SYNTAX OR NOTHING: SOME THEORETICAL AND EMPIRICAL REMARKS
ON IMPPLICIT ARGUMENTS*

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ABSTRACT. I show that core implicit subjects in Spanish (i.e., agentive subjects in analytical passives, impersonal se, and analytical hacer ‘hacer’ causatives) can be derived from a theory under which absence of Merge in external subject position is a possible syntactic output. Core implicit arguments then have no syntactic representation (pace Landau 2010). Absence of Merge gives rise to two different scenarios: (i) a conflict at the interfaces, which requires the implementation of some repair strategy, (ii) no conflict at the interfaces. The first scenario is illustrated with reference to the so-called impersonal se in Spanish, and the second one with reference to analytical passives. This system is able to capture a set of very intricate facts that hitherto has not had a satisfactory solution. Crucially, this particular view on implicit arguments, together with a purely syntactic theory of argument structure, explains the full distribution of impersonals and reflexives in hacer ‘to make’ causative contexts. Finally, it is shown that the arbitrary readings that the two scenarios above described display have a different source: whereas impersonal se requires (costly) default computation at the interface, arbitrary interpretations in analytical passives are calculated at the vP level.

Keywords. implicit argument, Spanish, Merge, feature inheritance, thematic theory, causatives, arbitrary readings, impersonal se, analytical passives

1. Introduction

For reasons that should be more or less evident (at least from a philosophical point of view), the claim that some (non-perceptible) object exists requires more justification than the claim that some (non-perceptible) object does not. Put differently, some particular (non-perceptible) object is claimed to exist only in case we are forced

Para Adriana Álvarez (in memoriam)
y la otra Adriana, la pequeña
por el vínculo que une sus nombres

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to do so by strong empirical reasons.\textsuperscript{1} The issue is particularly pressing in the realm of elliptical / implicit / empty syntactic entities. To illustrate the point, let me start with an excursus about how null subjects were treated during the LGB days (Chomsky 1981) and, in particular, before the introduction of the so-called little pro (Chomsky 1982):

In (1), the basic clause structure in LGB is given:

\begin{equation}
S \rightarrow NP \text{ INFL VP}, \text{ where INFL} = [[+/- \text{ Tense}], \text{ (AGR)}]
\text{[Chomsky 1981: 241]}
\end{equation}

At that time, the inventory of empty categories only included different species of traces and the empty pronominal PRO, which replaced the transformation of \textit{Equi-NP} deletion.\textsuperscript{2} These categories were the only available ones to plug in a tree like (2), which should correspond to what underlies referential null subjects in pro-drop languages:

\begin{equation}
S
\quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \ April 22 2023
As for null subject languages, there should be some mechanism rendering PRO ungoverned in finite contexts. Chomsky’s conjecture was that the mechanism is affix hopping, a rule that can apply at syntax or PF.

(5) \( R \) may apply in the syntax. \([R = \text{affix hopping}]\) [Chomsky 1981: 257]

Syntactic affix hopping results in a configuration in which PRO is not governed, in consonance with the PRO theorem:

(6) \[
S \\
NP \quad VP \\
\quad \quad PRO \quad V \quad INFL
\]

The Null Subject Parameter can be now reduced to the statement in (7):

(7) **Null subject parameter:** The subject of a finite clause is PRO if and only if \( R \) has applied in the syntax. [Chomsky 1981: 258]

Evidently, next to particular commitments with unmotivated assumptions, such a theory loses the basic generalization that null subjects and rich agreement are connected (i.e., Taraldsen’s generalization; Taraldsen 1978), among other well-known correlations involving the null subject parameter. In Chomsky’s words:

[…] the parameter involves the inflectional element INFL, or more precisely, the agreement element AGR (=PRO) that is the crucial component of INFL with respect to government and binding. **The intuitive idea is that where there is overt agreement, the subject can be dropped, since the deletion is recoverable.** [Chomsky 1981: 241; emphasis mine]

Even though Chomsky explicitly refers to a deletion process, it turned out that the logic of that particular time in the history of generative grammar led Chomsky (1982) to make a suspicious movement: to extend the ontology of empty categories. That move gave us more or less what was, since then, the “standard” ontology of empty categories. In (8), I resume the inventory of empty categories we obtained after Rizzi (1982, 1986), Chomsky (1982) and subsequent works:

(8) a. **Traces**
   i. A’
   ii. A
   iii. heads
b. **PRO**
   i. controlled
   ii. arbitrary
c. **pro**
   i. referential
   ii. arbitrary
iii. “elliptical” (Lobeck’s 1995 approach to ellipsis)

From a general point of view, the question is whether this inventory is indeed justified or not by empirical considerations. To a certain extent this question is led by an obvious epistemological reason, although it easily fits within the minimalist research program (Chomsky 1995 and subsequent works). In fact, part of such a program has been to shed some theoretical light on the issue and to evaluate the validity of the inventory in (8). It turned out that in most cases a reductionist strategy brought more benefits than problems (see the next section). Here, I will further inquire into the nature of empty categories by addressing the problem of implicit arbitrary subjects. My main claim is that core implicit arguments should be considered as an indication that the operation Merge has not applied to a given functional category to produce a complex syntactic object. Failure of Merge might give rise to: (i) an illegitimate object at the interfaces that calls for a last-resort, interface solution, and (ii) a legible object at the interfaces. I demonstrate that, if tenable, the research program I will suggest from now on allows for a drastic reduction of the inventory of empty categories.

Before entering into the nature of implicit arguments, which is the core of this paper, in section 2, I will conceptually address the status of the term ellipsis and try to show that, under some particular conception of the grammar (Distributed Morphology; see Halle & Marantz 1993), there are not elliptical primitives of any sort; instead, ellipsis is just (normal) abstract syntax. I will then suggest the working hypothesis that whenever a given silent phenomenon cannot be derived by ellipsis, it should be seen as absence of Merge, unless we are forced to assume the opposite (pace Landau 2010). Implicit arguments are just an instance of this case. In section 3, I will present a purely syntactic theory of argument structure, according to which the very notion of argument structure is epiphenomenal and derives from the basic interactions between the structure-building operation Merge and the operation Agree. As we will see, the theory leaves room for the two types of scenarios created by absence of Merge: (i) an interface failure and (ii) an interpretable object. I illustrate the first case in the realm of impersonal se constructions and the second one in the realm of analytical passives in Spanish. Section 4 shows how my proposal straightforwardly accounts for the distribution of implicit arguments in Spanish causatives and their interaction with reflexives and impersonal se, a crucial issue that has received little attention in the literature (although see Baauw & Delfitto 2005 for a lexicalist perspective on the issue). In section 5, I reconsider the typology of implicit arguments in the light of the previous discussion and propose that only failure of Merge triggers, next to a PF-repair strategy, (costly) default interpretation at the C-I interface. Whenever absence of Merge is a legitimate option, no interface solution is required and the implicit argument reading is performed under usual syntactic (and non-syntactic) constraints on thematic interpretation applying at the vP-level. I briefly discuss how this new typology of implicit arguments could explain the presence or absence of Visser’s effects in Germanic languages and Spanish, the particular interpretative properties of some implicit objects, and, finally, the (im)possibility of licensing sluicing of the sprouting type. Section 6 concludes with some final remarks.

2. Syntax or nothing as a research program for the theory of empty categories

A particular view of the organization of grammar, Distributed Morphology, assumes that syntax is devoid of phonological information (see, among many others, Halle & Marantz 1993, Embick & Noyer 2001 and Embick & Marantz 2008). Such
information is supplied late in the PF component of the grammar, where, in addition to a set of possible morphological operations that alter the syntactic input, phonological information is added to the abstract nodes that syntax produces. An important corollary of this view for the theory of empty categories / ellipsis is stated as follows:

(9) Syntax is elliptical.

