

Title: On the L-Syntax of Manner and Causation

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## On the L-Syntax of Manner and Causation\*

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So-called *Manner conflation* has been argued to be a local process whose semantic interpretation is syntactically determined (Mateu 2002f; Mateu & Rigau 2002f; McIntyre 2004; Harley 2005; Zubizarreta & Oh 2007). Following this trend, I show how the present modification of Hale & Keyser's (2005) l(exical)-syntactic analysis of some Manner verbs (esp. *splash/smear* verbs) naturally leads us to revise Talmy's (1991, 2000) Manner conflation processes. After discussing the proper treatment of some complex causative constructions that involve Manner conflation, I claim that the present Hale&Keyserian perspective can provide us with the right balance between a conservative proposal like Folli & Harley's (2006) and a radical one like Borer's (2005).

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### 1. Hale & Keyser's (2005) l-syntactic analysis of *splash/smear* verbs

Before dealing with the L(exical)-syntax of those constructions that involve so-called “Manner conflation”, it will be useful to briefly sketch out Hale & Keyser's (1998, 2002, 2005) basic elements of argument structure, whose theory is assumed here. As is well-known, argument structure is conceived of by Hale & Keyser (H&K from now on) as the syntactic configuration projected by a lexical item, that is, argument structure is the system of structural relations holding between heads (nuclei) and the arguments linked to them. Their main assumptions can be expressed as follows: argument structure is defined in reference to two possible relations between a head and its arguments, namely, the head-complement relation and the head-specifier relation. A given head (i.e.  $x$  in 1) may enter into the following structural combinations in (1): these are its argument structure properties, and its syntactic behavior is determined by these properties.

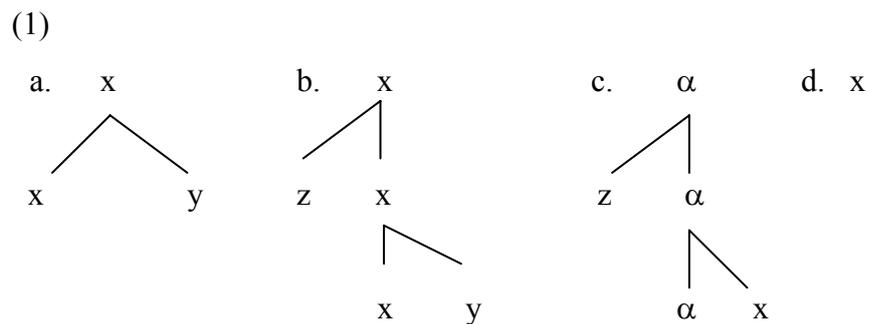


Figure 1. Head ( $x$ ); complement ( $y$  of  $x$ ), predicate ( $x$  of  $z$ )

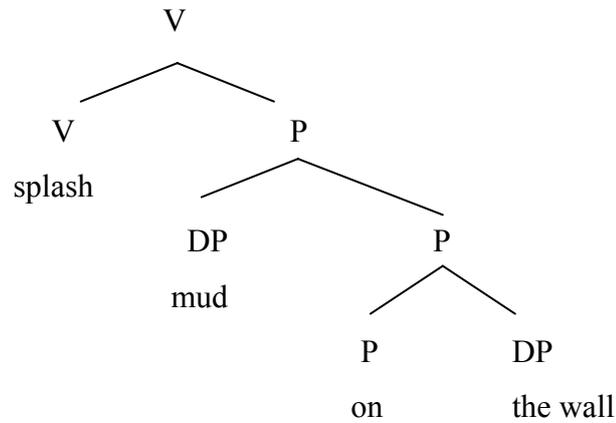
In the first part of the present paper, I am interested in a contrast that is addressed by H&K in many of their works (cf. H&K 1993, 2002, 2005): the one between (2) and (3).

- (2) a. The kids splashed mud on the wall.
- b. Mud splashed on the wall.
  
- (3) a. The kids smeared mud on the wall.
- b. \*Mud smeared on the wall.

According to H&K (2005: 19), the transitive alternant in (2a) results from so-called “immediate gratification” of the specifier requirement of the predicate P, as shown in the l-syntactic structure in (4a), which involves merge of the birelational configuration in (1b) into the monadic one in (1a); in contrast, the intransitive variant in (2b) results by so-called “delayed gratification” of that requirement, as shown in the l-syntactic structure in (4b), which involves the unaccusative configuration in (1c), where  $\alpha$  is the V (*splash*) that provides the predicate (*on the wall*) with a specifier (*mud*).

(4)

a.



b.

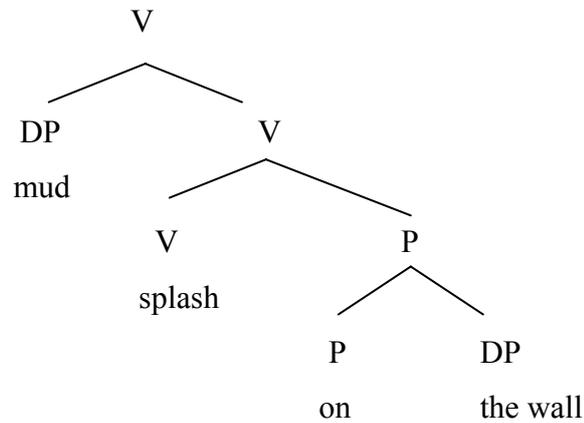
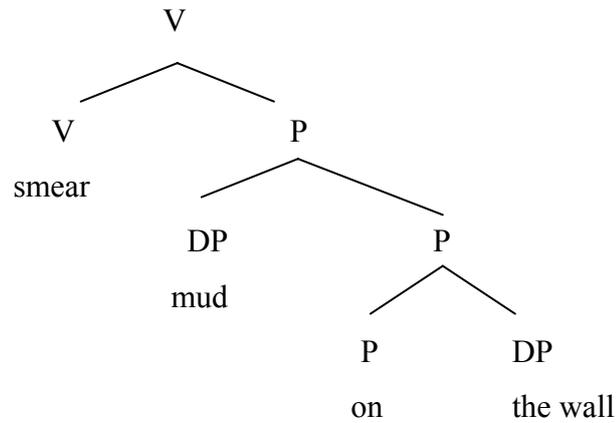


Figure 2. L-syntactic analyses of (2a-b) taken from H&K (2005: ex. (23a-b); p. 20)

H&K (2005) point out that the two alternants in (4) are defined straightforwardly and automatically by the operation Merge (Chomsky 1995). Other things being equal, this alternation should always be available, contrary to fact, since (3b), depicted in (5b), is ungrammatical.

(5)

a.



b.

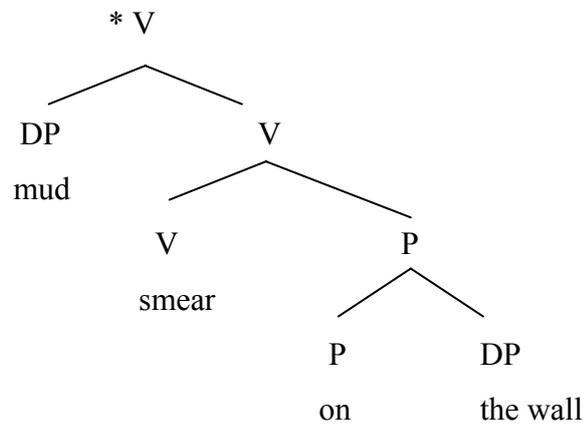


Figure 3. L-syntactic analyses of (3a-b) taken from H&K (2005: ex. (25a-b); p. 20)

H&K (2005) point out that the difference between *splash* and *smear* lies in the semantic components of their root elements. Specifically, they claim that the difference should be related to what they refer to as the “manner factor” inherent in the semantics of the root: it is the case that (2b) is grammatical since *splash* involves a manner feature which is “linked” to the internal

argument *mud*, while (3b) is ill-formed since the manner feature associated to *smear* can only be linked externally: (3b) is ruled out since there is no agent to license such a feature. In other words, the manner feature is patient-oriented in (4b), but agent-oriented in (5b). According to H&K, the *smear* factor in (5b) will then be unable to be linked to the external argument, since that position will be taken by the internal argument (*mud*), which is said to be raised there in “s(entential)-syntax”.<sup>1</sup> That’s why (5b) is ill-formed.

## **2. The l-syntax of *splash/smear* verbs revisited. Manner Conflation as *Welcome Invasion***

In this section, a revision of H&K’s (2005) analysis of the contrast in (2)-(3) is shown to be necessary. In fact, H&K themselves admit that, as it stands, their analysis involves a shift towards a semantic interpretation of the contrast, which could then be interpreted as a major departure from their general theory, whereby L-syntax (but not L-semantics) is supposed to be the central key out of which argument structure is derived. Given this, my present proposal is that the explanation of the contrast in (2)-(3) should not be considered as a departure from their syntactic theory iff the manner

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<sup>1</sup> According to H&K, the term “s(entential)-syntax” is used to refer to the syntactic structure assigned to a phrase or sentence involving both the lexical item and its arguments and also its “extended projection” (Grimshaw 1991; 2005) and including, therefore, the full range of functional categories and projections implicated in the formation of a sentence interpretable at PF and LF.

