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# On long-distance theta-role assignment

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#### Abstract

In this paper, the long-standing assumption that (External or Internal) Merge is a necessary condition for theta-role assignment is challenged. It is argued, then, that a theory of thematic assignment which allows for long-distance theta-role assignment under conditions of locality and activity is empirically preferable when it comes to some complex interactions between *se* and causative constructions in Buenos Aires Spanish. It is also shown that recent arguments against long-distance theta-role assignment do not hold in a theory as the one defended here, which conceives of theta-roles as regulated by conditions generally available in the realm of A-dependencies. © 2015 Elsevier B.V. All rights reserved.

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# 1. Introduction

A pervasive assumption about thematic theory is that Merge is a necessary condition for thematic assignment. The strongest version of such an approach is that only External Merge can satisfy thematic requirements (Chomsky, 1995, 2000, 2001; Miyagawa, 2010, among others). A weaker version – mostly represented by the proponents of the movement theory of control (MTC, Hornstein, 1999 and much subsequent works) – claims that Internal Merge also targets thematic positions (i.e., movement into theta positions is allowed). The common assumption is, again, that Merge is a necessary condition to establish thematic relations. Indeed, Sheehan (2012) has formulated this as a principle of UG:

(1) Principle of theta-role assignment:

Theta-roles can only be assigned via External or Internal Merge with a thematic head.

[Sheehan, 2012:38]

In this paper, I challenge this long-standing assumption in current minimalist theory by showing that theta-role assignment can proceed in a long-distance fashion provided that conditions on activity and locality are met (Chomsky, 2000, 2001 and subsequent work).

(2) Principle of theta-role assignment (informal version): A thematic head H can assign a theta-role to a given argument A if and only if A is active and local with respect to H.

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The notions of *locality* and *activity* that are at play for thematic assignment will be defined and illustrated in detail below. As we will see, my claim that activity and locality are the relevant conditions for thematic assignment does not force us to accept that theta-roles are features checked under some version of the so-called *Agree* operation; indeed, through this paper I will remain neutral about this possibility (see section 3).

It is also important to emphasize that the crucial difference between (1) and (2) is *locality*. As I will define this notion, a given argument will be local with respect to a given thematic head if it is contained within the projection of such a head. Evidently, such a definition is more liberal than its competitor in (1), which requires a stricter notion of locality, i.e., Merge in any of its variants. The consequence of this difference is that, according to the theory informally presented in (2), Merge is not a necessary condition for theta-role assignment.

As argued in section 3, both theories seem to be extensionally equivalent in several empirical domains (i.e., well-known contrasts between reflexive and impersonal *se* constructions, intervention effects in Spanish double object constructions, and basic control structures). However, they differ with respect to a basic fact, namely, the ban of reflexivizing the *causee* subject in analytical causatives in Spanish and other Romance languages (Baauw and Delfitto, 2005; Saab, 2014). See (3b):

- (3) a. Juan hizo comprar un auto / trabajar a Pedro.
   J. made buy.INF a car / work.INF to P.
   'Juan made Pedro buy a car/work.'
  - b. \*Juan se hizo comprar un auto / trabajar.
     J. se made buy.INF a car / work.INF
     Intended: 'Juan made himself buy a car/work.' (*Juan* = infinitive subject)

In section 4, I argue that the ungrammaticalities in (3b) are totally unexpected under some version of (1), in particular, under the attract-based theory mainly defended by the proponents of the MTC. On the contrary, as shown in Saab (2014), the same basic fact is directly derived in a theory that allows for theta-roles to be assigned in a long-distance fashion under activity and locality conditions (as defined below). If this is correct, we will have a new argument for dispensing with the Merge condition on theta-role assignment. Section 5 will reinforce the core argument by showing that analytical causatives of the *hacer* 'to make' type cannot be seen as ECM-constructions (*pace* López, 2001, 2012, among others), i.e., constructions in which the infinitival subject has to vacate the main clause for Case reasons. Indeed, the behavior of causatives and ECM constructions in Spanish drastically differ with respect to the main facts to be discussed here.

In section 6, I will address a putative argument presented by Sheehan (2012) against long-distance analyses of thetarole assignment and show that such an argument does not hold in the theory I will defend. Finally, I will also demonstrate that Reinhart and Siloni's (2005) long-distance theta-role assignment approach is incapable of accounting for the basic facts discussed in section 4.2 (see Appendix).<sup>1</sup>

Before entering into the details of the arguments to be developed in this paper, I will first introduce some basic assumptions about argument structure based on previous works by Pujalte and Saab (2012, 2014), Pujalte (2013) and Saab (2014). The main idea in those works is that argument structure effects have to be seen as epiphenomena resulting from the interactions between the operations Merge and Agree and the formal make up of functional heads. The theory will be illustrated with reference to *se* constructions in Spanish (mainly, reflexives and impersonals), an empirical domain which that will be crucial for the main arguments developed in detail in the rest of the paper.

#### 2. Argument structure as an epiphenomenon

I assume the approach to argument structure pursued in different works by Pujalte and Saab (see Pujalte and Saab, 2012, 2014; Pujalte, 2013; Saab, 2014). In such works, argument structure effects (i.e., argument addition or reduction, for instance) are seen as the result of the way in which syntax combines formal features (φ and subcategorization features) on functional heads and the way in which the computational operations Merge and Agree interact with each other in syntactic derivations. As shown in the cited works, such an approach is capable of deriving a complex set of empirical facts involving the derived notion of *argument structure*. In this section, then, I introduce the main ingredients of the theory of argument structure I will adopt in what follows.

<sup>&</sup>lt;sup>1</sup> Another important antecedent of a long-distance approach for theta-assignment is Bošković and Takahashi (1998), who propose that long scrambling in languages of the Japanese type can be explained if it is the case that (i) theta-roles are formal features and (ii) in languages in which such features are weak, such as Japanese, thematic assignment can proceed in a long-distance fashion via the operation of Feature Movement (in Chomsky's 1995 sense). Given that the Feature Movement hypothesis is not longer tenable for well-known reasons, I will not discuss Bošković and Takahashi's work here.

## 2.1. Assumption #1: Merge and its PF effects

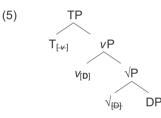
Following Müller (2010), Pujalte and Saab (2012) assume that the structure-building operation Merge is triggered by a set of ordered subcategorizarion features (D, V, P and so on). According to Müller (2010:39), such features are linked to the theta grid of a given predicate or, to be more precise, to the functional heads expressing some given theta-role.<sup>2</sup> I will adopt this assumption in a particular way. Concretely, I will assume that subcategorization features on thematic heads are a necessary condition to make such a head a theta-role assigner. So, for instance, an agentive *v* head will be a theta-role assigner only if it is explicitly specified with a [D] feature. Thus, theta-roles are not conceived of as formal features, but only subcategorization (and inflectional) features are (see section 3 for more details). That is, only purely formal features are encoded on functional heads. In addition, I will also assume that subcategorization features on potential probes (*v* heads, for instance) are enough to make such a probe a phase head, which will determine a particular cycle of syntactic computation.

Pujalte and Saab further propose that satisfaction of subcategorization properties on functional heads must be evaluated at PF through the following condition:

(4) At PF, every structure-building feature must be discharged.

#### [Pujalte and Saab, 2012:238]

The consequence of this condition is that, as far as syntax is concerned, a given subcategorization feature may remain unsatisfied because of the absence of a corresponding syntactic object canceling such a feature within the derivation space. In the abstract tree in (5), for example, absence of an external DP leaves a subcategorization feature on v unsatisfied.



[Pujalte and Saab 2012: 239]

Such a derivation would cause different syntactic and morphological conflicts depending on several general and language-particular considerations. In Spanish, Pujalte and Saab argue, (5) will trigger clitic insertion at PF to satisfy the conflicting [D] feature on v. In this respect, the *se* clitic and its agreeing forms are the explicit reflexes of what (5) illustrates in the abstract. Thus, several *se* constructions – ergative *se* (6), passive *se* (7), impersonal *se* (8) and reflexive *se* (9) – are unified by the same analysis:

- (6) Se hundió el barco con la tormenta. se sank.3sg the ship with the storm 'The ship sank with the storm.'
- (7) Se cerraron las puertas para bloquear la salida. SE closed.3PL the doors for block.INF the exit 'The doors were closed in order to block the exit.'
- (8) Nunca se castiga a los culpables. never se punishes Acc the culprits 'No one ever punishes the culprits.'
- (9) Juan se critica.
   Juan se criticizes
   'Juan criticizes himself.'

<sup>&</sup>lt;sup>2</sup> See Müller's work for a specific implementation of this idea. It is worth noticing that the same idea is at the core of the GB era (see, for instance, Jaeggli, 1986).

I refer to Pujalte and Saab (2012) for detailed discussion about the clitic insertion operation.<sup>3</sup> For my purposes here, it is enough to be clear with respect to the assumption underlying the syntax of *se* constructions. Under the view defended in this paper, the clitic *se* or its agreeing variants is not a Case reducer (*pace* Reinhart and Siloni, 2005, among others; see Appendix), but just an expletive that indicates the absence of an external argument in Spec, *v*P in the syntax (similar proposals, although with crucial different implementations, can be found in Embick, 2004; Schäfer, 2008, among others).<sup>4</sup> The term *expletive* as I understand it here does not depart from its traditional use in languages like English for elements like *it* or *there*, namely, it is a placeholder that satisfies some selection property of a given head. However, as we will see in section 6.2, there is a crucial difference when it comes to the timing of expletive insertion in English or Spanish. Thus, while in English expletives are inserted in the syntax, in Spanish a form like *se* (and any of its agreeing variants) is inserted at PF. A conceptual argument in favor of this distinction is that expletives cannot be inserted into thematic position in the syntax; otherwise, they would behave as arguments. See section 6 for more details.

In each of the examples in (6)–(9), absence of an external argument triggers, then, clitic insertion at PF. As shown by Pujalte and Saab, such an operation is subjected to strict locality conditions. For instance, expletive insertion in the examples at hand is permitted because the unsatisfied [D] feature on the v head is "visible" for the operation to apply. Concretely, the feature is part of the phase edge (namely, v) when the complex head -formed by Root to T movement-containing such a feature is evaluated for expletive insertion at PF. It must be the case, then, that a strong version of the Phase Impenetrability Condition (PIC) is at work in the PF component. Shortly, they adopt Marvin's (2002) version of the PIC, as formulated in (10):

(10) H and its edge are spelled out at the next (strong) phase. The domain of H is spelled out at the phase of HP. A head *h* adjoined to H is in the domain of H.

[Marvin, 2002:26]

The last clause in (10) just makes it clear that head movement does not affect PIC effects for moved heads.<sup>5</sup> As illustrated in (11), with reference to the complex head created by Root to T movement, the possibilities for clitic insertion are restricted to v and the heads above v.<sup>6</sup> In other words, only the [D] features in the head phase (i.e., v) and its edge, the T node, are visible for further computation at PF:

- Juan (se) comió la torta. (i) a. Juan se ate.3sg the cake 'Juan ate the cake.' b. cigarrillo. Juan (se) fumó el Juan se smoked.3sg the cigarette 'Juan smoked the cigarette.' (ii) Juan \*(se) besó con Ana.
- Juan se kissed with Ana Juan and Ana kissed each other.

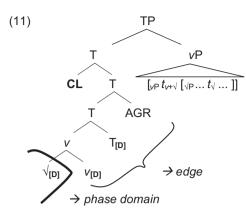
In both type of configurations, Case reduction does not apply and, nevertheless, clitic insertion takes place. The obvious next question is whether or not the clitics in (i) and (ii) form a natural class with the main paradigm in (6)–(9). The response might be positive. As has been argued in the literature, both constructions in (i) and (ii) seem to require a minimal clause analysis according to which the sentential subject of each configuration is based-generated as the subject of a minimal clause (see Campanini and Schäfer, 2010; Mare, 2012 for (i) and (ii), respectively). Clitic insertion is then predicted by Pujalte and Saab's analysis but not for the view of *se* as a Case reducer. This is so, because the former analysis predicts se insertion not only in contexts where a given argument is absent (i.e., in scenarios where Case reduction is attested), but also in contexts where the external theta-role bearer is generated in positions other than Spec, vP.

<sup>5</sup> The last clause is evidently a stipulation, needed, at any rate, to account for head opacity effects, among other phenomena. For different versions of the PIC, see Chomsky (2000, 2001, 2007, 2008), Richards (2007, 2011), Müller (2004), Gallego (2010), Citko (2014) and, in particular, Embick (2010) for a different morphological implementation of the PIC.

<sup>6</sup> I am assuming that the AGR node is a dissociated morpheme in Embick and Noyer's (2001) sense (see footnote 3).

<sup>&</sup>lt;sup>3</sup> Pujalte and Saab's system presupposes a version of Distributed Morphology, in particular, the model outlined in Embick and Noyer (2001), in which different sorts of morpheme insertion at PF are implemented under restricted circumstances. Such morphemes are called *dissociated* in Embick and Noyer's work. Clitic insertion, as proposed in Pujalte and Saab, is then just an instance of a general Dissociated Morpheme Insertion operation needed independently in other domains of the Spanish grammar (e.g., insertion of agreement morphemes, in general).

