



A minimal cartography of Differential Object Marking in Spanish

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Abstract

In this paper we use a minimal cartography to show that DOM constructions in Spanish have special properties that make them syntactically and semantically different from non-DOM constructions. First, *a*-marked DOs have a different underlying structure. In their structure there is a relational projection (RelP) which is modified by Disjoint, giving the interpretation that the DP complement is a recipient of the action of the verb. Second, *a*-marked objects occupy a different position in the structure from non *a*-marked objects: while the former occupy the complement of *proc(ess)*, the latter occupy a modifier position. By establishing these two differences, we provide a unified explanation for the special properties of DOM constructions that have been pointed out in previous works, like the presence of *a* or affectedness, specificity and animacy of the DO.

Keywords: Differential Object Marking, DOM, *a*-marking, Spanish, affectedness, specificity, animacy, event structure, Disjoint

1 Introduction¹

It is common for certain languages without obligatory case marking of direct objects (DOs) to mark some objects – but not others – depending on the semantic and pragmatic features of the object (Aissen 2003). This phenomenon, known as *Differential Object Marking* (hereinafter, DOM), following Bossong (1985), receives much attention in work on lexical semantics and syntax. More specifically, DOM in Spanish by the marker *a* (homonymous with the spatial preposition *a* ‘to’ and the *a* which marks the indirect object) is frequently studied (Bossong 1985, Torrego 1999, Aissen 2003, Leonetti 2004, Laca 2006, von Heusinger & Kaiser 2007, among others), and yet remains controversial. For example, (1) shows how certain DOs

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in Spanish cannot be marked by the element *a*, as in (1a), and yet others must be marked by the element *a*, as in (1b):

- (1) a. Juan vio (*a) un árbol
 Juan saw DOM a tree
 ‘Juan saw a tree’
- b. Juan vio *(a) Pedro
 Juan saw DOM Pedro
 ‘Juan saw Pedro’

In order to explain this phenomenon, the central focus of research has mainly revolved around the animacy and/or specificity of the direct object (Bossong 1985, Aissen 2003, Laca 2006, von Heusinger 2008, and von Heusinger & Kaiser 2007) from a diachronic perspective, by referring to the development of DOM along the Animacy Scale (in (2)) and the Referentiality Scale (in (3)):

- (2) human > animate > inanimate
- (3) personal pronoun > proper noun > definite NP > [+specific] indefinite NP
 > [-specific] indefinite NP

However, we consider that an analysis that covers all these factors is still necessary to capture, in a unified fashion, the syntactic and semantic behavior of DOM in Spanish.

In this paper, we propose an analysis of DOM constructions based on the idea that marked DOs have a different internal structure and they occupy a different position in the structure than non-marked DOs. Their internal structure does not correspond to a DP, but to a relational projection (RelP), introduced by *a*. The DP is a complement of Rel and represents a receiver or recipient of the action related to the verb. In general, this entity is affected in the sense that its relation with other entities in the world is described or changes. We show that in this way it is possible to explain the different properties of DOM constructions that have been pinpointed in the literature.

The structure of this paper is as follows: in §2, we offer a brief overview of the properties of DOM constructions that have been observed in the literature. In §3 we present the points of controversy of these properties. In §4 we present our analysis of DOM constructions. In §5 we show how this analysis accounts for the different properties of DOM constructions. Finally, in §6 we conclude, pointing out some other cases for which this analysis could be useful and other questions that remain for further research.



2 Properties of DOM constructions

In Spanish, the marker *a* is obligatory, optional or ungrammatical, depending on a variety of parameters (von Heusinger & Kaiser 2007). Throughout the literature, three main interactive parameters have been claimed to determine whether or not a direct object is marked: (i) intrinsic properties of the direct object (animacy/ [\pm human]) (Aissen 2003, Leonetti 2004, etc.); (ii) discourse-related properties (referential categories –definiteness and specificity– and topicality, defined as [\pm top]) (Torrego 1999, Aissen 2003, von Heusinger & Kaiser 2007); (iii) properties of the whole predicate (degrees of transitivity) and the verb semantics governing the direct object (e.g. affectedness) (cf. Torrego 1999, Leonetti 2004, von Heusinger & Kaiser 2007). In this section, we present the properties of DOM constructions that have been observed and that our proposed analysis will need to capture.

Regarding the intrinsic properties of the DO, animacy plays a crucial role (Fernández Ramírez 1986 [1951], Laca 1995, Torrego 1999, Rodríguez Mondoñedo 2007). Animate objects are *a*-marked, but generally inanimate ones are not:

- (4) a. Juan encontró (*a) la pelota [-anim]
 Juan found DOM the ball
 ‘Juan found the ball’
- b. Juan encontró *(a) María [+anim]
 Juan found DOM María
 ‘Juan found María’

As we observe in (4), an animate object like *María*, but not an inanimate like *the ball* is marked with *a*, although both are objects of the verb *encontrar* ‘find’. This also happens in other languages like those in the Slavic family (cf. Comrie & Corbett 1993: 16).

With regard to discourse-related properties, a first factor to consider in DOM is definiteness. It is not possible to find *a*-marked objects in indefinite contexts, as reflected, for instance, with an existential construction in (5):

- (5) Había (*a) una enfermera
 There-was DOM a nurse
 ‘There was a nurse’

The same happens in certain languages, where definite objects are overtly case marked, but not indefinite objects, like in Hebrew (cf. Aissen 2003: 453–455):

- (6) a. Ha-seret her’a ’et-ha-milxama
 the-movie showed ACC-the-war
 ‘The movie showed the war’



- b. Ha-seret her'a (*'et-)milxama
the-movie showed ACC-war
'The movie showed the war' (Aissen 2003: 453)

Another discourse-related property of DOM is the specificity of the DO. In Spanish, specific objects are generally *a*-marked, unlike non-specific objects, which are optionally marked, as shown in the following contexts:

- (7) a. Necesité *(a) cierta mujer para el experimento [+spec]
needed.1SG DOM certain woman for the experiment
'I needed a certain woman for the experiment'
- b. Necesito (a) una mujer que sepa inglés [-spec]
need.1SG DOM a woman that knows English
'I need a woman that knows English'

Something similar happens in other languages. For instance, in Turkish, NPs that are overtly case marked are obligatorily interpreted as specific, and vice versa, i.e. NPs which are not case marked are interpreted as nonspecific (Enç 1991), as illustrated in (8):

- (8) a. Ali bir piyano-yu kiralamak istiyor
Ali one piano-ACC to.rent wants
'Ali wants to rent a certain piano'
- b. Ali bir piyano kiralamak istiyor
Ali one piano to.rent wants
'Ali wants to rent a (nonspecific) piano'

In (8a) the piano has to be interpreted as a specific piano because it is marked by *-yu*, the accusative marker. However, in (8b), the piano receives a non-specific reading.

Considering both definiteness and specificity, it is interesting to bring back the hierarchy suggested by Aissen (2003), which represents how likely an NP that occupies the object position will be marked or not in a DOM language:

- (9) personal pronoun > proper name > definite NP > indefinite specific NP > non-specific NP (Aissen 2003: 437)

The prediction of the hierarchy in (9) is that when an element of this hierarchy is marked in a language, the higher elements are also marked.