It is also important to point out that H&K do not represent the external argument at l-syntax (see 4a-5a): this argument can be argued to occupy the specifier position of a functional projection in s-syntax (cf. Kratzer 1996) or, alternatively, as assumed by H&K (2002), can be structurally an adjunct to the VP and, moreover, a “distinguished adjunct” coindexed with the VP (cf. Koopman & Sportiche 1991).

conflation process involved in (2) and (3) is analyzed in a more structural way: basically, the insertion of the verbal root in (4) and (5) can be claimed to be not as trivial as Hale & Keyser's (2005) analysis seems to involve. Accordingly, syntax will be shown to have an important role both in defining the locality of the Manner conflation process and in working out what "Manner" is from an l-syntactic perspective. We elaborate on these two points below.

Let's start with the important observation that *splash* is not locally conflated in the transitive l-syntactic structure of (4a), this being in contrast to what we can see in the unaccusative l-syntactic structure depicted in (4b), where the patient-oriented root is locally conflated with the inner verb, which can be said to express *Change*. Given this, I disagree with H&K's (2005) proposal that the very same l-syntactic analysis can be posited for both (2a) and (3a): see (4a) and (5a), respectively. In contrast to their proposal, the present one is that *splash* verbs can essentially be analyzed as deadjectival verbs like *clear* (see 6) on the basis that both classes of verbs typically enter into the causative alternation and both have a patient-oriented root.<sup>2</sup> According to H&K (2002, 2005), (7a) depicts the causative l-syntactic

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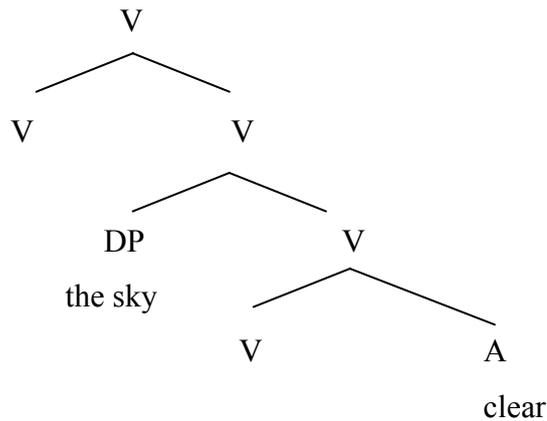
<sup>2</sup> An anonymous reviewer raises the following objection: the fact that *splash* and *clear* verbs show up in unaccusative contexts "does not seem to be enough a factor to conclude that they constitute a single group". Granted. Two relevant remarks are in order: first, transitive denominal verbs like *shelve* and *saddle* can be shown to be similar in that they do not enter into the causative alternation. Accordingly, H&K provide both classes with a uniform monoeventive l-syntactic structure, which makes them "constitute a single group". However, their claim is not incompatible with classifying these verbs into different groups from another perspective: for example, cf. the *location* and *locatum* classes, respectively (see Hale & Keyser 1993, 2002, 2005, for the claim that these two classes involve different abstract prepositions). Second, my specific claim here is simply that a bieventive analysis

analysis of (6a), which involves merge of the unaccusative configuration of (1c) into the monadic one in (1a), while (7b) depicts the unaccusative 1-syntactic analysis of (6b), which only involves the configuration of (1c). In both cases the conflation of the adjectival root with the null verb has been omitted.

- (6) a. The strong winds cleared the sky.  
 b. The sky cleared.

(7)

a.




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for both *clear* and *splash* verbs can account for the *structural* fact that both classes of verbs enter into the causative alternation; similarly, a bieventive analysis for these two classes allows a *syntactic* encoding of the fact that both have a patient-oriented root. Of course, the present proposal is not incompatible with the claim that both classes can “constitute a different group” when other facts are taken into account (for example, Manner conflation is shown to be involved in *splash* verbs but not in *clear* verbs).

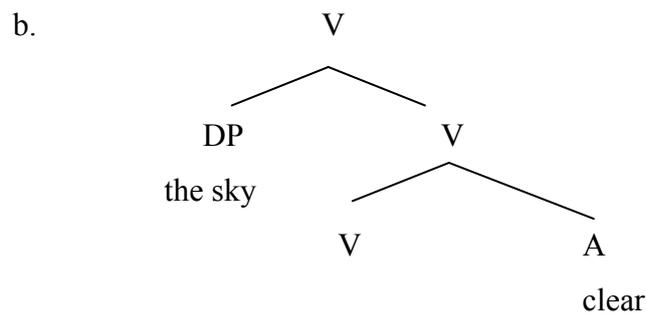


Figure 4. L-syntactic analyses of deadjectival verbs in (6)

As noted, there is a crucial difference concerning the formation of deadjectival verbs like *clear* and manner verbs like *splash*, whereby it cannot be said that they “constitute a single group” (see footnote 2): while the former are formed via conflation of Adj into V (see H&K 1998, 2002), the latter involve a syntactic conflation process of their root with the inner verb via a *plug-in* device (see Mateu 2002; McIntyre 2004; Harley 2005; Zubizarreta & Oh 2007; Den Dikken 2008). Given this difference, the insertion of roots like  $\sqrt{\text{SPLASH}}$  and  $\sqrt{\text{SMEAR}}$  into the relevant l-syntactic structures should not be taken as a trivial process, as one could infer from H&K’s (2005) simple analyses depicted in (4) and (5). Rather, following McIntyre’s (2004: 553) and Zubizarreta & Oh’s (2007: chap. 3) insightful modifications of my previous analysis of conflation structures (cf. Mateu 2001, 2002), the syntactic formation of manner verbs like *splash* can be argued to involve adjunction of a  $\sqrt{\text{ROOT}}$  onto a light verb -a causative one (upper V) or a transitional one (inner V). Accordingly, H&K’s (2005) l-

syntactic analyses in (4) and (5) should be reformulated as in (8) and (9), respectively.<sup>3</sup>

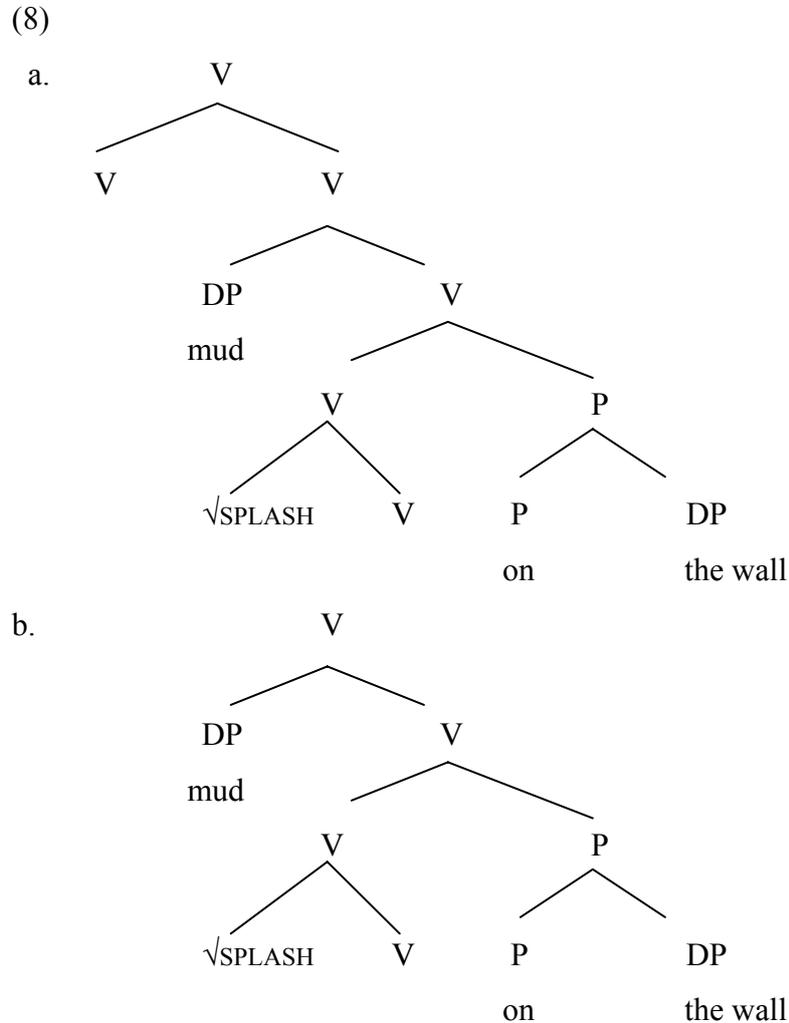


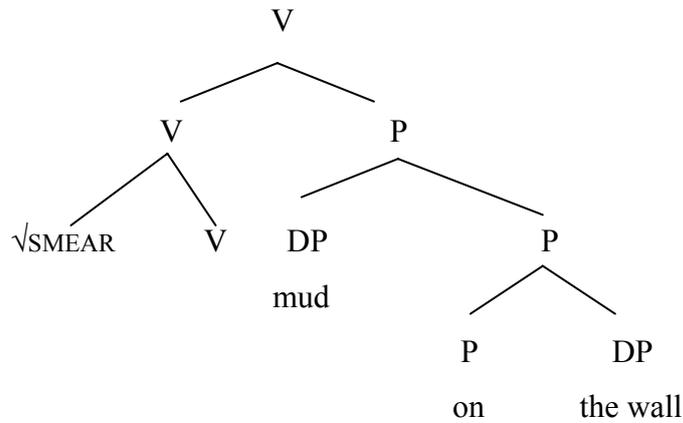
Figure 5. L-syntactic analyses of *splash* verbs revisited

