More radiographies of grammatical categories
Juan Romeu

Summary: In Romeu (2014a) and (2015) I presented a model in which grammatical categories are considered to be only theoretical labels that gather lexical items that lexicalize similar parts of the syntactico-semantic structure of languages. In those works I give evidence based on prepositions.
In this work, I show that not only this model can be applied to prepositions but also to other categories and phenomena. By these means I present different ways to explain controversial questions in the analysis of languages. I show that this model allows us to address and explain, among other questions, the differences between prepositions and particles, the real nature of stranding, why only certain languages have resultatives, the difference between restrictive and non-restrictive adjectives, what hides behind the apparently redundant nature of agreement, etc.

0. Introduction

In Romeu (2015) I explain that grammatical categories are labels that gather lexical items that give phonological content to similar (but not exactly the same) parts of the syntactico-semantic structure of languages. By these means it is possible to understand why lexical items that belong to the same category can show different behaviors. We saw the case of preposition *hasta* (≈ 'up to, until'), which, against other prepositions, seems to behave like an adverb in certain circumstances, combining with a pronoun in nominative case (*hasta yo lo hice* 'even I did it'), unlike prepositions like *a* (≈ 'to'), which always combine with pronouns in oblique case (*a {mí/*yo* 'to {me/*I}').
To make this possible I proposed a model in which the syntactic structure is composed by nodes, each of which encodes an indecomposable semantic primitive. The meaning of these primitives can be altered or specified by modifiers:

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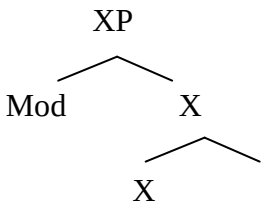
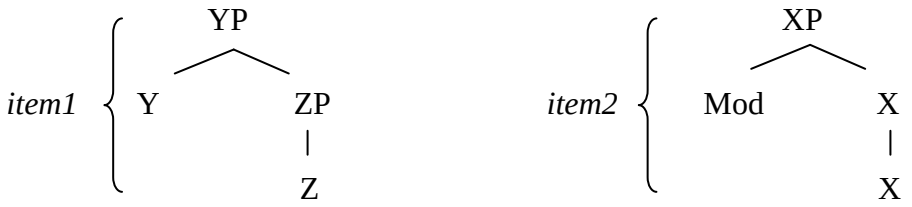
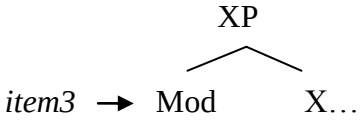


Modifiers are elements with more specific semantic content.
Once the structure is built, by combining nodes and modifiers, a lexical item can lexicalize one node (2a), a node plus a modifier or a modifier alone (2c):

(2) a. b.



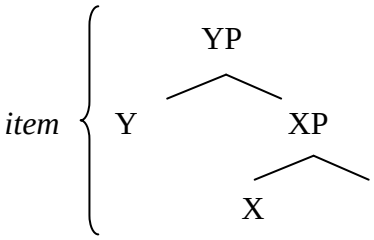
c. .



Romeu (2015:2-3)

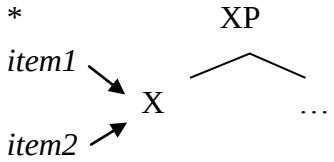
It is also possible that one lexical item lexicalizes more than one node:

(3)



The opposite is, though, not possible. One node cannot be lexicalized by more than one lexical item:

(4)



This bunch of possibilities makes it possible to associate different lexical items with one node and classify them together into one category. For instance, we saw that lexical items that lexicalize a part of the structure close to node *Rel* (which introduces a relation) are classified into the category of prepositions, no matter they do not exactly lexicalize the node *Rel*, in contrast to what happened in the past where they obligatorily had to lexicalize the node *P*.

We saw a preposition in Spanish that only lexicalizes *Rel* (like *de* '≈of'), prepositions that lexicalize the node *Rel* together with a modifier (*a* '≈to' and *en* '≈in') and, also, the case of *hasta* ('≈ up to, until'), which only lexicalizes a modifier of *Rel*.

This fine-grained analysis makes it possible to explain why all these lexical items are related (they lexicalize a part close to *Rel*), but, at the same time, it explains the syntactic differences between them (because they lexicalize elements of the syntactic structure with different properties).

In the work I present here I develop the ideas that I already hinted in the handout "A minimal cartography: Some notes and ideas for September" (Romeu 2014b). We will

see how these radiographies of lexical items make it possible to understand some of the more controversial questions of the nature of languages. I briefly present these questions, with the idea of developing them in future works.

First, I show that what differentiates prepositions from particles is that the latter lexicalize modifiers, not nodes. These modifiers, as such, can occupy different positions in the structure, combining, for instance, with *Rel*, but also with *proc*. In this latter case, they can be lexicalized before or after the lexicalization of the verb, which will make them be considered verbal prefixes or particles, respectively.
Second, I show that, in the same way that prepositions like *a* or *to* can be differentiated by means of the modifier of *Rel* that they lexicalize (*Disjoint* and *ScalarPoint*, respectively), adjectives, whose lexicalization area includes (or spans) *Rel*, can also be differentiated by means of the different modifier of *Rel* they lexicalize. In this way I explain that English has resultatives because adjectives in that language, in the same way as *to*, lexicalize *ScalarPoint*, which makes it possible to interpret the points in the scale that are necessary for the process to take place.

Third, the possibility that modifiers can occupy different positions in the structure allows us to compare the contrast between *a* ('≈ to') and *en* ('≈ in') in Spanish with the contrast between *ser* and *estar* ('≈ be') and even with the contrast between indicative and subjunctive and between different verbal tenses.

Fourth, assuming that modifiers have a repercussion in syntactico-semantic selection, I show that it is necessary that there exists compatibility between modifiers of different parts of the structure and that this compatibility is what agreement consists on.

Finally, I suggest a way to explain the difference between restrictive and non-restrictive adjectives according to this model. I also show that this confirms that conceptual information is present in the syntactico-semantic structure before the process of lexicalization.

1. Prepositions, particles and verbal prefixes

The fact that lexical items can lexicalize a node or a modifier plus a node makes it possible to differentiate particles from prepositions. The difference is that particles lexicalize only modifiers. This means that particles do not lexicalize *Rel*, but a modifier that can be combined with *Rel*.
In languages like English it is possible to find the following possibility:

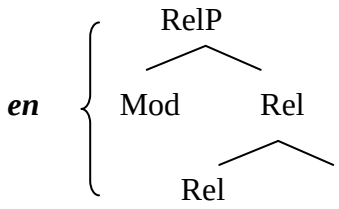
(5) He went in (the room).