Most diachronic and synchronic studies have focused on the intrinsic properties of the direct object (animacy) and discourse-related properties (e.g. referentiality), but have not done much investigation into verb classes, the other contributing factor to the distribution of DOM.



Interestingly, affectedness would fall in this latter category as another influential factor for DOM (e.g. Næss 2004 or von Heusinger & Kaiser (2011)). von Heusinger & Kaiser (2011) aim to explain the distribution of DOM with respect to the concept of affectedness, understood as ‘the persistent change in an event participant’. They claim that affectedness is an additional parameter for DOM in that highly affected DOs are more likely to be marked than non-affected DOs. This would hold for the case of Spanish, since they observe that highly affected DOs are more likely to be *a*-marked than non-affected DOs:

- (10) a. Juan asesinó *(a) un secretario
 Juan killed DOM a secretary
 ‘Juan killed a secretary’
- b. Juan buscó (a) un secretario
 Juan searched DOM a secretary
 ‘Juan looked for a secretary’

In (10a), a verb like *asesinar* (‘kill’) needs to combine with an *a*-marked object, because the object has to be obligatorily affected for the event to take place. By contrast, with a verb like *buscar* (‘look for’), the object may be affected or may not even exist, but the object can be considered affected in the sense that it starts being searched for by another entity. Affectedness is a very difficult notion to define. Beavers (2011: 3) suggests the following:

- (11) An argument *x* is affected iff there is an event *e* and a property scale *s* such that *x* reaches a new state on *s* through incremental, abstract motion along *s*.

This is easy to see with a verb like *asesinar*, where the object is affected in the sense that it dies, but it is not so clear with a verb like *buscar*. As we will see, in this paper we understand affectedness in DOM constructions as a situation in which a property that has to do with the relation between the object and another entity is described or changes. In this sense, the object of *buscar* can be interpreted as affected in the sense that the entity it refers to starts being searched for, no matter whether this entity is not conscious of the fact that it is being searched. However, as we will see later, it is important to note that this object usually needs to be sentient, i.e. it has to be able to feel subjective experiences, so that the change in the perception of it by other entities or in the relation that this entity holds with other entities is relevant.

Moreover, as the action of looking for somebody is naturally durative, the example in (10b) ameliorates in the imperfect:

- (12) Juan buscaba (a) un secretario
 Juan searched.IMPERF DOM a secretary
 ‘Juan looked for a secretary’



As affectedness has to do with the way other entities consider the entity to which the object refers, it is not necessary that this entity is conscious of the change. For instance, although someone can be searched without knowing it, its relationship with another entity has changed from the moment that now it is being searched by someone. However, as we will see later, the object has to be a sentient entity because, otherwise, it would be meaningless for it to be searched.

In this regard, one conclusion is that the interpretation of *buscar* when it combines with an *a*-marked object is different than the meaning it acquires when it combines with a non-marked object. In the former case, the interpretation is that someone is looking for another person for some reason. In the latter case, the interpretation is that someone needs some other person with certain properties.

Talking about affectedness of the object, we cannot ignore the role of the agent. Agentive verbs are more likely to combine with a marked DO (cf. von Heusinger & Kaiser 2011, Bassa Vanrell 2011). In this way, a verb like *mirar* ('watch') in Spanish requires a marked object, while a verb like *ver* ('see'), which is less agentive, does not, despite of their similar meaning, as shown in (13):

- (13) a. Miré *(a) un niño
 looked.at.1SG DOM a child
 'I looked at a child'
- b. Vi (a) un niño
 saw.1SG DOM a child
 'I saw a child'

That *mirar* is more agentive than *ver* can be seen, for example, in the fact that *mirar* is more natural in the imperative form, as illustrated in (14):

- (14) a. ¡Mira al niño!
 look.IMP DOM.the child
 'Look at the child!'
- b. #¡Ve al niño!
 see.IMP DOM.the child
 'See the child!'

As von Heusinger & Kaiser (2011)'s results show, in pairs like *oír* ('hear') vs. *escuchar* ('listen to') and *ver* ('see') vs. *mirar* ('look at') the second member more frequently combines with *a*. That is to say that the more agentive verb of the pair shows a much higher frequency of *a*-marking of its object.

Furthermore, the individuation of the object and topicality, which are closely related to definiteness and specificity, have also been said to be determining factors for marking the object. According to Hopper & Thompson (1980), the parameter of transitivity that would explain the behavior of *a*-marking would be *Individuation of*

the Object (highly individuated O involves high transitivity vs. non-individuated O which implies low transitivity). In other words, the DO is marked with *a* if its high in individuation and, consequently, within the framework of Transitivity Hypothesis, these marked DOs indicate a higher degree of transitivity in their clause than those which are less individuated (Hopper & Thompson 1980).

In the same line, Torrego (1999) perceives subtle differences in the semantics of events, stating that *a*-marked objects are more individualized. Marked objects are topics, which, according to Leonetti (2004: 86), 'introduce prominent participants in the discourse'. Also von Heusinger & Kaiser (2007: 90) point out that topics are 'more strongly involved in the event'. For these authors *a* is a topic marker, considering 'topic' in the sense of an 'anchor of new assertions' (Leonetti 2004 : 14), and not in the sense of old information. This explains the following contrast:

- (15) a. Besaron un niño llorando
 kissed-3PL *a* child crying
 'They kissed a child while they were crying'
- b. Besaron a un niño llorando
 kissed-3PL DOM *a* child crying
 'They kissed a child while they were crying' or 'They kissed a crying child'
 (Torrego 1999: 1789)

It is only possible to interpret that the gerund is related to the object in the case that it is a prominent participant in the event and, for authors like Leonetti (2004), this is only possible when the object is *a*-marked, as observed in (15b). Torrego also notes that the object in (15b) is interpreted as being more strongly involved in the event than in (15a). She argues that this is reflected by the fact that the predicative *llorando* can modify either the subject or the highly individualized object in (15b), unlike in (15a), where it can only modify the subject (Torrego 1999).

There is also an intuition that recurs in the literature on DOM that DOM functions to disambiguate the subject from the object. This function of marking the object differently from the subject has been mentioned in Aissen (2003), Laca (1995: 69–74) and Torrego (1999: 1784), among others. Following this approach, the presence of *a* allows us to distinguish the subject from the object in examples like the following in (16):

- (16) a. Perseguría al guardia el ladrón
 pursued.IMPERF DOM.the guard the thief
- b. Perseguría el guardia el ladrón
 pursued.IMPERF the guard the thief
 'The guard was pursuing the thief' (Torrego 1999: 1784)

In this regard, despite the order of the constituents in (16), we can tell that *the thief* is the subject in (16a), but it is the object in (16b).

Finally, a last factor that has been said to characterize DOM constructions is telicity. Atelic predicates can become telic with marked DOs, but not with non-marked DOs (cf. Torrego 1999). This can be seen in the following contrastive pair of examples:

- (17) a. *Besaron un niño en un segundo
 kissed a boy in a second
 b. Besaron a un niño en un segundo
 kissed DOM a boy in a second
 ‘They kissed a boy in a second’ (Torrego 1999: 1789)

Therefore, in a normal context, it is easier to have a telic modifier such as *en un segundo* in combination with an *a*-marked DO, although, as we will see, it is also possible to find contexts in which a telic modifier can appear with non-marked DOs.

