On long-distance theta-role assignment

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Abstract: I contend the long-standing assumption that (External or Internal) Merge is a

necessary condition for theta-role assignment. Concretely, I show that recent arguments

against long-distance theta-role assignment (such as Sheehan 2012) do not hold in a

theory which conceives of theta-roles to be assigned under well-defined conditions of

locality and activity generally available in the realm of A-dependencies. Such a theory

is indeed superior in non-trivial respect to attract-based theories of theta-role assignment

when it comes to some complex interactions between se and causative constructions in

Buenos Aires Spanish. I also show that other competing theories of long-distance theta-

role assignment, such as Reinhart & Siloni 2005, cannot account for those interactions,

either.

Key words: Theta theory, locality, activity, causatives, reflexives, impersonal se,

Spanish

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 and Miyagawa

2010, among others). A weaker version - mostly represented by the proponents of the

Movement Theory of Control (Hornstein 1999 and much subsequent works) - claims

that internal Merge also affects thematic positions. The common assumption is, again,

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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 contend this long-standing assumption in current minimalist theory by showing that theta-role assignment can proceed in a long-distance fashion provided that well-known conditions on activity and locality are met (Chomsky 2000, 2001, and subsequent works). In other words, I propose that thematic dependencies comply with essentially the same syntactic conditions that affect other A-dependencies, maybe related to the so-called operation Agree (Chomsky 2000, 2001)<sup>1</sup>. Informally, these conditions are stated with reference to a given vP domain (other heads can also be thematic heads) as follows:

#### (2) Principle of theta role-assignment revisited:

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>2</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  $\nu P$ domain to enter into further A-dependencies).
- (B) *Locality:* A is local 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  $x_{[D]}$ ).

<sup>1</sup> Although I will remain neutral about the issue of the exact nature of such an operation.

<sup>&</sup>lt;sup>2</sup> The notation  $x_{\text{IDI}}$  stands for a head with a subcategorization feature of the D type that makes that head a potential theta assigner.

## 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 of y if x and y are thematic heads which introduce the same structural argument (internal or external).

The notion of *containment* is the usual one (Chomsky 1986) and, although it will be enough for our 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 for thematic roles makes use of structural positions regardless of the specific content that a given thematic role encodes on a particular thematic head. Obviously, same thematic heads are introduced into identical structural positions, but different thematic roles (experiencers, agents, causes) can also be introduced in the same positions. Put differently, a thematic head introducing an experiencer may be an intervener for an agentive functional head. Again, further refinements could be shown as necessary in this domain.

The type of locality proposed in (2B) seems to be connected to the A-over-A condition in some basic respects<sup>3</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 (2B) is independent of any attract theory of movement. Indeed, as I will show below, there

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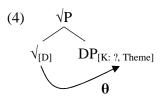
<sup>&</sup>lt;sup>3</sup> The A-over-A condition appears originally suggested in Chomsky 1962 and 1964 in the Standard Theory framework. See Rackowski & Richards 2005, Hornstein 2009 and Nunes 2010 for some minimalist revivals of the A-over-A condition.

are strong empirical reasons for rejecting a formulation of the displacement property in terms of attract.

Now, let me illustrate the working of this theory in a simple transitive sentence like (3):

### (3) John read the book.

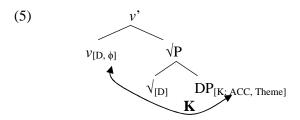
In the first relevant step (4), the DP *the book* with an unvalued K feature merges with the Root (or V, depending on different approaches to lexical categories). This Root is endowed with a subcategorization feature [D], which is not only an instruction for applying Merge (Müller 2010 and Pujalte & Saab 2012, among others), but also an instruction that the Root is a thematic head (i.e., it has a theta-role to discharge; see Jaeggli 1986).<sup>4</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 (2).



The next step is the introduction of the v head, which in this case is  $\phi$ -complete (it is a probe for accusative case). This head is also a thematic head because it encodes a [D] feature. At this point, inheritance from v to Root is triggered (Chomsky 2007, 2008 and

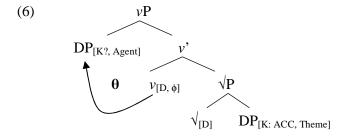
<sup>4</sup> In other words, we capture thus some aspects of the linking between theta-roles and subcategorization features.

Richards 2007, among many others) and the internal DP enters into an Agree relation with 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 unvalued K feature of the DP is valued as accusative. The tree in (5) illustrates this step in the derivation (feature inheritance is not represented for expository convenience).



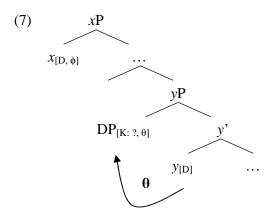
Given that the K feature of the internal DP has been valued, the thematic role of the v head cannot be assigned to this argument because of Activity (2A). Notice that this is the case even if the thematic calculus and Case are evaluated concomitantly; i.e., *the book* is accusative at the point where the external role is being evaluated. We derive thus the observation that a thematic head, which is also a probe, cannot assign a thetarole 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 (2):



As is well-known, the unvalued K feature of the external DP remains active for valuation until C (or T, depending on assumptions on 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 (1), although conceptual arguments can be given in favor or against one or the other. Theories that conceive of thematic heads as potential attractors as in (1) make however different predictions in particular empirical domains.<sup>5</sup> Assume for instance that a derivation has reached the following stage:



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

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<sup>&</sup>lt;sup>5</sup> An attract-based theory of thematic role seems to be unavoidable for the proponents of (1). A survive approach to movement (Bosković 2007 and Stroik 2009), according to which movement is triggered by properties of the moved element, is not compatible with (1) in its weak version. For a survive approach to long distance dependencies, then, thematic dependencies are strongly configurational.

my approach, this DP does not move for thematic reasons; i.e., thematic heads are not attractors (see section 4 for more discussion). This issue of course goes beyond the limits of this paper. In any case, the DP in (7) 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 introducers. Put differently, (7), under the conditions just specified, illustrates a locality violation in the abstract. As I will show here this scenario is concretely attested in the domain of causative constructions in Spanish.

