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Why Four Kinds of V (DP) PP Verbs? A Projectionist Account¹

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Argument alternations, in which a verb shows alternate syntactic expressions of its lexical arguments, pose a challenge for any theory of argument structure claiming that the syntactic expression of a verb's arguments is determined mostly by the structure of its lexical entry (what Levin and Rappaport Hovav 2005 call "projectionist theories"). The locative alternation, productive intra- and cross-linguistically, presents one such puzzle:

- (1) Josie loaded her stuff on the truck
- (2) Josie loaded the truck with her stuff

As it is well known, while the sentences in (1) and (2) are semantically equivalent² (the verb having the basic meaning PUT x ON y), in (1) the locatum argument appears as the object and the locatio argument as a PP, while in (2) it is the other way around. If we assume a single lexical entry for this particular meaning of the verb, and a single correspondence algorithm between lexical and syntactic levels, the alternance is problematic. Moreover, semantically similar verbs surprisingly differ in their tolerance for the alternation:

- (3) a. Jake poured oil on the toast bread
b. * Jake poured the toast bread with oil
- (4) a. Jonah filled the glass with water
b. * Jonah filled the water on the glass

The locative alternation has received much attention within lexical semantics. Most accounts are based on the recognition that the lexical entry of a given verb includes fine-grained semantic information about such things as end point, affectedness,

¹ Thanks to Ana Arregui, Jorge Guitart, Paul Hirschbühler, Chisato Kitagawa, Tom Roeper, Peggy Speas and Ellen Woolford for great help at different stages of this paper.

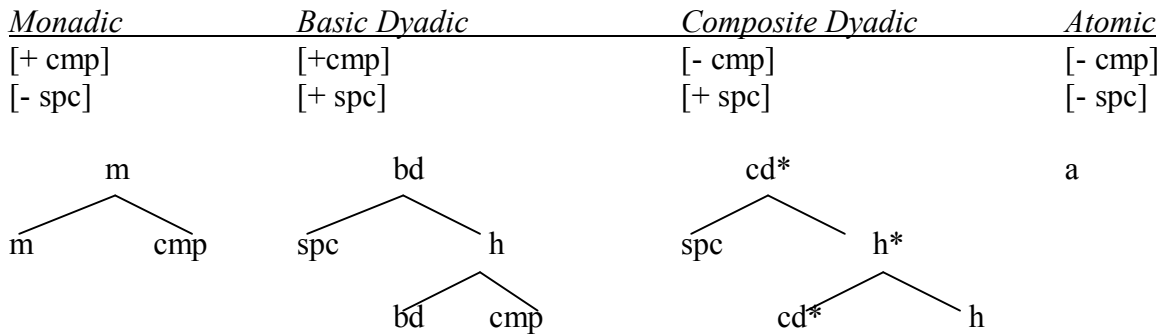
² The semantic differences are commonly subsumed under the label of the 'holistic/partitive effect'.

wholeness, etc. They focus on explaining the factors that allow or prohibit the occurrence of a given verb in the different syntactic frames. They however predict a much larger range of possible verbs than are actually found in natural language. I here present an alternative analysis of such phenomena, using the fundamentals of the theory of argument structure subsumed in Hale and Keyser 2002. The key difference is that structural, rather than semantic, factors are claimed to be responsible for the behavior observed in (1)-(4).

1. Hale and Keyser’s (2002) Theory of Argument Structure

In Hale and Keyser 2002 (henceforth H&K), these authors propose a theory in which structural factors restrict both the number of arguments that are possibly associated to a head, and the syntactic expression of such arguments. They take as a starting point the observation that from a structural point of view, the possible argument structures that are allowed by natural languages are rather restricted. Specifically, the number of arguments associated to a verb is crosslinguistically rarely more than three (as in English *give*, with two objects and a subject). This is a particular fact about argument structures that contrasts with the syntactic structures of sentences, whose size, by virtue of the property classically called recursion, is in principle infinite.