In this paper, we consider that these properties are epiphenomena related to deeper properties. As we will see next, this explains why the different properties presented here do not seem to work for all cases, and need to be considered from a multi-factorial perspective.

3 DOM properties as epiphenomenal factors

One of the first problems that has been widely observed is that animate objects are not always marked by *a*, as can be seen in the following example:

- (18) Juan vio (a) un niño
 Juan saw DOM a child
 ‘Juan saw a child’

In this case an animate object like *un niño* ‘a child’ is not obligatorily marked with *a*. However, as we will see below, the interpretation is different depending on the presence of *a* or not.

On the other hand, it is possible to find many cases of non-human or inanimate objects that are *a*-marked. Most of them, however, are cases of personification or cases in which the non-human object is considered to be somehow sentient, as in (19), or cases in which it is possible to think that there is a secondary predication in the structure, as in (20) (cf. Fábregas 2013):

- (19) Pesqué a un pez enorme
 I.fished DOM a fish huge
 ‘I fished a huge fish’ (Fábregas 2013: 14)



- (20) Llamar al pan, pan y al vino, vino
to.call DOM.the bread bread and DOM.the wine wine
'to call bread "bread" and wine "wine"' (Fábregas 2013: 15)

However, as Fábregas (2013) notes, there are other instances which cannot be included in the two previous cases, for example verbs like *preceder* 'precede', *seguir* 'follow', *sustituir* 'substitute' or *caracterizar* 'characterise' among others:

- (21) El género caracteriza a los sustantivos
the gender characterises DOM the nouns
'Gender is characteristic of nouns' (Fábregas 2013: 16)

A second problem that authors like Leonetti (2004) and Rodríguez Mondoñedo (2007) have pointed out is that specificity is not a clear property that distinguishes DOM from non-DOM objects. There are cases in which *a* appears with non-specific indefinite DPs:

- (22) Está buscando a alguien / No está buscando a nadie
is looking.for DOM someone not is looking.for DOM nobody
'She is looking for someone' / 'She is not looking for anyone'
(Leonetti 2004: 82)

With respect to affectedness, as we have already noted, one of the most difficult questions arises: what is affectedness? It is difficult to see how *María*, for instance, is affected in an example like the following one in (23):

- (23) Juan ama a María
Juan loves DOM María
'Juan loves María'

In an example like this, it is possible that *María* does not even know that Juan loves her.

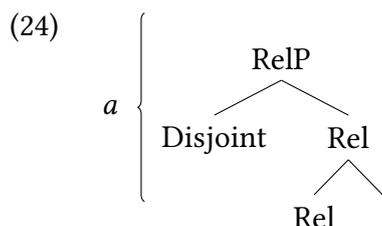
In the next section we give an explanation of why marked DOs in Spanish need to have the properties presented above and how the counterexamples presented here can be accounted for.

4 Marked DOs are different

Our proposal is that all the factors presented before are derived from two specific properties of DOM constructions: (i) *a*-marked DOs have a different internal structure from non *a*-marked objects; (ii) *a*-marked DOs appear in a different position in the event structure.

4.1 Different internal structure

Romeu (2014) argues that *a* in Spanish locative constructions lexicalizes a modifier Disjoint, together with a Rel projection which encodes the meaning of ‘relation’ (see Romeu 2014: 54–57). This is distinct from an element like *en*, which lexicalizes Rel and Conjoint.² The structure that Romeu (2014) suggests for *a* is as follows:



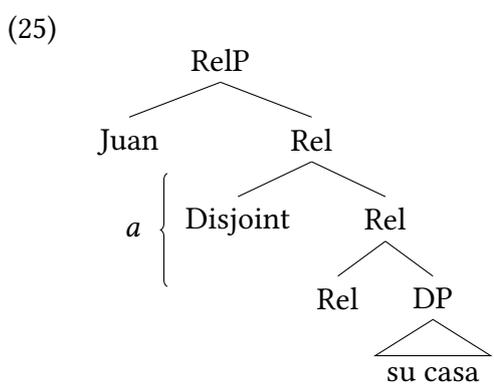
The way in which this structure is lexicalized is by means of phrasal spell-out (cf. Starke 2001, 2007, among others), which makes it possible for a single lexical item to lexicalize postsyntactically a ‘chunk’ of the structure, as represented in 24.

Disjoint gives the interpretation that the DP-complement of Rel corresponds to the second point of an interval, so it is separated from another point in the event. In contrast, Conjoint gives the interpretation that the two points coincide or overlap. This makes it possible to explain, for instance, why only *a*, and not *en*, is possible in a case like *Juan fue {a/*en} su casa* (‘Juan went to/in his house’). A verb like *ir* needs to combine with an element that entails two separated points for the change of location to be possible. The presence of Disjoint makes it possible to interpret the house as a second point and, hence, as a Goal for the change of location.

The structure of *a* here is as follows:³

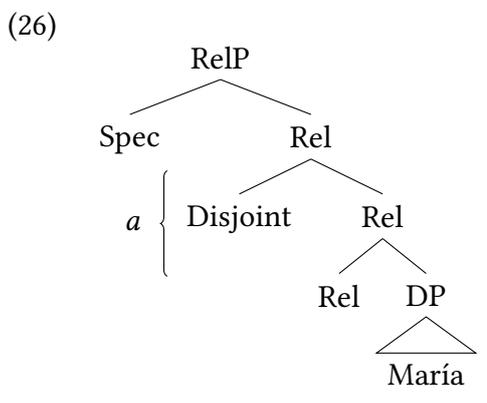
²We use the term ‘modifier’ in a similar way to Zwarts & Winter (2000), where the modifier returns the same element it merges with.

³In directional constructions, this RelP would correspond to the complement of a result phrase (*res* in Ramchand 2008), which is a complement of *proc* or the projection that encodes the process. There are certain properties of directional constructions that make them different from DOM constructions. For instance, first, as we will see, in DOM constructions the RelP is a complement of *proc*. Second, in directional constructions the verb gives the interpretation of spatial motion. Moreover, following Romeu (2014), in spatial constructions there is a projection Region that gives the spatial points occupied by the entity (the DP) it combines with. In this way it is possible to give the same internal structure to *a* in spatial and non-spatial constructions, because Region would be lexicalized by the DP.



By means of Disjoint the interpretation is that the specifier of the relation, Juan, ends up at the entity referred to by the complement of Rel, in this case *su casa*. If Disjoint is not present, it is not possible to interpret the house as a second location and, hence, dislocation is not conceivable, like in **Juan fue en su casa* ('Juan went in his house'), as *en* does not lexicalize Disjoint, but Conjoint. As we have seen, Conjoint entails that the location of the two elements of the relation coincide, so the interpretation would be that Juan does not reach his house, but that he is there during the whole event, which limits the possibilities of interpreting movement.