The paper is organized in the following way. In section 2, I will show that a putative counter-example for long-distance theta-role assignment discussed in Boeckx, Hornstein and Nunes 2010 and Sheehan 2012 does not hold as such under the theory defended here. The discussion on this point will pave the way for the crucial argument in favor of (2). In section 3, then, I show that the scenario abstractly illustrated in (7) can indeed distinguish (2) from attract-based theories on empirical grounds in favor of the theory outlined here. The empirical domain involves *se*-reflexivization in causatives and ECM constructions in Spanish. In section 4, I show that alternative analyses to causative constructions that assimilate causatives and ECM constructions make wrong predictions. In section 5, I argue that competing theories on reflexivization and long-distance theta role-assignment, such as Reinhart & Siloni 2005<sup>6</sup>, cannot handle the patterns we will discuss here.

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<sup>&</sup>lt;sup>6</sup> Another important antecedent of a long-distance approach for theta-assignment is Bošković & 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, theta-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 & Takahashi's work here.

## 2. On Activity

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

According to Sheehan (2012) (based on Boeckx, Hornstein & Nunes 2010), 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:

# (8) \*There expected [John to leave]

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

[...] [8] can be ruled out in the MTC [Movement Theory of Control] by the fact that expletives cannot absorb theta-roles. 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 [8], with there satisfying the EPP. Crucially, [8] 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 (2A), repeated below, accounts directly for one of the essential aspects of the ungrammaticality of (8):

# (9) Principle of theta role-assignment revisited:

An argument DP A receives a theta-role from a thematic head,  $x_{[D]}$ , in the domain of a vP if and only if:

- (A) *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  $\nu P$  domain to enter into further A-dependencies).
- (B) *Locality:* A is local 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  $x_{[D]}$ ).

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.

(10) \*[TP There [
$$_{\nu P}$$
 expected+ $_{\nu \phi}$  [John<sub>ACC</sub> to leave]]] **Violates Activity (9A)!**

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 (8).

## 2.2. Activity and the timing of expletive insertion

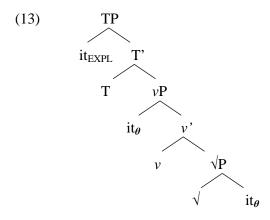
Spanish and other Romance languages, however, allows for sentences like (11), where impersonal se indicates the absence of an external argument for main vP (see below).

(11) (a  $Juan_i$ ) se  $lo_i$  considera inteligente. ACC  $Juan_i$  se  $him_i$  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, according to Pujalte & Saab (2012), it is possible to merge an expletive into the position of an unsaturated external role in Spanish, because such an operation takes place post-syntactically where thematic roles are not assigned / evaluated. 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 is syntactic in nature (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:

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

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

Merging *it* 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:



In Spanish, as already observed, an expletive can be inserted into the position of an unsaturated external argument like in (11) because expletive insertion in Spanish is post-syntactic. Such a post-syntactic operation is subjected to locality conditions related to the notion of phase. So, for instance, an expletive cannot be inserted into the Root position because this would violate a strong version of the Phase Impenetrability Condition, PIC (see Chomsky 2000, 2001, 2008, Richards 2007, 2011, Müller 2004, Gallego 2010 for discussion on the PIC, and see Marvin 2002 and Embick 2010 for different morphological implementations of the PIC). Therefore, a sentence like (14) cannot be interpreted as an impersonal *se* construction with the meaning that John hid something:

(14) \*Juan se escondió.

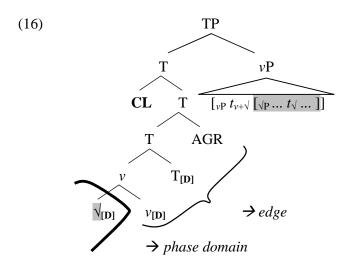
Juan se hid

Intended: 'Juan hid something.'

Assuming a strong version of the PIC such as the one provided by Marvin (2002) (see 15) the ungrammaticality of (14) 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,  $\nu$ ) when the complex head containing such a feature is evaluated for expletive insertion.

(15) 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)

As illustrated in (16), with reference to the complex head created for Root to T movement, the possibilities for clitic insertion are restricted to v and the heads above v.



We refer to Pujalte & Saab 2012 for detailed discussion about the clitic insertion operation. For our 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 & Siloni 2005, among others; see section 5), but it is 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). Crucially, because of the PIC, *se* never indicates the absence of an internal argument, at least in nominative-accusative languages or in morphological ergative ones. In true ergative languages (in Marantz's 1984 sense), it seems that this is not the case, what is

expected if the *internal argument* in these languages is indeed external, as in Marantz's original proposal (see also Otero 1985)<sup>7</sup>.

## Dyirbal (Marantz 1984: 212):

(17) a. bala yugu baŊgul yaraŊgu buyban.

stick-ABS man-ERG hides

'Man hides stick.'

b. bala yara buybayirnu.

man-ABS hides-REFL

'Man hides himself.' or 'Man hides (something).'

Impossible reading: \*The man is hidden.

In summary, the activity condition, plus the timing of expletive insertion in English and Spanish, accounts for the contrast between (8) and (11) repeated below as (18):

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

b. (a Juan<sub>i</sub>) se lo<sub>i</sub> considera inteligente.

ACC Juan; se him; considers intelligent

'John is considered intelligent.'