<sup>&</sup>lt;sup>4</sup> The view of se as a Case reducer (see Appendix for discussion on Reinhart and Siloni's 2005 particular approach) and the approach defended in Pujalte and Saab make different predictions when it comes to account for some particular occurrences of the clitic *se* in environments where Case reduction does no take place. Two concrete instances of this factual scenario are briefly discussed in Pujalte and Saab's work and in Pujalte (2013), where the issue is developed at some length. Concretely, they refer to the so-called optional *se* construction illustrated in (i) and the discontinuous reciprocal construction in (ii) (see Pujalte and Saab, 2012:256, fn. 23):



Crucially, se never indicates the absence of an internal argument, at least in nominative–accusative languages or in morphological ergative ones. Thus, a sentence like (12) cannot be interpreted as an impersonal se construction with the meaning that John hid something/someone (Otero, 1985):

(12) \*Juan se escondió.
 Juan se hid
 Intended: 'Juan hid something/someone.'

Assuming a strong version of the PIC like (10), then, the ungrammaticality of (12) follows: the unsaturated [D] feature of the Root cannot be rescued by expletive insertion at PF because this feature is in the complement of the phase (namely, v) when the complex head containing such a feature is evaluated for expletive insertion.<sup>7</sup>

In summary, Pujalte and Saab's (2012) analysis not only does it allows for unifying a set of se configurations in Spanish but also makes explicit the generalization that expletives cannot be associated with object position, which seems to be the correct state of affairs in natural languages of the nominative-accusative type, at least.<sup>8</sup>

<sup>8</sup> An anonymous reviewer suggests that this view of se as an expletive could be challenged by data like the following:

- (i) \*Se hay mucha gente se has a-lot-of people
- 'There are a lot of people.' (ii) \*Se parece que hay mucha gente
- se seems that has a-lot-of people 'There seems to be a lot of people.'

I do not think, however, that the data in (i) and (ii) are a real challenge for the view defended in Pujalte and Saab. The facts in (i) and (ii) involve the particular formal composition of the T node, an issue which is not under the discussion in their paper and in the present one. This is, of course, a crucial issue when it comes to evaluate the nature of the Null Subject Parameter, but the point is orthogonal to the main discussion here. At any rate, there are several ways to account for (i) and (ii) in a consistent way with the view of *se* as a (PF) expletive. First, recall that *se* is an indication that the external argument introducer has not been merged with the relevant DP argument. The data in (i) and (ii) are irrelevant in this respect, because there is no *v*<sub>[external argument]</sub> in the first place. It could be simply the case that T in null subject languages is not encoding any [D] property (although see Pujalte and Saab, 2012 for discussion of some potential instances of *se* insertion induced by the T node in Spanish). In other words, null subject languages do not require projecting Spec,TP (as in Alexiadou and Anagnostopoulou's 1998 influential paper) either because T is not encoding a [D] feature or, alternatively, because such a feature is indeed expressed but canceled by other means (for instance, by an agreement morpheme; see Alexiadou and Anagnostopoulou's 1998 and Saab, 2008 for extensive discussion). Another alternative could be assuming that T does express a [D] feature that requires cancelation and that this is indeed an expletive, however, is obligatory deleted or null. This would be more in consonance with the classic approach to null expletives (although see Muñoz Pérez, 2014 for a recent alternative).

<sup>&</sup>lt;sup>7</sup> This state of affairs strongly suggests a post-syntactic analysis of *se* constructions. Notice that if *se* insertion applied in the syntax, then PIC effects discussed here would remain unexplained. In effect, a purely syntactic approach to clitic insertion predicts that an unsaturated [D] feature in Root position can be canceled in the syntax under local inspection. See, however, section 6 for more discussion on the timing of expletive insertion in English and Spanish.

#### 2.2. Assumption #2: Agree and feature inheritance

A second ingredient is needed for the system to work properly. This ingredient involves the working of the syntactic operation Agree (Chomsky, 2000, 2001). Let me present the idea in some detail.

Following Pujalte and Saab (2012), I adopt the hypothesis that  $\phi$ -sets do not need to be inherently specified on probe heads (*pace Chomsky*, 2000). With reference to  $v_{\text{[external argument]}}$ , v can enter the derivation only with its categorial [D] feature. In a configuration like (13), v, being  $\phi$ -defective, cannot value the K feature of the internal argument and, consequently, this internal DP will be valued as nominative after C and T are introduced into the derivation. As will become clearer below, this nominative DP will get two theta-roles.

(13) vPv' $v_{[D]}$   $\sqrt{P}$  $\sqrt{+DP}$ 

Nominative valuation for the internal DP is induced by feature inheritance from C to Root (Chomsky, 2007, 2008), a possibility strictly correlated with the  $\phi$ -defectiveness of the *v* head and the absence of an external argument. In other words, the system dictates under which syntactic configurations the absence of an external argument is permitted. As argued in Pujalte and Saab (2012), the scenario abstractly represented in (13) underlies the syntax of se-reflexive sentences in Spanish and other Romance languages.<sup>9</sup> See (9), repeated as (14), and its associated analysis in (14b):

(14)	a.	Juan	se	critica.	
		Juan	SE	criticizes	
		'Juan criticizes himself.'			

b.  $[_{CP} \mathbf{C}_{\phi} [_{TP} T [_{vP} v_{[D]} [_{RootP} Root_{[D]} DP_{[uK]}]]]]$ 

Se-syncretism between reflexives and impersonals (see 8) is straightforwardly captured under this view. The difference in Case between an impersonal like (15a) and a reflexive like (14a) is simply accounted for if the probe is v in (15a) but C in (14a):<sup>10</sup>

- (15) a. Se castigó a los culpables.
   se punished Acc the culprits
   'One punished the culprits.'
  - b. [CP C [TP T [ $_{VP}$   $\boldsymbol{v}_{[\phi}$ , **D**] [RootP Root[D] DP[uK]]]]]

Reflexives

Impersonals

<sup>&</sup>lt;sup>9</sup> The canonical word order in Spanish reflexives is SVO. How this word ordering is obtained is not addressed in Pujalte and Saab's work. Through this paper, I will also leave word order considerations for future investigation (although see Ordóñez and Saab, 2013 for discussion about word order in causatives).

<sup>&</sup>lt;sup>10</sup> Another property of the syntax of impersonal se constructions is that C must be defective, a hypothesis that receives confirmation from the fact that these constructions are inflected as third person singular by default.

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Notice that both structures lack an external argument to cancel the [D] feature on *v*. Therefore, *se* insertion applies at PF under the conditions discussed above and the observed syncretism is correctly accounted for.<sup>11</sup> In turn, Case differences between both constructions are just the consequence of  $\phi$ -specification on probes (C in reflexives, *v* in impersonals). This difference also correlates with the fact that, in contradistinction with reflexives, the internal argument of an impersonal *se* sentence cannot be also the agent of the sentence. However, this system does not explain why the nominative subject of a reflexive sentence bears two theta roles, but an impersonal *se* sentence receives an arbitrary reading for its external argument. Pujalte and Saab acknowledge the problem and simply stipulate the following conditions on thematic assignment:

- (16) In a vP domain with active-agentive v, the internal DP can be interpreted as the agent of the event only if:
  - (i) *v* has a non-discharged D feature,
  - (ii) vP is not inherently specified with  $\varphi\mbox{-features}.$

[Pujalte and Saab, 2012:242]

Evidently, the two conditions in (16) only describe what was said about the syntax of reflexive and impersonal se constructions in Spanish. Thus, the subject of a reflexive construction is involved in a derivation in which both conditions in

 $^{11}$  A putative counterexample to this approach is the so-called passive *se* construction (see 7 and i below), where there is agreement between T and the internal argument, but the external argument is, nevertheless, interpreted as arbitrary:

(i) Las puertas se abrieron a propósito. the doors se opened.PL on purpose 'The doors were opened on purpose.'

As argued in Saab (2014), agreement is not a conclusive indication of nominative assignment. If it were the case, the arbitrary reading for the external argument would be prevented and a reflexive or anti-causative reading would be the only available one. However, several tests indicate that the internal argument in (i) does not receive nominative Case, but accusative (or inherent) Case. First, overt nominative marking cannot occur in passive se contexts:

- (ii) a. Se encontraron cadáveres. se found.3PL bodies 'Bodies were found.'
  - b. \*Se encontró Juan/él.
     sE found.3sg Juan/he Intended: 'He was found.'
  - c. \*Me encontré yo. cL.1sg.acc found.1sg l Intended: 'I was found.'

[b-c OK as reflexives; see Saab, 2014:166]

Second, an overt pronoun can only show up in the accusative form, which superficially produces an impersonal se construction, not a passive one:

- (iii) a. Se lo encontró. se cl.MASC.3SG.ACC found.3sg 'He was found.'
  - b. Se me encontró. se cl.1sg.acc found.3sg 'I was found.'

[Saab, 2014:166]

Finally, notice that a similar situation is found with respect to proper nouns, which can only occur in the impersonal se configuration under differential object marking, a property of accusative objects:

 (iv) Se encontró a Juan se found.3sg Acc J.
 'Juan was found.'

[Saab, 2014: 166]

It seems then that *verb-subject* agreement effects only show up with those objects that are not morphologically marked as accusative. I refer the reader to Saab (2014) and Pujalte and Saab (2014) for detailed discussion on passive se in Spanish. See also Rodríguez-Mondoñedo (2007) for a similar idea regarding surface subject–verb agreement effects in Spanish existential constructions.

(i) and (ii) are met. On the contrary, condition (ii) is violated in impersonal se environments, where v has  $\phi$  features, and, consequently, an arbitrary reading arises at (or beyond) LF (see section 3.2 below and Saab, 2014 for details about how arbitrary readings are implemented in this system). This, of course, is far from being an explanation of the data. For this reason, Saab (2014) proposes reconsidering conditions (i) and (ii) in (16). Under closer inspection, condition (ii) can be seen as some version of the Activity Condition (Chomsky, 2000, 2001): a potential probe without  $\phi$ -specification will leave its associated DP with its K(ase) feature unvalued and, consequently, active for further computation. In turn, condition (i) means that the internal DP is the closest argument (in this case, the only available one) for agentive v to discharge its theta-role. In other words, condition (i) is reinterpreted as a type of locality condition on theta-role assignment. In the next section, I will elaborate on these conditions at length and, in addition, I will discuss some preliminary empirical results and compare them with an attract-based theory of theta-role assignment.

## 3. A theory of theta-role assignment: illustrations and comparisons

The activity and locality conditions informally expressed in (2) and in the last paragraph are more explicitly stated with reference to a given vP domain (other heads can also be thematic heads) as follows (see also Saab, 2014), where the notion of *domain* is understood as the set of categories contained in vP "that are distinct from and do not contain" v (Chomsky, 1995:178):

## (17) Principle of theta-role assignment:

An argument DP *A* receives a theta-role from a thematic head,  $x_{[D]}$ , in the domain of a vP if and only if:<sup>12</sup> (A) *Activity*: *A* has an unvalued K feature at the point of the derivation where the theta-role of  $x_{[D]}$  is being evaluated/assigned (i.e., *A* is active within the vP domain to enter into further A-dependencies).

(B) **Locality**: A is the closest local argument to  $x_{[D]}$ ; (i.e., A is not contained in the domain of another  $y_{[D]}$  of the same type as  $x_{[D]}$  c-commanded by  $x_{[D]}$  and there is no closest argument A' local to  $x_{[D]}$ ).

Associated definitions:

Contained: X is contained in Y if at least one segment of Y dominates X.

Sameness: x is a thematic head of the same type as y if x and y are thematic heads that introduce the same structural argument (internal or external).

*Closeness:* Given two active DPs, Y and Z, such that Y and Z are local to a given theta-role assigner  $x_{[D]}$ , Y is closer to  $x_{[D]}$  than Z if Y c-commands Z.

The notion of *containment* is the usual one (Chomsky, 1986a) and, although it will be enough for my purposes here, further research could show that a more restrictive notion, such as *dominance*, is superior for empirical reasons. The notion of *sameness* with reference to a thematic head is at the heart of the theory of thematic locality. Crucially, it states that locality involving thematic roles makes use of structural positions regardless of the specific content that a given thematic role encodes on a particular thematic head. By hypothesis, same thematic heads are introduced into identical structural positions, but different thematic roles (experiencers, agents, causes) can also be introduced into the same positions. Put differently, a thematic head introducing an experiencer may be an intervener for an agentive functional head.<sup>13</sup> Again, further refinements could be necessary in this domain (see footnote 29 for more discussion on the definition of *sameness*).

 (i) \*Juan se hizo comprar un auto/trabajar.
 J. se made buy.INF a car/work.INF Intended: 'Juan made himself buy a car/work.' (*Juan* = infinitive subject)

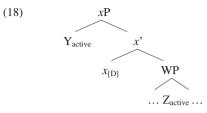
Here, two thematic heads of the same type (*hacer* and the agentive *trabajar* and *comprar*, respectively) interacts in such a way as to produce a locality effect that rules out reflexivization of the external argument of the embedded infinitive. In these examples, the embedded infinitives are agentive heads. However, some experiencers also produce the same locality effects, indicating that they are of the same type as other external argument heads:

- (ii) a. Su madre le hizo detestar los mariscos. his/her mother cL.3sg.DAT made hate.INF the seafood 'His/her mother made him/her hate the seafood.'
  - b. \*Su madre se hizo detestar los mariscos (a sí misma). his/her mother se made hate. $\ensuremath{\mathsf{INF}}$  the seafood to herself

<sup>&</sup>lt;sup>12</sup> In accord with the discussion in section 2.1, the notation  $x_{[D]}$  stands for a head with a subcategorization feature of the [D] type that makes that head a potential theta-role assigner.