Following this analysis in Romeu (2014), we assume that *a* also lexicalizes Disjoint in DOM constructions. Hence, the internal structure of an *a*-marked DO like the one in *Juan vio a María* ('Juan saw María') would be the following:⁴



In (26), the presence of Disjoint triggers the interpretation that *María* is the second entity related to another in the event, which means that, in the appropriate context, she is the recipient of the specifier of the relation in the same way as, in

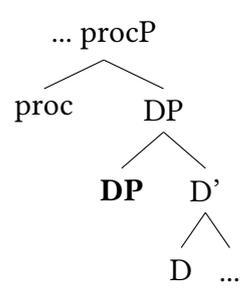
⁴This means that the internal structure of *a* is the same in these two cases, but it does not imply that it is always like that.

the directional construction before, the house was the goal.⁵ Next we explain which element occupies the specifier in these constructions and why, according to our analysis, this has to be the case in order to make the right predictions.

4.2 Different position in the event structure

One important consequence of the fact that the internal structure of *a*-marked objects is different from the internal structure of non-marked objects has to do with their interaction with event structure. In line with authors like Rodríguez Mondoñedo (2007), we claim that non-marked DOs occupy a different position than marked DOs in the event structure. However, in order to account for all the properties of DOM constructions that we have seen before, we consider that the position of these elements is different from the one suggested in Rodríguez Mondoñedo (2007), who claims that the position of marked DOs is higher than the position of non-marked DOs due to movement driven by agreement. We claim that while non-marked DOs are modifiers of a DP-complement of *proc*, which is the projection that encodes the process in the decomposition of the event structure proposed in Ramchand (2008), *a*-marked DOs are RelP-complements of *proc*.⁶

(27) a. non-DOM:

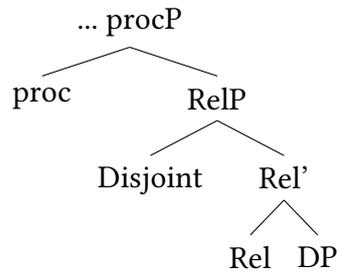


⁵As a reviewer points out, the fact that these DPs are interpreted as recipients resembles dative constructions (cf. Cuervo 2003). As we will see in this paper, this is due to the fact that both dative elements and DPs in DOM constructions are complements of a RelP with Disjoint. Therefore, both are interpreted as the second element of an interval, or recipients. The difference between them is that in DOM constructions the specifier, or the element that is received, is the action of the verb, whereas in dative constructions this element is an entity, like the book in *Juan dio el libro a María* ('Juan gave the book to Mary').

⁶Here we present the two extreme options. As we suggest at the end of the paper, it is possible that there is a third position for DOs as DP-complements of *proc*. We do not explore that option here, because our main interest is in determining the position of marked DOs.

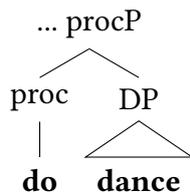


b. DOM:



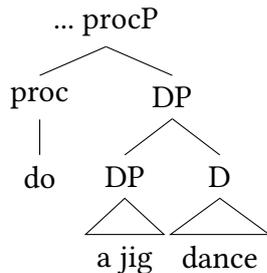
For the structure of non-marked objects, we follow Hale & Keyser (1993, 2002) and Ramchand (2008) in the idea that the complement of *proc* is a DP that encodes the action of the event. This has been suggested for verbs like *dance*:

(28)



We differ, however, from Ramchand, in the fact that we consider that in a case like *dance a jig*, the DP *a jig* is a modifier of the DP *dance*, determining the specific kind of dance, and not a complement of *proc*:

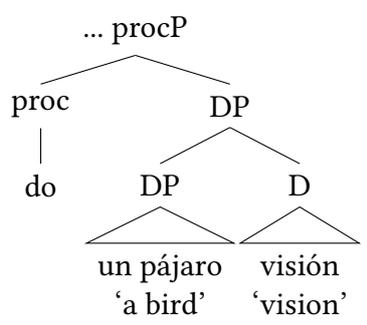
(29)



In the same way, in cases like *Juan vio un pájaro* ('Juan saw a bird'), the direct object is a modifier of the DP that encodes the activity, which corresponds to something similar to *vision* ('vision'):⁷

⁷Although here we suggest that *do* only lexicalizes *proc*, it would lexicalize *init(iation)* as well. In the case of not considering *ver* as an activity, as the subject could be interpreted as an experiencer, the only difference would be that there would not be an *init* head in the event structure and, thus, *Juan* would only be the specifier of *proc*. In any case, the position of the DP objects would be the same.

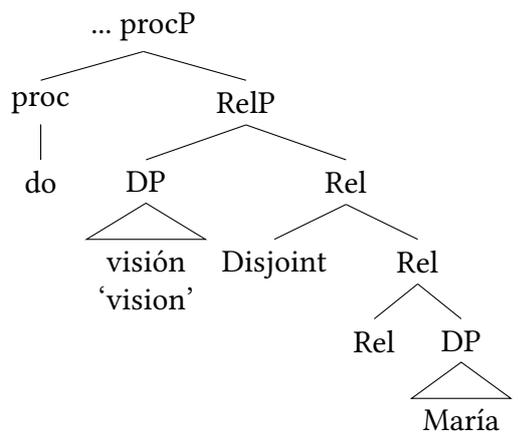
(30)



We consider, thus, that intransitive Vs like *dance* share the same basic structure of transitive Vs like *ver* ('see').

In the case of DOM constructions, the structure is different. The complement of *proc* is now a RelP. In this regard, *proc* combines with a RelP, in a very similar way as Hale & Keyser (2002) suggest for verbs like *saddle*, where V selects for a PP instead of a DP. According to this, the structure of an example like *Juan vio a María* would be the following:

(31)



In (31), the DP *visión* now occupies the specifier position of a Rel projection, which, in its turn, is a complement of *proc*. This DP establishes a relation with the DO. This relation is in a certain way similar to the one established between this DP and the DO modifier in non-marked cases, but there are some differences. As we will see next, these differences capture the properties of DOM constructions that we have presented above.

One subtle piece of evidence for the different position occupied by marked and non-marked objects has to do with subextraction. We have seen that non-marked objects are modifiers, which puts them on a similar level as adjuncts. As has been claimed since Ross (1967), extraction from adjuncts is banned (see Stepanov 2007 for a more recent approach). According to this, one would expect

that it is more difficult to extract from non-marked objects. This is borne out in contrasts like the one below (see also Fábregas 2013: 51), although it is possible to find variation among speakers:⁸

- (32) Juan busca (a) un profesor de Ciencias
 Juan looks.for (DOM) a teacher of science
 ‘Juan looks for a teacher of Science’
- a. ? ¿De qué busca Juan un profesor?
 of what looks.for Juan a teacher
- b. ¿De qué busca Juan a un profesor?
 of what looks.for Juan (DOM) a teacher?
 *‘What is Juan looking for a teacher of?’

Further evidence that marked and non-marked objects occupy different positions is that they cannot be coordinated (see also Rodríguez Mondoñedo 2007: 3.3) nor can they coincide in gapping constructions, as illustrated in (33) and (34):⁹

- (33) a. Juan vio a María y *(a) un gato
 Juan saw DOM María and DOM a cat
 ‘Juan saw María and a cat’
- b. Juan vio un perro y un gato
 Juan saw a dog and a cat
 ‘Juan saw a dog and a cat’
- (34) a. Juan vio a María y Pedro *(a) un niño
 Juan saw DOM María and Pedro DOM a child
 ‘Juan saw María and Peter a child’
- b. Juan vio un perro y María un gato
 Juan saw a dog and María a cat
 ‘Juan saw a dog and María a cat’

⁸At the end of the paper we show that it is possible to find other cases of non-DOM examples where subextraction is possible.