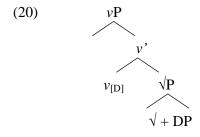
The picture we get as far as the parametric variation of expletive insertion is concerned can be graphically represented as in (19):

<sup>7</sup> This state of affairs strongly suggests a post-syntactic analysis of *se* constructions, as the one proposed in Pujalte & Saab 2012. 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 cancelled in the syntax under local inspection.

The ungrammaticality of (18a) 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. Of course, something more has to be said with respect to the arbitrary interpretation for the external argument in the impersonal sentence in (18b). But before entering into this aspect of thematic theory, let us see whether the activity effects in this sentence can be avoided in order to trigger thematic assignment to the ECM subject by the main v head.

# 2.3. Activity and (syntactic) reflexivization

Following Pujalte & Saab (2012), I adopt the idea that the  $\phi$ -set of a given functional head does not need to be inherently specified on that head (*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 (20), v, being  $\phi$ -defective, cannot value the K feature of the internal argument and, consequently, this internal DP is active for further thematic interpretation:



As argued in Pujalte & Saab (2012), this scenario underlies se-reflexive sentences in Spanish and other Romance languages:

(21) Juan se ama.

> Juan se loves

'Juan loves himself.'

Se-syncretism between reflexives and impersonals (among other se-constructions, see Pujalte & Saab 2012) is straightforwardly captured under this account. The difference in Case between an impersonal like (22) and a reflexive like (21) is simply accounted for if the probe is v in (22) but C in (21):

(22)Se castigó culpables. los

> punished ACC the culprits se

'One punished the culprits.'

(23)a.  $[CP C_{\phi} [TP [vP v_{D}] [RootP Root_{D}] DP_{[uK]}]]]]$ Reflexives

> b.  $[CP \ C \ [TP \ [vP \ v_{[\phi, D]} \ [RootP \ Root_{[D]} \ DP_{[uK]}]]]]$ *Impersonals*

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.<sup>8</sup>

<sup>8</sup> A putative counter-example to this approach is the so-called passive se construction (see i), where there is agreement between T and the internal argument, and the external argument is interpreted as arbitrary (see 2.4 below):

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

'The doors were opened on purpose.'

As for ECM constructions, then, the prediction is that we should have the reflexive counterpart of (18b), repeated as (24a), whenever the main v is also  $\phi$ -defective. This is correct as can be demonstrated by the contrast between the impersonal (24a) and the reflexive (24b):

inteligente. (24)a. (a Juan<sub>i</sub>) se loi considera *Impersonal* ACC Juan<sub>i</sub> se him<sub>i</sub> considers intelligent 'John is considered intelligent.' b. Juan se considera inteligente. Reflexive considers Juan se intelligent 'John considers himself intelligent.'

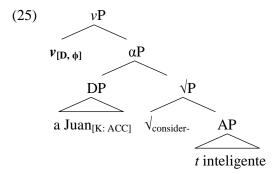
I will follow, among others, Koizumi 1995 and, in particular, López 2012 in assuming that ECM subjects move to a projection between v and the Root. Following López, I will call this projection  $\alpha P$  in order to avoid any commitment with the particular content of this head (either aspectual, as in Travis 1991, or thematic, e.g., an applicative head as in Pylkkänen 2008)9. In regular ECM sentences, the ECM subject moves then to Spec, $\alpha P$  and values accusative case via Agree with v. As noticed above, this is exactly what is observed in impersonals like (24a) (modulo se-insertion). See (25):

As shown in detail in Saab 2012 and Pujalte 2013, agreement is not a conclusive indication of nominative assignment. If it were the case, the arbitrary reading for the external argument would be prevented by Activity 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)

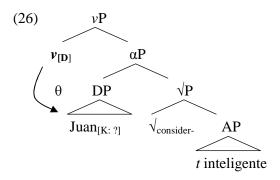
same conditions at play in impersonal se environments. <sup>9</sup> Although, of course, the content of  $\alpha$  is not trivial for the locality dimension of thematic theory.

case. Activity, then, blocks the reflexive/anti-causative reading in (i) and the arbitrary one arises under the

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As for the reflexive ECM in (24b), 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:



The DP in (26) 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 (2). 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 of v.

In summary, the Activity condition directly accounts for the different thematic readings in reflexives and impersonals. This theory connects Case and theta-role assignment to derive morphophonological patterns of systematic syncretism in the domain of *se* 

constructions in Romance. Reflexives and impersonals form a minimal pair as far as thematic assignment is concerned, where Case plays a crucial role blocking double theta-assignment in impersonal sentences. By the same token, the system explains the absence of double theta-role assignment in ECM-constructions in English and Romance, whenever main v is  $\phi$ -complete.

### 2.4. On Arb

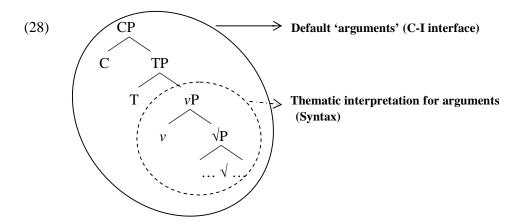
We can now address the question about what triggers the arbitrary interpretation (*arb* henceforth) in the impersonal *se* cases. I follow here the hypothesis that *arb* arises as a default strategy at the semantic-pragmatic interface (for a default approach to arbitrary readings, see also Williams 1980, Chomsky 1981 and subsequent works). Concretely, I will adopt Saab's 2012 approach to arbitrary readings in *se* constructions.

# (27) <u>Default agents:</u>

For any agentive  $v_{[D]}$ , assign *arb* in absence of a *nominative subject* in the C-domain of  $v_{[D]}$ .