In Spanish it is not possible to find the same example, but with *en*:

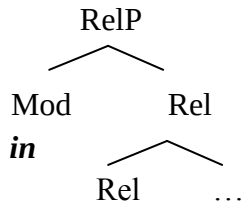
(6) Entró en *(su cuarto)

This is due to the fact that unlike *en*, in English *in* only lexicalizes a modifier:

(7) a.

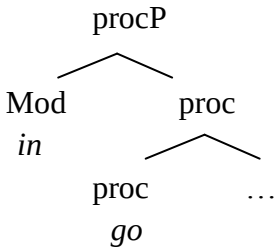


b.



According to Romeu (2012b), in the case of (5) *in* lexicalizes a modifier with a meaning similar to [interiority]. As a modifier, it can combine with different elements in the structure. In this case Romeu (2012b) suggests that it combines with *proc* (the node that introduces a process) indicating that the process takes place inwards, i.e., the process of going is realized in a direction that goes towards the interior of a place. A simplified structure of (5) is represented below:

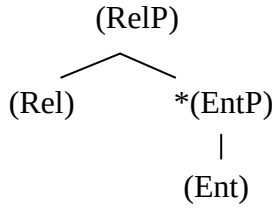
(8)



The fact that *in* is a modifier of *proc* and not of *Rel* explains why it is not necessary that there is a *DP* or *Ent(ity)P* (cf. Romeu 2015) as a complement of *Rel*. The structure would already be completed. For this I assume that the structure is divided into areas that need to be completed. One of these areas is the one composed by (*Rel* +) *Ent* in which *Ent* needs to be present: [1]

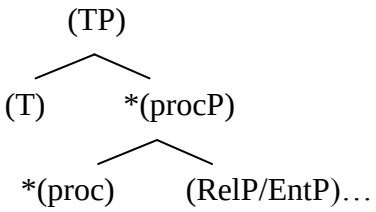
[1] One could also think that *Rel* needs to be present. This would explain why it has been said that any *NP* or *EntP* must be case marked. Assuming that *Rel* lexicalizes case in languages, what probably occurs is that, in languages like English, nouns can lexicalize *Rel* in nominative case, while in languages like Spanish, nouns only lexicalize *Ent* and nominative case is lexicalized by a silent element or by articles and determiners. This would explain the condition of pro-drop language of Spanish, against English, and also the possibility of English, unlike Spanish, of having *N-N* compounds like *banana box.* The fact that the noun lexicalizes *Rel* in English makes it possible that there is a Figure or specifier of that *Rel*. In Spanish it would be necessary to insert the most basic (non silent) element that lexicalizes *Rel*: *de*. For the nominative to remain silent, it would be necessary to license it somehow, by some external element. Verbal inflection could be one of those elements, but it is not the only one. This could explain why there are pro-drop languages with no verbal inflection.

(9)



Another area is the one of the verb, in which at least *proc* needs to be present, but its complement (which belongs to a different area), or higher layers like *Tense*, can be absent:

(10)

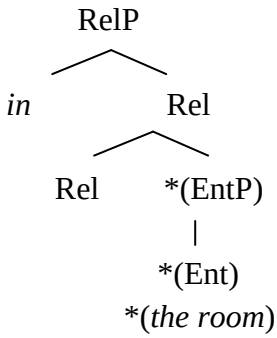


We see that, in line with the *anchor condition* (cf. Caha 2009), the lower element of an area needs to be present.[2] These lower elements are, for instance, *Ent* and *proc* (also *Stat* in stative constructions) of their respective areas.
This principle makes it possible to explain contrasts like the following, which moves us back to the case of *He went in*:

(11) a. He went in (the room).
b. He is in *(the room).

In the first case *in* lexicalizes a modifier of *proc*, whereas in the second case *in* lexicalizes a modifier of *Rel*.[3]
In this second case, *the room* would be necessary to complete the *Rel* + *Ent* area:

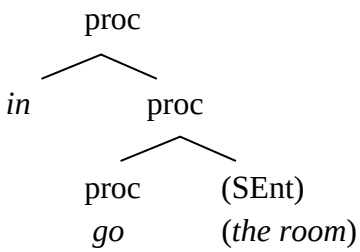
(12)



[2] This does not seem to happen when *res* is a complement of *proc*. There are verbs that can lexicalize *proc* and *res* or only *proc*. I leave this question for future research. One possibility is that *res* does not belong to the area to which *proc* belongs.
[3] In Romeu (2012b) I suggest that it lexicalizes the modifier plus *Rel*. The problem is that this would mean that there are two different instances of *in* in English. Although this would not be desirable, it is not strange. If we observe languages like Norwegian, we can find an element *inne*, another *inn* and another *i* for cases in which English only has *in*. While *inne* and *inn* in Norwegian seem to lexicalize modifiers, *i* seems to lexicalize only *Rel*. In any case, the area of *Rel* would be incomplete in (11b) and that is why the example is not natural.

But it would not be necessary in the first case, because the *proc* area is completed, despite the absence of *EntP*:

(13)

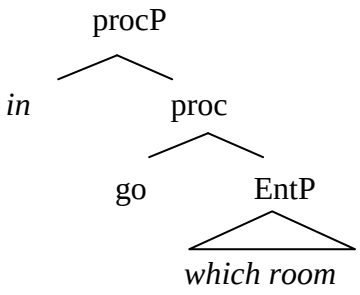


Thus, only when *in* modifies *proc* the presence of the *EntP* is optional.
This fact automatically explains some controversial questions. First, it explains the cases of *stranding* in English:

(14) Which room did he go in?

What happens in these cases is not that the preposition is stranded, left behind by the *DP* or *EntP*, but that those two elements are not part of the same constituent in any moment. The *EntP which room* is a complement of *proc*; *in* is a modifier of *proc*:

(15)



Thefore, the *EntP* can be lexicalized in a different position with no need of taking *in* with it, because *in* is a modifier that does not belong to the constituent of this *EntP* in the structure.

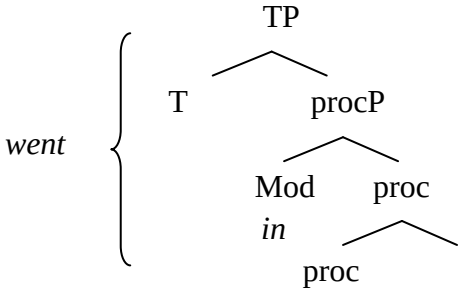
It is also possible to explain why elements like *in* only have a directional meaning if they are lexicalized after the verb. If they are lexicalized before, together with the *EntP*, the interpretation is only locative:

(16) In the room he ran.