To a certain extent, then, the term *ellipsis* is trivial. In other words, there is nothing particular about elliptical objects when compared with non-elliptical ones, except that the former have less information than the latter. Therefore, the heart of the theory of ellipsis boils down to accounting for the following generalization, where Lexical Insertion Rules are included in the relevant set of morphological operations affecting X:

(10) **Ellipsis-Morphology Generalization** *(Elmo-generalization)*: For every morphological operation $MO$ that affects the domain of $X$, where $X$ contains the target of $MO$, $MO$ cannot apply to $X$ if $X$ is subject to ellipsis.

The informal statement that $X$ is “subject to ellipsis” entails constructing an explicit theory for deriving two basic conditions on ellipsis:

(A) A syntactic object $X$ (sometimes a head, sometimes a phrase) is in an identity relation with another constituent $Y$ of the same type. The nature of such an identity relation is a matter of debate, but I will assume here that it is purely formal (i.e., syntactic; see Saab 2008 for extensive discussion). The more widely accepted position is that it is semantic (early Merchant’s works, in particular, Merchant 2001) or that it is a relation combining both semantic and syntactic constraints (see Chung 2006, 2013).

(B) Some additional (syntactic or morphological) conditions must apply. This is sometimes called the *licensing problem*. See, among many others, Rizzi (1986), Lobeck (1995), for a theory of licensing for null pronominals, and Merchant (2001), for a reinterpretation of the licensing problem within a theory of PF-deletion.

Again, the research program aims to give a precise formulation of (A) and (B). It seems to me that this program is being developed by current research with important empirical and theoretical results, mainly in the domain of phrasal ellipsis (i.e., TP-ellipsis, VP-ellipsis, NP-ellipsis and so on). In the realm of null subjects, things are less clear, although see Perlmuter (1971), Holmberg (2005), Roberts (2010), and Saab (2008, 2012) for different implementations of a deletion analysis of null subjects. A deletion analysis for traces is a standard assumption in the minimalist program and several explicit analyses were proposed (in particular, Nunes 2004). Topic-drop phenomena are at the heart of an intense debate in the domain of East Asian languages, and it is my impression that a deletion analysis is tenable in this empirical domain, as

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3 Adapting de Saussure’s [2002] conclusions on the matter; see Saab (2007) for some brief remarks on de Saussure’s ideas on ellipsis

4 A nice consequence of the formulation in (10) is that ellipsis blocks not only phonology but also other morphological operations. See Saab (2008), Saab & Zdrojewski (2012), Saab & Lipták (in press), and Temmerman (2012) for illustrations of the correctness of (10) in several empirical domains.
well, as proposed by Saito (2007) and Takahashi (2008, 2010), among others, at least for languages like Japanese (see Saab 2012 for details). The common property that this entire set of phenomena share is that they require some notion of antecedent; so, even when differences among them are remarkable, I think that they can be thought as forming a natural class of elliptical facts; i.e., as syntax without phonology. The ontology of empty categories in (8) is thus drastically reduced.

However, notice that we are still left with a remaining set of empty primitives that cannot be obviously derived as ellipsis (i.e., they lack any evident antecedent). This sort of empty category is sometimes called implicit argument (see Bhatt & Pancheva 2006 for a recent overview). With reference to the list in (8), PROarb and proarb are implicit arguments in this sense.

In a recent paper, Landau (2010) claims that we are forced to assume that the surviving implicit arguments of the aforementioned list cannot be eliminated and proposes a typology of implicit arguments that includes at least two types (Landau 2010: 359):

(11)  a. Strong implicit arguments (SIA): null D(P)s : PRO, pro
b. Weak implicit arguments (WIA): null φ(P)s: Passive agent, implicit object

According to Landau, SIAs can enter into more syntactic dependencies than WIAs. Whereas SIAs can bind, control, license secondary predicates and so on, it seems that WIAs are only allowed to control (in some very restricted circumstances). Now I will not focus on the new empirical argument provided by Landau to justify his typology (see section 3.2 for discussion). For the time being, I will only advance my view that core SIAs are just normal (elliptical) syntax, whereas core arbitrary WIAs are, instead, cases where the computational system does not produce a relevant object; i.e., WIA lacks any syntactic representation. For the reasons previously adduced (and the forthcoming ones), I will assume this as the null hypothesis:

(12)  Null hypothesis: Implicit arguments simply signal the absence of a (sometimes expected) application of the operation Merge. In other words, at least in the ideal case implicit arguments have no syntactic representation.

As discussed in section 3.3, it seems that (12) is a too strong claim and that in some very restricted scenarios (to be discussed there) we are indeed forced to assume the existence of some null syntactic entity. Most cases of what Landau calls WIAs, however, comply with the hypothesis in (12). The particular domain I will address here includes core cases of arbitrary subjects: (i) implicit arguments in both analytical passives and impersonal se constructions, and (ii) implicit arguments in Spanish hacer ‘to make’ causatives. In section 5, however, I will suggest that (12) could also be extended to arbitrary plural subjects and implicit objects in Spanish and arbitrary subjects of impersonal passives in Germanic languages. Let me then present a theory including (12) as one of its central components and illustrate it with the empirical scenarios just mentioned.

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5 This is not the case for Chinese null subjects and Spanish indefinite objects, where an ellipsis analysis seems to be untenable. See Huang (1984) for a first approach to the problem in Chinese, and Campos (1986) and Suñer & Yépez (1988) for some first observations with respect to Spanish object drop.
3. Implicit arguments as absence of Merge

Pujalte & Saab (2012) and, in particular, Pujalte (2013), have outlined a theory of argument structure, according to which argument structure effects reduce to the formal composition of functional heads and the interactions between Merge and Agree. The theory has some crucial ingredients, which are: (i) a feature inheritance mechanism for Agree, as essentially proposed by Chomsky (2007, 2008), and (ii) a subcategorization component triggering particular applications of the operation Merge. In addition, I will also propose a syntactic theory of thematic interpretation, based on well-restricted conditions on A-dependencies. Let us address these ingredients separately and see how the theory applies to some core cases of implicit arguments: impersonal *se* and analytical passives.

3.1. Feature inheritance

Chomsky (2007, 2008) proposes that only phase heads (C and \( \nu \)) can enter the derivation encoding \( \phi \)-features. Non-phase heads as T or Root (\( \nu \), in his terms) inherit their inflectional specification from the phase heads selecting them. According to Chomsky, inheritance from C to Root is prohibited by the sisterhood condition on Agree; i.e., the Goal must be in the sister domain of the Probe (unidirectional arrows indicate feature inheritance from head to head).

However, Pujalte & Saab (2012) argue that the scenario in (13) only arises if \( \nu \) indeed merges with a DP. In other words, inheritance from C to Root should be allowed whenever no DP merges with \( \nu \). This situation is illustrated in (14b), which is the underlying structure of an unaccusative verb (bidirectional arrows indicate agree relations):\(^6\)

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\(^6\)When irrelevant, I will omit the inheritance relation between heads and simply specify the Agree relation between the original probe and a given goal.
In principle, nothing in the Agree system prevents agentive \( v \) from entering the derivation without \( \phi \)-features. The consequence of such a possibility is “unaccusative” inheritance from \( C \) to Root, but with a transitive skeleton. Of course, it could be also the case that \( v \) is a probe, but \( C \) is not. This last option, however, should be restricted to situations where default agreement for the \( C-T \) domain is available\(^8\) and, again, no DP is merged with agentive \( v \). In any case, a \( C \) unspecified for \( \phi \)-features is a logical option.\(^9\)

\[\text{C without } \phi \]
\[\text{Transitive } v \text{ without } \phi \]

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\(^7\) As a notational convention, I use the label *agentive* to refer to any type of external argument, including, for instance, experiencers.