H&K claim that the constrained nature of argument structure follows from the structural nature of the lexical categories. Two structural relations are taken as basic: whether the head category has a specifier (*spc*) or not, and whether it has a complement (*cmp*) or not. Based on these parameters, H&K distinguish the following four types:



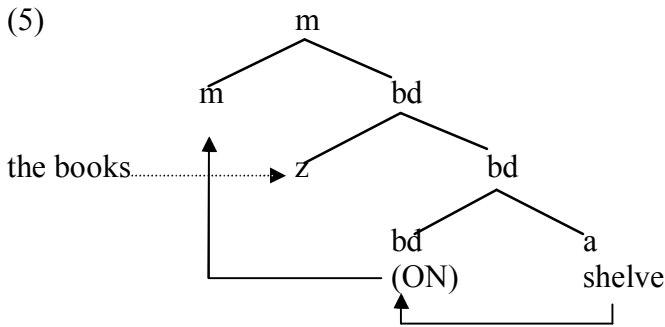
These structures contain information about the projection properties of the word. Obviously, structural information of this kind might coexist in the lexical entry with information of semantic character that also plays a role in the syntactic behavior of the word, such as aspectual type, certain features on the arguments such as definiteness or number, or features on the root itself, such as boundedness. It is the interaction between structural and semantic information what ultimately determines the syntactic behavior of the word.

Under this view, all words are morphologically derived from one lexical type or other: there are no verbal, nominal or otherwise, basic stems, but the category of the word

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depends on the structure the stems appear in (much in the spirit of Distributed Morphology). Since all possible argument structures are formed by combinatorial merging of these primitive structural categories, the goal of the theory is to determine the zero-relatedness of all predicates, i.e., to identify their argument structures in terms of the types allowed by the basic lexical categories above.

For example, a transitive verb like *shelve* in *Ayse shelved the books*, has the following lexical projection structure:



In this structure, a head *bd* (roughly glossed as the homonymous preposition *on*) projects a basic dyadic structure, with the morphological constant (the root), itself an atomic structure, as its complement. Because of *bd* being phonologically empty, a (*shelve*) is automatically incorporated (*conflated*) onto *bd*. The specifier is occupied by a lexical variable, here represented by *z*, acting as a placeholder for the object to be syntactically inserted. The whole basic dyadic structure is the complement of a monadic element *m*, which is responsible for the introduction of the external argument in syntax. Again, the emptiness of *m* requires the incorporation of the complex [*shelve* + *bd*].

H&K offer an analysis of a known contrast in transitivity alternation of an apparently homogeneous class. The class is that of verbs that uniformly present the syntactic frame [V DP PP]. In this class there is a split between verbs of getting (including *get*, *splash*, *drip*, *spill*, *dent*, *anger*, *frighten*, *cut*, *split*, etc) and verbs of putting (including *put*, *smear*, *daub*, *stamp*, *kick*, *love*, *respect*, *estimate*, etc.); as seen in the examples below, *get* or *splash* appear in both transitive (6a) and inchoative (6b) syntactic configurations, while *put* or *smear* can only give rise to a transitive sentence (7a), a hypothetical inchoative being impossible (7b):

- (6) a. The pigs got/splashed mud on the wall
- b. Mud got/splashed on the wall
- (7) a. We put/smeared saddlesoap on Leecil
- b. * Saddlesoap put/smeared on Leecil

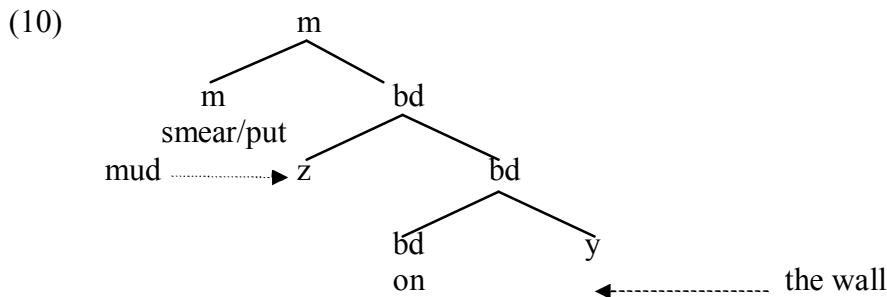
Recall from *shelve* in (5) that verbs with a prepositional complement are zero-related to a basic dyadic element, merged with a monadic element. In (5), *z* becomes the syntactic object, and the upper monadic element is what H&K call a ‘transitivizer’, which introduces a syntactic subject. This element is optional in unaccusative verbs alternating between a transitive and an intransitive frame, such as *clear*:

- (8) a. The wind cleared the sky
 b. The sky suddenly cleared

However, in the case of locatio/locatum verbs such as *shelve*, it is obligatory. This fact, which we don’t have space to justify here, accounts for the impossibility of an intransitive variant of a verb like *shelve*:

- (9) * The books shelved

If so, we would expect all the verbs taking prepositional complements not to allow intransitive versions of their argument structure. This is consistent with the contrast in (7a-b), where the verbs *put* and *smear* do not allow an intransitive structure. We can safely conclude, therefore, that verbs of this group have the structure depicted in (5), with the only difference that in them, the head of the basic dyadic structure is not empty, and hence it does not require the conflation of its complement, and the head of the monadic head is also not empty, but actually contains the p(honetic)-signature of the verb:

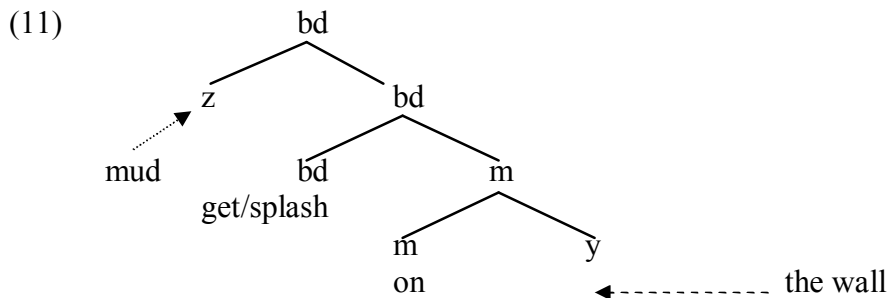


The problem arises with verbs that have a prepositional complement, but do appear as intransitives, as well as the predicted transitive structure. These are verbs such as *get* and *splash*, as exemplified by (6a,b). H&K’s explanation for these verbs is that even though they are also based on the combination of a monadic and a basic dyadic structures, their timing of merging is different from the cases above.³ In Juarros-Daussà 2003, I argued for an alternative analysis which presented a simpler and less problematic

³ According to H&K, in verbs of getting the basic dyadic head is first merged with its complement, at this point a placeholder. Instead of projecting the specifier required by the nature of the basic dyadic element, such projection is delayed, and the head of a monadic verbal element is merged instead.

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solution. I argued that the basic idea of H&K was that prepositional verbs were composed of two lexical segments, a monadic structure and a basic dyadic one, and that the differences between the two subgroups were due not to the timing, but simply to the way these structural segments were merged together. If so, the two logical possibilities are: a) merging the basic dyadic structure as the complement of the monadic one, as in (10) for verbs of putting; and b) merging the monadic structure as the complement of the basic dyadic one, as in the structure below, which I argue corresponds to verbs of getting:



In sum, there are two lexical structures corresponding to the two kinds of verbs with prepositional complements, defining those that alternate and those that don't. The problem however remains of how to ensure that a given verb falls into the right group. In other words, we have to prevent verbs like *smear* from being associated with the structure in (11), while making sure that verbs like *splash* do. In order to achieve this, H&K propose a solution that somewhat diverts from their program of explaining lexical argument structure solely in terms of the structural properties of the basic lexical categories in (1). A new element is introduced, which H&K call 'manner index'.

The basic argumentation relies in the observation that verbs of getting include as an integral part of the meaning of the verbs themselves an adverbial semantic feature that carries information concerning the argument occupying the specifier position in the basic dyadic category, which will become the syntactic object of the verb (*mud*, in the examples above, and *hot chocolate* in (12)-(13) below). Since this element bears the 'patient' theta role, this class of verbs is termed the 'patient-manner' verb class, be it the syntactic object of the verb (12) or the syntactic subject (13):

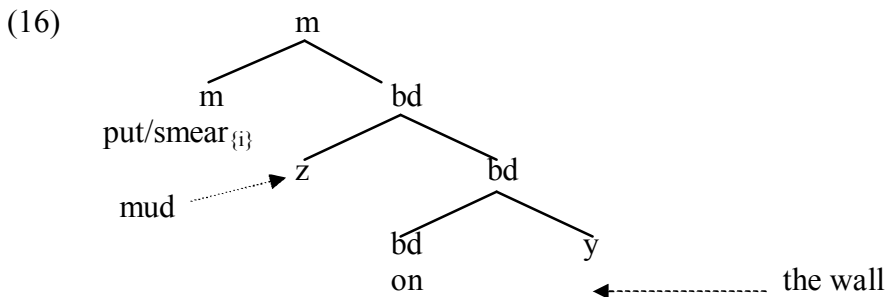
- (12) The children got/splashed/dripped/spilled hot chocolate on the carpet
- (13) Hot chocolate got/splashed/dripped/spilled on the carpet

In both sets of examples above, there is not only the information of hot chocolate ending up on the carpet, but also information about the specific way in which it got there. Nothing is however said about the external argument. This contrasts with the second type of examples, corresponding to verbs of putting, which are 'agent-manner' verbs:

- (14) The children put/smeared/daubed/stamped paint on their clothes
 (15) * Paint put/smeared/daubed/stamped on their clothes

The semantic feature carrying adverbial information is represented by a curly bracketed index, $\{i\}$, and it is treated as subject to syntactic binding by the element it is associated with. Binding is roughly understood as happening between an element and its c-commanding antecedent, where no other potential antecedent intervenes. In this sense, the adverbial feature in agent-manner verbs like *put* is obviative, necessarily bound by an external (presumably, to the argument structure projected by the verb) element. Object-manner verbs like *get*, on the other hand, have a proximate adverbial feature, necessarily bound locally, by an element present in the lexical projection of the verb. If so, the alternating verbs will have to allow binding of the manner component feature by the internal argument in both the transitive and the intransitive syntactic structures, while the non-alternating verbs will have to block such binding from their internal argument and allow it from the external argument; as a consequence, the intransitive structure in the non-alternating verbs will be impossible (15), for there is no external argument in it (but only an internal argument that becomes the syntactic subject).

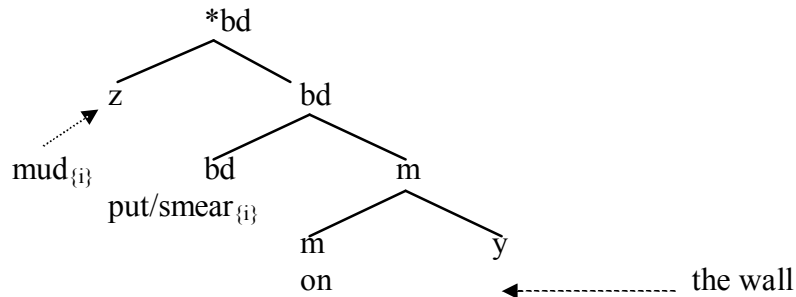
Now, looking again at the structures associated with both kinds of verbs, it should be clear that they make the right predictions. Recall that non-alternating verbs such as *smear* or *put* have an agent-manner component, which should be externally bound. Recall the structure associated with this verbs, repeated below with the addition of the external manner component index $\{i\}$ associated with the verbal root:



In (16), the obviative index notated by $\{i\}$ can be c-commanded by the sentential subject, even when the sentential object *mud* is introduced in place of the variable *z*. However, if we were to assign the wrong structure to *smear* –mainly, the one corresponding to *splash* in (11)–, such binding would be prevented by the object intervening between the manner component and a potential external binder; since the object is itself a potential binder, the manner component would not be bound externally, and the structure would be ill-formed:

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(17)



Clearly, the opposite is the case for the alternating verbs, in which the proximate adverbial component will always be successfully bound by the internal argument of the verb, independently of it ending up as the sentential object (as a structure parallel to (17) will produce) or as the syntactic subject (if *mud* becomes a derived subject.)

In sum, verbs of syntactic frame V DP PP are composed of two segments, a monadic structure and a basic dyadic one, and the differences between the two groups are due simply to the way these structural segments are merged together. The assignment of one structure or the other to particular roots is determined by the existence of obviative versus proximate adverbial features associated with the particular roots, together with general principles of binding theory (part of a yet to be elucidated syntax of obviation, examples of which abound in other linguistic domains.) While the introduction of adverbial components somehow diverts from the original focus of H&K's enterprise, it is a fine example of the fine interaction between structural and semantic elements of the lexical entries.^{4,5}

⁴ Beyond the transitivity alternations considered above, these structures make the right predictions concerning the impossibility of eliminating the external argument for the verbs of putting by any syntactically available procedure, while verbs of getting present the mirror image. In the following examples, the external argument has been eliminated by means of an inchoative, a middle, a nominalization and a compound, successively:

- i. * Mud put on the wall
- ii. * Mud puts on the wall easily
- iii. * A put/smear of mud on the wall
- iv. * jail-put prisoner
- v. Mud got on the wall
- vi. Mud gets on the wall easily
- vii. A splash of mud on the wall
- viii. mud-splashed wall

⁵ In addition, these structures make the right predictions for adverb position:

17. I splashed/got mud all morning on the wall
18. */? I put/smeared mud all morning on the wall
19. Mud splashed/got all morning on the wall

This is of course assuming that the adverb placement between the object and the PP is possible only in the case of *get/splash* because only in that case are the object and the PP in different segments within the argument structure, that is, in different lexical categories. The intuition behind this claim is that syntactic adverb insertion might be sensitive to lexical structure, in that it is only available at lexical category