As the modifier occupies the position adjacent to the node in the structure it has to be lexicalized in a close enough position. The far position that *in* occupies in (16) indicates that it lexicalizes a modifier of *Rel* and not of *proc*. The directional meaning is only possible if *in* appears as a modifier of *proc* (and of a *proc* that has the meaning of movement). The meaning would be that the process happens in a direction inwards. If *in* modifies *Rel*, the meaning is that relation takes place in an inner place.

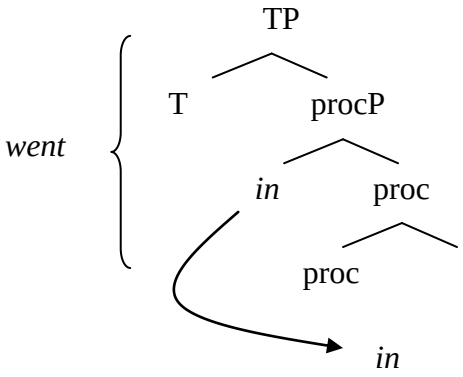
At this point, it is necessary to clarify that the fact that a modifier needs to be lexicalized in a certain position does not mean that it necessarily appears immediately adjacent to the element it modifies. As I explain in Romeu (2014b), in the process of lexicalization there is a process that I call *slipping* by means of which, when there is an element in the middle of the lexicalization area of another one, the former can be lexicalized either before or after the latter, depending on different factors (generally phonological). Consider the following structure for *went in*:

(17)



In this case, the modifier that *in* lexicalizes appears in the middle of the lexicalization area of *went*. At the moment of lexicalization of the structure, physical limitations force to lexicalize the elements sequentially:

(18)



Altough *in* appears in the middle of the lexicalization area of *went*, it needs to be lexicalized after *went*.

Sometimes more than one lexical item can behave as a lexicalization block or a complex lexical items at the time of lexicalization. In those cases, if an element appears in the middle of its area, again it has to be lexicalized either before or after the whole block. This explains the possibility of finding particles in different positions (like in *John looked the information up* / *John looked up the information*)[4] or in the case of clitic climbing that we will see before. In any case, I leave the necessary conditions for a lexicalization block to be built for further research.

[4] It could also be the case that *up* in the second case lexicalizes a modifier of *proc* and in the first one a modifier of *Rel* that belongs to an internal small clause.

Now, as we have seen, in English, the preference is to lexicalize *in* after *went*. But in other languages, like Czech, Russian or Latin, this element can appear before the verb. In Romeu (2012a) I suggest that this is what we call verbal prefixes. In that same work I show that if we consider verbal prefixes to be modifiers, it is possible to explain cases in which there are two instances of a same element, and also the cases in which a verbal prefix is different from the lower preposition:

(19) a. One **v**-bezala **v** magazin.
she V-ran in the.shop-ACC
'She ran in the shop.'
Russian: Spencer y Zaretskaya (1998:28)

b. **in** aedis **ac**-cederes.
house.ACC to-march.SBJV.IPFV.2SG
'you should come into the house'
Latin: adapted from Acedo-Matellán (2010:214)

In these cases there is a lexical item that lexicalizes the modifier of *proc* (*v*- and *ac*-) and another that lexicalizes the modifier of *Rel*, or even *Rel* (*v* and *in*). These modifiers can appear in different positions of the structure, but they do not need to be exactly the same; it is enough that they are compatible. This is why they do not need to be lexicalized by the same element.

The fact that elements like particles lexicalize modifiers makes it possible to account for the possibility of finding sequences of particles in complex examples like the following:

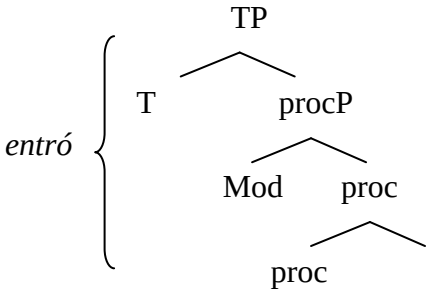
(20) The boat drifted up over in front of the palace.
Svenonius (2010:151)

Having in mind that these elements can lexicalize modifiers of *proc*, modifiers of *Rel* or even the node *Rel* and that one single node can combine with different modifiers (as long as there is no semantic incoherence), it is possible to account for examples like the one in (20) and for more complex examples.

The fact that a modifier of *proc* can be lexicalized before or after the verb puts on the same level the cases of stranding in English and examples in Spanish like *sobrevolar* ('fly over'), where an element like *sobre* lexicalizes a modifier of *proc*, but it appears before the verb.

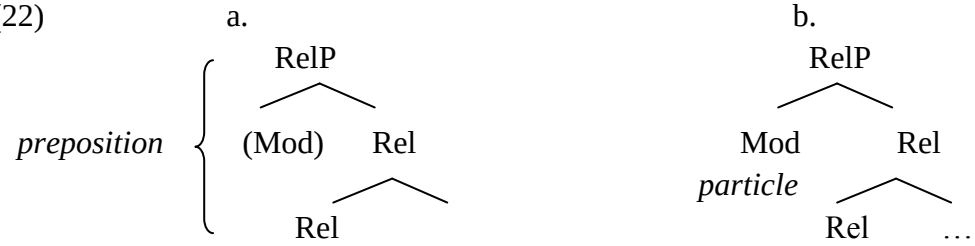
It is also possible to think that there are cases in which the modifier is lexicalized together with the verb, like in *entró* ('entered'), where it is not easy to determine the division between the different lexical items that lexicalized the structure in the past:

(21)



We have seen, thus, that English (as well as other languages), against Spanish, has particles. This is due to the fact that in English lexical items like *in* only lexicalize a modifier, unlike Spanish elements like *en*, which lexicalize the node *Rel* plus a modifier.[5] The difference in the structure between Spanish prepositions like *en* and English particles like *in* is represented below:

(22)



This difference makes it possible to explain phenomena like stranding and others that I explain in previous works, like the nature of *into* (where the structure is not *to* + *in*, but *in* as a modifier of *to*) (cf. Romeu 2012a).