This rule is conceived of as the semantic-pragmatic counterpart of the operation that inserts se on an unsaturated [D] position at PF. In other words, (27) is a repair strategy that applies at the conceptual (maybe pragmatic) interface whenever there is no nominative subject in the sentence. Applied to the minimal pair in (24), (27) gives the right result inserting arb only in the personal se construction, but not in the reflexive one, where the argument Juan receives two theta-roles in consonance with (2) and values nominative. As an interface strategy, (27) takes the full sentence (a CP) for evaluation and not the vP level, where the conditions in (2) are computed. Put

differently, the domain of application of thematic assignment is considerably reduced when compared with the domain for *arb* assignment.



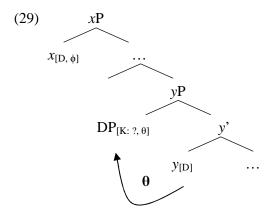
This conception of thematic interpretation differs from other approaches to the problem of thematic and arbitrary assignment. It confronts with Reinhart & Siloni 2005, for whom the domain of theta-role assignment is the IP (in a sense to be specified in section 5), and to some extent it also confronts with Chierchia's 2004 approach to saturation and arb-saturation (or arbitrarization in Reinhart & Siloni's 2005 terminology), according to which arbitrary readings in impersonal se form a sub-type of saturation, the semantic rule that applies to, e.g., analytical passives giving their typical existential reading under existential closure. I will assume here that existential closure is only triggered by a full defective agentive v, i.e., a v without [D] and  $\phi$ -specification.

For what has been argued so far, we can conclude that the contrast between (24a) and (24b) is a specific prediction of the thematic theory we are outlining in this paper, according to which theta-role assignment is dependent on the timing of Case valuation. The examples in (24) form a good minimal pair to evaluate the Activity condition on thematic assignment. In turn, the reflexive sentence in (24b) forms a minimal pair with the English example in (18a) discussed by Sheehan 2012 and Boeckx, Hornstein & Nunes 2010. I have shown that this ungrammatical counterpart to (24a) does not

constitute a counterexample to theory defended here, according to which long-distance theta-role assignment is allowed by UG. In what follows, I show that a thematic theory with the conditions in (2) at its heart is not only compatible with the basic facts, but also derives a set of problems that has not received a satisfactory answer hitherto. Concretely, I explore a set of complex interactions involving the clitic *se* (and its agreeing variants) in analytical causative environments. As we will see, some of these interactions entail a serious problem for an attract-based theory of thematic assignment.

# 3. On locality

Having shown how the theory defended in this paper accounts for Sheehan's argument against long-distance theta-role assignment, I will explore now 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 (7), repeated below, where  $x \in y$  are both thematic heads of the same type:



Recall 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,yP to its own specifier and, only under this configuration, it assigns its thetarole to the DP. Under theory in (2), instead, (29) is a Locality violation as stated in (2B).

- (30) (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  $\nu P$  domain to enter into further A-dependencies).
  - (B) *Locality:* A is local 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  $x_{[D]}$ ).

As I will 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 as (30) over an attract-based theory. In section 5, we will also see how once more complex patterns are taken into consideration the approach in (30) is clearly superior to other alternative analyses of long-distance theta-role assignment, such as the one presented in Reinhart & Siloni 2005.

## 3.1. The syntax of analytical causatives

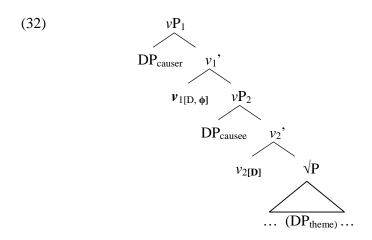
As is well known, *hacer* 'to make' causatives come in two guises: (i) *faire-par* causatives or, as I will call them, *passive* causatives (cf. 31a), and (ii) IP or *active* causatives (cf. 31b) (see, among many others, Kayne 1969, Bordelois 1974, Burzio 1986, Folli & Harley 2007, Pujalte 2013, and the references therein):

- (31) a. Juan hizo arreglar la cocina por Pedro.
  - J. made to.repair the kitchen by P.
  - b. Juan le hizo arreglar la cocina a Pedro.
    - J. DAT made to repair the kitchen to P.

<sup>&#</sup>x27;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 (32).

## Structure for active causatives



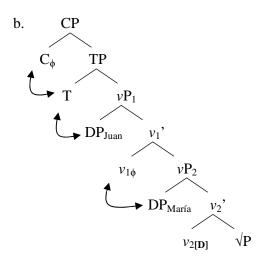
As shown by Pujalte, case relations in  $\nu P_2$  are entirely determined by the properties of  $v_1$ , which acts as the probe, and by feature inheritance. First, if  $v_2$  is unaccusative or unergative, the subject of the infinitive values accusative case against  $v_1$ . Let us illustrate the point with unergative infinitives<sup>10</sup> (bidirectional arrows between heads indicate feature inheritance, but Case valuation between heads and DPs):11

All patterns of causative sentences 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, an issue which I will not discuss here (see also footnote 14).

11 As discussed in Pujalte & Saab 2012, inheritance from  $v_1$  to  $v_2$  in (33b) is prevented for particular

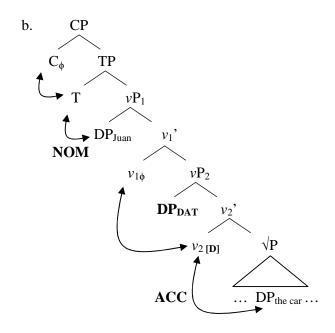
properties of unergatives.

(33) a. Juan la hizo saltar a María.J. CL made to.jump ACC M.'John made Mary jump.'