In the rest of this paper I show that the structures proposed in my interpretation of H&K can be used to explain the patterns of behavior that we observe in Spanish prepositional verbs with respect to the locative alternation. I then expand the analysis to account for the existence of two classes of prepositional verbs in Spanish first discovered by Demonte 1991. I show that the existing patterns are the ones predicted by the theory in a surprisingly exact way. The reasoning goes as follows: if there are two factors that determine the syntactic behavior of the verbs considered above (i.e., the structural properties of the lexical elements they are related to, on the one hand, and the presence of an index that is part of the obviation system of the language, on the other hand), the question arises of whether these two components are dependent of each other (and, say, always appear associated in a fixed manner) or can be shown to maintain a certain degree of independence from each other (and, say, show different patterns of combination). I here explore the hypothesis that the second is the case. I show the productivity of such hypothesis by identifying the four lexical argument structures that the free combination of these two elements predicts.

2. Prepositional Verbs in Spanish

The locative alternation has been identified since early work in languages as diverse as English, Berber, Igbo, Japanese, and Russian.⁶ Spanish examples are presented below:

- (18) José cargó arena en el camión
José loaded sand on the truck
(19) José cargó el camión con arena
José loaded the truck with sand

In Spanish, as in English, not all locatio/locatum verbs participate from the locative alternation. In fact, all possible patterns are attested: alternation (20), locatum as direct object only (21) and locatum as object of preposition only (22):^{7,8}

- (20) a. Juan roció lejía en la camisa
Juan sprayed bleach on the shirt

boundary. This hypothesis makes interesting predictions that go beyond the focus of this paper; for example, one would expect that the lexical category boundary is the only available site for an infix to be inserted (see Travis 2000).

⁶ See references in Levin 1993 and Levin and Rappaport Hovav 2005, as well as at the end of this paper.

⁷ As briefly noted in the introduction, English too presents the three possible patterns (Levin, 1993): locative alternation (*load, dust, pile, splash, wrap...*), locatum as direct object only (*arrange, pour, suspend, raise, pour...*), and locatum as prepositional object only (*adorn, flood, infect, saturate, soak...*).

⁸ Demonte's explanation rests upon the aspectual properties of the predicates; while verbs like *rociar*, 'spray' are atelic, the other two predicates, *echar*, 'pour' and *llenar*, 'fill', are telic. In her account, the aktionsart of the predicate, and not only its lexical composition, mediates the syntactic realization of arguments.

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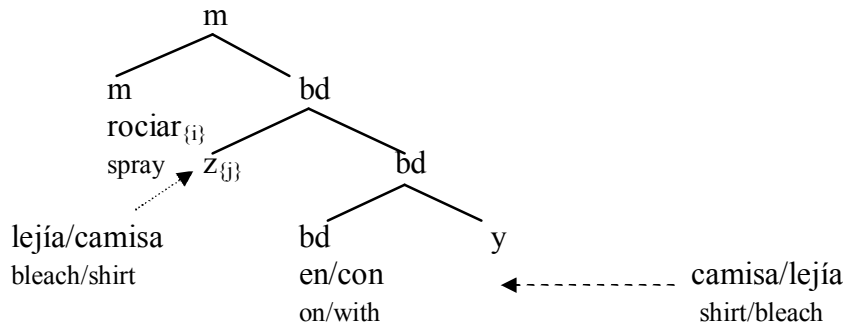
- b. Juan roció la camisa con lejía
Juan sprayed the shirt with bleach
- (21) a. Jaime echó agua en la jarra
Jaime poured water into the jar
b. * Jaime echó la jarra con agua
Jaime poured the jar with water
- (22) a. * Julia llenó agua en el vaso
Julia filled water in the glass
b. Julia llenó el vaso con agua
Julia filled the glass with water

Here I propose an explanation of these facts within the framework of the revised theory of H&K that was presented above. Crucial to my analysis is the obviative/proximate index. In H&K, the nature of the index determined the two different merging patterns of the two lexical categories involved in the building of the argument structures in question (hence obtaining the structure of verbs of getting and that of verbs of putting). Inspired by a remark about the middle construction in English in which H&K claim that on occasion the index can appear in a structure independently of the semantics that motivated it, I expand their idea by completely isolating the structural properties of the obviative/proximate index from the structures they supposedly conditioned in the first place. I show that doing so predicts the existence of four argument structures, by mere combination of the two kinds of indexes and the two kinds of merging patterns of the lexical categories. These predictions are then verified in the syntactic behavior of Spanish prepositional verbs, which include verbs with a syntactic frame V DP PP, and a specific kind of verbs with a syntactic frame V PP. I therefore argue for the existence of the obviative/proximate index in argument structure as a productive tool to explain the syntactic behavior of a wider typology of verbs than the one presented in H&K.