<sup>3</sup> Notice that the complex l-syntactic analyses in (8) and (9) are not directly predicted by H&K's basic theory of argument structure, which could be considered a step back with respect to their very restrictive types depicted in (1). At the risk of losing explanatory power, Hale & Keyser (1997b: 228-229) and Mateu (2001, 2002) decided to take a similar extension as necessary in order to provide an account of how an independent manner component is allowed to enter into complex path of motion constructions like those in (i), which are taken from Hale & Keyser (1997b: 228). For a more detailed empirical justification for such a move within a Hale&Keyserian framework, see also Harley (2005), Zubizarreta & Oh (2007), and Mateu (2002, 2008).

- (i)
- a. The kids ran into the room.
  - b. The horse jumped over the cattleguard.
  - c. Rizzuto slid into third base.

(9)

a.



b.

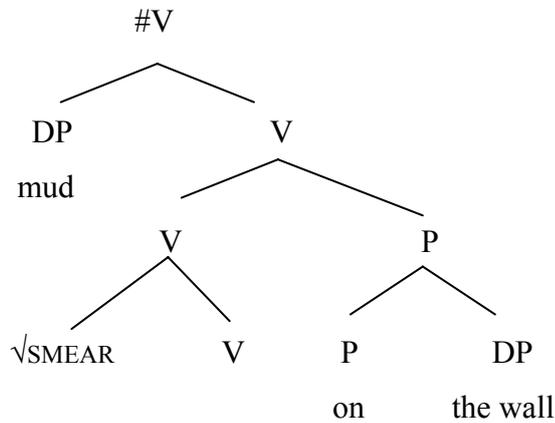


Figure 6. L(exical)-syntactic analyses of *smear* verbs revisited

Given (8) and (9), it is important to point out that two facts contribute to determining a more syntactically transparent interpretation of the Manner component: on the one hand, Manner conflation is locally represented in the l-syntactic structures in (8) and (9); on the other, Manner conflation is represented via a syntactic plug-in device, which in turn will allow us to define this semantic notion in l-syntactic terms. We elaborate on these two points immediately below.

The Manner conflation process depicted in (8) and (9) is argued to be local in the following sense: the root  $\sqrt{\text{SPLASH}}$  is interpreted as patient-oriented in (8a-b) *because* it is l-syntactically merged within the domain of the inner predicate (that is, within the inner verbal structure that encodes the change of location of the Theme), while the root  $\sqrt{\text{SMEAR}}$  in (9a) is agent-oriented *because* it is l-syntactically merged outside the domain of the inner predicate.<sup>4</sup> Accordingly, the ill-formedness of (9b) is due to the violation of this lexical-syntactic requirement: the root  $\sqrt{\text{SMEAR}}$  cannot be structurally interpreted as agent-oriented in that inner position. If any, it could only be interpreted as patient-oriented (hence the # (rather than \*) symbol in (9b)).

On the other hand, the l-syntactic compound formed by the adjunction of a  $\sqrt{\text{ROOT}}$  onto a null light verb in (8) and (9) can be argued to be an instantiation of *conflation* in Hale & Keyser's (1998, 2002) sense since there is a null light verb that is provided with the phonological content of a root, this process being carried out in an l-syntactic configuration. However, the conflation process depicted in (8) and (9) is different from the usual ones discussed by H&K (1998, 2002), (e.g., see (7), where the complement root  $\sqrt{\text{CLEAR}}$  provides the null V head with phonological

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<sup>4</sup> Notice the importance of the causal directionality, which is fully coherent with H&K's syntactic approach to argument structure: i.e., X is semantically interpreted as Y *because* it is syntactically merged in Z position (and not the other way around). As pointed out by H&K (1993), the same reasoning holds for so-called "thematic roles": e.g., an argument is interpreted as "Theme" *because* it is syntactically merged in the relevant inner specifier position (and not the other way around: that is, an argument is Theme in (non-syntactic) "lexical conceptual structure", whereby it occupies the syntactic direct internal argument position. For more discussion on this point, see Levin & Rappaport Hovav (2005) and Acedo-Matellán & Mateu (2009), among others.

content) in that the former involves a syntactic plug-in device: the root in (8) and (9) is somehow *external* to the basic argument structure and is plugged into it via an adjunction process (Mateu 2002f; McIntyre 2004, Harley 2005). The external character of the roots involved in *Manner conflation* has led Hirschbühler (2006) to rebaptize this process as *Welcome Invasion*: an “invading” (i.e., external) root is allowed to conflate with the null verb of the basic argument structure in order to saturate its null phonological matrix.<sup>5</sup>

Importantly, the present l-syntactic definition of Manner conflation also leads us to give a purely structural definition of what Manner is in l-syntactic terms: a non-relational element (i.e., a lexical head that takes no complement nor specifier; see 1d) that gets adjoined to a null light verb. Accordingly, Manner is also a semantic notion that can be read off the mere l-syntactic structure. Once again notice the relevance of the causal directionality: the roots  $\sqrt{\text{SPLASH}}$  and  $\sqrt{\text{SMEAR}}$  are interpreted as Manner in (8)-(9) *because* they occupy an adjunct position to the verbal head. This claim is compatible with the present program: L-syntax determines (the grammatically relevant) l-semantics, and not the other way around (see footnote 4). Given this, the lexical-conceptual classification of *splash* or *smear* as “Manner roots” (cf. Levin & Rappaport Hovav 2005) is not

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<sup>5</sup> See H&K (1998, 2002), for discussion of the external condition of avoiding empty phonological matrices at PF.

relevant to syntax: that is, the l-syntactically relevant notion of Manner is not the conceptual one but the one defined structurally as in (8) and (9).

Examples like the ones in (10) also show that a configurational/syntactic definition of roots is more grammatically relevant than a conceptual one (Acedo-Matellán & Mateu 2009): what is required by the unaccusative syntax of (11) is that the root  $\sqrt{\text{BREAK}}$  be interpreted as Manner.<sup>6</sup> Accordingly, the configurational meaning of  $\sqrt{\text{BREAK}}$  as Manner is read off the adjunction structure in (11), while the configurational meaning of  $\sqrt{\text{BREAK}}$  as Result (e.g., in *John broke the glass / The glass broke*) would be read off an inner predicate position like the one in (7), which depicts the relevant l-syntactic structures encoding (causative) change of state verbs (see Hale & Keyser (1998, 2002), for more discussion of the latter class).

- (10) a      He broke into the room.  
      b.      The hammer head broke off.

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<sup>6</sup> Compatible with our proposal that the root in (11) is not structurally interpreted as Result is the fact that (10a) and (10b) do not entail *He broke* and *The hammer head broke*, respectively. For example, in (10b) it is the hammer that got broken, but this result predication is not l-syntactically represented: the only predicative relations that are l-syntactically represented in (11) are the one between *he* and *into the room*, and the one between *the hammer head* and *off*.