<sup>&</sup>lt;sup>13</sup> As we will see in section 4, this notion of *locality* will be crucial to account for the ungrammaticality in (3b), repeated as (i):

Finally, the definition of *closeness* plays an important role when it comes to decide between two active and local DPs with respect to the same theta-role assigner. Consider, in this respect, the following abstract configuration:



Here, both Y and Z are contained within the  $x_{[D]}$  projection and both are local with respect to it. However, Y is closer than Z to  $x_{[D]}$  given the c-command condition in the definition of *closeness* in (17). It is worth noticing that this definition is less restricted than the Sisterhood Condition on Agree (Chomsky, 2000, 2001), which requires that goals must be in the complement domain of a given probe. In my approach to closeness, however, the specifier position of a given thematic head is a potential candidate for taking whatever theta-role such a head has to assign.

The type of locality proposed in (17B) seems to be connected to the A-over-A Condition in some basic respects,<sup>14</sup> although not only the original formulation is implemented in a totally different fashion, but also the empirical motivations that were the basis for its formulation were different and involved other types of locality considerations. At any rate, what is important to keep in mind is that the locality condition formulated in (17B) is independent of any attract theory of movement.

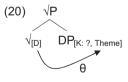
Before entering into more concrete illustrations, let me clarify some additional matters. Through this paper, I will remain neutral about some aspects of thematic theory. As noticed in the introduction, my main claim is that Merge in any of its variants is not a necessary condition for theta-role assignment. This does not commit me to see neither theta-roles as features (see section 2.1) nor to reduce theta-role assignment to some version of the operation Agree. What is more, although the definitions in (17) are presented as being strictly derivational, in the sense that each theta-role is discharged in a corresponding derivational step, I see no deep reason to reject an alternative according to which theta-roles are evaluated, for instance, once a given vP level is completed.<sup>15</sup> With these provisos in mind, let me present some concrete illustrations of the theory in (17) and compare it with an attract-based theory, such as the one implicit in (1).

## 3.1. The theory at work

Now, let me illustrate the working of this theory in a simple transitive sentence like (19):

# (19) John read the book.

In the first relevant step (see 20), the DP *the book* with an unvalued K feature merges with the Root (or V, depending on different approaches to lexical categories). This Root is endowed with a subcategorization feature [D], which is not only an instruction for applying Merge, but also an instruction that the Root is a thematic head (i.e., it has a theta-role to discharge; see section 2.1).<sup>16</sup> Given that the Root is not a probe for Case, the DP, which is trivially local to the Root, remains active after Merge applies and, consequently, receives the theme role from the Root. Put differently, the internal DP obeys both Locality and Activity as defined in (17).



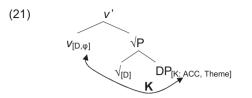
The next step is the introduction of the v head, which in this case is  $\phi$ -complete (i.e., it is a probe for accusative Case). This head is also thematic because it encodes a [D] feature. At this point, inheritance from v to Root is triggered (Chomsky, 2007, 2008; Richards, 2007, among many others; see section 2.2) and the internal DP enters into an Agree relation with

<sup>&</sup>lt;sup>14</sup> The A-over-A condition appears originally suggested in Chomsky (1962, 1964) in the Standard Theory framework. See Rackowski and Norvin (2005), Hornstein (2009) and Nunes (2010) for some minimalist revivals of the A-over-A Condition.

<sup>&</sup>lt;sup>15</sup> However, a representational view on thematic assignment would have to alter some assumptions on Case assignment in order to avoid that a theme DP, for instance, becomes inactive in a simple transitive sentence because its Case feature was already valued once the *v*P level is completed.

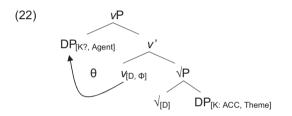
<sup>&</sup>lt;sup>16</sup> In other words, we capture thus some aspects of the linking between theta-roles and subcategorization features.

the formal set of v (now in the Root). As a result, the valued but uninterpretable  $\phi$ -set of the v-Root complex is deleted for LF and the K feature of the DP is valued as accusative. The tree in (21) illustrates this step in the derivation (feature inheritance is not represented for the sake of expository convenience).



Given that the K feature of the internal DP has been valued, the thematic role of the v head cannot be assigned to this argument because of the Activity Condition (17A). Notice that this is the case even if the thematic calculus and Case are evaluated concomitantly; i.e., *the book* is accusative at the point where the external role is being evaluated (see section 3.2 for more details). I derive thus the observation that a thematic head, which is also a probe, cannot assign a theta-role to the same DP this head is probing for Agree (see also Sheehan, 2012 for a recent discussion).

The external theta-role, which cannot be assigned to the internal DP for the reasons just adduced, can however be assigned to an external DP at the point where Merge between the v head and this DP takes place. This is so because this DP complies both with Locality and Activity as defined in (17):



As is well-known, the unvalued K feature of the external DP remains active for valuation until C (or T, depending on assumptions regarding feature inheritance) is introduced into the derivation with a set of formal features to value. So far, this theory of theta-role assignment seems to be extensionally equivalent to some version of (1), repeated below:

(23) Principle of theta-role assignment:

Theta-roles can only be assigned via External or Internal Merge with a thematic head.

[Sheehan, 2012:38]

In the next sections, I will emphasize this point to make clear that both theories seem to account for the same range of basic data depending on some assumptions. In doing this, some further aspects of the theory in (17) will also be illustrated and clarified.

## 3.2. Impersonal and reflexive se

Let's start with the basic contrast between reflexive and impersonal se constructions:

(24)	a.	Juan	se	critica.
		Juan	SE	criticizes
		'Juan	n criticizes himse	

(25) a. Se castigó a los culpables. se punished Acc the culprits 'One punished the culprits.'

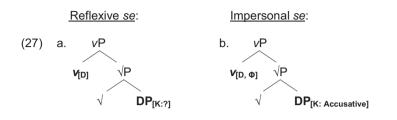
As already mentioned, the main visible syntactic difference between both constructions is, of course, Case. Thus, whereas *Juan* bears nominative in (24), *los culpables* bears accusative in (25). This difference crucially involves the Activity Condition as defined in (17A), and repeated below:

(26) **Activity**: A has an unvalued K feature at the point of the derivation where the theta role of  $x_{[D]}$  is being evaluated/assigned (i.e., A is active within the vP domain to enter into further A-dependencies).

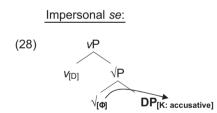
Reflexives

Impersonal

As illustrated in the following trees, the internal argument of a reflexive structure in (27a) is active in the sense defined in (26) (i.e., this DP has its K feature unvalued when the theta-role of v is being evaluated). In (27b), instead, the internal argument is inactive, because its K feature has being valued at the point in which the theta-role of v has to be discharged:



Jairo Nunes (p.c.) and two anonymous reviewers fairly point out certain vagueness in this definition of Activity, namely, it is not clear why in (27b) Case is evaluated before (or concomitantly with) the theta-role assigned by  $v_{[D]}$ .<sup>17</sup> Why is not, for instance, the [D] feature on *v*-linked to the external theta role- associated to the internal DP before the K feature of such a DP is valued?<sup>18</sup> If this were the case, the internal DP of a given transitive impersonal *se* configuration should also receive the external theta-role in such a way that it would be undistinguishable from a reflexive *se* construction. It seems that the right result, then, is ensured only by definition in my system. I leave this in a rather vague way (or in a purely definitional one), not because I do not think that there are no deeper reasons behind the basic facts, but because I would like to remain neutral about such possible reasons. Let me, however, mention three plausible motivations for the putative ordering stipulated in the definition of the Activity Condition. Firstly, and maybe more consistent with my own assumptions, the reason why K(ase) seems to be valued before the [D] feature on *v* follows from the inheritance assumption (Chomsky, 2007, 2008; Richards, 2007; Gallego, 2014 for a recent implementation). Given that the  $\phi$ -set on *v* is inherited by the lower non-phase head (the  $\sqrt{}$  head in this case), we end in a configuration in which such a  $\phi$ -set is lower than the [D] feature takes place. I assume then that evaluating the [D] feature on *v* before the (inherited)  $\phi$ -set on the Root is not allowed.<sup>19</sup>



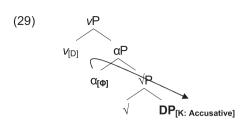
Under this option, indeed, K valuation takes place before [D] cancelation and, by extension, theta-role assignment by v. In other words, under this view, there is no concomitance between [ $\phi$ ] and [D] satisfaction.

A similar way to proceed is just assuming that [ $\phi$ ] and [D] are distributed on different heads across the *v*P skeleton. This would be in consonance with works by Travis (1991), Koizumi (1995) and López (2012), according to which accusative assignment is implemented by a functional category intervening between *v* and the Root. Following López (2012), let's call such a projection  $\alpha P$ :

<sup>&</sup>lt;sup>17</sup> As noticed by an anonymous reviewer, theories allowing theta-roles to be discharged via Internal Merge face essentially the same problem (see also Sheehan, 2012 for discussion).

<sup>&</sup>lt;sup>18</sup> The issue is developed at length in recent work by Georgi (2014), where different orderings between Merge and Agree seem to be available in natural language. These orderings would produce what Georgi calls *opaque interactions*. A careful exploration of how Georgi's results could affect the definition of Activity I propose here will be left for future research.

<sup>&</sup>lt;sup>19</sup> The rationale behind this would be in consonance with the Matching Effect Condition (Chomsky, 2001:15), according to which Case valuation must take place as soon as possible.



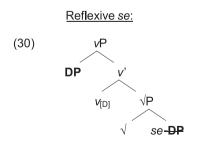
Under such an alternative, the result would be the same: accusative K valuation takes place before the satisfaction of the [D] feature on v (i.e., there is no concomitance). However, these are not the only options. In a more representational approach to thematic assignment, where, for instance, theta-roles are evaluated at LF for a given vP level, the internal DP of an impersonal se construction, but not of a reflexive one, will be inactive at the point in which theta-roles are evaluated regardless of the ordering of the operations at hand (although see footnote 15). Therefore, it seems that there are several routes of analysis to explore with probably different empirical predictions in some cases. After these important clarifications, I will work with the definition of Activity as it stands and leave the options just mentioned as a matter for future research.

Beyond these important details, the crucial ingredient of the analysis for impersonals and reflexives is precisely the activity component. Put differently, no movement is implemented for deriving the double theta-role reading for reflexives. As for the arbitrary reading in impersonal se sentences, Saab (2014) proposes a default rule at the semantic-pragmatic interface much in the spirit of Williams (1980), Chomsky (1981) or Chierchia (2004), among others. I refer to Saab's paper for details of this aspect of thematic theory, which will not be crucial for the arguments to be presented in the following sections.

So far, the main motivation for the analysis sketched is to capture the syncretism pattern between reflexives and impersonals involving the clitic *se* (and its agreeing variants). Another virtue of the system is that it also captures a property of thematic assignment -one that seems to be abandoned in more LF-related views (such as, for instance, Heim and Kratzer's 1998 approach). Concretely, the present theory makes an explicit link between abstract Case and thetaroles in such a way to subordinate theta-assignment to Case valuation.<sup>20</sup> This seems to me a welcome aspect of the theory, which elegantly explains the well-known contrasts between reflexives and impersonals connected to thematic interpretation.

At this point, however, it should be noticed that the basic facts discussed so far do not allow us distinguishing between a long distance theta-role assignment approach like the one defended here and an attract-based theory for reflexivity phenomena (Hornstein, 2001, for instance) or a more classic approach, according to which movement into theta position is prohibited (Chomsky, 1981 and more recent works by Chomsky). Let me just comment on the attract-based theory which will be in the focus of this paper.

According to Hornstein (2001) (see also Boeckx et al., 2008), a plausible way to account for reflexives is, informally speaking, through A-movement. Thus, the internal DP of a reflexive sentence moves from its base position to the external v position. In this framework, the clitic se would just be the residue of this type of argumental movement:



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<sup>&</sup>lt;sup>20</sup> As noticed in Saab (2014), this connection between Case and thematic assignment is exactly the inverse to the old visibility condition proposed in Chomsky (1986b).

As for impersonal se constructions, I can only conjecture what an attract-based analysis would have to say, given that se constructions in Spanish are not explicitly analyzed in the relevant literature. However, it sounds entirely plausibly to me that some version of the Activity Condition will also makes the difference between reflexives and impersonals (see indeed Sheehan, 2012 for an explicit attract-based analysis using a version of the Activity Condition). Thus, the fact that the internal argument of an impersonal se sentence is inactive because of accusative assignment makes this argument non-eligible for movement. I would like to insist that I am not claiming that this would be the only option for an attract-based analysis. Hornstein's original analysis is indeed extremely more complex than what I am just saying here. But given that my aim is just showing that, in principle, the basic se paradigm cannot be used to distinguish between the theories in competence, these conjectures would be enough for the argument to hold.<sup>21</sup>

In summary, both theories could be extensionally equivalent when it comes to se constructions in Spanish, provided that different assumptions are made on different respects (the nature of se, for instance).

## 3.3. Interventions effects in Spanish double object constructions

An interesting pattern perfectly compatible with the system defended here and also with the attract-based theory of theta-role assignment involves some intervention effects connected to reflexivization of indirect objects in Spanish. The basic facts are discussed in Kaminszczik and Saab (in press), so I will only introduce the basics of the analysis in order to illustrate how my theory and an attract-based theory can capture the pattern to be seen.

In (31a), we have a ditransitive verb which takes a full direct object and a full indirect one. In (31b), we see the pattern of accusative and dative pronominalization:

- (31) a. Juan entregó a Pedro a las autoridades.
   J. delivered Acc P. to the authorities
   'Juan turned Pedro in/over the authorities.'
  - b. Juan se lo entregó (a las autoridades). J. CL.DAT CL.ACC delivered (to the authorities) 'Juan turned him in/over them.'