Recall that in our modification of H&K's analysis of V DP PP verbs, the two different structures (that of verbs of getting and that of verbs of putting) were obtained by merging the two lexical segments that the verb was made of (one monadic and one basic dyadic), in consonance with the binding requirements of the manner component index that was part of the independently motivated linguistic system of obviation. I here propose that the resulting structures correspond to the first two groups of prepositional verbs in Spanish, exemplified by *rociar*, 'spray' (also *cargar*, 'load'), which presents the locative alternation, and *llenar*, 'fill', which does not. Let's examine each case in detail.

Consider first verbs that allow the locative alternation, examples of which also include *grabar*, 'record', *imprimir*, 'print', *untar*, 'spread', *salpicar*, 'splash', etc. I propose that these verbs have the structure of verbs of putting, and hence are composed of a monadic category with a basic dyadic category as its complement, and an obviative index that requires an agent to bind it:

(23)



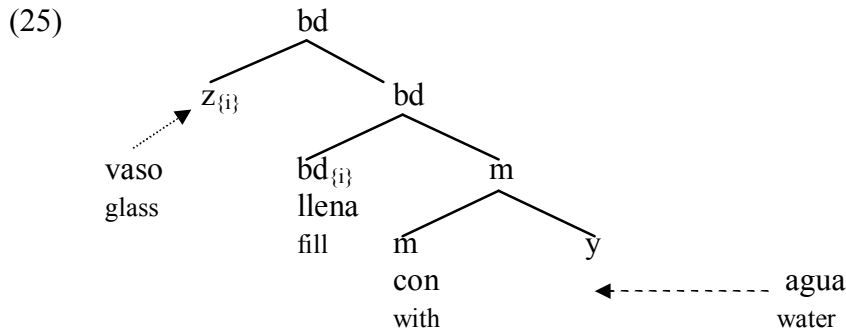
The alternation is based on the choice of prepositional type to be the root of the basic dyadic structure. Following H&K, I acknowledge two types of lexical prepositions: the preposition of terminal coincidence that appears in verbs like *put*, *splash*, and locatio verbs like *shelve*, and which is paraphrasable as ON; and the preposition of central coincidence, appearing in verbs like *get*, *smear*, and locatum verbs like *saddle* or *box*, which can be paraphrased as WITH. Both prepositions have the same structure (a basic dyadic one), but determine mirror distribution of the arguments. The preposition of terminal coincidence (ON) converges only in the case that the locatum argument (*bleach*, in (23)) is in the specifier position, and the locatio argument (*shirt* in (23)) is in complement position. The reverse is true for the preposition of central coincidence. Therefore, the basic claim is that the verbs presenting the locative alternation present an optional selection of the type of preposition heading their complement, and hence can act as either locatio or locatum verbs. The reason for this optionality might well be related with the verbs of this group being ‘agent oriented’, and hence somehow more *committed* to the predication of the agent than to the predication of the internal arguments.

Moreover, the presence of the obviative index makes the prediction that the external argument be obligatory, and hence that an inchoative alternant in which (either) object raises to subject position be impossible. Such prediction is met, as shown below, using the clitic *se* and ignoring the irrelevant impersonal reading:

- (24) a. * La lejía se roció en la camisa (sola)
the bleach se sprayed on the shirt (on.its.own)
b. * La camisa se roció con lejía (sola)
the shirt se sprayed with bleach (on.its.own)

Consider next those verbs that present only the alternant in which the locatio argument appears as the direct object of the verb. Such verbs are exemplified by *llenar*, ‘fill’, *rellenar*, ‘refill’, *disolver*, ‘dissolve’, *adornar*, ‘adorn’, etc. I propose that these verbs have the structure of verbs of getting, i.e., a basic dyadic category with a monadic one as complement, and a proximate index requiring the internal object to bind it:

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These verbs are ‘patient oriented’, and therefore the verbal root appears as the head of the basic dyadic structure and is predicated of the locatio object. Such verbs seem to select a preposition of central coincidence WITH (*con* in Spanish, but the default preposition *de*, ‘of’, is also possible, see Hirschbüler 2006) as the head of its complement, the monadic structure, which in turn forces the interpretation of its complement as the locatum argument. By hypothesis, it is some component in the meaning of the verbal root that determines this distribution of internal arguments and the impossibility of a preposition of terminal coincidence that would reverse such distribution (and hence produce the ungrammatical alternant in which the locatio argument appears as the object of the preposition). Following the reasoning used for the alternating verbs above, it might well be that it is precisely the object-oriented nature of the verb that allows it to play a role on the distribution of the internal arguments.