⁹In the cases of coordination it is important to be sure that the two objects form a constituent. It could be possible to have examples like *Juan vio un gato y a María* but in these cases the two objects do not form a constituent but there is an ellipsis of the verb in the second coordinate: *Juan vio un gato y (vio) a María*. If they actually form a constituent this is not possible, as can be seen if we front the constituent:

- (i) *(A) un gato y a María vio Juan



These contrasts are more striking considering that there are examples in which an expression introduced by *a* can correspond to the direct object or to the indirect object, which seems to indicate that marked DOs are more closely related to IOs structurally speaking than to non-marked DOs; although they occupy different positions, they are both RelPs:¹⁰

- (35) unos profesores [a los que [quitaron su sueldo] y [golpearon]]
 some teachers DOM the which they.stole their salary and they.beat
 ‘some teachers that they stole their salary from and beat’

(Fábregas 2013: 7)

One further piece of evidence that seems to indicate that the difference originates in the structure rather than in the semantics is that ‘children seem to acquire the conditions to tease apart the two types of marking of DOM objects very quickly and with no errors, despite the fact that the conditions that govern this phenomenon are not simple’ (Rodríguez Mondoñedo 2007: 286). If the difference relies on the structure, it should thus be enough for children to learn the two different available positions.¹¹

5 Explanation of the properties of DOM constructions

First of all, the DO in DOM constructions is generally sentient. *Sentience* is understood as the ability to feel or have subjective experiences, following Dowty (1991) (see also Ramchand 2008 for the use of this term). The DO needs to be potentially conscious in a similar way as in directional constructions it is necessary for the goal to be a potential place where the Figure can arrive. If this is not the case then the result is not natural:

- (36) #Juan fue a Pedro
 Juan went at Pedro
 ‘Juan went to Pedro’ (Romeu 2014: 52)

¹⁰Briefly, IOs would correspond to complements of a RelP whose specifier is the DO and not the action of the verb.

¹¹Further evidence of the different position of marked and non-marked objects could be the fact that, as a reviewer points out, in Finnish, although objects are generally marked accusative, they can be marked partitive in certain cases like the following one, as shown in Pyllkänen (2008: 96):

- (i) Maija aja-a avoauto-a
 Maija.NOM drive-3SG convertible-PART
 ‘Maija drives a convertible (habitually)’

In Finnish, partitive objects occupy a non-argumental position. If non-marked objects in Spanish are related to partitive objects like the one above, this would mean that they also occupy a different position. In that case it could be possible to say that they are marked by a null element, which in Finnish is visible as partitive case.

Romeu (2014) explains that the oddness of (36) is due to the fact that it is difficult, although not impossible,¹² to identify an entity like Pedro as a *Region*, which corresponds to the set of points in space that the entity occupies (cf. Svenonius 2010).

In the same way, it is usually necessary for an entity to be a sentient entity so it can be considered affected by its relation with other entities. These properties generally have to do with psychological aspects, for the relation with other entities to become relevant. However, as we will see, it is also possible that a non-sentient entity is affected by its relation with other entities in cases in which these entities follow an order, for instance, as in the case of *seguir* ('follow').

This explains the first property that has been attributed to marked-DOs: animacy. The reason why DOs are generally animate is because sentient entities are more closely related to animate entities. Therefore, sentience becomes a requirement of marked DOs: marked DOs need to be sentient, so that they can be affected by their relation with other entities. This explains the contrasts related to animacy that we have seen before:

- (37) a. Juan encontró (*a) la pelota [-anim]
 Juan found DOM the ball
 'Juan found the ball'
- b. Juan encontró *(a) María [+anim]
 Juan found DOM María
 'Juan found María'

Variation across languages on marking with respect to animacy will depend on which entities are considered sentient for the speakers of that language.

As we have already noted, sentience is also related to another property of marked DOs: affectedness. Marked DOs need to correspond to entities that can be psychologically affected in the sense that we have explained before, i.e. in the sense that the relation of the DO with some other entity is relevant. This is to say that in an example like *Juan vio a María*, the recipient of the action, María, starts being seen by another entity in the world. As we have seen before, this explains why it is possible to have marked objects with psychological verbs like *amar*, where the receiver does not even need to be conscious of the action, although it needs to be an entity to which the fact of being loved is relevant:

¹²In a case in which Pedro is a doctor it is possible to say *Juan fue a Pedro* with the interpretation that Juan goes to the medical center where Pedro works. Also in cases in which the interpretation is clearly not the one in which Juan ends up 'in' Pedro, like in *Juan fue a Pedro y le dijo ...* ('Juan went to Pedro and told him ...'), where Juan goes to an area next to Pedro, not in him (cf. Romeu 2014: 174, fn. 49).



- (38) Juan ama a María.
Juan loves DOM María
'Juan loves María'

As in the case of *buscar*, in the case of *amar* there is a difference between the interpretation of the verb when it appears with a marked DO and when it appears with a non-marked DO. A piece of evidence for this difference is shown below:

- (39) a. Juan ama la naturaleza → Juan es amante de la naturaleza
'Juan loves nature' 'Juan is a lover of nature'
- b. Juan ama a María → #Juan es amante de María
'Juan loves María' 'Juan is a lover of María'

As we observe, only the non-DOM construction can be paraphrased by a sentence with *amante*, which suggests that there must be a difference between the two constructions. It could be possible to say that the complement of a present participle like *amante* corresponds to a non-marked object.

The property of marked objects in DOM constructions of being psychologically affected explains why certain verbs only combine with marked objects. Verbs like *saludar* ('greet'), *insultar* ('insult'), *castigar* ('punish') or *sobornar* ('bribe') (cf. Leonetti 2004: 84) generally imply a psychological affection of the object and, hence, the object needs to be marked, even if the DO is inanimate (in cases in which it is possible to find a context in which an inanimate object can appear as the object of these verbs):

- (40) Juan insultó *(a) la mesa
Juan insulted DOM the table
'Juan insulted the table'

The example in (40) requires the presence of *a*, regardless of the fact that the object is inanimate, because the object here is somehow conceived of as a sentient object, which is required by such a verb as *insultar* 'insult'.

Something similar occurs with verbs like *llamar* 'call', where the DO is possibly more recognizable as the recipient of the name or term. In those cases also inanimate objects must be *a*-marked:

- (41) ¿Cómo llamas *(a) esta construcción?
how you.call DOM this construction
'What do you call this construction?' (Fábregas 2013: 15)

Furthermore, it is now possible to explain the controversial question related to verbs like *preceder* 'precede', *seguir* 'follow', *sustituir* 'substitute' or *caracterizar* 'characterise', which, as we have seen before, obligatorily combine with an *a*-marked DO:



- (42) El sujeto precede al verbo
 the subject precedes DOM.the verb
 ‘Subjects precede verbs’ (Fábregas 2013: 16)

The reason would be that in these cases the nature of the verb implies that the DO is affected in the sense that the relation between the DO and another entity changes or is described. For instance, in the case of (42) the DO, *el verbo*, would be affected in the sense that it is preceded by another entity. In cases like *obedecer* the relation between the DO and another entity is again relevant:¹³

- (43) Su voluntad obedece a la razón
 his will obeys DOM the reason
 ‘His will obeys his reason’

This does not happen in cases like *Juan quemó el libro* (‘Juan burnt the book’), because in this case the relation between the book and Juan does not change.