Now, reflexivization of the direct or the indirect object is allowed in the patterns illustrated in (32):

- (32) a. Juan se entregó a las autoridades (a sí mismo)
   J. se delivered to the authorities (to himself)
   'Juan turned himself in/over the autorithies.'
  - Juan se entregó el premio (a sí mismo).
     J. se delivered the award (to himself)
     'Juan gave the award to himself.'

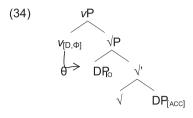
As shown in (32), there is no intervention effect in any direction, namely, the direct object does not block reflexivization of the goal argument and vice versa. This is totally expected under most theories of datives in Spanish (Masullo, 1992; Demonte, 1995; Cuervo, 2003, just to mention a few), given that the goal argument is realized as a PP argument in absence of a doubling dative clitic. Thus, in (32a) the direct object can be reflexivized independently of the position of the goal PP. For the sake of the exposition, let's assume that this PP is lower than the theme DP. For reflexivization to work here, we only need to assume that v lacks its  $\phi$ -set and, consequently, the theme DP is active to take a second theta-role from v.

(33)vP DRo

PP

<sup>&</sup>lt;sup>21</sup> Certainly, it is not clear to me how an attract-based theory would be account for the syncretism pattern, but I will assume that the classic view of *se* as a Case absorber could be at work here (although see footnote 4). In other words, it will not be fair to force to the competing theories to take for granted the expletive analysis of *se* presented in section 2.

As for (32b), we assume, following also standard assumptions, that the indirect object - realized now as a DP- is higher than the direct object, which, at any rate, is inactive because it values accusative after feature inheritance from v to  $\sqrt{.}$ Therefore, the goal argument can receive a second theta-role from  $v_{\text{fD1}}$ , as shown in (34):<sup>22</sup>



In both examples in (32), se is inserted at PF to cancel an unsatisfied [D] feature on v.23 Consider now the following impossible sentence:

(35) \*Juan se le a las autoridades (a sí mismo). entregó J. CL.DAT delivered to the authorities (to himself) SF

The only difference between this sentence and (32a) is the presence of the dative clitic le which duplicates the dative argument. There is compelling evidence in the literature to take the presence of a doubling clitic as indicating: (i) that the dative argument is a DP, and (ii) that such a DP c-commands the direct object (see for Spanish, especially, Demonte, 1995; Cuervo, 2003; Pujalte, 2013 for a criticism). Putting aside technical implementations, the main idea is that (35) has the simplified underlying structure in (36) (cf. 34):

 $\{DP, \ldots\}$  $[_{\sqrt{}} \sqrt{_{[D, \mathbf{P}]}} DP_{[Theme, Goal]}$ (i) а b.

We have, then, a timing problem: the system has to ensure that the second argument present in the derivational space is merged before the goal role is discharged on the already merged complement. If this happens, then, by Closeness (see 17), the argument in Spec, VP will be closest to the theta-role assigner than the complement DP and will correctly receive the goal role.

- (ii) a.
  - b.
  - $\begin{bmatrix} \sqrt{P} & DP_{[Goal]} \end{bmatrix} \begin{bmatrix} \sqrt{P} & \sqrt{P} & DP_{[Theme]} \end{bmatrix}$ С

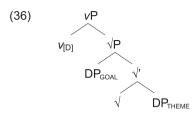
Under one alternative, this ordering could be motivated assuming that the system prefers a simultaneous [D] and thematic evaluation over split evaluation, whenever such an option is syntactically possible. In the case at hand, given that there is a second argument to be merged in the derivational space, the syntax satisfies the formal and thematic properties of the Root at once for the same DP. Of course, other alternatives are conceivable. It should be noticed, however, that the questions just raised and their possible answers are legitimate only under the general assumptions made in this paper with respect Case valuation and the particular structure for double object constructions sketched in (34). I will leave further exploration of the issues raised in this footnote for future investigation.

<sup>23</sup> Recall that se insertion is constrained by the PIC as formulated in (10). As already observed, this rules out examples like (12) (i.e., there is no impersonal se in object position). Interestingly, the PIC would also rule out the following derivation, where se would cancel some [D] feature of the Root domain:

(i) \*Juan sei entregó а María<sub>i</sub>. J se delivered to M. Intended: 'Juan delivered María to herself.'

However, in this case, an alternative explanation is available. Concretely, the DP Juan, which is in the same derivational workspace, would prevent that a [D] feature in the Root domain remains unsatisfied. In other words, timing considerations would apply here. Thanks to an anonymous reviewer for suggesting this type of examples to me.

<sup>&</sup>lt;sup>22</sup> This simplified tree for double object constructions opens interesting questions regarding the distribution of theta-roles in the Root domain when two DP arguments are merged with the same head. Should such a head be specified with a set of two ordered [D] features? If this is the case, how does the system prevent that the first merged argument receives the two thematic roles associated to the Root, namely, the theme and goal roles? The same questions are, of course, extensible to a low applicative analysis à la Pylkkänen (2008) (see Cuervo, 2003 for Spanish). Put differently, after merging the first argument in complement position, such a DP would receive the theme role but, at this point of the derivation, this DP would remain active for taking the goal role, as well, even if it is incapable of satisfying the second [D] feature specified on the  $\checkmark$  head (assuming, for instance, that a syntactic object cannot cancel the same feature twice). If this happens, of course, the second argument would be merged in Spec. J, cancel the last [D] feature on J but it would be thematically non-interpretable, given that the goal role was already discharged on the theme argument:



If this is correct, and assuming that in double object constructions of this type the dative argument is active (i.e., it bears a type of structural Case; see, however, section 4.1 and Pujalte, 2013 for another approach to dative assignment with similar consequences), reflexivization of the direct object is prevented by Closeness as defined in (17) and repeated below:

(37) *Closeness:* Given two active DPs, Y and Z, such that Y and Z are local to a given theta-role assigner  $x_{[D]}$ , Y is closer to  $x_{[D]}$  than Z if Y c-commands Z.

The basic fact in (35), then, illustrates the working of the thematic theory I am defending when more than one argument competes for the same theta-role. Once again, however, this fact does not allow us to distinguish between this theory and its attract-based competitor. For the proponents of an attract-based theory, the ungrammaticality in (35) could follow as a minimality violation. This, again, would depend on some assumptions on minimality and the proper representation of double object constructions, but these considerations are not crucial now (see the discussion regarding other putative minimality violations in section 4.2, ex. 54).

## 3.4. Obligatory control

As is well-known, the unification of control and raising structures is one of the alleged triumphs of the proponents of the MTC (see Hornstein, 1999 and much subsequent works). If theta-roles are attractors and movement into theta position is permitted by UG, then obligatory control sentences would receive the (rough) analysis in (38):

(38) Juan quiere [<del>Juan</del> trabajar] J. wants J. work.ı№ 'Juan wants to work.'

I will not enter into the details and the controversies raised by the MTC. I just would like to emphasize that there is no incompatibility between the spirit of the MTC and the thematic theory defended here. The controversy, of course, will be in the premise, adopted by most proponents of the MTC, that theta-roles are attractors and, as such, can induce movement. Evidently, this is not compatible with the approach defended here. Yet, as shown in detail by Pujalte (2013), a movement analysis for control structures is perfectly possible under the analysis we are illustrating in this section. The crucial assumption is that movement is triggered by properties of the moved element and not by properties of the probe, as proposed in survive approaches to movement (see, for instance, Bošković, 2007; Stroik, 2009). Assuming that defective CPs (e.g., infinitival complements of control structures) are incapable of valuing nominative Case for the infinitive subject and that they also constitute a phase for probing the infinitive subject from main CP, such a subject moves to the main clause (maybe, targeting first the edge of the embedded CP), specifically, to the first landing site it finds in that clause, namely, Spec,  $\sqrt{P}$ . From this position, two consequences are obtained. First, the subject DP is now active and local with respect to main  $V_{\text{ID}}$  for receiving the main external theta-role and, second, it will be visible for nominative valuation after the introduction of main C. In (39) I represent the main step of such a derivation (i.e., the escape of the infinitival subject from its own clause):

(39)  $[_{vP} \text{ quiere} + v_{\text{ID}}] [_{vP} \frac{\text{Juan}_{\text{IK}}}{\text{Juan}_{\text{IK}}} ]_{2} [_{v'} \frac{\text{quiere}}{\text{quiere}} [_{CP} \frac{\text{Juan}_{\text{IK}}}{\text{Juan}_{\text{IK}}} ]_{2} \text{ trabajar} ...$ 

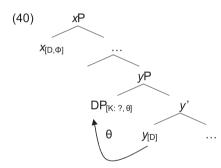
In summary, the only motivation for movement in control structures is an unsatisfied K feature on the infinitival subject and not an unsatisfied thematic feature on some theta-role assigner in the main clause. In other words, the present theory is compatible with an A-movement analysis for basic obligatory control configurations. This means, once again, that this particular empirical domain does not make the job of distinguishing between a long-distance approach to theta-role assignment and an attract-based one.

## 3.5. Summary

In this section, I have presented a theory of thematic assignment based on two main conditions, namely, locality and activity. I have illustrated the basic working of such a theory in several empirical domains (*se*-constructions, Spanish double object constructions and obligatory control structures) in order to show how the theory accounts for some important facts without the need of a strong configurational view, according to which Merge is a necessary condition for theta-role assignment (see 1/23). Two particular consequences can be extracted from the precedent discussion: (i) the theory is incompatible with any movement theory of reflexivization for se constructions (*pace* Hornstein, 2001 and related works), and (ii) the theory, depending on some assumptions regarding Case and movement, is perfectly compatible with some version of the movement theory of control. A more general corollary of this is that movement is never triggered by thematic reasons, a conclusion which contrasts with attract-based theories of thematic assignment.

Yet, another not less important aim of this section has been to show that, at first sight, an attract-based theory to thetarole assignment seems to be extensionally equivalent to the one defended here. Of course, such an empirical equivalence does not work in a *ceteris paribus* manner, so to speak. Put differently, assumptions on several components of the UG design are not always shared for the theories under competence. At any rate, the basic patterns discussed in this section do not allow to take a conclusive decision when it comes to evaluate the theories at hand. The question is, then, whether more conclusive (and purely empirical) arguments can be constructed in order to take such a decision. Fortunately, I think that the response is positive. Let's see the argument in the abstract first.

Theories that conceive of thematic heads as potential attractors like in (1/23) make different predictions in particular empirical domains. Assume, for instance, that a derivation has reached the following stage where *x* and *y* are theta-role assigners of the same type and the argument DP is active:



Under this scenario, theories that allow for movement triggered by thematic reasons predict movement of the DP in Spec, yP to Spec, xP to cancel the thematic feature of x. In my approach, this DP, as already explained, does not move for thematic reasons. The DP in (40) receives a theta-role from the y head, but not from x, assuming that x and y are thematic heads of the same type; for instance, both are external argument assigners. Put differently, (40), under the conditions just specified, illustrates a locality violation in the abstract. As I will show in the next section, this scenario is concretely attested in the domain of causative constructions in Spanish.

#### 4. The core argument: interactions between se and causatives

In this section, then, I will explore the predictions made by my conception of thematic theory and the attract-based theory on the basis of some concrete instances of the abstract scenario illustrated in (40). Recall first that according to the attract-based theory, x, a thematic head with a [D] feature to discharge (or, depending on a slightly different implementation, a  $\theta$ -feature) attracts the DP in Spec, *y*P to its own specifier and, only under this configuration, it assigns its theta-role to the DP. Under the theory in (17), instead, (40) is a Locality violation as stated in (17B) and repeated below:

(41) **Locality**: A is the closest local argument to  $x_{[D]}$ ; (i.e., A is not contained in the domain of another  $y_{[D]}$  of the same type as  $x_{[D]}$  c-commanded by  $x_{[D]}$  and there is no closest argument A' local to  $x_{[D]}$ ).

As I show in this section, analytical causatives in Spanish constitute an ideal case to evaluate this type of predictions. The factual scenario, even in the more simple patterns, clearly favors a theory with (41) at its heart over an attract-based theory. In Appendix, I will also explain how once more complex patterns are taken into consideration the approach in (17) is clearly superior to other alternative analyses of long-distance thematic assignment, such as Reinhart and Siloni's (2005) one. The analysis I adopt in this section is from Saab (2014).

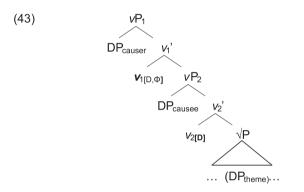
#### 4.1. The syntax of analytical causatives

As is well known, *hacer* 'to make' causatives come in two guises: (i) *faire-par* causatives or, as I will call them, *passive* causatives (cf. 42a), and (ii) IP or *active* causatives (cf. 42b) (see, among many others, Kayne, 1969; Bordelois, 1974; Burzio, 1986; Treviño, 1992, 1994; Folli and Harley, 2007; Tubino Blanco, 2011; Pujalte, 2013; Saab, 2014):<sup>24</sup>

(42)a. Juan hizo arreglar la cocina por Pedro. J. made repair.INF the kitchen by Ρ. Pedro. b. Juan le hizo arreglar la cocina a .1 CL.DAT made repair.INF the kitchen to P. 'Juan made Pedro repair the kitchen.'

I will follow here the syntactic approach to active causatives proposed by Pujalte (2013), according to which this type instantiates the abstract structure in (43).