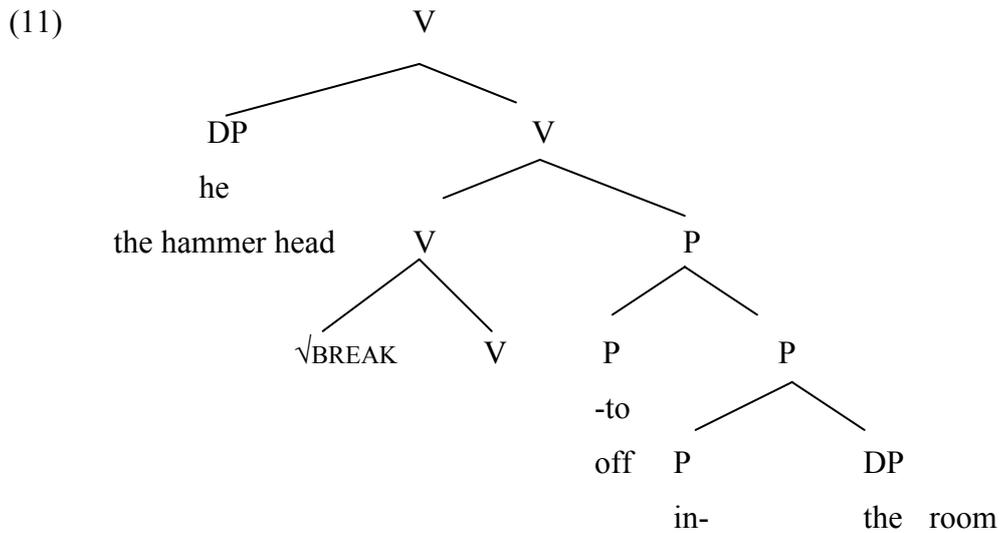


Figure 7. L-syntactic analysis of (10)

### 3. *Welcome Invasion* extended: Some typological considerations

In this section, I show how the parametrized operation of *Welcome Invasion* introduced above allows us to account for some of Talmy’s (1985, 1991, 2000) well-known typological predictions, in particular, for the lexicalization pattern exemplified in (12a).<sup>7</sup>

- (12) a. The bottle floated into the cave.

<sup>7</sup> To put it in Talmy’s (1985) terms, (12a) involves conflation of Motion with Manner, or alternatively, in Talmy’s (1991) terms, (12a) involves conflation of MOVE with SUPPORTING [EVENT]. In contrast, the corresponding counterpart of (12a) in a Romance language like Spanish (cf. 12b) typically involves a different lexicalization pattern, i.e. conflation of Motion with Path, the Manner component (or the Co-event) being expressed as adjunct. Accordingly, while English is typically (but not always) taken as an example of “satellite-framed language” (i.e., the Path is a “satellite”, e.g., a particle), Spanish is typically regarded as an example of “verb-framed language” (i.e., the Path is conflated in the verb).

- b. *La botella entró en la cueva (flotando).* (Spanish)  
the bottle entered in the cave (floating)  
'The bottle entered the cave floating.'

Drawing heavily on Talmy's typological observations, Mateu (2002f), Mateu & Rigau (2002, 2007, 2008), and Mateu & Espinal (2007) claim that the absence of the lexicalization pattern in (12a) from Romance languages like Spanish or Catalan is a lexical-syntactic one, whereby it can be appropriately stated in H&K's terms. In particular, Romance languages lack complex resultative(-like) constructions like the ones in (13) where the verb is crucially non-directional and the path/result is argumental (Mateu & Rigau 2007, 2008). Essentially, the basic proposal is that an example like (12a) can be represented as in (14),<sup>8</sup> where the very same conflation process

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<sup>8</sup> As is well-known, H&K do not posit a direct association of the *Path* (cf. *to* in (14)) and *Place* (cf. *in* in (14)) functions with the prepositional(like) elements of I-syntax. Rather they prefer using the notions of *terminal* and *central coincidence relations* (Hale 1986; H&K 2000, 2002). Roughly, a terminal coincidence relation (e.g. cf. *to*, *out of*, *from*, etc.) involves a coincidence between one edge or *terminus* of the theme's path and the place, while a central relation (e.g. cf. *with*, *at*, *in*, etc.) involves a coincidence between the center of the theme and the center of the place. See Hale (1986) for further discussion. However, I think that there is an emerging consensus concerning the semantics associated to the prepositional(like) elements, the notions of Path and Place being the most relevant ones (see Svenonius (2008) and Mateu (2008), i.a.). In this sense, H&K's syntactic project could provide configurational approaches with an important insight: H&K (2000, 2002) argue that the distinction between terminal coincidence relation and central coincidence one can in fact be derived or read off from the mere I-syntactic structure: i.e., the terminal coincidence meaning is derived from a configuration containing two P's, while the central coincidence one is derived from a configuration containing only one P. Accordingly, in spite of the fact that examples like (ia) and (ib) are superficially identical, H&K (2000, 2002) posit that the former involves a complex P structure (i.e. *to* = the terminal coincidence relation *to* plus an abstract central coincidence relation: e.g. *at*), while the latter involves a simple P structure, the one headed by *in*. See H&K (2002: 221-224) for more discussion.

- (i) a. Leecil went to Tucson.  
b. Leecil stayed in Tucson.

involved in *splash/smear* verbs applies here as well.<sup>9</sup>

- (13) a. The bottle floated into the cave.  
 b. The truck rumbled into the yard.  
 c. He talked us into a stupor.  
 d. He laughed his butt off.  
 e. The dog barked the chickens awake.  
 f. He gambled his fortune away.  
 g. He hammered the metal flat.

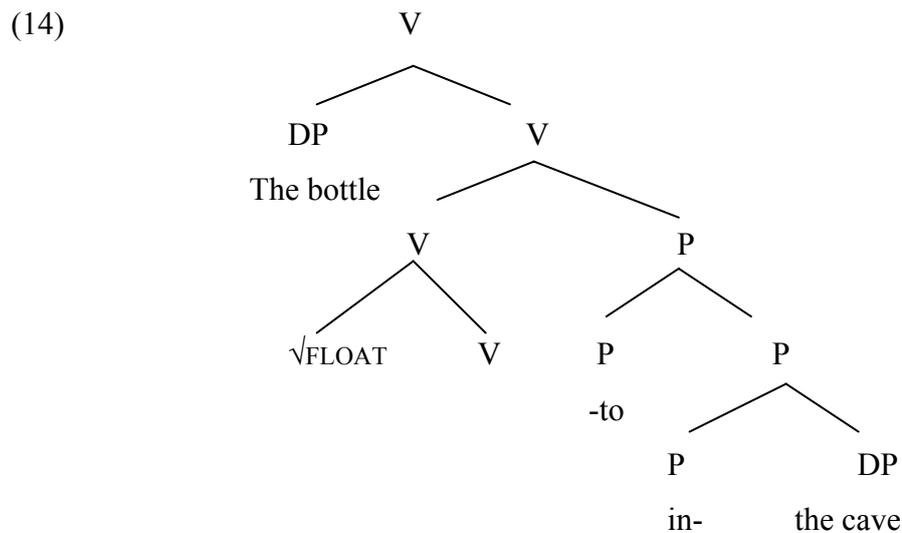


Figure 8. L-syntactic analysis of (13a)

<sup>9</sup> The so-called “satellite-framedness” of Germanic languages is to be related to the fact that, for example, the *P*(ath) element *into* in (14) is not conflated in the verb, this null verb being then allowed to be conflated with the so-called {“Manner constituent”/ SUPPORTING [EVENT]}. To put it in the present lexical-syntactic terms, the non-conflating (i.e. “satellite”) nature of *into* allows the phonologically null unaccusative verb to be merged with the root √FLOAT (cf. 14). In contrast, the conflating nature of this Path element in Romance gives a directional verb (Sp. *entrar* ‘enter’), the adjunct *flotando* (‘floating’) being merged outside the main argument structure.

In particular, the main descriptive generalization can be summarized as follows: Romance languages (and more generally, Talmy's (2000) so-called "verb-framed languages") lack complex resultative(like) constructions where the verb is crucially non-directional, i.e., the verb itself does not encode/involve a Path (e.g., see (13)).<sup>10</sup> To put it in Hoekstra's (1988) terms, the relevant descriptive generalization is that Romance languages lack the combination of a (pure, i.e., non-directional) Manner verb with a Small Clause Result.

However, given the existence of examples like those in (15), Italian appears to be a clear counterexample to Talmy's predictions concerning Romance languages, in particular, with respect to the incompatibility of a Manner verb plus a telic directional phrase.

- (15) a. *Riuscirai a lavare via il sudore.*  
 manage-FUT to wash away the sweat  
 'You will be able to wash the sweat away.'
- b. *Devono raschiare via la sporcizia.*  
 must-they scrape away the dirt  
 'They must scrape the dirt away.'

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<sup>10</sup> But see Horrocks & Stavrou (2007) for an alternative interesting explanation of the parametric differences which is mainly based on the observation that languages that grammaticalize viewpoint aspect in their verb morphology (e.g., Spanish or Greek) reject resultative-like constructions like those in (13).

Mateu & Rigau (2007, 2008) argue that examples like the ones in (15) are not to be taken as lethal counterexamples against Talmy's (1991, 2000) typology (at least, as we understand it). Our crucial point is that, unlike the non-directional verbs in (13), the verbs in (15) do acquire a Path/Result component: i.e., our claim is that the Italian verbs *lavare* 'wash', *raschiare* 'scrape' involve an abstract directionality component in their accomplishment use in (15). Indeed, one could wonder whether there is any evidence for this division, i.e., for the claim that complex resultative-like constructions in (13) involve *pure* Manner verbs while those in (15) involve *directional* Manner verbs. We think that there is such evidence: for example, see the interesting English vs. Romance contrasts in (16) to (19), taken from Mateu & Rigau (2007, 2008).<sup>11</sup>

- (16) a. John washed the stain ??(away).  
 b. *Gianni ha lavato (via) la macchia.* (Italian)  
 Gianni has washed away the stain

- (17) a. John wiped the fingerprints \*(from the table/away...).