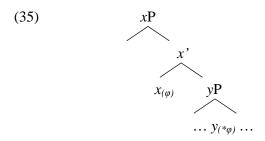


Second, in contexts of transitive infinitives (or ditransitive ones; see Pujalte 2013 for details), the internal argument of the embedded verb gets accusative and the external argument of the infinitive gets dative. This is predicted by the inheritance system, because for a given transitive infinitive 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 last resort morphological strategy. As explored in detail by Pujalte, the situation reproduces exactly what is empirically observed with applied datives in Spanish.

(34) Juan le hizo comprar el María. a. auto a J. CL.DAT made to.buy DAT M. the car 'John made Mary to buy the car.'



The fact that  $v_2$  is  $\varphi$ -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 (35), only the upper probe can bear  $\varphi$ -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.

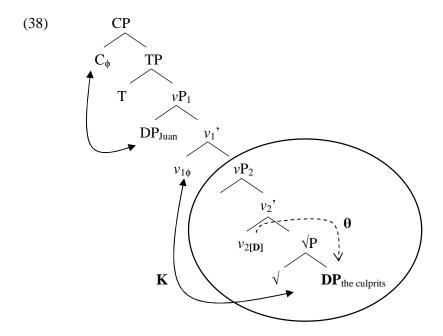
For the specific analysis of causatives, two immediate predictions arise from Pujalte's generalization. First, analytical causatives should disallow double accusative marking in cases like (34). This is borne out; compare (34a) with (36):

- (36) \*Juan la hizo comprarlo.
  - J. CL.ACC made buy-CL.ACC

Second, a prediction is made also with respect to the distribution of *se* within the caused sentence. Concretely, in a sentence like (37), the internal DP can have a reflexive / reciprocal reading but not an impersonal one. This is also correct:

- (37) Juan [hizo [castigarse a los culpables]].
  - J. made to.punish-se ACC the culprits
  - *i. Reciprocal / reflexive reading (OK under the active structure)*
  - 'Juan made the culprits to punish themselves / each other.'
  - ii. Impersonal reading (NO)
  - \*'John made the culprits were punished.'

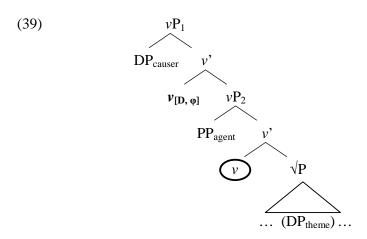
By the activity and locality conditions in (30), the internal argument of the embedded infinitive is both local and active as far as  $v_2$  is concerned and, consequently, receives the agent role (see the tree in 38).



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  $vP_2$  domain in consonance with (30A). 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, the difference between an impersonal se in a sentence like (22), where v is  $\phi$ -complete, and (37), where  $v_2$  is fully  $\phi$ -defective, would not be explained. By the same token, the reflexive / reciprocal reading of (37) is derivationally captured, as well: at the point in which  $v_1$  is introduced into the derivation thematic assignment has been essentially exhausted within  $vP_2$ , so the fact that the internal argument values accusative against  $v_1$  is entirely irrelevant as far as thematic assignment within  $vP_2$  is concerned.

As for passive causatives (31a), I adopt the analysis put forth by Saab (2002) which is the same as Pujalte's for active causatives with a crucial difference: the embedded v is both  $\phi$ - and D-defective. By (35),  $\phi$ -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 difference between the two *hacer*-causatives reduces to this minimum difference in the subcategorization properties of agentive v. Compare in this respect the tree in (32) with (39), which illustrates the structure I propose for passive causatives like (31a):

Structure for passive causatives



As shown in detail in Saab 2012, by-phrases entail fully defective v (cf. 37), so this particular aspect of passive causatives does not require additional considerations. Let us see how this minimal difference between both types of causatives can capture the complex set of interaction between se and causative constructions. A more complete picture of the empirical scenario to be discussed now is provided in Saab 2012, where a comparison with other proposals (such as Baauw & Delfitto 2005, where a similar paradigm is discussed for Italian) is made.

# 3.2. Locality effects in causatives

A long-standing problem related to the so called passive causatives (Kayne 1969, Bordelois 1974, Folli & Harley 2007, Torrego 2010, among many others) is that the internal DP of the caused sentence can be reflexivized in connection with the causative verb (see Reinhart & Siloni 2005, Folli & Harley 2007, and especially, Baauw & Delfitto 2005, *inter alia*). Thus, in a sentence like (40) the theme of the caused sentence is also the agent of *hacer*:

- (40) Juan se hizo besar por María.
  - J. SE made to.kiss by M.

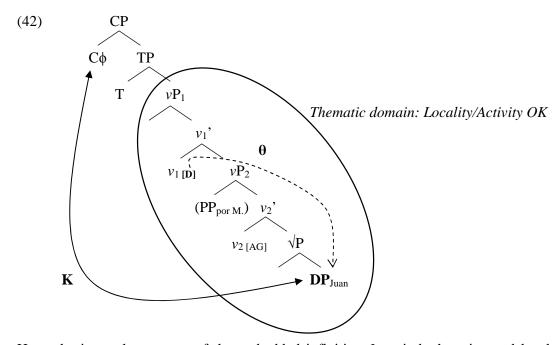
'John<sub>i</sub> made Mary kiss him<sub>i</sub>.'

This is impossible with active causatives:

- (41) \*Juan se (le) hizo besar a María.
  - J. SE (DAT) made to.kiss DAT M.

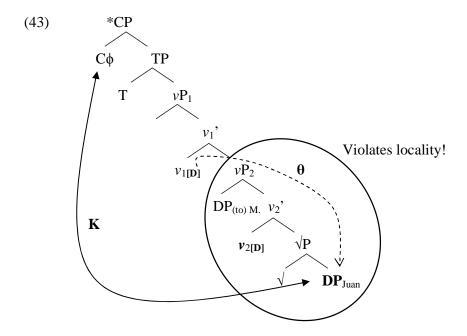
Intended: 'John<sub>i</sub> made Mary kiss him<sub>1</sub>.'