2. The relation between prepositions and adjectives. Resultatives

Another difference between English and Spanish is that, as I suggest in Romeu (2014a), in English the *ScalarPoint* modifier is more productive than *Disjoint*, whereas in Spanish the more productive modifier is *Disjoint*. In this way, *to*, the basic preposition in English directional constructions lexicalizes *ScalarPoint*, unlike *a* in Spanish, which lexicalizes *Disjoint*.

ScalarPoint gives the interpretation that a point belongs to a scale. *Disjoint* gives the interpretation that a point is separated or different from another one.

[5] We saw in Romeu (2015) that in Spanish *hasta* is only a modifier. One would expect that there are examples like *Juan hasta corrió* ('Juan up to ran') in the interpretation that Juan ran up to some point, in which *hasta* is a modifier of *proc*. But this interpretation is not possible. The reason is that it is not enough that a lexical item lexicalizes only a modifier for it to behave as a particle; it is also necessary that some semantic requirements are satisfied. Unlike *in*, that can indicate that the process goes inwards, *hasta* does not specify anything about the properties of the process. It only adds the redundant information that the final point is a limit. Unlike *hasta*, in English *to* does not indicate limit, but direction, and it can combine with *proc* to indicate directionality, but only in the case that the verb does not already express directionality by itself. This explains the following contrast:

(i) Where did he {ran/?go} to?

I leave these interesting questions for further research.

Among other questions, this difference explains the contrast presented in Talmy's typology between the possibility of combining *to* with manner of motion verbs like *dance*, unlike *a* in Spanish:

(23) a. Mary danced to the store. (Ramchand 2008:111)

b. *Mary bailó a la tienda.

The interpretation that there is a scale introduced by *to* allows it to combine with verbs that do not obligatory indicate displacement by themselves. The same happens with particles like *out*, unlike elements like *fuera* in Spanish:

(24) a. The bottle floated out of the cave

b. *La botella flotó fuera de la cueva. (in a directional interpretation)

Again *out*, unlike *fuera*, lexicalizes *ScalarPoint*, which makes it possible to interpret that the process of floating is developed in an outwards direction.

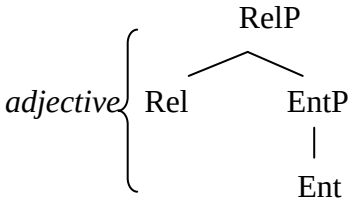
This difference also makes it possible to explain the possibility of having adjectival resultatives in English, but not in Spanish. Unlike in English, in Spanish it is not possible to find examples in which an activity verb combines with an adjective to indicate the result:

(25) a. He wiped the table clean. (Washio 1997: 5)

b. *Frotó la mesa limpia.

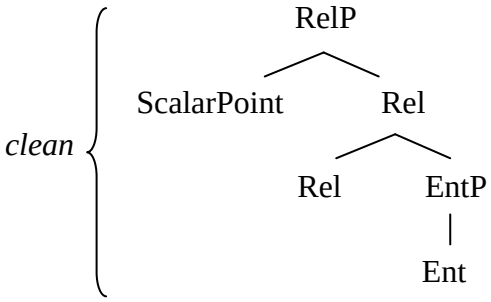
In Romeu (2015) I suggest that adjectives lexicalize at least *Rel* and *Ent*, a similar idea to the one in Amritavalli & Jayaseelan (2003) and Mateu (2002), who consider that the adjective is the combination of a preposition and a noun:

(26)



As adjectives lexicalize *Rel*, it could be the case that they also lexicalize modifiers of *Rel*. In the same way as in the case of *to* or *out*, adjectives in English lexicalize *ScalarPoint*, but this is not the case of Spanish asjectives:

(27)



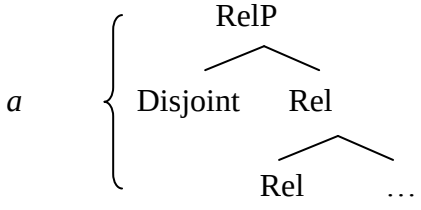
Adjectives like *clean* in English can combine, thus, with an activity verb like *wipe* and give a resultative interpretation because they lexicalize *ScalarPoint*, which indicates that the property of clean is the final point after a scale. The interpreted scale makes it possible that the process of the verb takes place. In Spanish, adjectives like *limpio* do not lexicalize *ScalarPoint* and, thus, block the possibility that the process develops. This is why *limpio* cannot appear as a resultative.

In light of this, it is possible to understand macroparameters that have been suggested in works like Snyder (1995, 2001) and Beck y Snyder (2001) like the one that establishes that a language that has resultatives can also have directional particles with manner of motion verbs. The explanation is that in languages like English *ScalarPoint* is a productive modifier that is present in the structure of these elements.

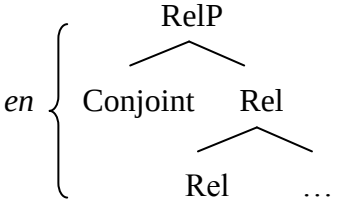
3. Modifiers in different positions of the structure

We have seen that two different elements, like adjectives and particles, share a part of their structures. In English, these elements also share the modifier *ScalarPoint*, which in both cases modifies the same element: *Rel*.
It is also possible that a same modifier combines with different elements in the structure, i.e., in different positions. In Romeu (2014a) I establish that the difference between *a* (‘≈ to’) and *en* (‘≈ in’) is due to the fact that, although both elements lexicalize *Rel*, *a* lexicalizes also the modifier *Disjoint* and *en* lexicalizes *Conjoint*:

(28) a.



b.

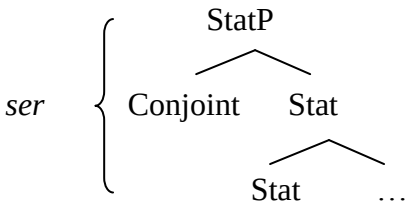


In this way the presence of *a* indicates that the established relation is not unique, but that there is at least another possible relation to which the described one is opposed. This is easily seen in directional constructions like *Juan fue a su casa* (‘Juan went to his house’), where the presence of *a* indicates that there is a place apart from the house of Juan. This other place is, at least, the place from which Juan left.

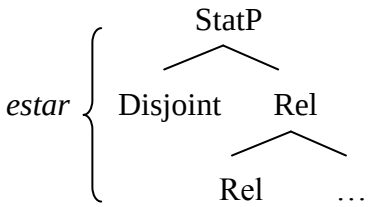
On the other hand, the presence of *en* indicates that the relation is unique, not opposed to any other. This is why *en* is not possible in a case like **Juan fue en su casa* ('Juan went to his house'), because in order to have direction and movement it is necessary to interpret at least two (locative) relations, which means two possible places where Juan can be. This is thoroughly explained in Romeu (2014a).