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<sup>11</sup> Notice that examples like *John wiped the fingerprints/the stains* are ill-formed on the reading that the direct object is not the surface (cf. *John wiped the table*) but the material removed. See Rappaport Hovav and Levin (1998: 118-122) for an alternative semantic explanation of the ill-formedness of examples like the one in (i):

(i) John swept the crumbs \*(onto the floor/off the table); cf. John swept the floor.

- b. *Juan fregó las huellas* (de la mesa). (Spanish)  
 Juan wiped the fingerprints (of the table)
- (18) a. John wiped the dust \*(from the table).  
 b. *Jean a essuyé la poussière* (de la table). (French)  
 Jean has wiped the dust (of the table)
- (19) a. John wiped the stains \*(from the door).  
 b. *En Joan fregà les taques* (de la porta). (Catalan)  
 the John wiped the stains (of the door)

The interesting contrasts in (16) to (19) can be accounted for on the basis that the Romance verbs do encode a directional component, while the English corresponding ones do not: indeed, this would account for why the directional phrase cannot be omitted in English. The ungrammaticality of the English examples in (16a) to (19a) would then run parallel to that of (20a) or (20b):

- (20) a. He talked us \*(into a stupor).  
 b. The dog barked the chickens \*(awake).

As shown by Hoekstra (1988), the resultative PP/AP is compulsory in (20) because it is the Small Clause Result predicate, and not the unergative verb,

that licenses the direct object as its argument. *Mutatis mutandis*, we argue that the English resultative PP's in (16a) to (19a) have the same function: their presence is compulsory in order to license the direct object (which expresses the stuff that is removed, but not the surface: please see footnote 11). In contrast, the Romance verb in (16b) to (19b) can be argued to incorporate the abstract predicative head of the SC-like resultative structure which encodes the Path/Result. Given this, the Romance counterpart of *wipe* in (16b) to (19b) means 'remove/get out': cf. *John [V+P<sub>i</sub> [<sub>SC</sub> {the stain/the fingerprints/the dust} P<sub>i</sub>]]*. No further PP is then necessary in (16b) to (19b) to license the SC, since such a licensing is carried out via the incorporation of the Path/Result head of the SC into the verb.

Mateu & Rigau (2007, 2008) claim that the Small Clause Result-based account presented above can be provided with a more explanatory power by using H&K's theory of l-syntax. In particular, we argue that the English examples in (16a) to (19a) involve the l-syntactic pattern depicted in (21).

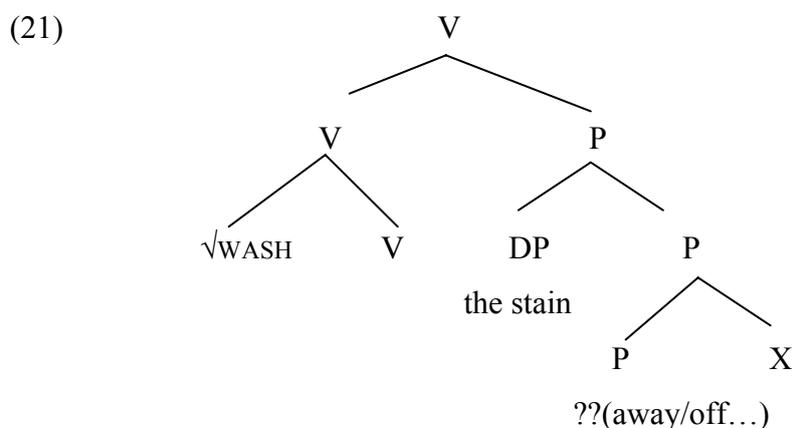


Figure 9. L-syntactic analysis of (16a)

The Germanic l-syntactic pattern in (21) should be distinguished from the Romance one in (22), where the Italian verb *lavare* can be claimed to encode an abstract directionality which can be further specified (or foregrounded) via an optative particle. The l-syntactic derivation of the verb *lavare* in its directional usage involves the following steps: (i) the root  $\sqrt{\text{LAVA}}$  conflates with the relevant abstract directional P; (ii) the resulting complex P-X conflates with the upper null verb, giving the removal sense of *lavare* ('remove'). Notice that the abstract conflation of the directional P into V is coherent with Talmy's descriptive claim that Italian is a verb-framed language. In contrast, the directional P in (21) remains as a 'true satellite' since it lacks the conflating status of its Romance counterpart.

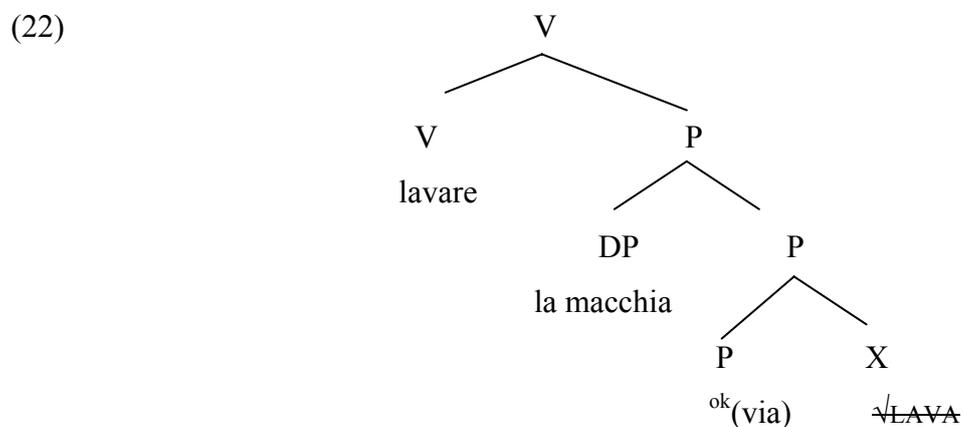


Figure 10. L-syntactic analysis of (16b)

Our conclusion is that, despite appearances, we deal with two different types of directional particles in (21) and (22).<sup>12</sup> In particular, Mateu & Rigau (2007, 2008) argue that the *optional* Path particle in (22) is introduced via so-called *P-cognition*:<sup>13</sup> that is, Romance directional particles typically specify the directionality component which is already conflated in the verb. Some authors have argued that the existence of examples like those in (15) in Italian goes against Talmy's predictions with respect to Romance languages (cf. Iacobini & Masini 2007; for similar apparent counterexamples, see also Folli & Ramchand 2005). However, it is the case that those verbs in (15) can be claimed to involve a directional component, whereby they cannot be considered true counterexamples. Talmy's predictions concerning Romance languages would be refuted by the existence of examples like those in (13) or (23), where it is clear that the

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<sup>12</sup> See Mateu & Rigau (2007, 2008), for the claim that it is only the first kind of particle (e.g., the one depicted in (21)) that is relevant to Talmy's (1991, 2000) typology of so-called "satellite-framed languages".

<sup>13</sup> Following H&K's (2000) insightful analysis of complex verbs like *heat up* or *cool off*, Mateu & Rigau (2007, 2008) argue that *via* in (22) is also introduced by means of so-called "P-cognition". In particular, we were inspired by H&K's (2000: 45f) insightful analysis of those English complex verbs where the directional particle is analyzed as a *cognate* <sic> complement of an abstract P conflated in the verb. That is to say, according to H&K, it is not the case that the root *heat* incorporates into the particle *up*; rather their claim is that this prepositional-like element is inserted into the P head *after* the simple verb has been formed. *Mutatis mutandis*, in (22) we claim that the root *lava-* does not conflate with the particle *via*; rather our claim is that this prepositional-like element is inserted into the P head *after* the simple verb (It. *lavare* 'wash') has been formed.

Indeed, H&K's and our analyses of P-cognition can be said to have cyclicity problems, but, for the time being, my personal view is that these technical problems should wait their turn since our present priority is "to determine the extent to which the possible predicate argument structures are a function of the elementary properties of the linguistic elements which are necessarily involved in defining them –i.e., the lexical categories and the fundamental relations of complementation and predication" (H&K 1997a: 62).

verb does not involve directionality. As far as we can tell, such cases are not easy to find in Romance languages, as predicted by Talmy's typology.

- (23) a. John worked the night away.  
b. John outworked Mary.  
c. John worked the guts out.  
d. John worked his debts off.

To conclude this section, as it stands, Talmy's (1991, 2000) descriptive typology cannot easily accommodate Romance data like those verb-particle constructions in (15). However, once his descriptive typology is framed in H&K's (2000, 2002) more explanatory terms, their apparently exceptional character vanishes: these apparently exceptional constructions can be argued to involve an abstract directional component encoded in the verb.