Another property of marked objects that can now be explained by means of the structure proposed here is their status as participants in the event. The reason is that, as marked objects are not modifiers, they need to have the properties of a participant in the event, unlike modifiers.¹⁴ This confirms the idea in Leonetti (2004) that marked DOs are topics, in the sense of entities that are involved in

¹³A reviewer suggests that it is not necessary to consider that the presence of *a* is due to this relation between two entities but because of a locative relationship, as happens in normal locative constructions with *a*. However, unlike in locative constructions, in this case the marked object can be replaced by a pronoun, which indicates that they are different:

- (i) a. El sujeto precede al verbo → El sujeto le precede
 the subject precedes DOM.the verb the subject CL.DAT precedes
 ‘The subject precedes the verb’ → ‘The subject precedes it’
- b. Juan permanece a la derecha del árbol → *Juan le permanece
 Juan remains at the right of.the tree Juan CL.DAT remains
 ‘Juan remains to the right of the tree’ → ‘Juan remains it’

Of course, in DOM constructions the presence of Disjoint is related to location in the sense that there are two separated entities, but, as we have said before, in this case there is no Region that gives the spatial meaning. In this sense, with verbs like *acercar* (‘approach, get closer’), an alleged directional element can be replaced by *le*. This indicates that they are not real directional constructions:

- (ii) Juan se acercó al árbol. → Juan se le acercó
 Juan SE approached at.the tree Juan SE CL.DAT approached
 ‘Juan approached the tree’ → ‘Juan approached it’

¹⁴As a reviewer points out, it is important to note that the nature of the event and, hence, its internal structure, is relevant in this case. If there is no available object position in the structure for a participant it is not possible to have an individuated object. As we have seen, this is exactly

the event as prominent participants. In this regard, marked DOs will generally be specific and definite, although this is not absolutely necessary, as described in §2. Therefore, it is possible to find examples with definite and indefinite marked objects:

- (44) a. Juan vio a mi hija
 Juan saw DOM my daughter
 ‘Juan saw my daughter’
 b. Juan vio a una niña ‘Juan saw a girl’
 Juan saw DOM a girl

However, these indefinite marked objects must at least be [+specific]. For instance, this explains why bare plurals are not natural in DOM constructions:

- (45) Juan vio (*a) niños
 Juan saw DOM boys
 ‘Juan saw boys’

In Spanish bare plurals are not natural participants in the event. For instance, they cannot generally appear as subjects:

- (46) *Niños están jugando al fútbol
 Boys are playing of.the soccer
 ‘Boys are playing soccer’

Another characteristic in behavior that follows from the fact that marked objects are participants is that they can have scope over the subject, unlike non-marked objects, which are not participants. This can be seen in the following contrast in (47):

- (47) a. Todos vieron un niño
 Everybody saw a child
 → only wide scope:
 ‘Everybody saw some child, a different one’
 b. Todos vieron a un niño
 Everybody saw DOM a child
 → both readings:
 ‘Everybody saw some child, a different one’
 ‘Everybody saw a specific child’

what happens in Finnish with partitive objects, when there is no argument position for the object (cf. Pylkkänen 2008: 95).



Moreover, as marked objects are participants in the event, they can have a secondary predicate, unlike non-marked objects, as illustrated in the following example (in line with Torrego 1999: 1789):

- (48) a. Juan buscó un niño corriendo.
 Juan looked.for a boy running
 ‘Juan looked for a child running’
 → Juan was running
- b. Juan buscó a un niño corriendo
 Juan looked.for DOM a boy running
 ‘Juan looked for a child running’
 → Ambiguous: Juan was running or the boy was running

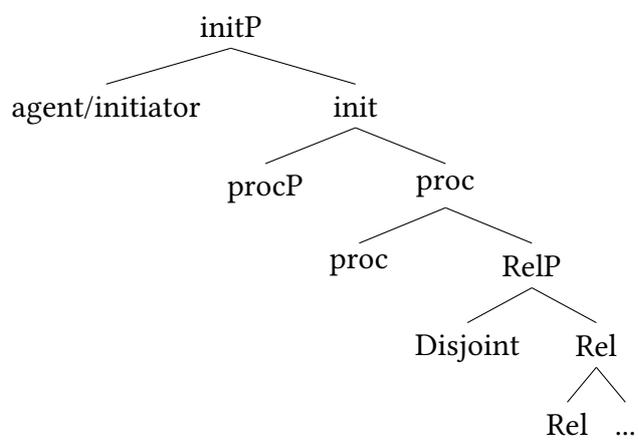
The different properties that we have examined account for the idea that marked DOs are similar to subjects, in the sense that they are participants of the event, but at the same time they look like indirect objects, because they are receivers or goals of the action of the verb and are also *a*-marked (cf. Laca 1995: 69-87, Fábregas 2013: 5).¹⁵

Furthermore, regarding the property of agentivity in DOM constructions, this can be linked to the fact that the presence of Rel+Disjoint as a complement of *proc* may introduce a change, which has to be initiated somehow. Thus, these constructions usually contain an *init* projection in their structure, which requires an agentive specifier or initiator, although, as we have seen, this is not obligatory:

¹⁵However, as a reviewer points out it could be possible to have examples like *Juan buscó niños corriendo* (‘Juan looked for children running’), where it is possible to interpret that the children are running. In that case we consider that *corriendo* and *niños* are a constituent that occupies the modifier position of the complement of *proc*, so *corriendo* does not occupy a position in the spine of the structure. Evidence that they are a constituent is that it is not possible to separate them. In this way, while it is possible to have *Juan vio corriendo a un niño*, with the interpretation that it is the child who runs, it is not possible to have **Juan vio corriendo niños*.



(49)



Very related to this is the telic condition of DOM constructions. Again it is possible to analyse this property as not exactly a reason for but only a consequence of the different structure of DOM constructions. The structure of DOM constructions is closely related to telicity because of the presence of Disjoint. However, it is possible to find telic constructions both with marked and non-marked objects, against the example we have seen before, given an appropriate context:¹⁶

- (50) a. Juan vio un niño en un segundo
 Juan saw a child in a second
- b. Juan vio a un niño en un segundo
 Juan saw DOM a child in a second
 ‘Juan saw a child in a second’

In this sense, Aissen (2003: 460) notes that ‘it is worth considering whether telicity only indirectly determines case-marking via its effect on specificity’.