The long-distance reflexivization case in (40) is directly derived under the theory of theta-role assignment I am developing. See the following tree:



Here, the internal argument of the embedded infinitive *Juan* is both active and local with respect to the higher  $v_{[D]}$  in consonance with (30). 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.

The 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 (41):



As it should be evident now, the crucial difference between active and passive infinitives that accounts for the contrast between (40) and (41) is the underlying category composition of agentive v: whereas passive v is fully defective, active v enters the derivation with a [D] feature. It is this feature, then, what creates a locality violation, as formulated in (30B), given that upper  $v_{\rm [D]}$  cannot access to the domain of vP<sub>2</sub> 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 (40) and (41) is the result of minimality. In effect, whereas in (41) 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 (40) where the path from the internal argument position to the main spec, vP is "clean". The ungrammatical (41) is then ruled out as Minimal Link Condition violation (Chomsky 1995).

Clearly, then, the minimal pair in (40) and (41) does not help us 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 & Delfitto 2005 and Saab 2012); so taking the active causatives in (44a) as a basis, the corresponding reflexivization of the external argument is not obtained:

(44)a. Juan hizo trabajar / comprar Pedro. un auto a J. made to.work / to.buy P. a car to 'John made Peter work/buy a car.' b. \*Juan hizo trabajar / se comprar un auto. J. SE to.work to.buy

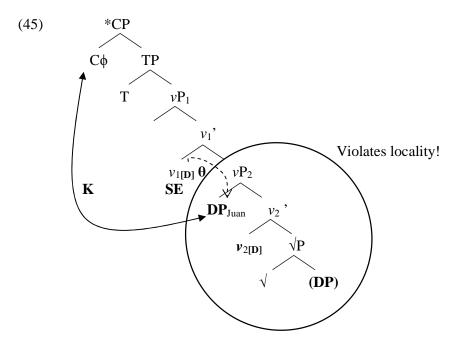
Intended: 'Juan made himself work / buy a car' (*Juan* = infinitive subject)

made

It is clear that the ungrammaticality of (44b) follows straightforwardly under the theory of thematic locality we adopt here as a violation of Locality (30B), but not under the attract-based theory. That (30B) is violated can be easily demonstrated with the following tree, in which the external DP is contained within a  $\nu$ P of the same type as  $\nu P_1$ .

a

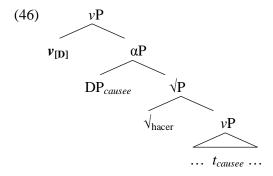
car



Under the attract 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 (44b), 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, because this 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 the thematic interpretation of the main vP has taken place. We are lead to conclude then that thematic interpretation is exhausted in the low vP domain (*pace* Reinhart & Siloni 2005; see section 5 for more details). At any rate, the point is that the *causee* subject is not attracted to the main vP against what is predicted by attract-based theories.

## 4. Refuting alternative ECM-analyses for Romance causatives

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 and Folli & Harley 2007) - so our conclusion 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. 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 our 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 our 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 á la Kayne is equivalent in this respect. López's approach is very similar to the analysis of ECM constructions we offered in (25). The crucial step is movement to the *causee* to a designated position in the main clause (αP).



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<sup>&</sup>lt;sup>12</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 & Saab 2013 for a criticism to the applicative strategy for Romance causatives.

According to López (2001), this movement is triggered by thematic reasons: the *causee* moves in order to receive a second theta-role from *hacer* (the *affectee* role<sup>13</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* 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 activity (30A) would prevent theta-role assignment to the *causee* by v. As already argued, this scenario is attested in contexts of reflexivization. The basic fact in (44b) shows that this prediction is not borne out: you cannot reflexivize the causee under any circumstance in Romance causatives. We are left with two minimal options, then. Either the ECM analysis of causatives is incorrect or the thematic theory in (30) 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 at least since Marantz 1984, ECM allows for reflexivization of the embedded subject at least in languages of the Spanish type (see Reinhart & Siloni 2005 and section 5 below). So, in addition to (24b), an adjectival ECM, we can have reflexive ECMs with perception verbs:

(47) Juan se escuchó cantar.

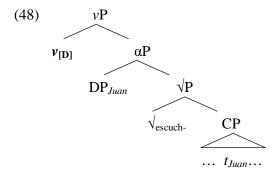
J. se heard to.sing

'John heard himself to sing.'

We adopt the assumption that infinitival complements of perception verbs are CPs. The crucial step is again movement of the embedded subject to the main clause:

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<sup>&</sup>lt;sup>13</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, our analysis follows the insights of Folli & Harley's 2007 approach.



Given that the subject of the infinitive escaped from his 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 (30A) blocks theta-role assignment by main v to the ECM-subject. This was already demonstrated with respect to (8) in English and (11) in Spanish.

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 (37), repeated below as (49), in which impersonal *se* is disallowed in caused sentences, with (50), an ECM construction, in which both the reflexive/reciprocal reading and the impersonal one are allowed (see Baauw & Delfitto 2005 for a similar example in Italian):<sup>14</sup>

(49) Juan [hizo [castigarse a los culpables]]

J. made to.punish-se ACC the culprits

<sup>&</sup>lt;sup>14</sup> The judgments in (50) correspond only to Buenos Aires Spanish speakers. Peninsular Spanish speakers from the *leista* variety do no accept the impersonal reading. In this respect, then Buenos Aires Spanish behaves like Italian (Baauw & Delfitto 2005). The relevant correlation that divides these groups of speakers seems to be in the fact that Buenos Aires Spanish, like Italian, fully distinguishes accusative and dative clitics in its pronominal system (i.e. it is not a *leista* dialect).