#### **4. The I-syntax of *smear* verbs extended: *Welcome Invasion* in complex transitive structures**

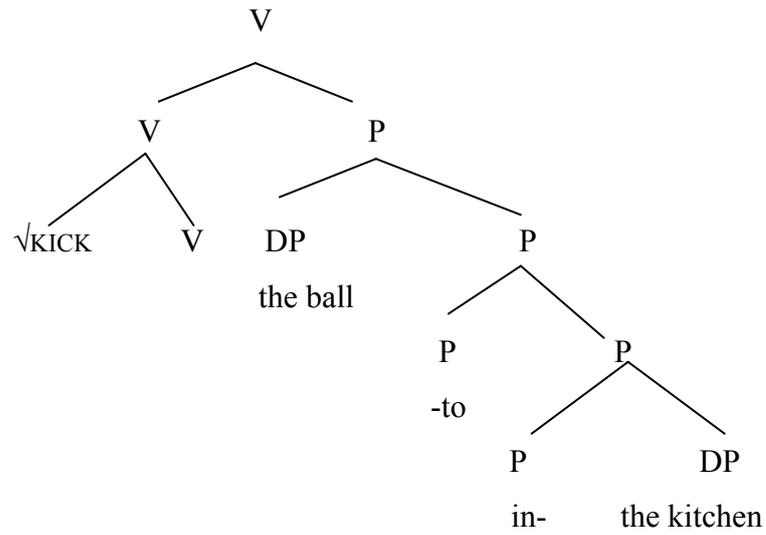
In Section 3 it has been claimed that conflation of the *Welcome Invasion* kind is not involved in Romance, this fact being related to the conflating properties of the relevant Path (e.g., cf. (12b)). Next let us concentrate on English, a language which, as predicted by Talmy's typology, should make an extensive use of this kind of conflation. In particular, I want to argue that

constructions like those in (24a) and (24c), which are predicted to be impossible in a verb-framed language like Catalan (cf. Mateu 2002: 25-26), can also be analyzed as involving conflation of that kind: for example, *smear*, *kick* and *push* are agent-oriented roots (H&K 2002, 2005), whereby the l-syntactic analysis in (25a) seems to be the appropriate one. The ill-formedness (rather than ungrammaticality) of (24b) should then be related to the fact that the agent-oriented root  $\sqrt{\text{KICK}}$  cannot be properly interpreted due to its being inserted into the unaccusative configuration in (25b): as noted above when dealing with *smear* verbs, the agent-oriented root  $\sqrt{\text{KICK}}$  will then be unable to be linked to the external argument, since that position will be taken by the internal argument (*the ball*), which is raised there in s(entential)-syntax.

- (24) a. The kids kicked the ball into the kitchen.  
b. #The ball kicked into the kitchen.  
c. John pushed the car into the garage.  
d. #The car pushed into the garage.

(25)

a.



b.

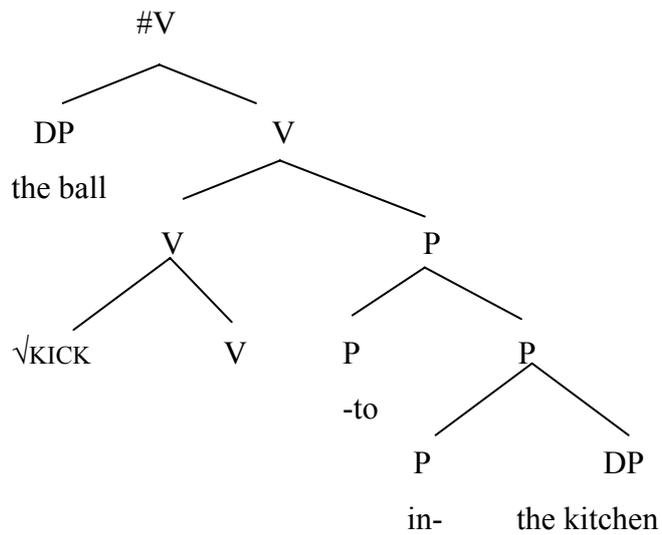


Figure 11. L-syntactic analyses of (24a-b)

As above, I claim that the root  $\sqrt{\text{KICK}}$  is semantically interpreted as Manner in (25) *because* it is adjoined to a null light verb at l-syntax: it is then not the case that the root  $\sqrt{\text{KICK}}$  expresses manner and, as a result of such a non-syntactic ontological classification, it occupies a modifier position in

argument structure. Rather it is l-syntax (not l-semantics) that has epistemological priority in the present framework (see H&K 1993; 2002).

On the other hand, I claim that the root  $\sqrt{\text{KICK}}$  is always a non-relational element in that it takes no specifier nor any complement at l-syntax: see (1d).<sup>14</sup> While its non-relational status remains invariable, what changes is its structural interpretation depending on the l-syntactic position it occupies: e.g., it can be interpreted as Manner in (25a), as a created argument in the complement position of unergative structures (*He kicks: He* [<sub>V</sub> V [ $\sqrt{\text{KICK}}$ ]]), etc.; see also footnote 14.

## 5. The l-syntax of *splash* verbs extended: *Welcome Invasion* in complex causative structures

Some interesting parallel examples to the *splash* case analyzed in Section 2, where *Welcome Invasion* was carried out internally to the second/embedded VP, can also be found in another lexical semantic area: for example, in causative constructions where the Theme can be said to move in a particular manner. Accordingly, I want to show that the present syntactic analysis of strict local conflation naturally leads us to analyze causative constructions

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<sup>14</sup> Unlike Harley (2005), I do not assume that the root  $\sqrt{\text{KICK}}$  involved in sentences like (ia) is a bare nominal root that takes a complement: see (ib). Following Mateu (2002) and Acedo-Matellán & Mateu (2009), I claim that non-relational elements (*roots*) do not take complements, whereby Harley's (2005) intuitive analysis in (ib) is ruled out in the present framework. Following H&K (2002), the underlying argument structure corresponding to (ia) is assumed to be more similar to the one posited for ditransitives (see ic): cf. *to provide the ball with a kick / to give it a kick*.

- (i) a. John kicked the ball.  
b. John [<sub>V</sub> DO [<sub>√N</sub> kick the ball]]  
c. John [<sub>V</sub> V [<sub>P</sub> the ball WITH  $\sqrt{\text{KICK}}$ ]]

like those in (26) from a different, more syntactically-driven perspective than the one adopted by Folli & Harley (2006): they argue that both (26) and (27) have the very same syntactic argument structure where the relevant root is inserted under a causative  $v$ , whereby their relevant differences are not syntactically/configurationally represented. I want to argue, in contrast, that conflation applies in a more local way, whereby the syntactic locus of Welcome Invasion in the examples in (26), which involve a patient-oriented use of the root (cf. *splash* verbs), and in the examples in (27), which involve an agent-oriented use of the root (cf. *smear* verbs), is different. (28a) is the l-syntactic representation of (26a), where it is syntactically determined that it is the rats who ran. On the other hand, (28b) is the l-syntactic representation of (27a), where it is syntactically determined that it was John who ran.<sup>15</sup>

- (26) a. He ran the rats into the maze (cf. *The rats ran into the maze*).
- b. He danced the puppet across the stage (cf. *The puppet danced across the stage*).

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<sup>15</sup> As noted above, by using syntactic/structural tests like the causative alternation, one can argue for the hypothesis that two verbal heads are l-syntactically represented for *splash* verbs and deadjectival verbs like *clear*, but not for *smear* verbs nor denominal verbs like *shelve*. As is well-known, H&K (1998, 2002) provide some arguments in that direction (but see Harley (1995) for arguments against the syntactically encoded bieventivity of causative predicates).

- (27) a. John ran the package to the office (cf. #*The package ran to the office*).
- b. Mary whistled Rover to her side (cf. #*Rover whistled to her side*).