Based on this contrast in Romeu (in press) I suggest that this difference is also present in other levels of the structure. There I analyze the level of states (*Stat*) and I propose that the difference between *ser* and *estar* in Spanish is due to the fact that both verbs lexicalize *Stat*, but with a different modifier. While *ser* also lexicalizes *Conjoint*, like *en*, *estar* lexicalizes *Disjoint*, like *a*:

(29) a.



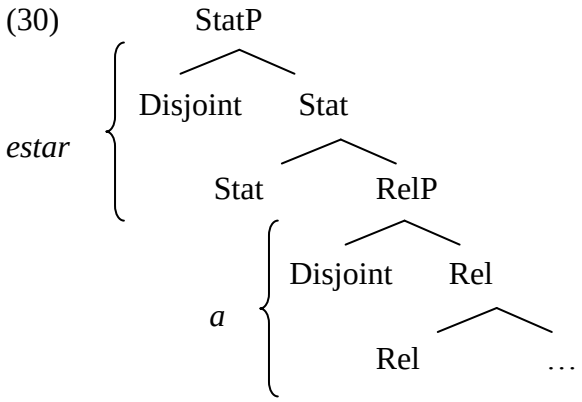
b.



In this way the presence of *ser* implies that only one state is taken into account. The presence of *estar*, on the contrary, obligatorily relates the described state to at least another one. This is why the state introduced by *estar* is generally interpreted as temporary or transitory. The existence of other states makes it possible to interpret that it is possible to change the state, unlike what happens with *ser* where only one state is taken into account and, thus, the normal interpretation is the one of permanence the only state at stake.

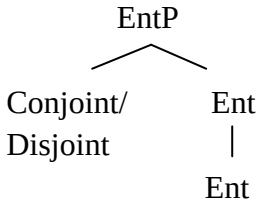
In this way I also explain in Romeu (in press) why it is possible that *estar* combines with *a* in cases like *Los calcetines están al fondo del cajón* ('The socks are at the bottom of the drawer'), which suppose a problem for authors that consider that *estar* is used when a terminal preposition is incorporated into the verb. If this were so, it should not be possible to combine it with a terminal preposition (it has incorporated). In my analysis, nothing prevents that there are two *Disjoint* modifiers in different positions:

(30)



Once the possibility that modifiers like *Conjoint* or *Disjoint* occupy different positions in the structure is available, we can think that they can combine with more nodes. In Romeu (2014b) I already consider the possibility of the presence of these modifiers combined with lower nodes like *Region* (the one which gives the points that an entity occupies, cf. Svenonius 2010) or even *Entity*:

(31)



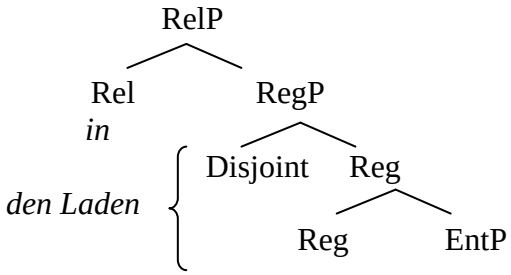
There I pointed out that the presence of *Disjoint* as a modifier of *Ent* could explain the presence of accusative in directional constructions in Latin or German:

(32) er rannte in den Laden → Directional interpretation
he ran in(to) the-AC shop
'He ran to the store.'

Den Dikken (2010:112)

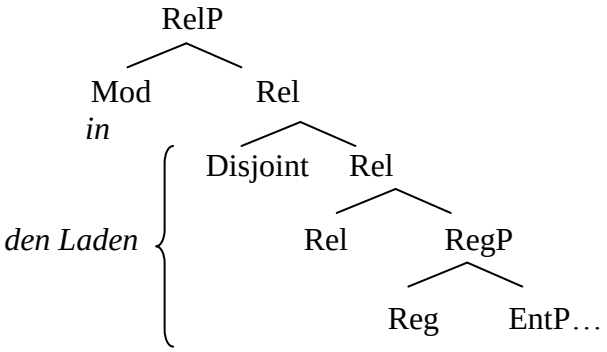
The representation that I proposed is the following (cf. Romeu 2014a:76):

(33)



However it is also possible that even in these cases the *DP* in accusative case lexicalizes up to *Rel*, with *in* lexicalizing the modifier of *Rel* and not *Rel*:

(34)



Another case in which it could be possible to think that *Disjoint* appears in lower positions is in DOM (differential object marking) constructions like *Vi a Juan* ('I saw

Juan'). If a complement can be preceded by *a*, despite it apparently occupies the position of an *EntP* (*Vi el árbol* 'I saw the tree') and despite it can be replaced by a pronoun (*Le/Lo vi* 'I saw him'), it seems that *a* in that case does not lexicalize *Rel + Disjoint* but a lower *Disjoint* modifier. However, Bassa Vanrell y Romeu (in press) give evidence in favor of considering that even in DOM constructions *a* lexicalizes *Rel+Disjoint*.

It could also be possible to consider that *Disjoint* modifies lower nodes in English constructions like *John and me*. The fact that *me* can only appear in combination with another entity (like *John*) can be due to the fact that only in those cases *Disjoint*, the modifier that opposes two elements, is licensed, because the two opposed entities are identified: only in that case it is possible to interpret a person from which another is separated.

Also the presence of *Conjoint* in the pronominal level can explain the different binding principles. Only when it is possible to identify that two entities coincide, the presence of *Conjoint* is licensed, being lexicalized with an anaphoric element like *sí* (*-self*): *María habla de sí misma* ('María talks about herself').
If the coincidence of the two entities is not possible, the presence of *Conjoint* would not be licensed and *Disjoint* would be necessary, lexicalized by a pronominal element, in order to identify the two different entities.
The difference in the structure, assuming for simplicity that both pronominal and anaphoric elements lexicalize *Ref* (which introduces referentiality), is represented below:

(35) a. anaphoric element: b. pronominal element:

At the same time, it is possible to think that *Disjoint* and *Conjoint* modify higher nodes. In Romeu (2014a:195-196) I suggest that if *Disjoint* combines with a tense node (T) we obtain the future interpretation (in line with the proposal in Ritter & Wiltschko 2014).
In the same way, it could be possible to think that if we combine the node that encodes Mood with *Disjoint*, we obtain the interpretation of a possible world opposed to the real one, which could be lexicalized by subjunctive forms.