#### Structure for active causatives:



As shown by Pujalte, Case relations in  $vP_2$  are entirely determined by the properties of  $v_1$ , which acts as the probe, and by feature inheritance. First, if  $v_2$  is unaccusative or unergative, the subject of the infinitive values accusative Case against  $v_1$ . Let me illustrate the point with unergative infinitives (bidirectional arrows between heads indicate feature inheritance, and mono-directional ones Case valuation between heads and DPs):<sup>25</sup>

(i) Juan lo/le hizo leer estos libros/llegar. J. cl.MASC.3SG.ACC/cl.3SG.DAT made read.INF these books/arrive.INF 'Juan made him read these books/arrive.'

<sup>&</sup>lt;sup>24</sup> All patterns of analytical causatives in this paper are from Buenos Aires Spanish, a dialect where the pronominal paradigm of object clitics is fully transparent. Judgments sometimes differ for *leista* speakers. For instance, an anonymous reviewer informs me that in his/her Peninsular dialect (42a) is ungrammatical without the presence of the clitic *se* (e.g., *Juan se hizo arreglar la cocina por Pedro* Lit: 'Juan se made to repair the kitchen by Pedro'). This judgment, although not as a radical as the reviewer suggests, is also shared by some Buenos Aires speakers. The same reviewer also notices that (42a) becomes grammatical in absence of the *by*-phrase. I think that this judgment is maybe produced because the *by* phrase at hand takes a proper name as complement. Thus, those speakers who find the sentence a little degraded also report that the sentence become perfect if, instead of *Pedro*, a common noun is used (e.g., *por el plomero*, 'by the plumber'). Similar effects are obtained in eventive nomimalizations, as expected if both structures share the same type of underling *v* head (see Saab, 2014; Folli and Harley, 2007 for an alternative).

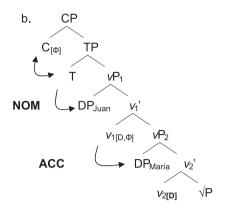
Beyond *leista* dialects, some varieties from Mexico Spanish are also relevant in this respect. According to Treviño (1992, 1994), the *causee* subjects of these varieties allow for an accusative/dative alternation for the subject *causee* that correlates with the semantic distinction of direct and indirect causation, respectively:

Treviño directly connects this pattern to the well-known accusative/dative alternation attested with pysch verbs of class 2. Following the insights in Belletti and Rizzi (1988), she proposes to account for the alternation in (i) by assuming that these different readings are linked to inherent Case assignment, which relates each particular Case, accusative or dative, to a different theta-role.

 $<sup>^{25}</sup>$  As discussed in Pujalte and Saab (2012), inheritance from  $v_1$  to  $v_2$  in (44b) is prevented by particular properties of unergatives.

(44) a. Juan la hizo saltar a María. J. CL.FEM.3SG.ACC made jump.INF ACC M.

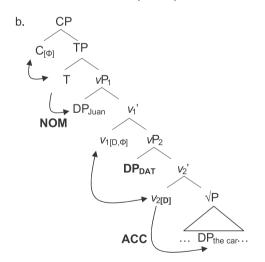
'John made Mary jump.'



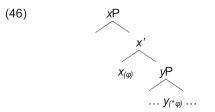
Second, in contexts of transitive infinitives (or ditransitive ones; see Pujalte, 2013 for details), the internal argument of the embedded verb gets accusative and the external argument of the infinitive gets dative. This is predicted by the inheritance system, because for a given transitive infinitive with defective v, inheritance from  $v_1$  to  $v_2$  is mandatory. The external argument, in turn, is in a position where it cannot value either nominative or accusative Case and, as a result, it receives dative as a last resort morphological strategy. As explained by Pujalte, the situation reproduces exactly what is empirically observed with applied datives in Spanish.

(45) a. Juan le hizo comprar el auto a María.

J. CL.3SG.DAT made buy.INF the car to M. 'John made Mary to buy the car.'



The fact that  $v_2$  is  $\phi$ -defective follows from a generalization also explored in Pujalte (2013), according to which when two potential probes of the same type are in a configuration like (46), only the upper probe can bear  $\phi$ -features:

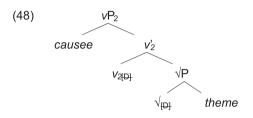


The particularity of this configuration is the impossibility of activating/realizing the  $\phi$ -set of the lower cyclic head. This is so because of the near presence of *x*, where by *near* we understand that no C head (a phase head of another type) intervenes. Notice that upper *x* may be the locus of  $\phi$ -features, but this is not a necessary condition for triggering *y* deactivation. It is the sole presence of upper *x* what deactivates the  $\phi$ -set of lower *y*.

For the specific analysis of causatives, three immediate predictions arise from Pujalte's generalization. First, analytical causatives should disallow double accusative marking in cases like (45a). This is borne out. Compare (45a) with (47):<sup>26</sup>

(47) \*Juan la hizo comprarlo. J. CL.FEM.3SG.ACC made buy.INF-CL.MASC.3SG.ACC

Second, if, as noticed by an anonymous reviewer,  $v_2$  is always defective, we should explain how thematic roles are determined for both the *causee* subject and the theme. It has to be the case that both arguments remain active until  $v_1$  is merged in the structure and feature inheritance takes place. Consider, then, the following tree, which represents the step previous to  $v_1$  introduction:



According to the theory in (17), repeated as (49), and with reference to the thematic head  $v_2$  in (48), it can be concluded that: (i) both arguments are local with respect to  $v_2$ , (ii) both arguments are also active, but crucially, (iii) the *causee* is closest to  $v_2$  than the theme and, consequently, it receives correctly its theta-role from it.<sup>27</sup>

(49) Principle of theta role-assignment:

An argument DP *A* receives a theta-role from a thematic head,  $x_{[D]}$ , in the domain of a *v*P if and only if: (A) *Activity*: *A* has an unvalued K feature at the point of the derivation where the theta role of  $x_{[D]}$  is being evaluated/assigned (i.e., *A* is active within the *v*P domain to enter into further A-dependencies).

(B) **Locality**: A is the closest local argument to  $x_{[D]}$ ; (i.e., A is not contained in the domain of another  $y_{[D]}$  of the same type as  $x_{[D]}$  c-commanded by  $x_{[D]}$  and there is no closest argument A' local to  $x_{[D]}$ ).

Associated definitions:

Contained: X is contained in Y if at least one segment of Y dominates X.

Sameness: x is a thematic head of the same type as y if x and y are thematic heads that introduce the same structural argument (internal or external).

*Closeness:* Given two active DPs, Y and Z, such that Y and Z are local to a given theta-role assigner  $x_{[D]}$ , Y is closer to  $x_{[D]}$  than Z if Y c-commands Z.

<sup>&</sup>lt;sup>26</sup> As noticed by an anonymous reviewer, an ECM analysis as the one to be discussed in section 5 could be assumed for languages of the English type in which double accusative marking is attested in analytical causatives (e.g., *I made him kiss her.*). However, this is not the only option. Indeed, (47) is also grammatical in Mexican Spanish under the direct causation reading (Esthela Treviño p.c.). If the accusative Case of the *causee* subject is inherent, as proposed by Treviño (1992, 1994) (see also footnote 24), then the ECM analysis is not directly forced by the facts. Indeed, Mexico Spanish behaves as Buenos Aires Spanish in cases like (50) below in not allowing impersonal *se* readings for *causee* subjects. This is in clear contradistinction with ECM-sentences of perception verbs (see 63). As for the ban of reflexivizing the *causee* subject, Mexico Spanish also seem to pattern as Buenos Aires Spanish at least as far as transitive infinitives are concerned (cf. 57b vs. 60). This seems to challenge any attempt to derive (47) in Mexico Spanish in ECM terms. At any rate, more research is needed to account not only for the difference between English and Spanish, but also between different Spanish dialects.

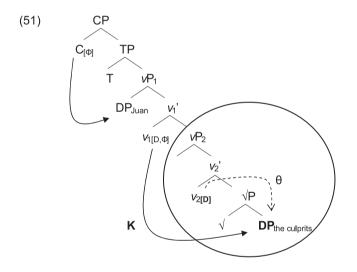
<sup>&</sup>lt;sup>27</sup> Moreover, because of what was argued in footnote 22 in connection to Spanish double object constructions,  $v_{[D]}$  does not discharge its thetarole until merging of the subject DP, which is available in the derivational space.

Interestingly, the distribution of theta-roles within  $v_2$  constitutes another instance of what Closeness predicts (see the abstract tree in 18) and was already illustrated for the case of double object constructions in Spanish in section 3.3 (see the tree in 36 and the relevant example in 35).

Finally, and connected with the precedent observation, a prediction is made also with respect to the distribution of *se* within the caused sentence. Concretely, in a sentence like (50), the internal DP can have a reflexive/reciprocal reading but not an impersonal one. This is also correct, as noticed in Saab (2014):

(50) Juan [hizo [castigarse a los culpables]]
J. made punish.INF-SE ACC the culprits *i. Reciprocal/reflexive reading (OK under the active structure)*'Juan made the culprits punish themselves/each other.' *ii. Impersonal reading (NO)*Intended: 'John made someone/one punish the culprit.'

By the Activity and Locality conditions in (17/49), the theme argument of the embedded infinitive is both local and active as far as  $v_2$  is concerned and, consequently, receives the additional agent role (see the tree in 51). Moreover, in this particular case, a potential argument in Spec,  $vP_2$  position is absent, because the *causer* is part of another derivational cycle corresponding to upper  $v_{1[D]}$  (section 2.1). Therefore, Closeness as defined in (49) is irrelevant (i.e., the internal argument is the only available candidate to receive the *causee* role).

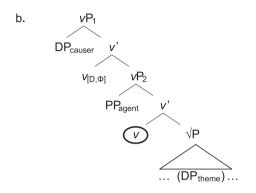


Importantly, the structure for the impersonal se reading is simply not derived under the system outlined in this paper. As noticed, the crucial property of this situation is the  $\phi$ -defectiveness of the embedded v. It is this property what renders the internal argument active for further thematic interpretation in the vP<sub>2</sub> domain in consonance with (17/49A). Therefore, this case nicely illustrates that thematic interpretation proceeds derivationally under usual constraints on cyclic syntactic computation. Notice that if it were the case that thematic interpretation was computed globally (say, at the CP or IP level), the difference between an impersonal se sentence like (15) (i.e., *Se castigó a los culpables* Lit: 'SE punished Acc the culprits.'), where v is  $\phi$ -complete, and (50), where v<sub>2</sub> is fully  $\phi$ -defective, would not be explained. By the same token, the reflexive/reciprocal reading of (50) is derivationally captured, as well: at the point in which v<sub>1</sub> is introduced into the derivation thematic assignment has been essentially exhausted within vP<sub>2</sub>, so the fact that the internal argument values accusative against v<sub>1</sub> is entirely irrelevant as far as thematic assignment within vP<sub>2</sub> is concerned.

As for passive causatives (42a), I adopt the analysis put forth by Saab (2014) which is the same as Pujalte's for active causatives with a crucial difference: the embedded v is both  $\phi$ -and D-defective. By (46),  $\phi$ -defectiveness in both types of analytical causatives follows directly, as well, although it remains to be explained whether the option with respect to the [D] specification on the embedded v is also derived from some general principle of selection or not. In any case, the distinction between the two *hacer*-causatives reduces to this minimum difference in the subcategorization properties of agentive v. Compare in this respect the tree in (43) with (52b), which illustrates the structure I propose for passive causatives like (42a), repeated as (52a):

#### Structure for passive causatives

- (52) a. Juan hizo arreglar la cocina por Pedro.
  - J. made repair.INF the kitchen by P.



I will simply assume here that *by*-phrases entail fully defective *v*; i.e., *by*-phrases in passive causatives, as in other related constructions (e.g., analytical passives and event nominalizations), are taken as an indication of *v* full defectiveness (see Saab, 2014 for arguments in favor of this hypothesis).

Let us see, now, how this minimal difference between both types of causatives can capture the complex set of interactions between *se* and causative constructions. A more complete picture of the empirical scenario to be discussed now is provided in Saab (2014), where a comparison with other proposals, such as Baauw and Delfitto (2005), is made.

## 4.2. Locality effects in causatives

A long-standing problem related to the so called passive causatives is that the internal DP of the caused sentence can be reflexivized in connection with the causative verb. Thus, in a sentence like (53) the theme of the caused sentence is also the agent of *hacer*.

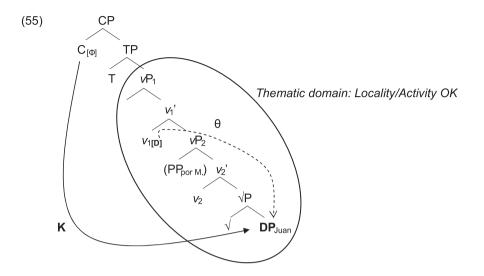
(53) Juan se hizo besar por María. J. se made kiss.ı№ by M. 'John<sub>i</sub> made Mary kiss him<sub>i</sub>.'

This is impossible with active causatives:

(54) \*Juan **se** (le) hizo besar a María. J. **se** (CL.DAT) made kiss.INF to M. Intended: 'John<sub>i</sub> made Mary kiss him<sub>1</sub>.'

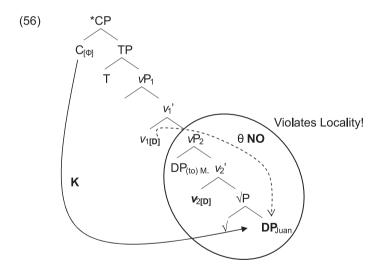
The long-distance reflexivization case in (53) is directly derived under the theory of theta-role assignment I am developing. See the following tree:<sup>28</sup>

 $<sup>^{28}</sup>$  I am assuming that the *by*-phrase is generated as a *v*P specifier/modifier, but this is not a crucial assumption. Importantly, given the definition of *closseness* in (17), such a PP is not an intervener for thematic assignment.