Furthermore, the familiar prediction regarding verbs with this structure to be able to appear as inchoatives, by raising of the argument in the specifier position of basic dyadic structure to sentential subject position, is met:

- (26) El vaso se llenó con/ de agua (solo)
 The glass se filled with/of water (on.its.own)

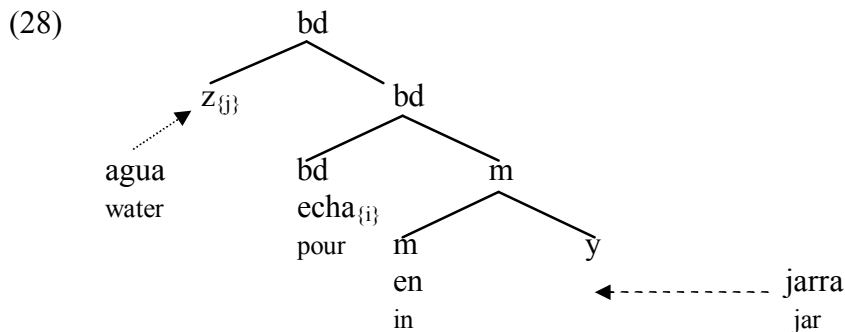
Notice that a hypothetical inchoative created with the wrong distribution of arguments, with the locatum as specifier of the basic dyadic structure raised to subject position, results in ungrammaticality, offering further support to the structure in (25):

- (27) * El agua se llenó en el vaso
 the water se filled in the glass

Now, what about the verbs that present only the alternant in which the locatum argument is the object of the verb, exemplified by *echar*, ‘pour/throw’, but including others like *esparcir*, ‘scatter’, *derramar*, ‘spill’, *verter*, ‘pour’, *inscribir*, ‘inscribe’ etc.? It seems like the possible structures provided by H&K’s theory are all used up, and still here is a pattern that we have yet to account for. I propose that in order to account for this

further group of verbs we have to separate the two main components that determine the structures under consideration, that is, the combination of lexical categories and the obviative/proximate index, and allow for some degree of autonomy from each other. So far, we have only seen the obviative index associated with the verbs of putting, and the proximate index associated with verbs of getting. The implication has been that these associations were dependent on each other, that is, that only the obviative index would make the derivation corresponding to verbs of putting converge, and so on. However, I here propose that such inference is not true, and that we indeed find all the logical combinations of structures and indexes considered as independent of each other.

I propose that verbs in which the locatum argument is always the direct object of the verb have the lexical structure of verbs of getting, but unlike these, they have an obviative index and a preposition of terminal coincidence, like the verbs of putting (represented here by the different indexing on the object and the verbal root):



This structure is, so to speak, a hybrid. As such, it presents hybrid properties. On the one hand, the structure of verbs of getting blocks the possibility of alternating between a preposition of terminal coincidence and one of central coincidence, in this case restricting it to the opposite preposition that we found in the verbs like *llenar*, ‘fill’. The important point is not which preposition appears in the structure, but the fact that it is fixed in the lexical entry, *selected* by the verbal root, and cannot be interchangeable, as it could with verbs that present the alternation, such as *rociar*, ‘spray’.

On the other hand, the structure of verbs of getting would predict the alternation between a transitive and an inchoative construction. In fact, an inchoative is however not possible:

- (29) * El agua se echó en la jarra (sola)
 the water se pour in(to) the jar (on.its.own)

An explanation for this fact is that the inchoative is blocked by virtue of the structure having an obviative index. Such index should be bound by an argument distinct from the internal argument. If the internal argument were to rise to sentential subject

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position, there would be no possible argument to bind the obviative index different from the internal argument, and the requirements of the index wouldn't be met. The only possibility for such requirements to be met is if an external argument is introduced. Hence the forced transitivity of the construction.

In sum, by separating the two components of the structures at hand, and allowing for their free combination, we obtain the structure corresponding to the third group. The question now arises of whether a fourth logical possibility, the one corresponding to an argument structure like that of verbs of putting but without an obviative index (or with a proximate one) exists. Next I argue that such possibility is also attested in Spanish.