As in DOM constructions there is generally a change, these constructions are generally telic. However, as Ramchand (2008) shows, change of state verbs do not necessarily imply that they are telic, as can be seen in the following pair of examples, where (51b) is obligatorily atelic:

- (51) a. María empujó a Juan {en un segundo / durante diez segundos}
 María pushed DOM Juan in one second / for ten seconds
 ‘María pushed Juan {in one second / for ten seconds}’

¹⁶As a reviewer points out, the interpretation of the two examples is different. In (48a) the interpretation is something similar to Juan saw one child in one second, whereas in (48b) the interpretation is that, for a specific child, Juan employed one second in seeing him. This suggests a difference in scope of the two objects, which supports the idea that there are two different positions for the object in the different structures. For now, the relevant idea is that it is possible to find telic examples with both constructions.



- b. María empujó a Juan por el cuarto {durante diez segundos /
María pushed DOM Juan along the room for ten seconds /
*en un segundo}
in one second
'María pushed Juan along the room {for ten seconds / in one second}'

On the other hand, non-DOM constructions are inherently atelic, as has been exemplified in the contrast in Torrego (1999) before.

One final difference between DOM and non-DOM constructions has to do with their interpretation. On the basis of the structure we suggest here, the interpretation of a non-marked example like *Juan vio un pájaro* is similar to 'Juan did or experienced the act of seeing a bird' or 'Juan did or experienced the act of a-bird-seeing'. As a modifier, the DO *un pájaro* restricts the denotation of the act, in this case, the act of seeing.

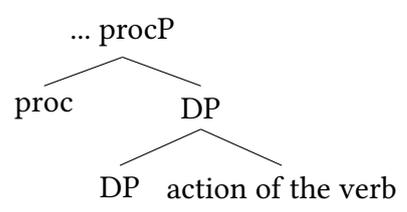
In contrast, in DOM constructions like *Juan vio a María*, the interpretation is that 'Juan did or experienced the act in which his vision finishes its trajectory or ends at María'. This difference in the interpretation is due to the fact that the presence of Rel in DOM constructions introduces a relation between the two entities, which means that the DO is not a modifier of the DP *visión* 'vision', but it is another entity with which it establishes a relation. Moreover, the presence of Disjoint gives the interpretation that the DO is a second entity with respect to the specifier of Rel, i.e. with respect to *visión*. In this sense, marked DOs correspond to entities where the action of the event finishes its trajectory.¹⁷

In sum, we have observed that the different properties of DOM constructions are captured in a unified way by means of the proposal made here.

6 Conclusions and last remarks

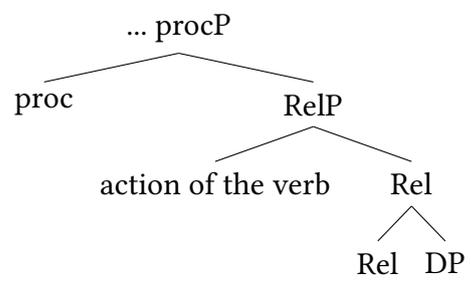
All in all, we have proposed that DOM constructions have a different structure from non-DOM constructions:

- (52) a. non-DOM:



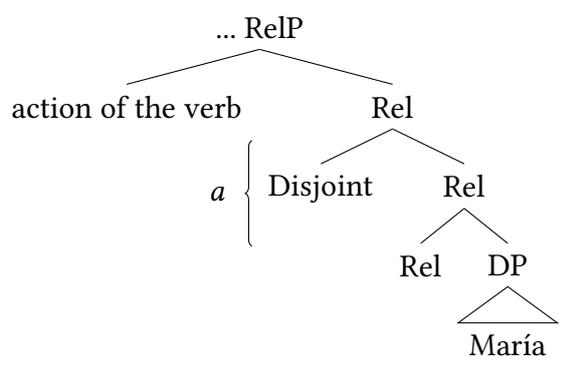
¹⁷The interpretation of movement towards the DO is visible in idioms like *echar un vistazo a Juan* or *lanzar una mirada a Juan*, both with the literal meaning of 'throwing a look to Juan'.

b. DOM:



While the DO in non-DOM constructions is a DP-modifier, the DO in DOM constructions is a RelP complement of *proc*. In the former, DOs restrict the denotation of the DP they modify, which indicates the action of the verb, whereas in the latter DOs are complements that are interpreted as receivers of the action of the verb. This is motivated by the different internal structure of marked and non-marked objects. Marked objects have a relational projection modified by Disjoint in their structure:

(53)



The presence of Disjoint explains why these objects are introduced by *a*, which is the element that lexicalizes Rel+Disjoint in Spanish, as suggested by Romeu (2014) for spatial constructions. It further explains the semantics of *a*-marked objects, as receivers of the action of the verb.

The different internal structure of marked and non-marked objects and the different position they occupy explain why marked DOs must behave affected (in the relation they hold with another entity), be animate and why they require certain specificity properties. Moreover, it explains why subjects in DOM constructions are more likely agentive and why DOM is obligatory with certain verbs.

Although we have accounted for many of the properties of DOM constructions, there are some questions that still remain controversial.

One important question left is why marked objects can be replaced by accusative clitic pronouns in the same way as non-marked objects:

- (54) a. Juan vio a María → Juan la vio
 Juan saw DOM María Juan CL.ACC.FEM saw
 ‘Juan saw María’ → ‘Juan saw her’
- b. Juan vio una mesa → Juan la vio
 John saw a table Juan CL.ACC.FEM saw
 ‘Juan saw a table’ → ‘Juan saw it’

What is intriguing here is why these objects are replaced by the accusative clitic and not by the dative clitic, as indirect objects, which are also introduced by *a* in Spanish:

- (55) A María le preocupa la lluvia
 A María CL.DAT worries the rain
 ‘María is worried about rain’

There are at least two possible explanations. The first one is to think that the clitic constructions in (54) are not the exact correlate to the examples without clitics. In other words, it could be the case that clitic examples have the structure of non-marked objects, by the clitic occupying a modifier position, rather than the structure of DOM constructions. However, we have not found any clear structural difference between DOM constructions and those with clitics.

The second option is that accusative clitics can replace marked DOs and not indirect objects because DOs and IOs have a different internal structure. In the same way as a DP like *el cuarto* (‘the room’) can lexicalize a DP plus a Region projection, as proposed in Romeu (2014: 48), it could be the case that IOs have a feature in their structure that make them different from *a*-marked DOs. This, together with the fact that IOs occupy a different position than marked DOs, could be the reason why a different clitic is used to replace them.

In this work we have only suggested two different positions for DOs. However, once we have opened up the possibility of different positions of the DO by means of the modifier position, which is available at any projection and is recursive, it is possible to think that there are more possible positions for the different DOs than the ones we have postulated here, as Fábregas (2013: 51) suggests. This could explain why, for instance, there are cases in which subextraction from a non-marked object is completely grammatical:

- (56) ¿De quién viste el retrato?
 of whom saw the portrait
 ‘Of whom did you see the portrait?’

It could be the case that certain DOs occupy the complement position of *proc*, in the same way as the RelP in DOM constructions. This could be the case, for instance, of creation verbs (cf. Ramchand 2008).

Related to this, it would be interesting to apply this analysis to *se*-constructions. Interestingly, in *se* constructions like the one represented below, a bare plural is banned:

- (57) a. Los niños comieron patatas
 the children ate potatoes
 ‘Children ate potatoes’
 b. Los niños se comieron *(las) patatas
 the children SE ate the potatoes
 ‘Children ate potatoes’

The contrast in (57) seems to suggest that a non-marked object bears the properties of a participant of the event, which could mean that it sits in the specifier of Rel. Remember that this is the position that the action of the event occupies in DOM constructions.