Here, the internal argument of the embedded infinitive *Juan* is both active and local with respect to the higher  $v_{[D]}$  in consonance with (17/49). This is because  $vP_2$ , being fully defective (i.e. "passive"), is not an intervener. That is why thematic association between the non-discharged [D] feature on  $v_1$  and the object DP is allowed.

On the other hand, absence of reflexivization of the embedded internal argument in active causative environments constitutes a case where thematic locality is violated. See the associated tree for (54):



As it should be evident now, the crucial difference between active and passive infinitives that accounts for the contrast between (53) and (54) is the underlying category composition of agentive  $v_2$ : whereas passive  $v_2$  is fully defective, active  $v_2$  enters the derivation with a [D] feature. It is this feature, then, what creates a locality violation, as formulated in (17/49B), given that upper  $v_{1[D]}$  cannot access to the domain of  $vP_2$  to establish a thematic dependency with the object of the infinitive.

Notice that the proposed analysis is merely compatible with the data, not forced by them. There are, of course, other compatible analyses in accord with the attract-based theory. At first sight, one can conjecture that the difference between (53) and (54) is a result of a minimality effect (recall the discussion on double object constructions in section 3.3). In effect, whereas in (54) the subject causee *María* intervenes in the way to upper spec, vP given that it c-commands the internal argument *Juan*, this is not the case in (53) where the path from the internal argument position to the main spec, vP is "clean". The ungrammatical (54) is then ruled out as Minimal Link Condition violation (Chomsky, 1995).

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Clearly, then, the minimal pair in (53) and (54) does not help us, again (see section 3), to decide between the theories of theta-role assignment in competence. Fortunately, there is a crucial piece of data that does help. Concretely, the external argument of an active causative cannot be reflexivized either (see Baauw and Delfitto, 2005 and Saab, 2014); so taking the active causatives in (57a) as a basis, the corresponding reflexivization of the external argument is not obtained in (57b) (see also 3b):<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Assuming with Folli and Harley (2007:214–215) that active causatives accept unaccusative infinitives, an anonymous reviewer raises the crucial question about what the predictions of my system are when it comes to reflexivization of unaccusative embedded subjects. The patterns are admittedly complex in this respect. And although my own research is not conclusive, some preliminary thoughts can (and must) be advanced here. Firstly, it should be noticed that while some unaccusative subjects of verbs like *llegar* 'to arrive' cannot be reflexivized in analytical causative environments, other unaccusative subjects of verbs like *desaparecer* 'to disappear' and related ones can (examples in (ii) modeled on the basis of a *google* corpus, where a clear preference in favor of *desaparecer* over the other verbs is observed):

(i)	a.	*Juan	se	hizo	llegar/venir	(a sí mismo).
		J.	SE	made	arrive.INF/come.INF	(to himself)
	b.	Juan	se	hizo	desaparecer/caer/morir	a sí mismo.
		J.	SE	made	disappear.INF /fall. INF /die.INF	(to himself)

A first idea that comes into mind to account for this contrast is to make use of the sameness clause in the definition in (17/49), repeated below:

(ii) Sameness: x is a thematic head of the same type as y if x and y are thematic heads which introduce the same structural argument (internal or external).

This would amount to saying that verbs of the *llegar* type, when taking human subjects, are introduced as specifiers of a  $v_{[D]}$  taking a Root complement, but verbs like *desaparecer* have a DP as complement of the  $\sqrt{P}$ :

(iii)  $[_{\nu P} \mathbf{DP} \mathbf{v}_{\mathbf{D}} ] [_{\sqrt{P}} \sqrt{\text{llegar}}]$ 

(iv)  $[_{vP} v [_{\sqrt{P}} \sqrt{\text{desaparecer}_{IDI} DP}]]$ 

If this is correct, then, some unaccusative subjects must be interpreted as being of the same type of some agentive verbs, in this case, of the same type of causative *hacer*. Recall that *sameness* is defined as making reference to structural positions more than to the specific content of each head (see section 3). There are some preliminary indications that this contrast between *llegar* and *desaparecer* could be on the right track. On the one hand, *desaparecer*, but not *llegar*, allows for synthetic causatives in some Spanish dialects (specifically, Buenos Aires Spanish; see Pujalte, 2013 and the references therein):

(v) Juan lo desapareció (a Pedro). J. CL.MASC.SG.ACC disappeared (ACC P.) 'Juan made Pedro disappear.' \*Juan lo (vi) llegó (a Pedro). CL.MASC.SG.ACC arrived ACC J. Р 'Juan made Pedro arrive.'

This could be explained if *desaparecer* leaves room for an agentive subject to be added in the basic structure in which the verb is inserted. The subject of *llegar*, instead, would be in complementary distribution with such an agentive subject, blocking thus the possibility in (vi). On the other hand, *llegar* easily allow for agentive-related readings when modified for some adverbials like *tarde* 'late' (thanks to another anonymous reviewer for discussion around examples of this type):

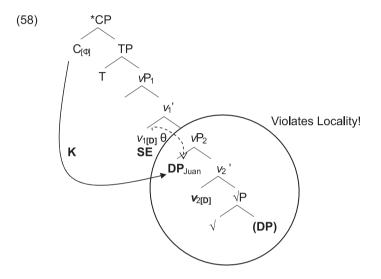
(vii) Juan llegó tarde. J. arrived late 'Juan arrived late.'

That this example is related to volition predicates is shown by several tests involving: (a) compatibility with impersonal se constructions (viii), (b) incompatibility with absolute clauses (ix), and (c) incompatibility with participial adjectives (x):

- (viii) Se llegó \*(tarde). se arrived (late) 'One arrived late.'
  (ix) Llegados (\*tarde) los estudiantes... arrived (late) the students 'Once the students arrived (late)...'
- (x) un hombre recién llegado / \*un hombre llegado tarde a man just arrived a man arrived late

- (57) a. Juan hizo comprar un auto/trabajar a Pedro.
   J. made buy.INF a car/work.INF to P.
   'Juan made Pedro buy a car/work.'
  - b. \*Juan se hizo comprar un auto/trabajar.
     J. se made buy.INF a car/work.INF
     Intended: 'Juan made himself buy a car/work.' (*Juan* = infinitive subject)

It is clear that the ungrammaticality of (57b) follows straightforwardly under the theory of thematic locality we adopt here as a violation of Locality (17/49B), but not under the attract-based theory. That (17/49B) is violated can be easily demonstrated with the following tree, in which the external DP is contained within a vP of the same type as  $vP_1$ .



Under the attract-based theory, instead, there is no obvious reason why some  $\theta$ -feature on  $v_1$  cannot attract the subject in Spec,  $vP_2$  to its own specifier. Notice that *Juan* is active in the reflexive derivation both in the unergative sentence and in the transitive one in (57b), given that it cannot value Case either against  $v_2$  or  $v_1$ . Therefore, this DP is a candidate for attraction. However, it does not move for thematic reasons or Case – the later is not required at least in Spanish, where Agree can operate in a long-distance fashion. A-bar movement to a pre-sentential, topic position is allowed in Spanish, but this movement seems to take place only after thematic interpretation within the main vP has taken place. We are led to conclude then that thematic interpretation is exhausted in the low  $vP_2$  domain (*pace* Reinhart and Siloni, 2005; see Appendix for more details). At any rate, the point is that the *causee* subject is not attracted to the main  $vP_1$  against what is predicted by attract-based theories.

Therefore, it seems that there are some principled reasons to analyze verbs like *llegar* as hybrid predicates with respect to agentivity/intentionality. As for analytical causatives, notice indeed that *llegar* is clearly preferred under its volitional reading:

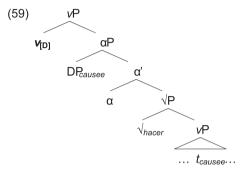
(xi)	?Juan/la tormenta	hizo	llegar	а	María.
	J./the storm	made	arrive.INF	ACC	M.

(xii)	Juan/la tormenta	hizo	llegar	tarde	а	María.
	J./the storm	made	arrive.INF	late	ACC	М.
'Juan/the storm made Mary arrive late.'						

At any rate, a deeper exploration of the patterns involving unaccusative predicates in analytical causatives must be carried out before taking any conclusive decision about the basic facts in (i) and (ii) in connection with the notion of *sameness*. Needless to say, it could be the case that other selection or more general semantic/pragmatic conditions are at play here obscuring the ultimate reasons of such a contrast. For instance, it is my impression that unaccusative predicates are preferred in active causatives when the *causer* is a non-intentional causer even if animate. This is the first reading one obtains in examples like (xii). If this is correct, then the ungrammaticality of (i) could be linked to the difficulty of reflexivizing non-volitional causers. Other differences between ergative/transitive predicates, on the one hand, and unaccusative ones, on the other, related to the (im)possibility of having embedded arbitrary subjects (see López, 2001 and the reference therein) could be also telling to account for the paradigms at hand. I will leave a careful exploration of the empirical patterns involving unaccusative subjects of *hacer* causatives and its analytical possibilities as a topic for further research.

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It should be noted that while some of the particular assumptions we have adopted here with regard analytical causatives are compatible with other influential proposals on Romance causatives (mainly, Burzio, 1986; Folli and Harley, 2007) – so my conclusions on thematic theory does not depend on the details of the analysis -, it is not compatible for instance with the ECM analysis, à la Kayne (2004) or López (2001).<sup>30</sup> Therefore, it is important to show that the *in situ* analysis of the *causee*, according to which the *causee* is introduced by a *v* of the same type as *hacer*, is superior in non-trivial aspects to other competing theories. Otherwise, the empirical basis of my argument here would be considerably weakened. As for the ECM-analysis of causatives, the crucial step is the movement of the *causee* to the main clause. Given that the details of this type of analyses are not my concern here, I will just assume López's (2001, 2012) analysis for the sake of exposition, but it should be kept in mind that an analysis à la Kayne would be equivalent in this respect. At any rate, the step to have in mind is movement of the *causee* to a designated position in the main clause, namely,  $\alpha P$  (see also section 3.2).



According to López (2001, 2012), this movement is triggered by thematic reasons: the *causee* moves in order to receive a second theta-role (i.e., the *affectee* role<sup>31</sup>); therefore, his analysis is a good example of an attract-based approach to thematic assignment. Notice now that if this analysis were on the right track, then the subject *causee* in (59) would be in a position transparent for theta-role assignment by main v in cases where this v is not a Case assigner (i.e., it is  $\phi$ -defective); otherwise the Activity Condition (17/49A) would prevent thematic assignment to the *causee* by v. The basic fact in (57b) shows that this prediction is not borne out: one cannot reflexivize the *causee* subject under any circumstance in Spanish causatives. We are left with two minimal options, then: Either the ECM analysis of causatives is incorrect or the thematic theory in (17/49) is. The easiest way to test this is to evaluate this type of predictions in the domain of indubitable ECM sentences. As is well-known since Marantz (1984), ECM allows for reflexivization of the embedded subject at least in languages of the Spanish type (see Reinhart and Siloni, 2005 and Appendix below). Thus, in Spanish, reflexivization of ECM subjects of perception verbs is grammatical. Compare (57b) with (60):

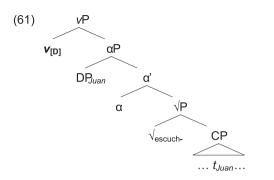
(60) Juan se escuchó cantar. J. se heard sing.INF 'John heard himself sing.'

We have then a first indication that analytical causatives cannot be reduced to ECM constructions. As for ECM sentences, we adopt the assumption that infinitival complements of perception verbs are CPs.<sup>32</sup> The crucial step is again movement of the embedded subject to the main clause:

<sup>&</sup>lt;sup>30</sup> Another approach to Romance causatives is the applicative analysis proposed, for instance, in Ippolito (2000), Ordóñez (2008) or Torrego (2010). I will not discuss this type of analyses in this paper. See Ordóñez and Saab (2013) for a critique to the applicative strategy for Romance causatives.

<sup>&</sup>lt;sup>31</sup> The *in situ* analysis of the subject *causee* proposed here supposes that the affectedness constraint does not require additional theta-role assignment to the *causee*. In this respect, my analysis follows the insights of Folli and Harley's (2007) approach, according to which affectedness is not seen as a particular additional theta-role on *causees*, but as a semantic side effect produced by selection properties of main *v* in active causatives.

 $<sup>^{32}</sup>$  As noticed by an anonymous reviewer, this is far from being a standard assumption for ECM-constructions, although the label ECM is also far from being something more than a descriptive term both within and across languages. I just make this assumption in order to keep the discussion on the nature and taxonomy of phase heads and clause structure in general as simple as possible. Descriptively, the point is that ECM-constructions can have two *v* heads acting as probes for accusative case (see 66 below). This follows from the generalization in (46) (see also 64 below), in case, for instance, that another phase head intervenes between both *vs*, which as I assume is C. There are, however, other options to explore not only regarding the exact nature of the intervening phase head (if any), but also regarding the proper structure of perception verbs. I will leave these options for future inquiry.



Given that the subject of the infinitive escaped from its sentence and that it is both active and local with respect to defective main v, it receives the external theta-role of the main clause. Of course, whenever v is a Case assigner, then Activity (17/49A) blocks theta-role assignment by main v to the ECM-subject, like for instance in the examples (70) below (see also section 6 for more examples from English and, more importantly, from Spanish adjectival ECM constructions).