Of course, all these possibilities are open for future and deeper research.

4. Agreement

Once we have seen that the different modifiers can combine with different parts of the structure, it is understandable to contemplate the possibility that a phenomenon like agreement, in which similar features seem to be repeated, could be explained by these means.

The apparent redundancy of agreement can be understood assuming that the same element or feature can (and generally must) appear in different positions in order to avoid semantic incoherences.

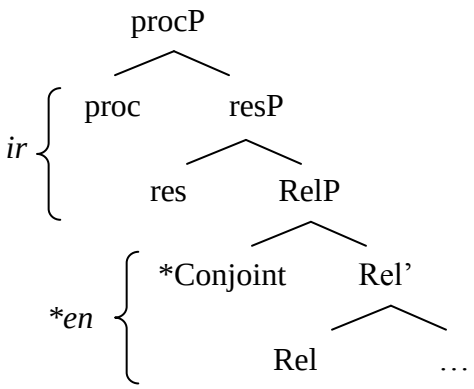
Consider the following case:

(36) Los niños juegan.
the.PL kids.PL play.PL
'The kids play'

In a case like this we see that there are three instances of the plural feature. This means, in my terms, that there are three *Plural* modifiers in different parts of the structure. In principle, I assume that plural is encoded as a modifier because with it no new element with different semantic nature is introduced (as happens, for instance, when *Rel* is introduced, where from an Entity we obtain a Relation).

With *plural* the nature of the element it combines with is preserved. Although we have more than one entity, we still have entities. This assumption goes in line with the idea in Romeu (2014a) that not only nodes can determine the syntactic combinability (or selection conditions) of its constituent, but also modifiers can condition this combinability. In that work I explain, for instance that a verb like *ir* ('go') cannot combine with *en* to indicate direction because the modifier *Conjoint* that *en* lexicalizes makes it necessary to interpret only one point and, for directionality to be possible, it is obligatory that at least two points are interpreted. The incompatibility is represented below:

(37)

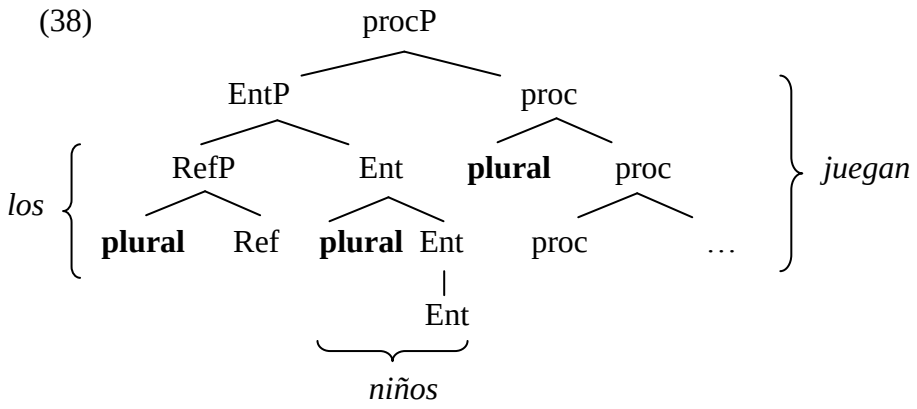


Romeu (2014a:261)

We see here a case in which a modifier (*Conjoint*) determines the selection conditions of the syntactic constituent to which it belongs:

Assuming that the plural feature is a modifier, the simplified *Los niños juegan* would be the following:

(38)



It is probably easier to see the information that gives the plural feature as a modifier of *Ent*, indicating that there is more than one entity. In the case of *Ref* the interpretation would be more complicated. The interpretation would be that there are multiple references. Maybe this precision in *Ref* is not necessary, which could explain why there are languages in which the article does not present a different form in plural. The same happens with adjectives, where the plural feature as a modifier would indicate that the property must be applied to different entities. We will see later that there are cases in Spanish, like the lack of agreement in clitics, in which it could be possible to think that there is no plural feature although it is as necessary as in the case of articles and adjectives.

With respect to the interpretation of plural combined with *proc*, in Romeu (2014b) I suggest that the modifier of *proc* is not actually *plural* but *Dispersion* (like the one that lexicalizes *por* ['≈ through'] in Romeu 2014a), as the interpretation given is not the one of more than one process, but the one of a process dispersed into multiple entities. This is why it is possible to find cases like *Los niños trajeron un tronco* ('The kids brought a log') in the interpretation that they only brought a log in total.
In any case, either we assume *Dispersion* or *plural*, a modifier is necessary for the process to be associated to more than one entity and for that there is no semantic incompatibility with the plural *EntP* that appears as the subject.
In all these cases, agreement is due to the fact that the presence of a certain feature is necessary in order to avoid a semantic crash. As agreement is a semantic process, one would expect that if the necessary feature is licensed by other means or, in other words, if the meaning that the feature gives is given in a different way, the construction is possible. This is the case of constructions like *La mayoría votaron que no* ('The majority vote no'). Here, the conceptual meaning of *la mayoría* makes it possible to agree with a verb in plural, no matter there is no plural modifier in the underlying

structure of *la mayoría*.[6] Interstingly, this agreement is only possible with the verb and not with the article (**las mayoría*), which could demonstrate that agreement is not exactly with *plural* but with *Dispersion*, as I propose in (2014b).
The agreement of *la mayoría* with the verb is similar to the person agreement between verbs and subjects. A similar explanation could be given for cases like the following, where a third person agrees with a verb in first person:

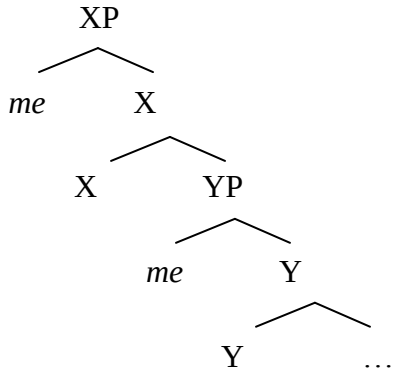
(39) Los alumnos estamos contentos con el profesor
The students are.1PL happy with the teacher
'We the students are happy with the teacher.'

Although with number and person it is possible to see semantic content, it is not so easy to see it in the case of gender. Gender agreement could be one of the few cases in which a syntactic element does not encode any semantic content. It should be assumed, though, that at some point of evolution it encoded it, in the same way as in the present it does in the case of animated entities. But even in the cases in which there is no risk of semantic incoherence, it is necessary that the features are compatible between the different parts of the structure. It could be possible to think that although gender does not encode in many cases a semantic content, when it combines with adjectives and articles, for instance, what we indicate is that the reference or the property has to be applied to an element with that feature, which is present in the structure although it does not encode any semantic information. If this is not so, we would have an incompatibility.