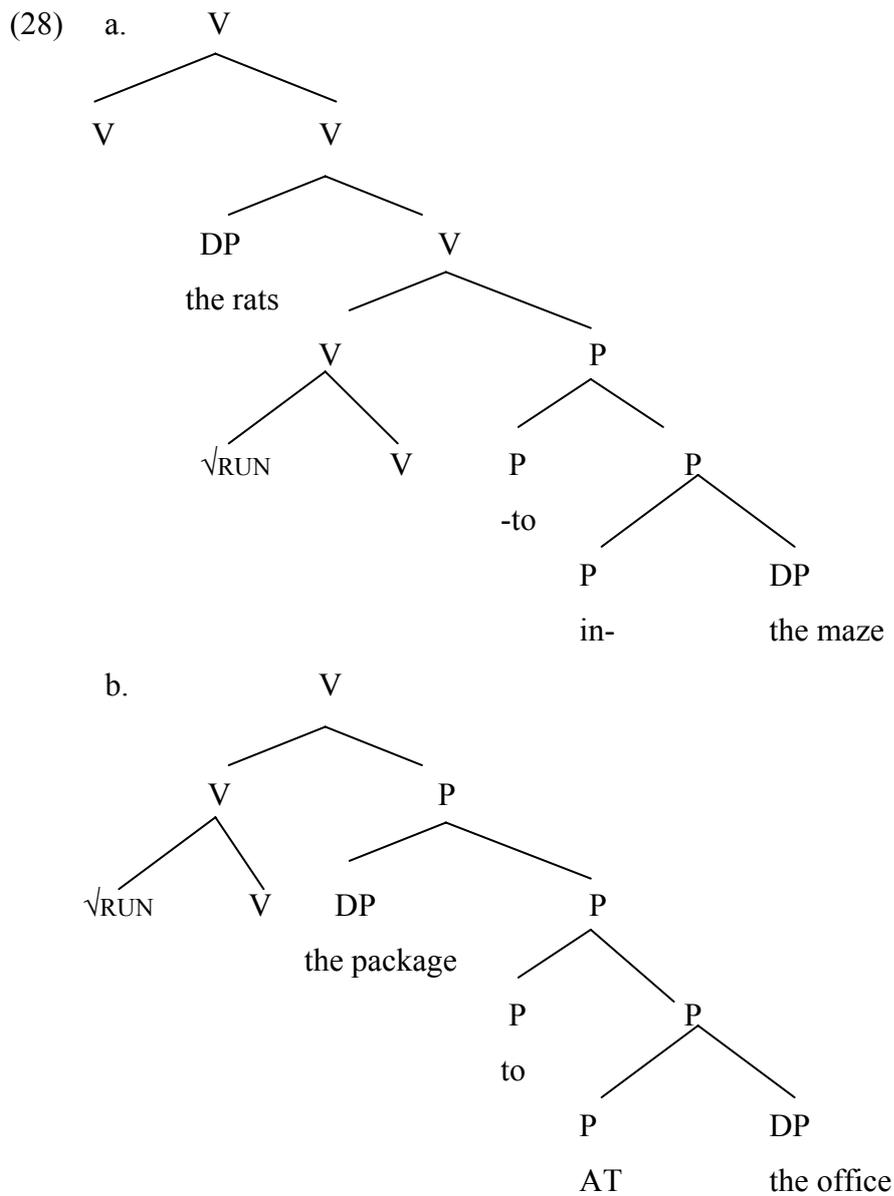


Figure 12. L-syntactic analyses of (26a) and (27a)

In the remainder of this section, I review F(olli) & H(arley)'s (2006: 143f.) classification of manner-of-motion verbs. According to them, “verbs which can appear with a directional PP fall into four distinct categories defined by their Agent and Path *implications* (my emphasis)”. Examples of each of the four types are provided in (29):

(29)

	+ Path	-Path
+Agent	walk, run, swim	whistle, hiss, sing
-Agent	roll, float, slide	shudder, tremble

Figure 13. Four manner of motion verbs classes  
taken from F&H (2006: 144)

According to F&H (2006: 143), “the classification of verbs like *walk*, *run*, *swim*, *whistle*, *hiss* and *sing* as requiring an Agent should be uncontroversial”. However, notice that *whistle* cannot be claimed to be a [+Agent] verb in (30a): rather it could perhaps be more properly classified as [ $\pm$  Agent] [-Path]. Moreover, it is not entirely clear what F&H mean when saying that “any Path PP that appears with these latter verbs <i.e., [-Path] verbs like *whistle* and *shudder*> is purely structurally licensed” (p.

144). Substance emission verbs like *stink* can also be classified as [-Agent] [-Path], but it is the case that *pure* unaccusative *structure* is not enough for its licensing: e.g., (30b) is not a well-formed example.

- (30) a. The bullet whistled into the room.  
b. #John stank into the room.

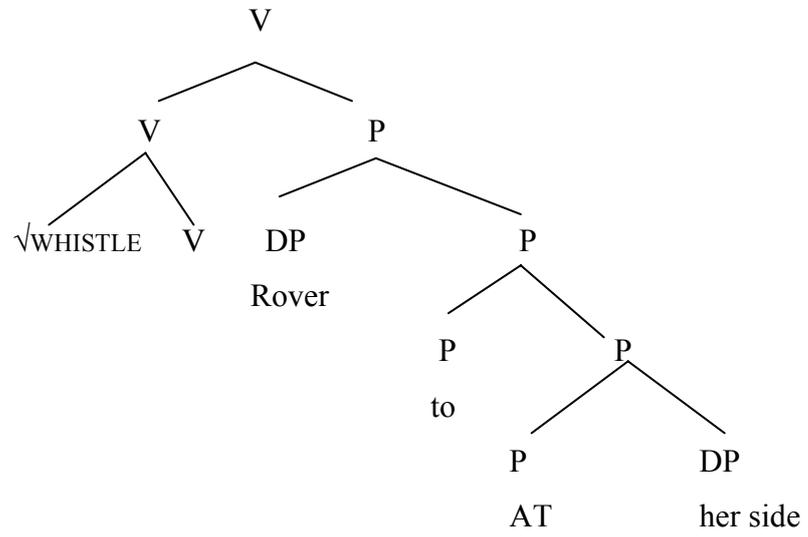
F&H's syntactico-semantic approach can be easily contrasted with the present lexical-syntactic one by analyzing examples like (31a) and (31b), which, according to them, have the very same syntactic argument structure, their differences being attributed to a different assignment of lexical semantic features: *whistle* verbs are [+Agent] [-Path], while *roll* verbs are [-Agent] [+Path] (cf. 29).

- (31) a. Mary whistled Rover to her side.  
b. Bill rolled the ball to the toddler.

In contrast to F&H's proposal, my present one is that the relevant semantic interpretation is to be read off from the l-syntactic configuration: for example, *whistle* is properly interpreted as an agent-oriented root in the configuration in (32a), while *roll* is properly interpreted as a patient-oriented root in (32b).

(32)

a.



b.

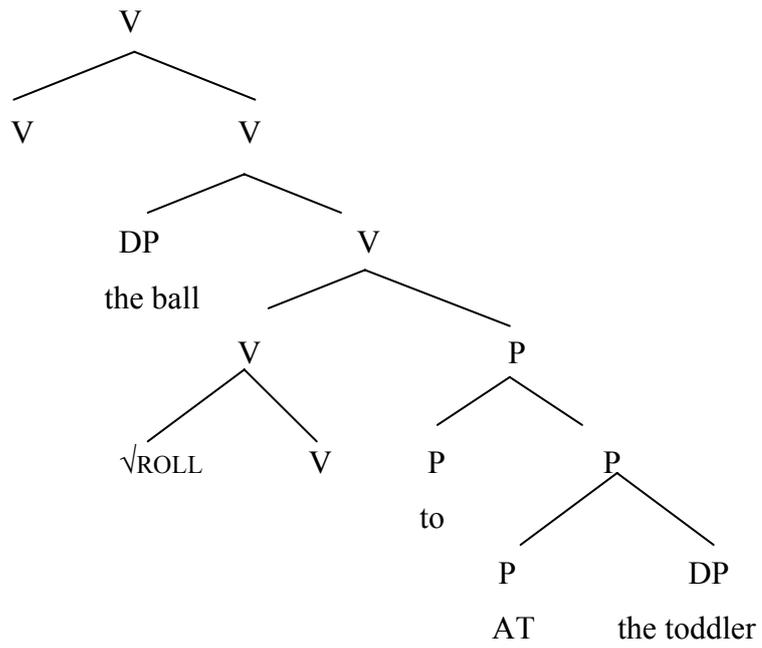
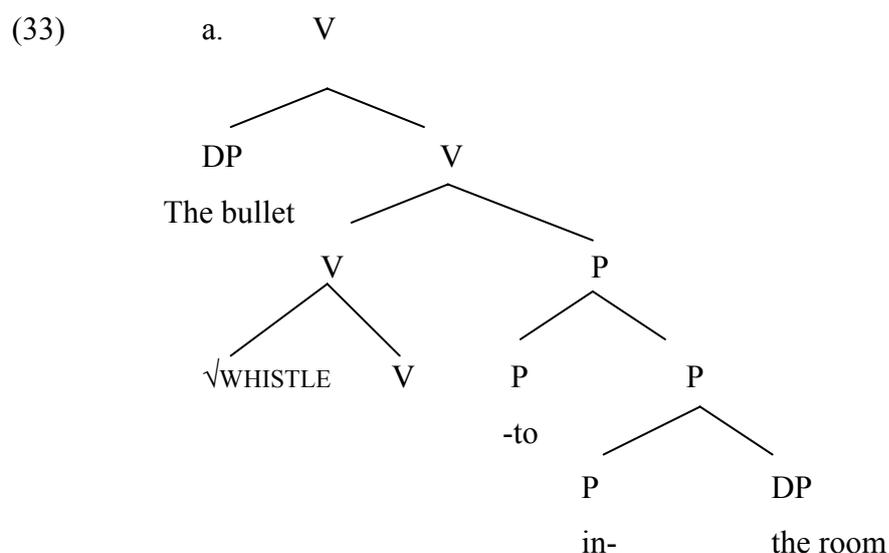


Figure 14. L-syntactic analyses of (31a-b)

One of the virtues of the present l-syntactic approach is that it avoids the determinism associated to those lexical assignments posited by F&H in (29): for example, a verbal root like *whistle* is said to modify the causing sub-event in the causative structure due to its [+Agent] feature (cf. 31a). However, in the unaccusative configuration in (30a) *whistle* modifies the motion event in spite of its having an alleged [-Path] feature: cf. (33a). Moreover, *whistle* cannot be said to be associated with a [+Agent] feature in (33a). Of course, it would be odd to posit that these lexical assignments in (29) (e.g., *whistle* is a [+Agent] [-Path]) are only useful when dealing with causative/transitive structures, but not with unaccusative ones. Accordingly, a more parsimonious solution would be to try to eliminate all those lexical features associated to roots like the ones in (29), the ill-formed cases like the one in (30b) (cf. (33b)) being excluded due to purely conceptual reasons (see Borer (2005) for a similar approach).