Other interactions between *se* constructions and ECM point also in the same direction: ECM and causatives cannot be reduced to the same basic analysis (the ECM one). Indeed, as far as the distribution of *se* is concerned, causatives and ECM constructions seem to be in complementary distribution. Compare for instance (50), repeated below as (62), in which impersonal *se* is disallowed in caused sentences, with (63), an ECM construction, in which both the reflexive/reciprocal reading and the impersonal one are allowed:<sup>33</sup>

(62) Juan [hizo [castigarse a los culpables]] J. made punish.INF-SE ACC the culprits *i. Reciprocal/reflexive reading (OK under the active structure)* 'Juan made the culprits punish themselves/each other.' *ii. Impersonal reading (NO)* Intended: 'John made someone/one punish the culprits.'

(63) Impersonal se in the embedded ECM-infinitive:<sup>34</sup>
Juan vio castigarse a los culpables.
J. saw punish.INF-SE ACC the culprits *i. Reciprocal/reflexive reading*'Juan saw the culprits punish themselves/each other.' *ii. Impersonal reading*'Juan saw someone/one punish the culprits.'

This is a crucial contrast that has not been discussed with the detail it deserves (although see Saab, 2014; Baauw and Delfitto, 2005 for discussion of related patterns in Italian). Under the analysis proposed in this paper, such a contrast is

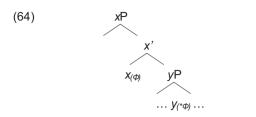
- (i) a. De castigarse a los culpables,... of punish.INF-se ACC the culprits 'If one punishes the culprits,...'
  - b. \*?De trabajarse mucho, … of work.INF-se a.lot
    - 'If one works a lot,...'
  - c. AI haberse trabajado tanto...
     to the have.INF-se worked so.much....
     'Since everybody has worked so much....'

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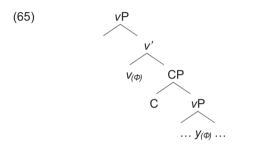
<sup>&</sup>lt;sup>33</sup> The judgments in (63) correspond only to Buenos Aires Spanish speakers. Some Peninsular Spanish speakers from the *leista* variety do no accept the impersonal reading (see Saab, 2014:159, footnote 25 for more discussion).

<sup>&</sup>lt;sup>34</sup> For poorly understood reasons, impersonal se is not allowed to occur in simple infinitive clauses containing unergative verbs (see ib), although judgments improve with composed infinitives (thanks to an anonymous reviewer for pointing out the example ic).

entirely predicted. Remember first that causatives entail  $\phi$ -defective  $v_2$ . This follows from Pujalte's observation that whenever two cyclic heads of the same type are local (in the sense that no other phase head intervenes), only the upper head can be a probe (cf. 46, repeated below).



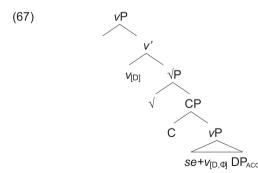
As already discussed, this accounts for the absence of impersonal *se* readings in caused sentences. Notice now that ECM constructions instantiate a case where C intervenes between the vs involved in the construction; for this reason, lower v can encode  $\phi$ -features:



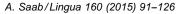
Indeed, ECMs with perception verbs, but not causatives (cf. 47 above; i.e., *Juan la hizo comprarlo* Lit: 'Juan her made buy it'), allow for double accusative marking, which shows that embedded v can be a probe for its internal argument:

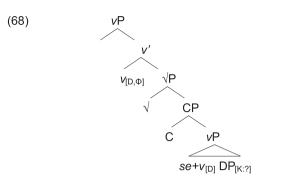
(66)	Juan	la	vio	comprarlo.
	J.	CL.FEM.3SG.ACC	saw	buy.inf-cl.masc.3sg.acc

The ambiguity in (63) follows straightforwardly now from the thematic theory outlined in this paper. Under the impersonal reading, the embedded *v* is  $\phi$ -complete and values the K feature of the internal argument as accusative. Given that after Case valuation this DP is inactive, the external theta-role remains unassigned and a default rule applies at the semantic-pragmatic interface giving the relevant arbitrary reading (see Saab, 2014 for details). In (67), the basic configuration for the impersonal reading in (63) is illustrated ( $\alpha$ P here and in 68 omitted for the sake of expository convenience)



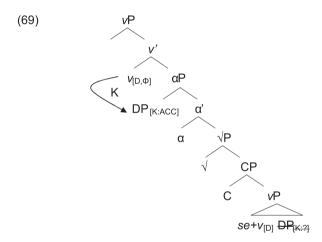
As for the reflexive/reciprocal reading in (63), the underlying structure is identical to (67) with a crucial difference: lower v is  $\phi$ -defective.





The internal DP receives then two theta-roles in this configuration: the patient role from the lower Root and the Agent role from the embedded *v*. This is so just because both Locality and Activity for thematic assignment are obeyed within the embedded clause, as in other reflexive configurations already discussed in this paper.

As for Case valuation in this type of ECM-configurations, I will assume that the fact that a DP cannot value its K feature within its own sentence triggers movement of this DP outside its clause, in consonance with survive approaches to movement (see Bošković, 2007; Stroik, 2009 and section 3.4 above). In an ECM configuration like (68), then, the internal DP has to move crossing the embedded CP domain (a phase) in order to value its K feature against a proper probe (i.e., main v).



So ECM verbs illustrate a situation where movement for Case reasons is actually attested. Word order facts in (63) obscure this conclusion. As is well known, ECM constructions in Spanish allow for free ordering between the ECM subject and the infinitive clause.

(70)Juan vio María. a. cantar а sing.inf acc M. J. saw b. Juan vio а María cantar. J. sing.INF saw ACC M. 'Juan saw Mary sing.'

However, what has not been previously observed is that altering the word order in (63) eliminates the ambiguity:<sup>35</sup>

(71) Juan vio **a los culpables** castigarse. J. saw Acc the culprits punish.INF-SE 'Juan saw the culprits punish themselves/each other.'

(only reciprocal/reflexive)



<sup>&</sup>lt;sup>35</sup> Thanks to Laura Stigliano for pointing out this fact to me.

Here, the only available reading is the reciprocal/reflexive, but not the impersonal one. This is accounted for if the object moves for Case reasons, which can only be the case if there is no available probe within its own clause. In other words, the fact that the object moves to look for a Case value is an indubitable indication that embedded v has to be  $\phi$ -defective preventing thus the impersonal reading, which only arises when Activity blocks theta-role assignment by agentive v to an internal argument with a valued Case feature.

Clitic ordering gives the same result: whenever the accusative clitic is associated with the main verb we get the reciprocal/reflexive reading, but the impersonal one if the clitic is adjoined to the infinitive verb.<sup>36</sup>

(72) a. Juan *los* vio castigarse. J. CL.MASC.3PL.ACC saw punish.INF-SE 'Juan saw them punish each other/themselves.'

(only reciprocal/reflexive)

b. Juan vio castigárse*los*.
 J. saw punish.INF-SE-CL.MASC.3PL.ACC
 'Juan saw someone/one punish them.'

(only impersonal)

This entire pattern follows if the *ex situ* position of ECM subjects is the result of A-movement for Case reasons as in Koizumi (1995) and subsequent work. Under the impersonal reading in (63), instead, the internal DP *los culpables* values its K feature within its clause; therefore, movement for Case outside its clause is not required. Put differently, (63) is a case of structural ambiguity. Under this view, the impersonal reading is not the result of an ECM derivation, but only the reflexive/reciprocal is. So surface post-verbal subjects in true ECM constructions are not within the embedded sentence but within the main clause. Post-verbal position of ECM subjects should be attributed to movement of the infinitive sentence, maybe as a type of predicate inversion derivation. This is not the case with the impersonal *se* derivation in (63), in which the accusative DP is internal to the infinitive clause.

## 6. A counterargument and its response: expletive insertion in ECM constructions

In this section, I first demonstrate why Sheehan's (2012) argument against long-distance theta-role assignment does not hold in the theory presented here (section 6.1). In section 6.2, I will further show that, indeed, Sheehan's basic fact

<sup>36</sup> An anonymous reviewer reports that (s)he finds the hacer causative counterpart of (72b) in (i) grammatical in his/her leista dialect.

Juan hizo castigárse*les*.
 J. made punish.INF-SE-CL.3PL.DAT
 'Juan made someone/one punish them.'

This is an intriguing fact in view that the same reviewer still seems to find (50/62), repeated as (ii), ungrammatical under the impersonal reading:

(ii) Juan [hizo [castigarse a los culpables]]
 J. made punish.INF-SE ACC the culprits
 *i. Reciprocal/reflexive reading (OK under the active structure)* 'Juan made the culprits punish themselves/each other.'
 *ii. Impersonal reading (NO)* Intended: 'John made someone/one punish the culprits.'

A plausible suggestion could be assuming that in some *leista* dialects the clitic *les*, when used as direct object, receives inherent Case (maybe optionally) by the Root within the caused sentence. Thus, in the inherent Case analysis of *les* the clitic would be inactive to take a second theta-role from embedded *v* and the impersonal reading would arise. It is worth noticing that in my non-*leista* dialect, where the regular accusative form of the clitic is used, (i) is fully ungrammatical (iiia). The only grammatical output is the reflexive/reciprocal reading, which, for some reason, triggers obligatory clitic climbing:

(iii) a. \*Juan hizo castigárse*los*.
 J. made punish.INF-SE-CL.MASC.3PL.ACC
 b. Juan *los* hizo castigarse.
 J. CL.MASC.3PL.ACC made punish.INF-SE
 'Juan made them punish themselves/each other.'

Beyond this particular effect in Buenos Aires Spanish, the judgment in (i), however, should be corroborated by further research in order to see if a micro-parametrical difference is indeed attested between some *leista* and non-*leista* dialects in this particular domain, a revealing conclusion if correct.

gives further support for some of the main claims made in this paper connected to (i) the Activity Condition and (ii) the late insertion view of *se* constructions in Spanish. Additionally, some basic contrasts between English and Spanish involving expletives insertion in ECM-constructions will allow me to extract some interesting crosslinguistic consequences with respect to the timing of expletive insertion (syntax or PF). Finally, section 6.3 will complete the argument regarding the Activity Condition by showing how the system directly derives impersonal and reflexive *se* readings in adjectival ECM configurations in Spanish.

# 6.1. English ECM and expletive insertion

According to Sheehan (2012) (based on Boeckx et al., 2010 observations in their chapter 3), if theta role-assignment proceeded in a long-distance fashion, under conditions regulated by the operation Agree, then the following sentence would be predicted as grammatical, contrary to fact:

(73) \*There expected [John to leave].

# In Sheehan's words (2012:37; my underline):

[...] [73] can be ruled out in the MTC [movement theory of control] by the fact that expletives cannot absorb thetaroles. Crucially, *this is only the case if theta-roles require Merge. If theta-roles could be assigned via Agree, John could simply receive two distinct theta-roles via Agree in* [73], *with* there *satisfying the EPP*. Crucially, [73] is not ruled out on Case grounds as *expect* is an ECM verb which, if transitive, can assign accusative Case to the subject of a TP complement (i.e. *John*). For the MTC to be empirically tenable, then, it seems necessary that theta-role assignment must be configurationally determined.

Notice, however, that the Activity Condition in (17/49A), repeated below, accounts directly for one of the essential aspects of the ungrammaticality of (73):

(74) **Activity**: A has an unvalued K feature at the point in which the theta role of  $x_{[D]}$  is being evaluated/assigned (i.e., A is active within the vP domain to enter into further A-dependencies).

In effect, given that *John* gets its accusative value within the main vP (i.e., it is an ECM construction), this argument is inactive when the theta-role for the external argument is evaluated (see section 3.2 for more discussion on Activity).

(75) \*[TP There [ $_{\nu P}$  expected+ $\nu_{\Phi}$ [John<sub>ACC</sub> to leave]]] Violates Activity (74)!

Under this situation, the main transitive v cannot discharge its theta-role. Merging an expletive into a theta position is not allowed in English, hence, the ungrammaticality of (73).

## 6.2. Activity and the timing of expletive insertion

Spanish and other Romance languages, however, allow for sentences like (76), where impersonal se indicates the absence of an external argument for main vP:

(76) (a Juan<sub>i</sub>) se lo<sub>i</sub> considera inteligente. Acc Juan<sub>i</sub> se cL.MASC.3SG.ACC<sub>i</sub> considers intelligent 'John is considered intelligent.'

Here, like in English, *lo* 'him' cannot receive the external theta-role of *considerar* because Activity is also violated (i.e., *lo* values Case at the point where the external theta-role of the main *v*P is being evaluated). However, in Spanish, it is possible to merge an expletive into the position of an unsaturated external role, because such an operation takes place post-syntactically where thematic roles are not assigned/evaluated (see section 2.1 for details). In other words, the difference between Spanish and English as far as the nature of expletives is concerned is the component of the grammar where expletive insertion takes place. In English, expletive insertion takes places in the syntax (see Vukić, 2003 and the reference therein for a recent theory); for this reason, inserting *it* or *there* into a thematic or semantically interpretable position gives us a referential expression as a result. This explains Jaeggli's (1986) observation with reference to the following sentences:

(77) a. \*It kills the rat. (*it* = expletive)

TP

itexpl

Т

it⊬

v

b. \*John ate it/there. (it/there = expletive)

Merging *it* or *there* in the syntax cannot give an expletive interpretation for this expression, but a thematic one. Thus, an expletive can only be interpreted as such when merged with T or another non-thematic head:

 $\sqrt{it_{\theta}}$ In Spanish, as already observed, an expletive can be inserted into the position of an unsaturated external argument like in (76) because expletive insertion is post-syntactic. Such a post-syntactic operation is subjected to locality conditions related to the notion of phase, as discussed in section 2.1. In summary, the Activity Condition in (74), plus the timing of expletive insertion in English and Spanish, accounts for the contrast between (73) and (76) repeated below as (79):

(79) a. \*There expected John to leave.

b. (a Juan<sub>i</sub>) se lo<sub>i</sub> considera inteligente. ACC Juan<sub>i</sub> se CL.MASC.3SG.ACC<sub>i</sub> considers intelligent 'John is considered intelligent.'