Demonte 1991 shows that in Spanish there are two classes of verbs with the syntactic framework V PP. They are exemplified by the following:

- (30) La tesis consta de cinco partes
The dissertation includes of five parts
- (31) Esteban abusa de la bebida
Esteban abuses of the alcohol

These two kinds of verbs present mirror patterns of grammaticality with respect to a number of properties. Among these: possibility of null PP, island effects in extraction contexts, null preposition in coordination, transitive variant without preposition, and a cluster of properties associated with unaccusative verbs for one of the groups.

Based on these properties, Demonte proposes that verbs like 'consist' in (30)⁹ are unaccusatives subcategorizing for a small clause, the subject of which is the sentential subject. The thematic role of the DP is assigned by the whole PP, but the PP cannot assign accusative case to the DP, because PP is not a lexical head, and hence the raising of the DP to subject position:

- (32) [IP [VP V_{unacc} [SC DP PP]]]

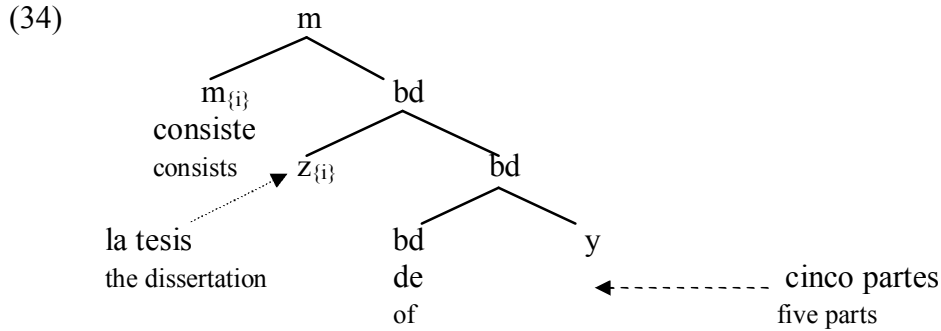
Verbs like (31),¹⁰ however, have a regular accusative (transitive) structure, the preposition not being a *real* preposition, but just an explicit mark of "agreement case" linked to the aspectual properties of the verb:

- (33) [IP DP [VP V_{tr} DP]]

⁹ Also *consistir en*, 'consists of', *prorrumpir en*, 'burst into', *abundar en*, 'abound', *adolecer de*, 'suffer from', *versar sobre*, 'be about', *redundar en*, 'redound to', *reposar en*, 'rest upon', *carecer de*, 'lack', *abogar por*, 'argue for', *irrumper en*, 'burst in', *dar a*, 'give to', *salir a*, 'go out to', *sustituir a*, 'substitute', *equivaler a*, 'amount to', etc.

¹⁰ Also *discrepar de*, 'disagree in', *insistir en*, 'insist on', *incurrir en*, 'incur', *prescindir de*, 'do without', *alardear de*, 'brag about', *pugnar por*, 'fighting for', *renunciar a*, 'resign', *resistir a*, 'resist', *maldecir a*, 'curse', *obedecer a*, 'obey', *depender de*, 'depend on', *confiar en*, 'trust', *optar por*, 'choose', etc.

I propose that the verbs of the first type (in (30)) correspond to the last of the possibilities of combining the structures and the manner indexes that we were considering in the previous section. Recall that the missing combination was one with the structure of verbs of putting and a proximate index requiring the internal object to bind it:



This structure forces the internal object to rise to subject position in order for it to be able to bind the proximate index of the verbal root. Hence, a transitive counterpart of this structure should be impossible. The data corroborates this prediction:

- (35) * Lidia consta la tesis de cinco partes
 Lidia consists the dissertation of five parts

The rest of properties of this group of verbs are also explained assigning them the structure in (34). Since these verbs have derived subjects (their argument structure can be depicted as a “double object unaccusative”), the cluster of properties identified for unaccusatives follow: for instance, the impossibility of omitting the PP presumably follows from recoverability issues, since it contains the trace of the subject; the impossibility of a transitive counterpart also follows, since the P element is the head of one of the segments of the lexical projection of the verb, and it is required as complement of the monadic head. The impossibility of a nominalization is shared by verbs with the structure of verbs of putting, and seems to be a feature of this kind of structure.

3. Summary

In this paper I argued that by allowing independence to the different components of the lexical structures that H&K assign to prepositional verbs, and observing the interaction between them, the following predicted typology arises, represented here by Spanish data:

	Obviative Index	Proximate Index
verbs of putting	<i>rociar</i> , ‘spray’	<i>constar</i> , ‘consist on’
verbs of getting	<i>echar</i> , ‘pour’	<i>llenar</i> , ‘fill’

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