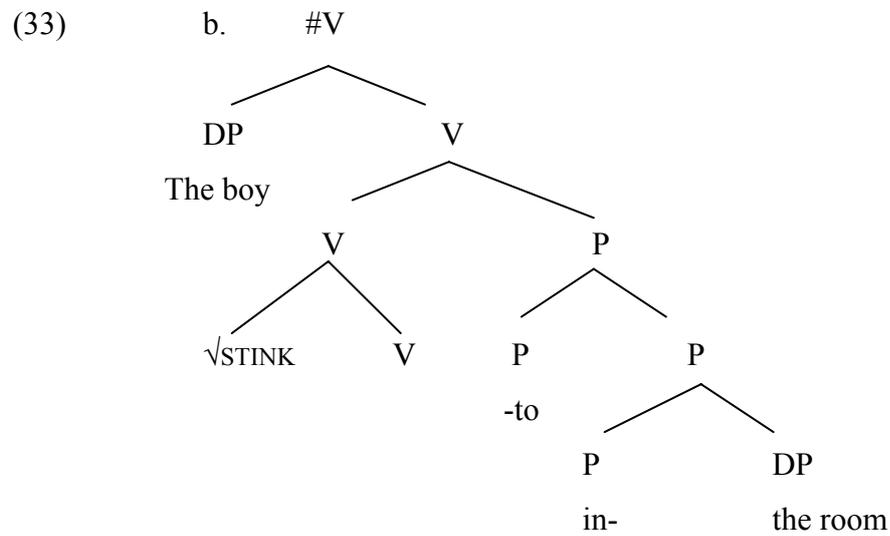
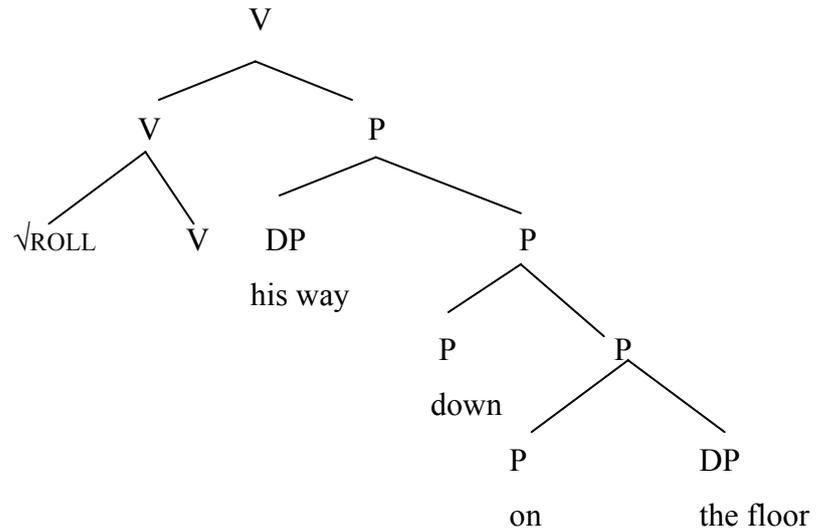


Figure 15. L-syntactic analyses of (30a,b)

Similarly, a verbal root like *roll* is said to modify the motion subevent in the causative structure due to its [+Path] feature. However, in the so-called *one's way* construction in (34a) *roll* modifies the causative event in spite of its having an alleged [-Agent] feature. Once again those lexical assignments in (29) (e.g., *roll* is lexically assigned a [-Agent] [+Path] combination) should be “relaxed” or perhaps, as Borer would claim, should be eliminated.

(34) a. John rolled his way down on the floor.



b. John rolled down on the floor.

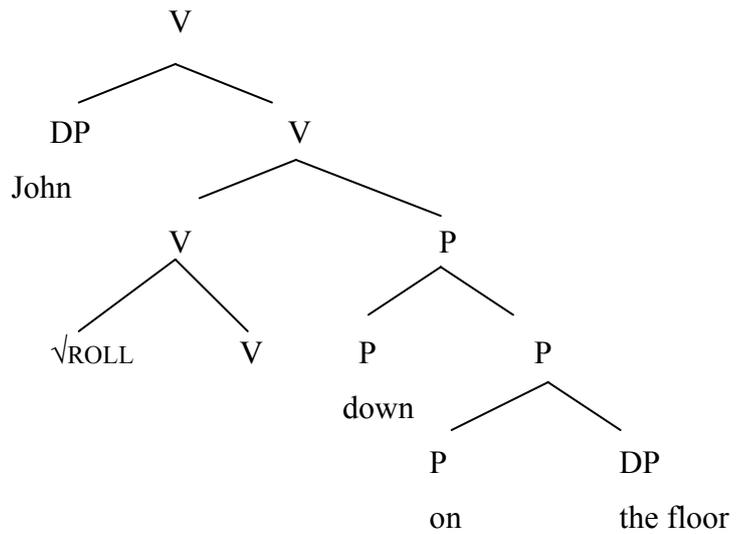


Figure 16. Two l-syntactic analyses of *roll*

Finally, let us deal with one of F&H's (2006) main points, i.e., what produces the so-called "accompanied-action requirement" in causative constructions like those in (35). According to them, it is the fact that the

manner verbal semantics of *gallop*, *walk*, and *waltz* is both [+Agent] and [+Path]:<sup>16</sup>

- (35) a. The jockey galloped the horse past the barn (“Manner-Motion modification”)
- b. Mary walked the bicycle to the shop (“Manner-Cause modification”)
- c. John waltzed Matilda around the room (“Manner-Cause and Manner Path modification”)

However, assuming that “the manner verbal semantics” of verbs like *push* and *kick* also includes the [+Agent] and [+Path] features (see the examples in (36)),<sup>17</sup> one can conclude that there must be something more relevant that produces the accompanied-action requirement in (35), since it is clearly not involved in (36b), nor necessarily applies to (36a). Of course, one could reply that the verbs *gallop*, *walk*, and *waltz* are intransitive, while *push* and *kick* are transitive, but then one would like to know how this syntactic

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<sup>16</sup> F&H (2006: 151) acknowledge the problem raised by the well-formation of examples like (i), for which they “do not have a theoretical explanation”. Notice that in (i) there is also a Cause-Path cotemporaneity effect.

- (i) The tide rolled the log up the beach.

<sup>17</sup> According to F&H (2006: 144), the test exemplified in (i) shows that *walk* or *roll* are [+Path] verbs, whereas *whistle* or *shudder* are [-Path] verbs (cf. 29):

- (i) a. How far did Sue walk?  
b. How far did the log roll?  
c. \*How far did the bullet whistle?  
d. \*How far did the train shudder?

difference relates to the accompanied-action requirement, a question that is not solved by F&H.

- (36) a. How far did he push the car?  
b. How far did he kick the ball?

All in all, it seems that the previous discussion should lead one to avoid the deterministic lexical assignments in (29); in other words, the proper treatment of the data discussed in this final section seems to require to find the right balance between a “conservative” proposal like F&H’s (2006) and a “radical” one like Borer’s (2005): in this section I have put forward the preliminary proposal that the present Hale&Keyserian perspective could provide us with such a balance.

## **6. Conclusions**

So-called *Manner conflation* has been argued to be a local process whose semantic interpretation is structurally determined at l-syntax (cf. Mateu 2002f; Mateu & Rigau 2002f; McIntyre 2004; Harley 2005; Zubizarreta & Oh 2007). After revising and reformulating H&K’s (2005) l-syntactic analyses of *splash* and *smear* verbs, I have pointed out their relevant connection with the Manner conflation processes studied by Talmy (1991, 2000). Finally, I have analyzed a variety of complex causative resultative-

like constructions from an even more syntactically-driven perspective than the one put forward by F&H (2006). I have concluded that the present Hale&Keyserian analysis of Manner and Causation can provide us with the right balance between a “conservative” proposal like F&H’s (2006) and a “radical” one like Borer’s (2005).

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