\(^8\) Default agreement in null subject languages, for instance, cannot take place in the absence of some overt morphological indication. Thus, the subject of a sentence like (i) can only be interpreted as referential, and not as generic:

\[(i)\]
\[\text{Castiga } a \text{ los culpables.}\]
\[\text{punish.3SG ACC the culprits}\]
\[\text{‘He punishes the culprits.’}\]

This kind of sentences, then, seems to be in complementary distribution with impersonals like (25) in the main text. This is not the case in partial pro-drop languages, where (i) is not allowed as a referential matrix sentence, but only as a generic one, as indicated by Kato (1999), Holmberg (2005, 2010) and Barbosa (2010), among others. As proposed in Saab (2008, 2012), this difference could be the result of the complementary distribution between rich agreement and syntactic EPP checking. I will not address the issue here.

\(^9\) For the purposes of this paper, I will assume that unergatives are hidden transitives (Hale & Keyser 1993 and much subsequent work). In the system proposed here, this means that unergative \( v \) is not subject to inheritance.
Another property of the inheritance system, especially stressed in Pujalte (2013), is that the theory should dictate how and when the options are permitted by the computational system. A remarkable observation is that no more than two probes are allowed for a given nominative-accusative or ergative-absolutive system (see also Bowers 2010). Assuming now that category-defining heads (the so-called little xs; Embick & Marantz 2008 and Embick 2010) are possible probes - i.e., the loci of unvalued $\varphi$-features in the low domain of the clause - and that more than one cyclic head can be merged in a given C domain, it follows a putative conflictive situation with respect to the locus of $\varphi$-features. For reasons that I will not investigate here, the computational system solves this putative inflectional conflict in the following way:

(16) Given a configuration like $[x^0 \ldots Z \ldots y^0]$, if $x^0$ and $y^0$ are cyclic heads of the same type, $Z \neq C$, and $x^0$ and $y^0$ are in a potential inheritance relation, then $y^0$ is fully $\varphi$-defective.

[adapted and translated from Pujalte 2013]

With reference to $v$ (i.e., $v = y$), the situation in (17b) is then excluded.

(17) a. $C \varphi \ldots x \varphi \ldots v$ (allowed by (16))
    b. $C \varphi \ldots x \ldots v \varphi$ (not allowed by (16))

I think that (16) conveys a strong empirical generalization, whose consequences go beyond the sentential domain. In the nominal domain, for instance, this is also the general situation, as can be easily demonstrated by nominals involving more than one category-defining head. See the examples in (18a) and the associated structure in (18b):

(18) a. hospitalización ‘hospitalization’, vaporización ‘vaporization’, realización, ‘realization’
    b. $n$
       \[real\] $\sqrt{real}$ $n_{[\varphi: feminine]}\]
       ción $v$
       iz(a)

As is well-known, even if $v$ is agentive and, consequently, a putative locus of $\varphi$-features, it cannot value structural case; only $n$, which in this particular case triggers feminine agreement, can enter into $\varphi$-dependencies (see Grimshaw 1990 and Alexiadou 2001, among many others).

(19) a. la realización de la obra por
    the.FEM realization.FEM of the play by
    Juan J.
    ‘the realization of the play by Juan’
    b. *la realización la obra$_{ACC}$ por
    the.FEM realization.FEM the play$_{ACC}$ by
    Juan J.
As we shall see shortly, what I have just observed with reference to this type of nominalizations underlies several distinct scenarios which are at the heart of this paper (passive and causative constructions).

3.2. Subcategorization

Pujalte & Saab (2012) propose that, as is the case with φ-features, there are no principled reasons that exclude the possibility that a given functional or Root head, which is normally associated with a given subcategorization specification, may enter the derivation without such a subcategorization encoding. In other words, I am assuming that assignment of subcategorization features is free and entirely implemented when the numeration is formed. Importantly, syntax cannot perform this feature assignment operation; otherwise, it would violate inclusiveness (Chomsky 1995). The consequence of assigning a [D] feature to a given head is triggering an instance of the operation Merge (Müller 2010). For a simple transitive sentence like (20), the simplified tree in (21) represents a situation where every subcategorization feature (also called structure-building features) is correctly discharged by a corresponding instance of Merge (the subcategorization √ feature on v is omitted for expository convenience):

(20) John read the book.

(21) \[ \begin{array}{c}
\text{DP} \\
\text{v} \\
\text{v[D]} \\
\text{√P} \\
\text{√[D]} \\
\text{DP}
\end{array} \]

Now, Pujalte & Saab claim that failure of Merge for a given syntactic head specified with a [D] feature produces a PF crash because of the interface condition in (22):

(22) At PF, every structure-building feature must be discharged.  
[\text{Pujalte & Saab 2012: 238}]

Thus, failure of Merge in this particular scenario creates an interface conflict:

\emph{Illegitimate object at PF}

(23) \[ \begin{array}{c}
\text{TP} \\
\text{T[√]} \\
\text{vP} \\
\text{v[D]} \\
\text{√P} \\
\text{√[D]} \\
\text{DP}
\end{array} \]

[\text{Pujalte & Saab 2012: 239}]

However, no crash is produced at the PF interface whenever a functional or Root head is not assigned with a structure-building feature in the numeration. In other words, absence of Merge for defective v creates a legitimate output at PF:
Pujalte & Saab (2012) defend the idea that (23) and (24) are the abstract structures that underlie impersonal *se* constructions and analytical passives in Spanish, respectively. Concretely, whenever C-T is fully defective (see (15a) repeated as (26) below), the possibility of having a full agentive *v* without a DP in its specifier position arises. This is the so-called impersonal *se* construction:

(25) \[ \text{Se castigó a los culpables.} \quad \text{Impersonal *se*} \]

\[ \text{SE punished ACC } \text{the culprits} \]

\[ \text{‘Someone / one punished the culprits.’} \]

(26) \[ \text{Having a } v \text{ with a non-discharged [D] feature creates a PF failure, unless PF can implement a repair strategy. Pujalte & Saab argue at length that this morphological operation exists in Spanish and consists of the insertion of a D-clitic that satisfies the [D] feature on v. The general observation is (27) (Pujalte & Saab 2012: 231):}^{10} \]

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As noticed by an anonymous reviewer, this analysis has connections to those analyses that propose some sort of EPP-checking via agreement with T in null subject languages (see, for instance, Alexiadou & Anagnostopoulou 1998, and Saab 2012 for discussion and another alternative). Under this perspective, *se* insertion in the cases discussed here and in Pujalte & Saab (2012) is a variety of EPP-checking for the \( v \) head occurring at PF (although see Pujalte & Saab 2012 for some instances of *se* insertion related to properties of the T node, and footnote 34 below). This entails a particular approach to morphological agreement which is in consonance with Embick & Noyer’s (2001) model of the grammar, according to which insertion of morphological agreement morphemes is implemented entirely at PF. This does not amount to saying that Agree is also a morphological operation, which it is not, at least according to the assumptions in this paper (see also Embick 2010 for a related view, and Bobaljik 2008 for a more radical morphological approach to agreement). Crucially, EPP-checking, by whatever mechanisms available in natural languages, for some unsatisfied [D] feature on agentive *v* is not, in principle, correlated with the null subject parameter in any relevant sense. Indeed, as we will see in section 5, impersonal passives in Germanic languages may also be seen as configurations containing an unsatisfied [D] property encoded in agentive *v* (see the discussion on Visser’s Generalization in section 5.2).
At PF a clitic has to be inserted when $v_{[\text{EXT ARG, D}]}$ does not have a specifier.