So far, we have seen general cases of agreement. There are other cases related to agreement or to the necessity that certain elements are present in different parts of the structure in order to create semantic coherence. One of these cases are clitics.
In Romeu (2014b) I already claim that clitics can be related to agreement. This agreement is clearly seen in reflexive and pronominal constructions like *Yo me peino* ('I brush myself') o *Yo me acuerdo de algo* ('I remember something') between *yo* (a nominative first person pronoun) and *me* (a first person clitic). In these cases *me* lexicalizes a modifier that indicates that the process is applied to a first person. Depending on the position of that modifier, the interpretation is that the process is applied directly to the person or that it is related to it in a certain way. I abstractly represent the two possible positions below:

[6] It is also possible to think that *la mayoría* lexicalizes that feature, but I think that it is more coherent with the model to assume that the feature is not present or, at least, that it does not occupy the same position as in *los niños*.

(40)



The same happens with clitics in other constructions:

(41) a. A María la vi.
To María her see
'I saw María'
b. A los niños les di un regalo.
To the kids them gave a present
'I gave a present to the kids'

Here the verb presents modifiers (lexicalized by *la* and *les*) that help to interpret how the process is applied, in the same way as we saw for the case of *in*, where *in* indicates that the process takes place inwards.
What is interesting in these cases is that, as we are dealing with a semantic question, agreement does not always occur in a strict way. This seems to happen in cases like the following:

(42) Le regalaron un peine a los niños.
him.SG gave.as.a.present a comb to the kids.PL
'The gave a comb as a present to the kids.'

Here there is no agreement between *le* and *los niños*. It seems that here we find one of those cases in which the feature *plural* does not appear in the structure, maybe because it is enough to indicate that the process is associated to a certain person, the third.
The same could be said about the cases that can be found in certain varieties of Spanish in which the clitic does not agree with the direct object it refers to:

(43) Se lo_i llevó una $caja_i$ (Perú)
SE it.MSC took a box.FMN
'He took a box'

Lipski (2012:13)

Again it is possible to assume that it is enough with the information that the process of the verb has to be applied to a third person and, thus, it is enough with *lo*, that does not have any mark of feminine.

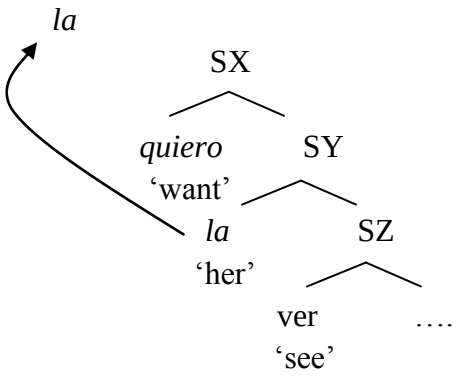
On the other hand, the fact of considering that articles lexicalize modifiers, as we have seen before, makes it possible to compare them to clitics, as has already been pointed out by some grammarians. The different form that they present (*le* and *el*, for instance) could be due to the fact that they lexicalize a different modifier or maybe to a different phonetic evolution.

Clitics are also another case in which it can be seen that it is necessary to assume the process of slipping. As clitics appear in the middle of the lexicalization area of the verb, they must be pronounced either before or after it. The vacillation that can be found in the history of Spanish with respect to their position, where in the past in certain circumstances it could be possible to find postposed clitics after the inflected verbs, like in *díjole* (‘said to him’), and the double possibility in the present, where we can still find post-posed clitics in the case of imperative, infinitive or gerund, can be explained by assuming that the different position is due to a phonological process like slipping and that, thus, their different position does not have any repercussion in the meaning of the construction. It is even possible to find speakers that pronounce the clitic in the middle of the verb:

(44) ¡Vayasen!
go-SE-PL
‘¡Go away!’

In the case that a verb and an auxiliary verb form a block of lexicalization, the clitic can be pronounced in a more dislocated position than where it is generated, like in *La quiero ver* (‘I want to see her’). This is the process that we generally call clitic climbing:

(45)



Again, as we deal with a phonological movement, there should not exist a change of meaning.

5. Restrictive and non-restrictive adjectives

One of the most controversial questions in Spanish is the difference between restrictive and non-restrictive adjectives. Briefly, here I propose that the difference is that they are modifiers that occupy a different position in the structure or, in other words, that they modify a different element.

Restrictive adjectives specify a property of an entity, in such a way that it is distinguished from other entities of the same kind that do not have that property. On the contrary, non-restrictive adjectives express an inherent property of the entity, without distinguishing it from others of the same kind.

This difference is due to the fact that the two types of adjectives lexicalize modifiers that occupy different positions in the structure. Non-restrictive adjectives lexicalize a modifier that at the same time is internal to the modifier of *Ent* where the conceptual properties are given. In this way it gives one of the multiple inherent properties of the entity.

On the other hand, restrictive adjectives lexicalize an independent modifier of *Ent*, which gives a certain external property. In the following representation each adjective lexicalizes the modifier in bold:

(46) a. non-restrictive adjective: b. restrictive adjective:

The different position of both types of adjectives at the time of lexicalization can be due to the fact that the position that the modifier with the properties of *Ent* (lexicalized by a non-restrictive adjective) occupy a higher position than the modifier that specifies one non-inherent property of the entity (lexicalized by a restrictive adjective), because, the latter alters to a greater extent the properties of *Ent*. At the time of lexicalization it would appear after the noun by means of slipping, but also for phonological or stylistic reasons, it could appear before, as it sometimes happens.

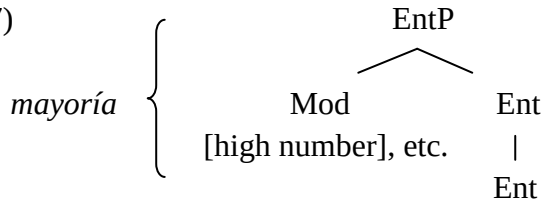
Although this issue obviously requires a deeper analysis, I have presented it here because it is related to the crucial question of the position of the conceptual or encyclopedic information in the structure.

In a model like the one presented here, in which lexical items themselves do not contain any meaning, conceptual meaning must obligatorily be present in the structure before the process of lexicalization, so as it is possible to determine the lexical item that lexicalizes that part of the structure.