- i. Reciprocal / reflexive reading (OK under the active structure)
- 'Juan made the culprits to punish themselves / each other.'
- ii. Impersonal reading (NO)
- \*'John made the culprits were punished.'

# (50) *Impersonal* se in the embedded infinitive: 15

Juan vio castigar**se** a los culpables.

- J. saw to.punish-se ACC the culprits
- i. Reciprocal / reflexive reading
- 'Juan saw the culprits to punish themselves / each other.'
- ii. Impersonal reading

'Juan saw the culprits to be punished.'

This is a crucial contrast that, with the exception of Baauw & Delfitto 2005, has not been discussed with the detail it deserves. Under the analysis proposed in this paper, such a contrast is entirely predicted. Remember first that causatives entail a  $\phi$ -defective  $\nu$  for the embedded infinitive. 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. 35).

 $<sup>^{15}</sup>$  For reasons poorly understood, impersonal se is not allowed to occur in infinitive clauses containing unergative verbs.

<sup>(</sup>i) a. De castigarse a los culpables,...
of to.punish-se ACC the culprits
'If one punishes the culprits,...'
b. \*?De trabajarse mucho, ...
of to.work-se a.lot
'If one works a lot....'

(51) 
$$xP$$

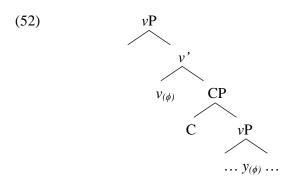
$$x'$$

$$x_{(\phi)} yP$$

$$yP$$

$$\dots y_{(*\phi)} \dots$$

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:

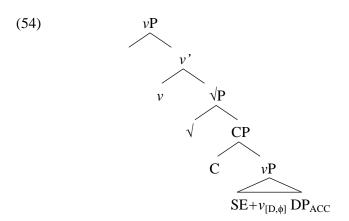


Indeed, ECMs with perception verbs, but not causatives (cf. 36 above), allow for double accusative marking, which shows that embedded v can be a probe for its internal argument:

- (53) Juan la vio comprarlo.
  - J. heracc saw to.buy-itacc

The ambiguity of (50) follows straightforwardly now from the theta 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

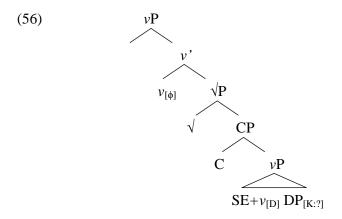
DP is inactive, the external theta-role remains unassigned and the default *arb* rule applies at the semantic-pragmatic interface:



# (55) *Default agents*:

For any agentive  $v_{[D]}$ , assign *arb* in absence of a *nominative subject* in the C-domain of  $v_{[D]}$ .

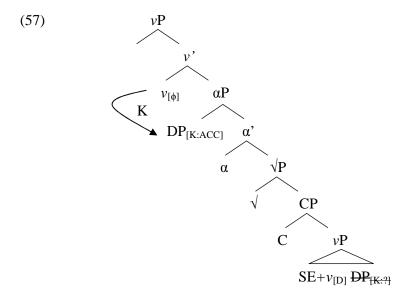
As for the reflexive/reciprocal reading in (50), the underlying structure is identical to (54) with a crucial difference: lower v is  $\phi$ -defective.



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 respected, 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 is what triggers movement of this DP outside its clause, in consonance with surviving approaches to movement (especially, Bosković 2007 and Stroik 2009). In an ECM configuration like (56), 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.



So ECM verbs illustrate a situation where movement for Case reasons is actually attested. Word order facts in (50) obscures this conclusion. As is well know, ECM constructions in Spanish allow for free ordering between the ECM subject and the infinitive clause.

(58) Juan vio cantar a María.

J. saw to.sing ACC M.

Juan vio a María cantar.

J. saw ACC M. to.sing

'Juan saw Mary singing.'

However, what has not been previously observed is that altering the word order in (50) eliminates the observed ambiguity:<sup>16</sup>

(59) Juan vio **a los culpables** castigarse

J. saw ACC the culprits to.punish-se

'Juan saw the culprits punishing themselves/each other'

(only reciprocal/reflexive)

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>16</sup> Thanks to Laura Stigliano for pointing out this fact to me.

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- (60) Juan los vio castigarse.
  - J. them saw to.punish-se

'Juan saw them punishing each other/themselves.'

(only reciprocal/reflexive)

Juan vio castigárse*los*.

J. saw to.punish-se-them

'Juan saw that they were punished.'

(only impersonal)

This entire pattern follows if the *ex situ* position of ECM subjects is the result of Amovement for case reasons as in Koizuimi 1995 and subsequent works. Under the impersonal reading in (50), the internal DP *los culpables* values its K feature within its clause; therefore, movement for Case outside its clause is not required. Put differently, (50) 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 postverbal subjects in true ECM constructions are not within the embedded sentence, but in the main clause. Postverbal 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 (50), in which the accusative DP is internal to the infinitive clause.

As the reader might notice, this analysis has a number of crucial consequences for the theory of Case and movement that go beyond the limits of this paper. Let me however mention one that is connected to thematic theory and its relation to Case and movement.

If this discussion on ECM and causatives is on the right track, an important conclusion arises; concretely, not only attract-based theories for theta-role assignment are incorrect, but movement for Case considerations is not amenable to an attract-based analysis, either. Therefore, we can dispense with the attract theory of movement for theta and Case reasons altogether. A-movement (*modulo* EPP effects) is limited to DPs with an active K feature that cannot be valued within its own clause. As already noticed, this fits very well with surviving approaches to movement. An interesting aspect of this type of approach is that movement cannot be triggered by thematic reasons under any circumstance, because of the wide-accepted assumption that arguments are always merged into theta positions (although see Bošković & Takahashi 1998 for an alternative) and, consequently, always get a theta-role (i.e., are always LF-interpretable in this respect). Given that under the surviving approach to movement attractors do no exist, a thematic head with a non-discharged theta-role cannot force movement of an active DP. Thus, we obtain the following corollary:

## (61) Movement for thematic reasons is not permitted by UG.

To sum up, locality effects in causative sentences of the type discussed in this paper are attested in Romance causatives. I have shown that a crucial problem for the theory of reflexives and causatives is derived provided that theta-role assignment proceeds under considerations of activity and locality (see 2).