I will not focus here on the details of clitic insertion in Spanish (see Pujalte & Saab 2012 for an explicit analysis), but the operation seems to be well motivated and constrained by conditions on morphological locality (Marvin 2002, Embick & Marantz 2008 and Embick 2010, among others). What I would like to stress here is the connection between the abstract representation in (26) and the theory of implicit arguments, in particular, with respect to the null hypothesis formulated in (12), and repeated as (28):

(28) **Null hypothesis:** Implicit arguments simply signal the absence of a (sometimes expected) application of the operation Merge. In other words, at least in the ideal case implicit arguments have no syntactic representation.

Thus, impersonal *se* constructions instantiate one of the situations connected with the theory of implicit arguments. On the empirical side, moreover, the unavailability for impersonal *se* constructions to enter into some set of A-dependencies follows without any additional machinery. Therefore, the fact that impersonal *se* does not license secondary predication (29a), cannot be reflexivized (29b) or bind a pronominal variable (29c) are immediately accounted for under the null hypothesis in (28) and under the particular analysis of impersonals provided by Pujalte & Saab (2012). Theories postulating $\text{PRO}_{\text{ab}}$ (Cinqu 1988 and much subsequent work), $\text{PRO}_{\text{arb}}$ (Mendikoetxea 1992, 2002), a null generic (Mendikoetxea 2008), or a special type of weak implicit argument (Landau 2010) require additional arguments for deriving the basic pattern in (29).

(29) a. *Ayer se besó* a María borracho. yesterday SE kissed ACC M. drunk.SG.MASC
   Intended: ‘One/someone kissed Mary drunk.’

b. *Aquí se lava* (a sí mismo). here SE washes ACC himself
   Intended: ‘One washes oneself.’

c. *Aquí se puede dejar* su saco. here SE can leave INF his coat
   Intended: ‘One can leave his coat here.’

Yet, it is worth noting that obligatory control is allowed in some particular environments. Consider, for instance, that impersonal *se* can control the subject of an infinitive in well-known cases of obligatory control (OC):

(30) *Se quiere castigar* a los culpables. se wants punish-INF ACC the culprits
   ‘Someone/one wants to punish the culprits.’

However, as argued at length by Landau (2010), exhaustive OC cannot be taken as a reliable test to evaluate whether implicit arguments have a syntactic representation.

---

11 As is well known, (29a) is grammatical in generic/conditional environments (see, for instance, Rivero 2001). Things are more complex when it comes to (29b,c) which can improve in those contexts but under different conditions. See the discussion with respect to the examples in (54) and, specifically, footnote 19.
or not. According to him, and I agree, OC can follow from predication theory (i.e., the fact that the infinitival complement must be interpreted as a predicate of the matrix subject).  

Despite this, Landau does believe that there is decisive empirical evidence that forces us to assume some type of syntactic representation for weak implicit arguments (i.e., the ones considered in this paper). This evidence comes from the fact that implicit arguments can participate in partial control (PC) configurations. See the examples in (31).

(31)  a. Mary found it exciting to meet on top of the Empire State Building.
    b. The chair found it frustrating to gather without a concrete agenda.
    c. Rachel found it embarrassing to kiss in public.

[Landau 2010: 369]

Here, an obligatory WIA anaphoric with the matrix subject partially controls the subject of the infinitive. A crucial assumption in Landau’s reasoning is that partial control cannot be derived from predication theory, simply because a PC infinitive—a collective predicate containing a plural subject PRO- cannot be predicated of a singular entity. Therefore, it follows that the relation between the controller and the controller PRO_{\text{S}} in PC configurations must be syntactically encoded (Landau 2010: 367), given that they are not local enough to be related via predication. I think, however, that his claim does not follow. First, it has not been proven that subjects of PC infinitives are plural entities. Second, as argued at length by Boeckx, Hornstein & Nunes (2010), PC predicates are closely connected to the syntax and semantic of commitatives, which as is well known, can apply to singular individuals. If this is correct, then PC fall under local predication and the infinitive complement of a given PC verb is also predicated of the matrix subject, a co-argument of the infinite complement. For expositive reasons, I will only discuss here the nature of the embedded subject, because if it turned out that they are indeed traces of the matrix subject, it would be demonstrated that Landau’s argument does not follow.

Compelling evidence that the subject of a PC infinitive is a trace of the matrix subject is discussed by Boeckx, Hornstein & Nunes (2010) on the basis of Rodrigues’ (2007) work on (inverse) PC. I will just discuss a very clear piece of evidence: gender concord. Consider the following example in Spanish, translated from the original Portuguese example from Rodrigues and Boeckx, Hornstein & Nunes:

(32)  La victim_{FEM} decidió reunirse vestida
      the_{FEM} victim.FEM decided gather-SE dressed_{FEM}
      informalmente
      casually
      ‘The victim decided to gather dressed casually.’

---

12 This is so even assuming the movement theory of control in Hornstein (1999) and much subsequent work. See Pujalte (2013) for a proposal regarding the derivation of cases like (30) in the framework of Pujalte & Saab’s theory.

13 Predication requires that predicates and co-arguments be strictly local. See Landau (2010) for an explicit definition of predication domains. For our purposes here, it is enough to assume that predicates and (co)-arguments must be in the same vP domain at some point of the syntactic derivation (although things are evidently more complex).
As explained by Rodrigues, the noun *victim* is invariably feminine regardless of the male or female property of the referent. Therefore, the fact that the embedded secondary predicate in (32) agrees with the matrix subject taking both its singular and gender specifications conclusively demonstrates that the subject of the infinitive is a singular entity. Furthermore, taken for granted that PRO cannot have inherent gender features, it also follows that the best analysis for controlled subjects is one in terms of A-movement. In a nutshell, PC reduces to OC as far as the properties of the embedded subject are concerned and, as a result of this, Landau’s argument does not hold. I conclude this brief discussion with the following observation:

(33) For any implicit argument IA, OC (including PC) is not a diagnostic to detect any sort of syntactic activity for that IA, because local predication derives coreference.

Notice now that the same pattern of lack of A-dependencies we have seen in (29) is also attested with analytical passives, although (29b), a *se* reflexive sentence, cannot be replicated in analytical passive configurations:14

(34) a. *María fue besada borracho.
M. was kissed drunk.MASC
Intended: ‘Mary was kissed (by some drunken guy).’

b. *María fue abandonada a causa de su amante.
M. was abandoned because of his lover
Intended: ‘María was abandoned because of his lover.’ (his = implicit agent)

Therefore, it seems that we have a first indication that implicit agents in analytical passives are also a concrete instance of the null hypothesis in (28); i.e., they are derived as absence of Merge. However, when compared with *se* constructions, crucial (well-known) differences arise. In other words, analytical passives in Spanish: (i) trigger gender and number agreement with the IA (not accusative valuation), (ii) license a *by*-phrase which is interpreted as the agent of the sentence, and (iii) do not show clitic insertion in the v position (although they can trigger other instances of clitic insertion, see Pujalte & Saab 2012). Let me show how these properties are derived under the approach I am suggesting here. In (35), we observe all the core properties expressed by a simple passive sentence in Spanish:

(35) *María fue besada* (por Pedro).
M. was kissed.FEM.SG by P.
'María was kissed (by Pedro).'