The picture we get as far as the parametric variation of expletive insertion is concerned can be graphically represented as in (80):

(80)

(78)



The ungrammaticality of (79a) in English, then, is not related to thematic theory, but to the timing of expletive insertion. At any rate, the crucial point is that Activity blocks the possibility that the main *v* assigns its theta-role to the ECM subject in both languages.

## 6.3. Activity and (syntactic) reflexivization

Before concluding, a last prediction must be mentioned with respect to the ECM facts discussed in this section. Concretely, the prediction is that we should have the reflexive counterpart of (79b), whenever the main v is also  $\phi$ -defective. This is correct as can be demonstrated by the contrast between the impersonal (79b) and the reflexive in (80):

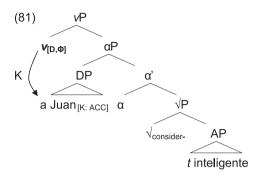
(80) Juan se considera inteligente.
 Juan se considers intelligent
 'John considers himself intelligent.'

Reflexive

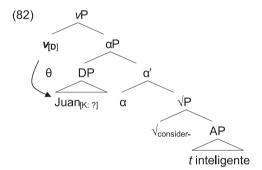
[Jaeggli, 1986:591]

[Jaeggli, 1986:589]

As already mentioned, I follow, among others, Koizumi (1995) and, in particular, López (2012) in assuming that ECM subjects move to a projection between *v* and the Root (see section 5 for details). Following López, I have called this projection  $\alpha P$  in order to avoid any commitment with the particular content of this head (either aspectual, as in Travis, 1991, or thematic, e.g., an applicative head as in Pylkkänen, 2008).<sup>37</sup> In regular ECM sentences, the ECM subject moves then to Spec, $\alpha P$  and values accusative Case via Agree with *v*.<sup>38</sup> As noticed above, this is exactly what is observed in impersonals like (79b) (*modulo se*-insertion). See (81):



As for the reflexive ECM in (80), v is unspecified for  $\phi$ -features, so it does not constitute a probe for Case valuation. Crucially, the ECM subject in this particular environment is both local and active with respect to  $v_{[D]}$  and receives the theta-role associated with this head, in addition to the theta-role previously assigned by the adjectival minimal clause:



The DP in (82) gets thus two theta-roles – the theta-role internal to the minimal clause and the one associated to  $v_{[D]}$  – under the conditions stated in (17/49). The derivation proceeds introducing T and  $C_{[\phi]}$  and valuing the K feature of this DP as nominative. At PF, in turn, se is inserted to cancel the [D] feature on v.

Thus, the Activity Condition directly accounts for the different thematic readings in reflexives and impersonals in the paradigms I have explored here (79b vs. 80). As argued through this paper, this theory connects Case and thematic assignment to derive morphophonological patterns of systematic syncretism in the domain of *se* constructions in Spanish. Reflexives and impersonals form a minimal pair as far as thematic assignment is concerned, where Case plays a crucial role blocking double thematic assignment in impersonal sentences. By the same token, the system explains the absence of double theta-role assignment in ECM-constructions in English and Spanish, whenever main *v* is  $\phi$ -complete (cf. the pair in 79).

In summary, in this section, I have shown that the putative counterexample in (73/79a) provided by Sheehan against long-distance theta-role assignment not only does not apply to the theory defended here, but can also be used as an additional argument in favor of the Activity Condition as formulated in (74).

<sup>&</sup>lt;sup>37</sup> Although, of course, the content of  $\alpha$  is not trivial for the locality dimension of thematic theory.

<sup>&</sup>lt;sup>38</sup> Notice that I am also assuming that adjectival minimal clauses constitute opaque domains for Case assignment from outside, like in ECM constructions of perception verbs, but unlike analytical causatives. At any rate, the point I am making here is orthogonal to the proper analysis of adjectival ECM sentences in Spanish.

## 7. Conclusions

In this paper, I have tried to show that the Merge Condition on theta-role assignment as defined by Sheehan in (1), and repeated below, should be dispensed with by mainly empirical reasons involving some complex interactions between the clitic se and analytical causatives in Spanish.

(83) Principle of theta-role assignment:

Theta-roles can only be assigned via External or Internal Merge with a thematic head.

[Sheehan, 2012:38]

The theory developed in this paper makes reference to conditions on locality and activity that allow for theta-roles to be assigned in long-distance configurations. I have demonstrated that this view is not only empirically equivalent in the main domains in which (1) is also successful (see section 3), but it is also empirically superior when it comes to the aforementioned pattern of *se* and causative interactions (see sections 4 and 5).<sup>39</sup> In addition, the main reason adduced by Sheehan against long-distance theta-role assignment approaches has been shown as unproblematic for the theory I have defended here (see section 6).

Several empirical domains involving inherent and quirky Case patterns should be addressed in future research in order to further corroborate the main arguments discussed in this paper. Preliminarily, at least, the Merge Condition on thematic assignment remains under suspicion. This could be seen as a welcome result in view of the basic fact that long-distance dependencies are empirically attested in other domains of the A-realm.

## Acknowledgements

I would like to thank three anonymous reviewers whose criticisms and comments helped me to improve several aspects of this paper. I am also grateful to Jairo Nunes for the insightful comments provided to a previous version of this work. I extend my gratitude to Mercedes Pujalte, Daniel Romero, Esthela Treviño, Pablo Zdrojeweski and the students of my seminar *Problemas de localidad a la luz del programa minimalista* (Universidad de Buenos Aires, 2013), especially, to Fernando Carranza, Sonia Kaminszczik, Carlos Muñoz Pérez and Laura Stigliano. I would also like to thank the audiences of the *Workhop on Ellipsis* (Leiden, 2012), the *V Congreso Internacional de Letras* (Buenos Aires, 2012), the *II Jornadas de Jóvenes Lingüistas* (Buenos Aires, 2013), and the *Encuentro Iberoamericano de Historia y Filosofia de la Lingüística Generativa* (Santa Fe, 2013). Finally, I am very grateful to Verónica Ferri for proofreading this paper. Usual disclaimers apply.

# Appendix. An argument against Reinhart and Siloni (2005)

In an influential paper, Reinhart and Siloni (2005) have also proposed a long-distance theta-role assignment approach, whose main claim is that thematic assignment can bundle undischarged theta-roles either in the syntax or in the lexicon, depending on the language, under the rule in (1):

- (1) Reflexivization bundling:
  - $[\theta_i] \ [\theta_j] \rightarrow [\theta_i \theta_j]$ , where  $\theta_i$  is an external  $\theta$ -role.

# [Reinhart and Siloni, 2005:400]

Simplifying, (1) allows for an argument to be associated with a complex theta-role under well-defined lexical or syntactic situations. I will not discuss the parameter that divides languages with respect to the component of the grammar relevant to (1) (syntax or the lexicon), because I am only interested in syntactic reflexivization of the Spanish type (a typical syntactic language according to Reinhart and Siloni). Indeed, the approach presented in this paper is in consonance with Reinhart and Siloni's approach as far as the syntactic nature of reflexivization in Spanish or French is concerned. In such languages, reflexivization takes place under the following scenario (Reinhart and Siloni, 2005:404):

## (2) Reflexivization in syntax

- a. Case: Case is reduced by the appropriate morphology (such as the clitic se).
- b. Bundling: Operation [1] applies to unassigned  $\theta$ -roles, upon merger of the external  $\theta$ -role.

<sup>&</sup>lt;sup>39</sup> As I show in Appendix, other competing theories allowing for long-distance theta-role assignment, such as Reinhart and Siloni's (2005) particular implementation of such a view, cannot handle for this basic paradigm, either.

Unlike what is assumed here, the clitic se is conceived of as a Case reducer (see footnote 4 for evidence against this approach). Obviously, this view has the consequence of affecting the licensing of argument DPs in the syntax. For this reason, once the clitic se has applied in the syntax the theta-grid of a given predicate will be left with an unsaturated theta-role. The rule in (1) will then apply at the relevant point where the external theta role is merged in the structure. Let us see how Reinhart and Siloni's system works in a reflexive sentence such as (3):

- (3) a. Jean se lave.
  - Jean se washes 'Jean washes.'
  - b. VP: [se lave<sub>θi-Agent, θk-Theme</sub>]
  - c. IP: [Jean<sub>< $\theta_i$ </sub>,  $\theta_k$ > [se lave<sub>j</sub> [VP t<sub>j</sub>]]]
  - d. ∃e [wash(e) & Agent(e, Jean) & Theme(e, Jean)]

In (3b) the internal theta-role of the verb remains unassigned because of the suppression effect implemented by the clitic *se*, which prevents an argument to be merged into the complement position. For this reason, the verb retains its internal theta-role until the relevant locality domain for thematic assignment is checked, namely, the smallest IP in which the relevant theta-roles are assigned. This is stated by Reinhart and Siloni in the following way (Reinhart and Siloni, 2005:405):

- (4) EPP: Merging the outermost Spec,IP of the cycle is obligatory.
- (5)  $\theta$ -Criterion: Every  $\theta$ -role must be assigned in the smallest full IP.

Therefore, bundling applies at the full IP level (i.e., an IP with a specifier). In the case at hand, both the external and the internal theta-role are assigned to the external argument in accord with (1).

As argued by Reinhart and Siloni, this approach directly accounts for reflexive ECMs as (6) below (see also the Spanish example in 60):

- (6) a. Jean se voit [ laver Marie]. Jean s∈ sees wash.INF Marie 'Jean sees himself wash Marie.'
  - b. Embedded IP:  $[_{IP}[laver_{\langle \theta i \rangle} Marie_{\theta g}]]$
  - c. Next VP:  $[VP \text{ se voit}_{\theta k} [IP[laver_{\theta i}] Marie_{\theta g}]]_{\theta f}]$
  - d. Top IP: [\_IP Jean\_{\theta k+\theta i} [\_VP se voit [\_IP [laver \_{<\theta i>} Marie\_{\theta g}]]\_{\theta f}]]

[Reinhart and Siloni, 2005:405]

[Reinhart and Siloni, 2005:404]

In this case, the external theta-role of the embedded verb remains unassigned and is then retained in the theta-grid of this predicate until merging the smallest full IP, namely, the main IP with *Jean* in its specifier, which consequently is interpreted with two theta-roles by bundling.

Reinhart and Siloni also notice that their system easily extends to reflexive causative constructions, where the external theta-role of the causative predicate receives two theta-roles: the causer role and the theta-role internal to the embedded predicate. In their words,

Further, [...] the ability of the causative verb to reflexivize in [7; see also 53 for Spanish] is also expected. [...] the Agent role of *embrasser* 'kiss' is not merged as an external argument [...]. As *embrasser* is embedded, its internal role is carried along the projections and is parasitically assigned upon merger of the external role of the causative *fera*.

Jean se fera embrasser (par Marie).
 Jean se make.FUT kiss.INF (by Marie)
 'Jean will make himself be kissed (by Marie).'

# [Reinhart and Siloni, 2005:407, fn. 15]

However, their approach has a crucial problem, because now it is not easy to see how the sentences in (3b/57b), repeated as (8), where the external argument is reflexivized, are ruled out.

 \*Juan se hizo comprar un auto/trabajar.
 J. se made buy.INF a car/work.INF Intended: 'Juan made himself buy a car/work.' (*Juan* = infinitive subject) (French)

(French)

(French)

Regardless of the internal structure of the infinitive sentence (defective IP or vP), its external theta-role should be retained until main IP is projected and closed by merging the main subject. Once this condition is met, *Juan* should receive the two external-roles by bundling as in the examples (3a), (6) and (7). A possible solution would be to assume that reflexivization of the external argument is not allowed for the simple reason that such an argument is not syntactically projected, in consonance with some approaches to passive causatives that try to account for the same basic fact (Baauw and Delfitto, 2005). Nevertheless, next to the fact that this analysis faces some empirical and conceptual problems (see Saab, 2014), it still overgenerates in the case of active causatives for which the external argument obviously projects in the syntax (see for instance 42b). In short, Reinhart and Siloni's (2005) bundling analysis is not empirically adequate in the realm of Romance causatives.<sup>40</sup>

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<sup>&</sup>lt;sup>40</sup> See Pujalte (2013) for a detailed criticism of other aspects of Renihart and Siloni's theory. Pujalte's discussion centers on the long-standing debate about the so-called *unaccusative* analysis for reflexives (Marantz, 1984 and much subsequent work) and gives convincing arguments showing that Reinhart and Siloni's attack to such an approach is not conclusive, at least in Spanish (additional evidence for Marantz's type of approaches is indeed provided by Pujalte). To a certain extent, this issue is orthogonal to the main point raised in this section, although of course my analysis of reflexivization follows Marantz's tradition. A unergative analysis for reflexives could be compatible with my approach to thematic assignment provided that some technical definitions are properly accommodated. I will leave the issue open for a future research.

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