I consider that this information occupies the position of a modifier of the different nodes. It can modify, thus, for instance, *Ent*, and that is why different nouns can

lexicalize this node. It can also lexicalize *proc* determining the verb that lexicalizes the structure in each case.
It is exactly the same as we have seen for other modifiers like *Conjoint* and *Disjoint*. Conceptual information must be present in the structure before the process of lexicalization and, thus, it determines which lexical item can lexicalize a certain part of the structure.
Evidence of this is the case of non-restrictive adjectives, which lexicalize modifiers of that conceptual information.
Further evidence is given by the cases of semantic agreement that we have seen, like *La mayoría piensan*. In this sense, consider the following structure:

(47)



Here, the presence in the structure of conceptual information like [high number] triggers the presence of a plural modifier in *proc*. If the conceptual information can be seen by other parts of the structure, i.e. if it can have syntactic repercussion, it means that this information must be present in the structure.

6. Conclusions and final notes

We have seen that the model presented in Romeu (2014a, b), directly applied to grammatical categories in Romeu (2015), can explain or at least can open ways of study for certain controversial issues of languages.
The fine-grained analysis that this model provides has a lot of advantages. It makes it possible to explain the minimal differences between apparently similar lexical items. It does not matter that these lexical items belong to a same category. This only means that they lexicalize a similar area of the structure, but it does not need to be the same.

Moreover, the existence of modifiers in the structure makes it possible to understand why a same semantic feature can appear in different positions of the structure, without being necessary to appeal to syntactic movements that are unjustified in many cases. In this way, apart from the cases that we have seen in this work, it is possible to understand the different positions of negation or degree, assuming that these notions are encoded as modifiers in the structure (cf. Romeu 2014a).
The fact that certain lexical items lexicalize only a modifier explains why they can behave in different ways. It depends on the element the modifier combines with. In this way it is not necessary to multiply the number of lexical items when they seem to belong to different grammatical categories.

But also this model, because of its characteristics, shows that it is necessary to assume that there exists a phonological process that adapts the lexicalization of the structure to physical limitations. In this way it is possible again to explain the movement of lexical items, without having to appeal to unjustified movements in the syntactico-semantic structure. This process, which I have called slipping, does not entail any change of meaning, as it is purely phonological (or stylistic).
Apart from the cases that I have explained in this work, other phenomena can be explained like *heavy NP-shift*, where the phonological characteristics of an element can vary the position in which it is pronounced.
It is also possible to explain cases in which an element can interrupt the lexicalization of the structure, triggering different ways of lexicalization. This is what happens in English constructions where the auxiliary verb *do* must be used (*do*-support constructions), when an element like negation interrupts the area of lexicalization of an inflected verb. Apart from the cases of clitic climbing, that we have seen, also anticipated negation constructions could be explained by these means.

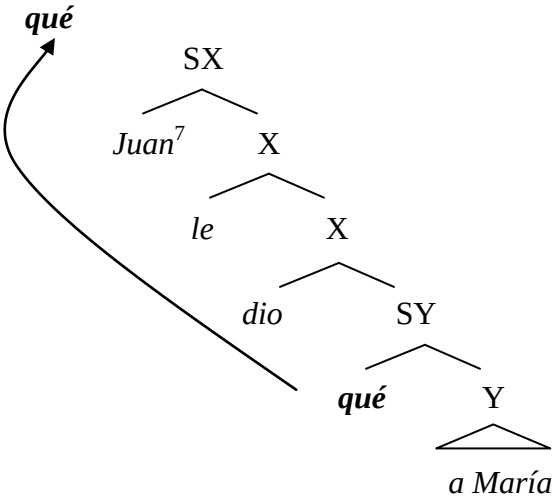
Furthermore, in a system in which there is no syntactic movement, the concept of islandhood does not have any sense. Islands (or syntactic constituents from which it is not possible to extract any element) are actually syntactic constituents whose structure becomes incomplete or non semantically licensed if an element is extracted from them. Consider the following well-known example:

(48) a. Of which car did [they find the (driver, picture)?
b. *Of which car did [the (driver, picture) cause a scandal]
Chomsky (2008:147)

An example like (48b) is not possible because in this case *Ref* is not licensed, not because the subject is an island. The fact that, in Spanish, an example like this is more natural (*¿De qué coche el conductor provocó un escándalo?*) shows that subjects are not islands for the only fact of being subjects or because of their position. At the same time it shows that articles in Spanish and in English lexicalize a different structure, as has been suggested in this work.

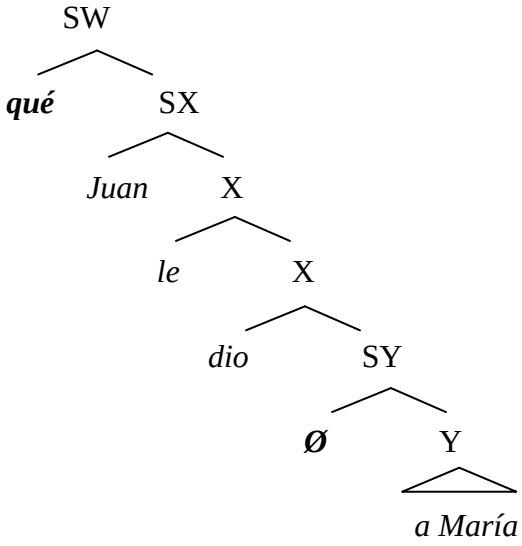
Related to this question is the fact that this system, because it does not have syntactic movement, needs to explain *wh*- movement either by assuming phonological movement either by assuming that the interrogative group is generated in the position it is lexicalized. In the first case it would be necessary to assume that the rest of the sentence constitutes a block of lexicalization out of which the *wh*- phrase remains, as represented below:

(49) ¿Qué le dio Juan a María?
'What did Juan gave Mary?'



In the second case, the *wh-* constituent would directly generate in a high position (maybe in focal one). Its presence in that position would make it impossible that a different element occupies the position about which the question is posed:

(50) ¿Qué le dio Juan a María?
'What did Juan gave Mary?'



I leave this question for deeper research.

[7] The post-verbal position of the subject could also be explained by means of slipping.

In general, the goal here has been to show how a model, in which each syntactic node encodes a semantic feature whose properties can be altered by a modifier, makes it possible to address in a simple way and with very few principles a bunch of questions that are still problematic in the study of languages.

Although here I have not given a complete and deep explanation of these questions, I think that I have given the crucial points in order to open some ways through which these questions can be developed in the future.

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