As for *by*-phrases, Bowers (2010) makes the following point:

---

14 Yet, as expected, another similar test involving the use of a syntactic anaphor as complement of a *by*-phrase produces ungrammaticality (see, for English, Baker, Johnson & Roberts 1989 and the references therein). In this respect, consider the following example:

(i) *Juan se fue criticado por sí mismo.*
J. was criticized by himself
it has been clear since the earliest transformational description of English (see Chomsky 1957, 1975a) that the presence of a by-phrase (or PROarb) entails passive verb morphology, while the absence of a by-phrase entails absence of passive verb morphology.

Assuming this controversial entailment (more on this below), he proposes “[to] account for this by assuming that the category Ag also contains the feature [+/- act]. [+act] Ag selects DP, while [-act] Ag selects a by-PP (or PROarb)” (Bowers 2010: 22).

By postulating rules like the ones in (36), which derive from Bowers’ reasoning, it seems to me that, even if the entailment he makes is correct, we would be missing the basic empirical generalization that connects the presence of implicit agents in passives to the licensing of a by-phrase, and the particular case properties of passives in general.

\[(36)\]
\[
\begin{align*}
\text{a. } & \text{Voice}_{[+\text{act}]} \rightarrow \text{DP} \\
\text{b. } & \text{Voice}_{[-\text{act}]} \rightarrow \left\{ \text{PROarb, by-PP} \right\}
\end{align*}
\]

As far as I can tell, the basic entailment is radically different from the one assumed by Bowers. Concretely, there is compelling evidence to derive the correlations in (36) from (37):

\[(37)\] Agentive by-phrases entail fully defective agentive v.

Notice that absence of D specification on v allows for the agentive argument to be realized as a PP, because no category requirement is expressed by little v. Let us assume, then, that a by-phrase can be merged with agentive v as an adjunct or specifier, although other alternatives should not modify this suggestion (attachment to the Root level, for instance; see Collins 2005 and Bowers 2010 for recent views on the position of the by-phrase in English). Absence or presence of such a PP will, of course, play a crucial role when it comes to the interpretation of v: a referential or an existential arbitrary reading will arise, respectively. But this would not alter the formal defectiveness of v in any case. We can assume with Chierchia (2004: 29), and much subsequent work, that whenever v is not modified by an agentive PP a rule of existential closure at some level of semantic representation will give us the relevant reading.

\[(38)\]
\[
\begin{align*}
\text{vP} \\
(\text{PP}_{\text{by}}) \\
\text{v'} \\
\text{v}_{\text{[agentive]}} \\
\sqrt{P} \\
\sqrt{\text{DP}}
\end{align*}
\]

\(^{15}\) Notice that merging a DP instead of a PP will leave such a DP without its K feature valued by C, given that the φ-features of C would be inherited by defective v (and then by the Root) and used for valuing the K feature of the internal argument as nominative.
The impossibility of associating a by-phrase with impersonal se is accounted for straightforwardly in this system: impersonal se entails a v[D] and, as a result, merging a PP in the v[D] domain will produce a category crash.\textsuperscript{16}

\textsuperscript{16} The Nueva Gramática de la Lengua Española [NGRALE 2009] also makes the same claim but adds that by-phrases (the so-called complemento agente ‘agent complement’ in the Hispanic tradition) are allowed in impersonal/passive se constructions only if such a by-phrase denotes collective or institutional entities.

(i) a. Este código parece que se adoptó primero por los venecianos establecidos en Constantinopla.

‘It seems that this code was first adopted by the Venetians established in Constantinople.’

b. Se convocó por el Gobierno Regional a un concurso de novelas.

‘A novel contest was held by the Regional Government.’

[NGRALE 2009: 3090]

However, as noticed by Pujalte (2013: 234), these by-phrases do not share the same distribution as agentive by-phrases. Crucially, the PPs in (i) and (ii) admit non-partitive paraphrases with por parte de ‘on behalf of’:

(ii) Se convocó a una reunión por parte de los vecinos.

‘A meeting was convened on behalf of the neighbors.’

(iii) *Los maestros fueron reprimidos por parte de la policía.

‘The oldest treatise on spherical trigonometry written in the world was indeed written by a cadi or judge from Jaén.’

Pountain claims that textual examples of this type are uncommon and that speakers’ judgments are unreliable because of normative pressure. However, he elicited the following judgments:

(vi) a. Este libro se publicó por Longman.

‘This book was published by Longman.’

b. Este libro se escribió por un profesor muy conocido.

‘This book was written by a very famous professor.’

c. ¿La casa se edificó por Gómez.

‘The house was built by G.’
 Regarding the absence of φ-specification on agentive v, this could be just an option provided by the UG, but I think that there is an interesting correlation that connects the impossibility of accusative case assignment in passives and the presence of number and gender morphology. Indeed, we can dispense with voice features of whatever sort by assuming the configuration illustrated in (40):

(40)  
xP
    \[x[φ]\]
    \[vP\]
    \[PP_{by}\]
    \[v[agentive]\]
    \[v'\]
    \[\sqrt{P}\]
    \[\sqrt{DP_{K:??}}\]

As the reader might have already inferred, (40) illustrates another case of the empirical observation made by Pujalte (2013):

(41)  
Given a configuration like \[x^0…Z…y^0\], if \(x^0\) and \(y^0\) are cyclic heads of the same type, \(Z \neq C\), and \(x^0\) and \(y^0\) are in a potential inheritance relation, then \(y^0\) is fully φ-defective.

That is to say, analytical passives pattern like event nominalizations (see (18) and (19) above) in that both entail the presence of a fully defective \(v\) selected by a probe of the same type as \(v\). The presence of a by-phrase and lack of accusative marking

---

Yet, this set of examples is controversial. The example in (via), for instance, is not relevant given the reasons adduced by Pujalte and commented on above (i.e., Longman is not a true agentive by-phrase). The rest of the judgments, in turn, remain unexplained by Pountain. In other words, why would the sentence in (vic), even if ungrammatical, be better than (vid)? To my ears, (vic,d) are fully parallel, more specifically, they are both fully ungrammatical. As for (vib), I find the sentence ungrammatical but better than (vic,d). I am not, of course, denying the existence of idiolectal or dialectal variation in this domain, but our current understanding of the basic facts in Spanish leads us to conclude that the generalization in the main text regarding the distribution of agentive by-phrases in analytical passives and impersonal/passive se constructions is quite robust across dialects.
follow directly from the analysis in (40). Now, in passives the IA argument has a K feature that defective x cannot satisfy. This makes the DP active for further Agree relations (Chomsky 2000, 2001 and much subsequent work). Therefore, once C enters the derivation, the unvalued case feature of this active DP is valued as nominative.

To sum up, I have demonstrated that absence of Merge has two main different reasons: (i) as a syntactic failure that is repaired at PF (impersonal se), or (ii) as a consequence of fully defective v (analytical passives). The similarities and differences between impersonal se and analytical passives are accounted for parsimoniously in the outlined system without invoking any lexical rule or voice features of any sort. The feature composition of the C and v heads seems to be enough to derive the syntax of these particular constructions. In the next section, I show how thematic interpretation proceeds in the derivation and how reflexives / reciprocals are integrated into this system in a simple way.

3.3. Activity and locality in thematic interpretation

Crucially, both cases seen so far, where no DP is merged with agentive v, create a situation that triggers the following interpretative scenarios:

(43) a. For agentive v assign a default arb interpretation, unless the agent role is expressed by other means (a by-phrase, for instance).
   b. For agentive v[D] assign an agent role to an active and local DP. In the absence of such a DP, (43a) applies.