Furthermore, for some speakers it is not possible to have a marked object without *se*:

- (58) Los caníbales *(se) comieron a María
 the cannibals SE ate DOM María
 ‘Cannibals ate María’

It appears to be the case that for these speakers *comer* is a verb that only accepts DOs if they occupy the modifier position, unless it combines with *se*. The presence of *se* could mean that there is a Rel complement.

There is also a similar contrast in passives. It is generally possible to have a passive subject in correlation with an *a*-marked object, but this is not always possible with non-marked objects, at least in the same sense:

- (59) a. Juan ama a María → María es amada por Juan
 Juan loves DOM María María is loved by Juan
 ‘Juan loves María’ → ‘María is loved by Juan’
 b. Juan ama la naturaleza → ?La naturaleza es amada por Juan
 Juan loves the nature The nature is loved by Juan
 ‘Juan loves nature’ → ‘Nature is loved by Juan’

If the non-marked object is affected, it becomes more easily a passive subject. In this sense, the following example is more natural if Juan reads the book aloud, because this is a more evident way in which the book is affected, although other readings are also possible:



- (60) El libro fue leído por Juan
The book was read by Juan
'The book was read by Juan'

Moreover, it would be interesting to apply this analysis to an investigation of what happens in languages in which there is no DOM. Is it that the structure is always the one suggested here for non-DOM constructions, i.e. that DOs are always modifiers, or is it that DPs in other languages can also lexicalize Disjoint?

A last problem relates to constructions in which there are two complements headed by *a*, like in the following case:

- (61) Enviaron *(a) todos los enfermos a la doctora Aranzabal
sent.3PL DOM all the sick.people to the doctor Aranzabal
'They sent all the sick people to Doctor Aranzabal'

(Ormazabal & Romero 2013)

One possible way to tackle these constructions is by considering the possibility of having a RelP as a complement or a specifier of another Rel.

Leaving aside these questions, we consider that an analysis like the one suggested here, which follows a minimal cartography, provides a method for more subtle explorations of DOM constructions and other constructions related to them.

References

Aissen, Judith. 2003. Differential object marking: iconicity vs. economy. *Natural Language and Linguistic Theory* 21(3), 435–483.

Bassa Vanrell, Maria del Mar. 2011. *The role of verb type – affectedness and agentivity – in Differential Object Marking: A quantitative and qualitative analysis in Modern European Spanish*. Unpublished ms.

Beavers, John. 2011. On affectedness. *Natural Language and Linguistic Theory* 29(2), 335–370.

Bossong, Georg. 1985. *Differentielle Objektmarkierung in den Neuiranisdchen Sprachen*. Tübingen: Gunter Narr Verlag.

Comrie, Bernard & Greville G. Corbett. 1993. *Introduction to the slavonic languages*. London/New York: Routledge.

Cuervo, Cristina. 2003. *Datives at large*. PhD dissertation, Massachusetts Institute of Technology.

Dowty, David R. 1991. Thematic proto-roles and argument selection. *Language* 67(3), 547–619.



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Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22(1), 1–26.

Fábregas, Antonio. 2013. Differential object marking in Spanish: state of the art. *Borealis: An International Journal of Hispanic Linguistics* 2(2), 1–80.

Fernández Ramírez, Salvador. 1986 [1951]. *Gramática española 4: El verbo y la oración*. Madrid: Arco Libros.

Hale, Ken & Samuel J. Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In Ken Hale & Samuel J. Keyser (eds.), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger* 24, 53–109. Cambridge, MA: MIT Press.

Hale, Ken & Samuel J. Keyser. 2002. *Prolegomenon to a theory of argument structure*. Cambridge, MA: MIT Press.

von Heusinger, Klaus. 2008. Verbal semantics and the diachronic development of DOM in Spanish. *Probus* 20(1), 1–31.

von Heusinger, Klaus & Georg A. Kaiser. 2007. Differential Object Marking and the lexical semantics of verbs in Spanish. In Georg A. Kaiser & Manuel Leonetti (eds.), *Proceedings of the workshop 'Definiteness, Specificity, and Animacy in Ibero-Romance Language'*, 83–109. Universität Konstanz Fachbereich Sprachwissenschaft.

von Heusinger, Klaus & Georg A. Kaiser. 2011. Affectedness and differential object marking in Spanish. *Morphology* 21(3–4), 593–617.

Hopper, Paul & Sandra Thompson. 1980. Transitivity in grammar and discourse. *Language* 56(2), 251–299.

Laca, Brenda. 1995. Sobre el uso del acusativo preposicional en español. In Carmen Pensado (ed.), *El complemento directo preposicional*, 61–91. Madrid: Visor.

Laca, Brenda. 2006. El objeto directo: La marcación preposicional. In Concepción Company Company (ed.), *Sintaxis histórica de la lengua española, Parte 1: La frase verbal*, 423–479. México D.F.: Universidad Autónoma de México / Fondo de Cultura Económica.

Leonetti, Manuel. 2004. Specificity and Differential Object Marking in Spanish. *Catalan Journal of Linguistics* 3, 75–114.

Næss, Áshild. 2004. What markedness marks: The markedness problem with direct objects. *Lingua* 114(9–10), 1186–1212.



Ormazabal, Javier & Juan Romero. 2013. Differential object marking, case and agreement. *Borealis: An International Journal of Hispanic Linguistics* 2(2), 221–239.

Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: MIT Press.

Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first phase syntax*. Cambridge: Cambridge University Press.

Rodríguez Mondoñedo, Miguel. 2007. *The syntax of objects: Agree and Differential Object Marking*. PhD dissertation, University of Connecticut, Storrs.

Romeu, Juan. 2014. *Cartografía mínima de las construcciones espaciales*. PhD dissertation, UCM-CSIC, Madrid.

Ross, John Robert. 1967. *Constraints on variables in syntax*. PhD dissertation, Massachusetts Institute of Technology.

Starke, Michal. 2001. *Move Reduces to Merge: A theory of locality*. PhD dissertation, University of Geneva.

Starke, Michal. 2007. Nanosyntax class lectures, fall 2007. Center for Advanced Studies in Theoretical Linguistics (CASTL), University of Tromsø.

Stepanov, Arthur. 2007. The end of CED? Minimalism and extraction domains. *Syntax* 10(1), 80–126.

Svenonius, Peter. 2010. Spatial P in English. In Guglielmo Cinque & Luigi Rizzi (eds.), *The cartography of syntactic structure*, vol. 6, 127–160. Oxford: Oxford University Press.

Torrego, Esther. 1999. El complemento directo preposicional. In Ignacio Bosque & Violeta Demonte (eds.), *Gramática descriptiva de la lengua española*, vol. 2: *Las construcciones sintácticas fundamentales: Relaciones temporales, aspectuales y modales, 1779–1805*. Madrid: Espasa.

Zwarts, Joost & Yoad Winter. 2000. Vector space semantics: A model theoretic analysis of locative prepositions. *Journal of Logic, Language, and Information* 9(2), 169–211.

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