#### 5. An argument against Reinhart & Siloni's 2005 approach to theta-assignment

In an influential paper, Reinhart & Siloni 2005 have also proposed a long-distance theta-role assignment approach, whose main claim is that theta-assignment can bundle

undischarged theta-roles both in the syntax or in the lexicon, depending on the language, under the rule in (62):

## (62) Reflexivization bundling

 $[\theta_i][\theta_i] \rightarrow [\theta_i - \theta_i]$ , where  $\theta_i$  is an external  $\theta$ -role.

Simplifying, (62) allows for an argument to be associated with a complex theta-role under well-defined lexical or syntactic situations. We will not discuss the parameter that divides languages with respect to the component of the grammar relevant to (62) (syntax or the lexicon), because we are only interested in syntactic reflexivization of the Spanish type (a typical syntactic language according to Reinhart & Siloni). Indeed, the approach presented in this paper is in consonance with Reinhart & 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 & Siloni 2005: 404):

## (63) Reflexivization in syntax

- a. Case: Case is reduced by the appropriate morphology (such as the clitic se).
- b. Bundling: Operation [62] applies to unassigned  $\theta$ -roles, upon merger of the external  $\theta$ -role.

Unlike what is assumed here, the clitic *se* is conceived of as a case reducer. Obviously, this view has as a 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 (62) will then apply at

the relevant point where the external theta role is merged in the structure. Let us see how Reinhart & Siloni's system works in a reflexive sentence such as (64):

(64) a. Jean se lave. (French)

Jean SE washes

'Jean washes.'

b. VP: [se lave<sub> $\theta$ i-Agent,  $\theta$ k-Theme]</sub>

c. IP:  $[Jean_{\theta_i, \theta_k}]$  [se lave,  $[VP t_i]$ ]]

d.  $\exists e [wash(e) \& Agent(e, Jean) \& Theme(e, Jean)]$ 

In (64b) the internal theta role of the verb remains unassigned because of the suppression effect of 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 theta-assignment is checked, namely, the smallest IP in which the relevant theta-roles are assigned. This is stated as Reinhart & Siloni in the following way (Reinhart & Siloni 2005: 405):

- (65) *EPP*: Merging the outermost Spec,IP of the cycle is obligatory.
- (66)  $\theta$ -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 (62).

As argued by Reinhart & Siloni, this approach directly accounts for reflexive ECMs as (67) below (see also the Spanish example in 48):

(67) a. Jean se voit [laver Marie]. (French)

Jean SE sees wash Marie

'Jean sees himself wash Marie.'

b. Embedded IP:  $[IP[laver_{\theta i}]]$ 

c. Next VP:  $[VP \text{ se voit}_{\theta}] [IP[laver_{\theta}]] [IP[laver_{\theta}]] [IP]$ 

d. Top IP:  $[IP Jean_{\theta k+\theta i} [VP se voit [IP[laver_{\theta i}]]] Marie_{\theta g}]]_{\theta f}]]$ 

In this case, the external theta-role of the embedded verb remains unassigned and it 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 & 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 own words,

Further, [...] the ability of the causative verb to reflexivize in [68; see also 40 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*.

(68) Jean se fera embrasser (par Marie). (French)

Jean SE make(FUT) kiss (by Marie)

'Jean will make himself be kissed (by Marie).'

[Reinhart & Siloni 2005: 407, fn 15]

However, their approach has a crucial problem, because now it is not easy to see how the sentences in (44b), repeated as (69), where the external argument is reflexivized, are ruled out.

Intended: 'Juan made himself work / buy a car' (*Juan* = infinitive subject)

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 (64), (67) and (68). 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 & Delfitto 2005. Nevertheless, next to the fact that this analysis faces some empirical and conceptual problems (see Saab 2012), it still overgenerates in the case of active causatives for which the external argument obviously projects in syntax (see for instance 31b). In short, Reinhart & Siloni's 2005 bundling analysis is not empirically adequate in the realm of Romance causatives.<sup>17</sup>

<sup>17</sup> See Pujalte 2013 for a detailed criticism of other aspects of Renihart & Siloni's theory. Pujalte's discussion centers on the long-standing debate about the so-called *unaccusative* analysis for reflexives

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## 6. Conclusions

In this paper, I have shown that long-distance thematic assignment takes place under conditions that restrict A-dependencies in general, namely, locality and activity. Crucially, I have demonstrated that the assumption that Merge (internal or external) is a necessary condition for theta assignment does not hold. I think that this is a natural conclusion. A principle such as (1), according to which thematic assignment requires Merge is just a stipulation. The fact that the Language Faculty allows for long-distance dependencies beyond movement is the null hypothesis in a framework where an operation as *Agree* is at play in the realm of A-dependencies. Therefore, I see no conceptual or empirical reasons to support the principle in (1). Instead, a theory as the proposed here, according to which thematic assignment just proceeds as other types of A-dependencies is justified both on conceptual and empirical reasons.

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(Marantz 1984 and much subsequent work) and gives convincing arguments showing that Reinhart & Siloni's attack to such an approach is not conclusive, at least in Spanish (additional evidence for Marantz type of approaches is indeed provided by Pujalte). To some a extent this issue is orthogonal to the main point raised in this section, although of course my analysis of reflexivization follows Marantz's tradition. An 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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