We can generalize even further by interpreting arb as last resort strategy.

Default arb assignment (preliminary version):

(44) For agentive v[D] assign arb in the absence of an agentive argument in the domain of v[D].

I will not try a formal definition of the intuitions that both (43) and (44) very informally express. The idea is that the presence of a syntactic argument encoding the agent role is preferred to default arb. On the basis of empirical evidence, I will try to demonstrate later that this interpretative rule cannot be on the right track. As shown in
detail in section 5.1, default \textit{arb} assignment does not apply to implicit arguments in analytical passives, but only to \textit{se} constructions (when necessary). I also will show that a correct characterization of (44) for default arguments entails taking into consideration some type of costly computation at the C-I interface. For the time being, let me delay the discussion on the nature of arbitrary readings and simply assume together with Rizzi (1986) that \textit{arb} is identical to a default [+ human, (+generic)] reading performed by the C-I system.

What I will propose now is a particular conception of thematic theory, under which a given argument DP can receive more than one thematic role in a given domain provided this DP is active when thematic interpretation applies. With reference to the agent role, it seems that a DP can be the agent of a given agentive \textit{v[D]} only if it is active and local with respect to \textit{v[D]}, as defined in (45):

\begin{enumerate}
  \item \textit{Activity}: A has an unvalued K feature at the point of the derivation where the theta role of \textit{x[D]} is being evaluated/assigned (i.e., A is active within the \textit{vP} domain to enter into further A-dependencies).
  \item \textit{Locality}: A is the closest local argument to \textit{x[D]}; (i.e., A is not contained in the domain of another \textit{y[D]} of the same type as \textit{x[D]} c-commanded by \textit{x[D]} and no other argument A’ local to \textit{x[D]} c-commands A).
\end{enumerate}

The formulation in (45) makes use of what has been proven as crucial in other syntactic domains: locality and activity. Put differently, to a certain extent, (45) adds nothing new with respect to the way in which syntactic dependencies are established during the syntactic computation. It is usually the case that a given syntactic category C with a formal feature F enters into a syntactic dependency triggered by F with another category C’ that is both active (i.e., it also possesses an unsatisfied formal feature) and local to C.

In a simple transitive sentence like (46), it can easily be checked that the external argument is the only active DP when thematic interpretation applies to this particular \textit{vP}, even though both DPs involved in this domain are local with respect to \textit{v[D]}:

\begin{enumerate}
  \item A crucial property of the system in (45) is that theta-role assignment can apply in a long-distance fashion; i.e., Merge is not a necessary condition for thematic assignment. Another important characteristic expressed in (45) is that the notion of \textit{domain} is defined in terms of \textit{containment}. This is a crucial difference with respect to Agree, which operates on a more restricted notion of \textit{domain}, namely, \textit{complement domain} (Chomsky 2000, 2001). Thus, unlike Agree, a DP in the specifier position of a thematic head can enter into a thematic relation with such a head. See Saab (2014) for detailed discussion regarding these and other aspects of this theory of theta-role assignment.
  \item The notation \textit{x[D]} stands for a head with a subcategorization feature of the [D] type that makes that head a potential theta assigner. As a side note, it is a curious fact that the activity condition seems to be exactly inverse to the \textit{Visibility Condition} in Chomsky (1986), according to which case marking is a condition for \theta-assignment at LF.
\end{enumerate}
      b. \[ \nu P \]

Suppose, however, that \( \nu \) is \( \phi \)-defective but encodes an unsatisfied [D] feature, as illustrated in (47):

(47) \[ \nu P \]

Here, the internal argument, which is already interpreted as the theme, is both active and local with respect to \( \nu[D] \) and, consequently, is interpreted as the agent of \( \nu[D] \). Later in the derivation, this DP will value nominative, if C is \( \phi \)-complete.

(48) \[ \text{CP} \]

Finally, a clitic is inserted at PF through the same mechanism we have previously described in connection with impersonal se to satisfy the non-discharged [D] feature on \( \nu \) (see 27).

The situation abstractly represented in (48) corresponds to reflexives / reciprocals in Spanish and other Romance languages:

(49) Juan se critica.
    Juan \textbf{SE} criticizes
‘Juan criticizes himself.’

Comparing now the trees in (47) and (48) with the analysis I have provided in (25) for impersonal se (repeated below with the relevant example), the different interpretative patterns observed with respect to a reflexive and an impersonal se are directly explained by the activity condition on thematic interpretation (45A): only $\phi$-defective $v$ with an unsaturated D feature can trigger agentive interpretation of the internal argument; impersonal se, instead, blocks this reading, given that, although the underlying $v$ also has a non-discharged [D] feature, it is not $\phi$-defective.

(50)  
Se castigó a los culpables.

SE punished ACC the culprits

‘Someone / one punished the culprits.’

(51)

Two immediate consequences are captured under this approach to impersonals and reflexives, as well. On the one hand, this proposal explains se syncretism in impersonals and reflexives as the direct result of the syntax-PF mismatch. On the other hand, the motivation for a last resort approach to arbitrary readings is also justified by the contrast between these two constructions. By (44), default arb is only assigned to impersonal se contexts given the fact that the internal argument of reflexive / reciprocal configurations complies with both the locality and the activity conditions on thematic interpretation and, consequently, can bear two thematic roles. It remains to be seen whether the arb interpretation in the way described here can also be conceived of as a repair strategy; i.e., as the semantic reflex of what is observed on the PF side (i.e., clitic insertion). Section 5.1 will be dedicated to discussing this issue.

Summing up, the system I have outlined so far (essentially following Pujalte & Saab 2012) derives a set of core cases of argument structure effects; in particular, it accounts for the following facts:

(52)

a. the complementary distribution between $v$-related se and by-phrases
b. the correlation between by-phrases and fully defective $v$ in passives and event nominalizations
c. the correlation between passive and nominal morphology and the absence of accusative marking
d. the absence of A-dependencies with implicit agents in passives and impersonal se constructions
e. the syncretism pattern between impersonals and reflexives / reciprocals
f. the arising of arb readings in impersonals, but not in reflexives / reciprocals
Interestingly, this system dispenses entirely with voice features and operations of argument reduction of any sort. It only invokes well-established constraints on the way in which Merge and Agree proceed and some restrictions on thematic interpretation that also follow from general conditions on syntactic computation (activity and locality).

For the set of phenomena discussed in this section, it then turns out that the null hypothesis that implicit arguments are absence of Merge has been confirmed.

(53) **Null hypothesis:** Implicit arguments simply signal the absence of a (sometimes expected) application of the operation Merge. In other words, at least in the ideal case implicit arguments have no syntactic representation.

Thus, our inventory of empty categories can be further reduced (see 8). Of course, this does not mean it is the end of the story. Empirical evidence can force us to reject (53) in some empirical domain and to accept that some particular empty primitive cannot be dispensed with. Only as an illustration, consider briefly the case of PROarb. As shown by Pujalte (2013), PROarb contrasts with impersonal *se* in each of the tests discussed above. Compare in this respect the sentences in (29) with the following cases of non-obligatory control (NOC):

(54) a. Está permitido entrar borracho en esta sala.
   ‘It is allowed to enter into this room drunk.’

b. Está permitido lavarse.
   ‘It is allowed to wash oneself.’

c. Está permitido traer su mascota.
   ‘It is allowed to bring one’s pet.’

Although the contrast between (29) and (54) has not been extensively discussed in the literature on Spanish (although see Mendikoetxea 1992, 2002, 2008, Rivero 2001, Ordóñez & Treviño 2007 and Pujalte 2013 for related discussion), the general situation arising from it is not a novelty. The fact that generic contexts, for instance, favor the establishment of A-dependencies that are otherwise impossible has been in the center of the debate on passives (Jaeggli 1986, Baker, Johnson & Roberts 1989, and Landau 2010), implicit objects (Rizzi 1986 and subsequent works), impersonal *se* in generic environments (D’Alessandro 2007) and null generics in partial pro-drop languages (see Holmberg 2010 and Saab 2012 for a recent view), among related constructions across languages.  

---

19 Thus, in contradistinction with (29a), (i) is perfect as a generic impersonal *se* sentence:

(i) Cuando *se* está borracha siempre …
   when *se* is drunk.FEM always
   ‘When one (female) is always drunk…’

However, (ii) and (iii), which involve *se*-reflexivization and pronominal binding, are both ungrammatical:
eliminated in favor of one of the two best alternatives we have for empty categories (i.e., syntax or nothing), then we are left with a basic empty primitive -maybe the only one made available by the UG- and with the need to explain its distribution across languages.

In spite of this, this situation, I think, does not lead us to generalize the

<table>
<thead>
<tr>
<th>(ii)</th>
<th>*Si se critica mucho…</th>
</tr>
</thead>
<tbody>
<tr>
<td>if SE criticizes a lot</td>
<td></td>
</tr>
<tr>
<td>Intended: ‘If one criticizes oneself too much…’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(iii)</th>
<th>*Cuando se ama a su hijo…</th>
</tr>
</thead>
<tbody>
<tr>
<td>if SE loves ACC his son…</td>
<td></td>
</tr>
<tr>
<td>Intended: ‘If one loves one’s son…’</td>
<td></td>
</tr>
</tbody>
</table>

It seems then that, although conditionals / generics allow for more syntactic dependencies than episodic ones, they do not allow for the same sort of dependencies attested in some NOC contexts.

Nevertheless, it is also important to note that (ii) and (iii) improve whenever generic uno (mismo) ‘one(self)’ is introduced into the picture in complement position as in (iv) or as possessor phrase as in (v):

<table>
<thead>
<tr>
<th>(iv)</th>
<th>(?)Si se critica a uno mismo …</th>
</tr>
</thead>
<tbody>
<tr>
<td>if SE criticizes ACC one self …</td>
<td></td>
</tr>
<tr>
<td>‘If one criticizes oneself too much…’</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(v)</th>
<th>Cuando se ama al hijo de uno (mismo) …</th>
</tr>
</thead>
<tbody>
<tr>
<td>when SE loves ACC, the son of one (self) …</td>
<td></td>
</tr>
<tr>
<td>‘When one loves one’s son…’</td>
<td></td>
</tr>
</tbody>
</table>

Although judgments are more subtle, some speakers also accept a pure syntactic anaphor like sí mismo ‘himself’ as a good counterpart for cases like (iv). Thus, Rivero (2001) provides the following pair:

<table>
<thead>
<tr>
<th>(vi)</th>
<th>Ahora se piensa solo en {uno mismo / ?sí mismo}</th>
</tr>
</thead>
<tbody>
<tr>
<td>now SE thinks only in {oneself / himself}</td>
<td></td>
</tr>
<tr>
<td>‘Now one thinks only of oneself.’</td>
<td></td>
</tr>
</tbody>
</table>

[Rivero 2001: 175]

Of course, (vi) is acceptable only if ahora ‘now’ is interpreted as a type of generic / habitual operator and not as a deictic adverb. The same examples improve even more when embedded in conditional sentences (e.g., Cuando/ si se piensa [en uno mismo / sí mismo]… ‘When/if one thinks of oneself…’). Taken together, the data in (29), (54) and (i)-(iv) show at least two basic things: (i) episodic and generic contexts clearly create different conditions when it comes to the licensing of secondary predication in impersonal se constructions, and (ii) NOC and generic se sentences cannot be derived by the same underlying mechanisms. To the best of my knowledge, we do not have an integral account for all these facts in the current literature. Although the theory presented here can deal with some of the basic facts (see, e.g., Pujalte 2013 for an explanation of the ungrammaticality of (ii) and Saab 2012 for some suggestions about the contrast between (29a) and (i)), some issues will have to remain open for further research.

This claim requires an important qualification. My suggestion is that the only type of null primitive is a type of variable bound by a syntactically represented topic. Thus, as is well-known, the arbitrary readings in examples like (54) are altered under the right conditions, for instance, if the main clause contains an explicit dative:

<table>
<thead>
<tr>
<th>(i)</th>
<th>(A Juan), le está permitido fumar.</th>
</tr>
</thead>
<tbody>
<tr>
<td>to J. CL.3SG.DAT is permitted smoke.INF</td>
<td></td>
</tr>
<tr>
<td>‘John is allowed to smoke.’</td>
<td></td>
</tr>
</tbody>
</table>

Williams (1980) proposed some explicit rules (his Arb rewriting rules; see Williams 1980: 216-218) to derive the “controlled” reading in (i) from the arbitrary one. Put differently, according to Williams, arb assignment is the default. Arb, then, is rewritten as coindexed with some DP in some particular configurations under the conditions established by the rewriting rules. We can reinterpret this theory assuming that non-finite clauses contain a variable bound by a left peripheral topic internal to
worst case (*pace* Landau 2010). In fact, assuming (53) as a working hypothesis has been demonstrated as a reasonable way to proceed and, in the remainder of this paper, I will further explore the nature of implicit arguments and show how a set of complex interactions between causatives, reflexives / impersonals and passives are straightforwardly derived as specific predictions of a theory with (53) as a core ingredient.

4. More core predictions: implicit arguments in analytical causatives

Causatives introduced by *hacer* ‘to make’ (also *dejar* ‘to let’) constitute an ideal case to evaluate the predictive power of the theory sketched in this paper. This is so because they have the basic property of having two cyclic vs being related in the way that (55) describes and (56) illustrates (see section 3.1):

(55) Given a configuration like \([x^0 \ldots Z \ldots y^0]\), if \(x^0\) and \(y^0\) are cyclic heads of the same type, \(Z \neq C\), and \(x^0\) and \(y^0\) are in a potential inheritance relation, then \(y^0\) is fully \(\varphi\)-defective.

(56) a. \(C\varphi \ldots x\varphi \ldots v\) (allowed by (55))
   b. \(C\varphi \ldots x \ldots v\varphi\) (not allowed by (55))

Therefore, in this section, I will demonstrate that the abstract representation in (56a) is what underlies the structure of causatives with *hacer*. As we will see shortly, a set of complex interactions between causatives, reflexives and passives are explained under the system proposed in the previous section without altering any of its aspects. With the exception of Baauw & Delfitto (2005), who proposed a concrete analysis based on some lexicalist assumptions about reflexives, the data to be discussed in this section have not received deep exploration in the current literature on causatives even when, as it will become clear, they are at the heart of the nature of causative constructions. Before entering into the core data to be explored, let me first introduce the basic syntax of analytical causatives in Spanish.

4.1. The syntax of active and passive causatives

As is well known, *hacer* causatives come in two guises: (i) passive causatives (cf. 57a), and (ii) active causatives (cf. 57b) (see, among many others, Kayne 1969, Bordelois 1974, Folli & Harley 2007, Pujalte 2013, and the references therein):

(57) a. Juan hizo arreglar el auto por el mecánico.
   b. Juan le hizo arreglar el auto

the infinitival clause. Such a topic will be generic/arbitrary whenever the main clause does not provide another suitable antecedent for such a topic. As claimed by Williams, the conditions regulating the arbitrary and referential reading must be linguistically determined and cannot be attributed to purely discourse factors, as happens, for instance, with infinitival subjects in Spanish absolute clauses (see Camacho 2011 for a proposal regarding absolute clauses in Spanish), Spanish null indefinite objects or, more generally, with Chinese null arguments, all of which can, as is well known, be controlled by discourse factors. The difference would follow if, as argued by Epstein (1984), the antecedent of some infinitival subjects in NOC environments is to be found in the argument structure of the main clause (for instance, the dative argument in (i)). At any rate, this shows, again, that the arbitrary readings in NOC contexts cannot be equated with the arbitrary readings in impersonal/passive *se* constructions, which never have a referential antecedent.
J. CL.3SG.DAT made repair.INF the car to.the mechanic
‘Juan made the auto mechanic repair the car.’

I will follow here the syntactic approach to active causatives proposed by Pujalte (2013), according to which this type instantiates the abstract structure in (58).

(58) Active causatives

As shown by Pujalte, case relations in $\nu P_2$ are entirely determined by the properties of $\nu_1$, which acts as the probe, and by feature inheritance. First, if $\nu_2$ is unaccusative or unergative, the subject of the infinitive values accusative case. Let me illustrate the point with a unergative infinitive:

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

b. 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 $\nu$, inheritance from $\nu_1$ to $\nu_2$ 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.

(60) a. Juan le hizo traer el auto a Ana.
    J. CL.3SG.DAT made bring.INF the car to A.
    ‘Juan made Ana bring the car.’

b. 

As for passive causatives, I will propose the same analysis as Pujalte’s for active causatives with a crucial difference: The embedded v is both [φ] and [D] defective. As we have seen in the previous sections, by-phrases entail fully defective v (cf. 37), so this particular aspect of passive causatives does not require additional considerations. By (55), φ-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 (58) with (61), which illustrates the structure I propose for passive causatives:
The first prediction this analysis makes is that, in absence of a by-phrase expressing the agent of the caused sentence, passive causatives, like analytical passives or impersonal se constructions (see section 3.2), should not allow secondary predication (62b), pronominal binding (62c) or reflexivization of the implicit argument (62d). This is correct.

At any rate, this state of affairs should not be a surprise under almost any existing analysis of analytical causatives in Romance. A more interesting question, then, is whether or not such a subtle difference in categorial specification between passive and active causatives can capture the set of intricate relations that both types establish with se constructions in Spanish and other Romance languages. Just to put the problem in an impressionistic way, let me make a list of the patterns we have to explain.

First, both types of causatives reject impersonal se as the subject of the embedded infinitive; so the sentence in (63) can have, under the active structure, a reflexive or reciprocal reading but not an impersonal one:

(63) 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 (impossible in both causatives)
   Intended: ‘John made someone/one punish the culprit.’
Second, only passive causatives allow for *long-distance reflexivization* of their internal argument:

\[(64)\] Juan se hizo besar por María.
\[J. SE made kiss.INF by M.\]
\[‘Juan, made María kiss him,’\]

\[(65)\] *Juan se (le) hizo besar a María.
\[J. SE (CL.3SG.DAT) made kiss.INF to M.\]
\[Intended: ‘Juan, made María kiss him,’\]

Third, it seems that there is a kind of *obviation effect* between the subject of *hacer* and the subject of the infinitive. This is demonstrated by the fact that the subject of the infinitive cannot be reflexivized:\[21\]

\[(66)\] *Juan se hizo llegar / trabajar / comprar un auto.
\[J. SE made arrive.INF / work.INF / buy.INF a car\]
\[Intended: ‘Juan made himself arrive/ work / buy a car.’ (Juan = infinitive subject)\]

Finally, double reflexivization is not allowed under any circumstance, either:

\[(67)\] *Juan se hizo besarse (por María)
\[J. SE made kiss.INF-SE (by M.)\]
\[Intended 1: ‘Juan, made {someone, María} kiss him,’\]
\[Intended 2: ‘Juan, made himself kiss him.’\]

Let me focus now on each of the sentences in (63)-(67) separately, and show how they are captured as specific predictions of the system proposed so far; in particular, I will center on how they follow from the activity and locality conditions on thematic interpretation we have formulated in the previous section (cf. 45):\[22\]

\[\text{As shown in Saab (2014: footnote 24), the behavior of *causee* subjects of unaccusative predicates is quite unstable. Much depends on the nature of each type of unaccusative verbs. Thus, whereas *llegar* behaves as an agentive predicate in rejecting reflexivization of the *causee* subject, other predicates like *desaparecer* ‘to disappear’ do license reflexivization:}\]

\[(i)\] Juan se hizo desaparecer a sí mismo.
\[J. SE made disappear.INF ACC himself\]
\[‘John made himself disappear.’\]

\[\text{As noticed by two anonymous reviewers, it seems that verbs like *llegar* show agentive properties in many contexts. For instance, unlike other unaccusative predicates, they are compatible with impersonal *se*:}\]

\[(i)\] Acá se llega siempre tarde.
\[here SE arrives always late\]
\[‘Here, people always arrive late.’\]

\[\text{This seems to indicate that, at least in some syntactic configurations, the subject of verbs like *llegar* is introduced by some type of agentive *v*. The facts in (66) justify this claim. As explained in section 4.5, *causee* subjects within the domain of agentive *v*[\[i\]] cannot be reflexivized.}\]

\[\text{For the sake of expositive clarity, I will not make here a deep comparison between the present approach and Baauw & Delfitto’s (2005), which to the best of my knowledge, is the most detailed one hitherto, although see also Reinhart & Siloni (2005) and Folli & Harley (2007) for some observations with respect to (64). The interested reader can compare the details of Baauw & Delfitto’s approach}\]
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 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 no other active argument $A'$ local to $x[D]$ c-commands $A$).

### 4.2. Prediction #1: Impersonals vs. reflexives and the activity condition

As already mentioned, the sentence in (63) repeated below cannot have an impersonal **se** reading, although it can be interpreted as reflexive or reciprocal:

(69) Juan hizo castigar**se** a los culpables.

*J. made**se** punish.ACC the culprits*

**i. Reciprocal / reflexive reading (OK under the active structure)**

with the purely syntactic analysis I will propose here and evaluate both on the basis of conceptual parsimony and empirical coverage. I think that, even if it turns out that both approaches are extensionally equivalent, simplicity considerations should lead to the conclusion that an approach that does not make any use of special rules to account for the full range of data is obviously superior.

However, it seems to me that there are also empirical reasons to prefer a pure syntactic analysis of reflexivization over a lexicalist one, as the one proposed by Baauw & Delfitto. Let me show briefly why.

A way to account for the difference between active and passive causatives could be to assume that passive causatives suffer a process of lexical intransitivization (Baauw & Delfitto 2005) or that they are syntactically nominalized (Folli & Harley 2007). Whatever is the case, it follows that the subject of the infinitive is syntactically inactive and, as a result, it cannot enter into syntactic dependencies. Crucially, the absence of reflexivization of the infinitive subject is directly explained in this particular view at least for the case of passive infinitives. Yet, this does not account for the absence of reflexivization in active causatives. Notice, for instance, that (66) should be allowed if the underlying structure of these sentences is the active one; i.e., with no suppression of the external argument position. Baauw & Delfitto (2005) recognize this problem for the case of unergatives and simply stipulate that “the embedded verb has been drawn from the lexicon as reflexively marked, that is, as devoid of the external theta-role” (Baauw & Delfitto 2005: 177). They conclude then that reflexivization of an intransitive predicate is trivially not allowed. Next to the fact that this is simply a stipulation, their claim is problematic, because now the contrast between active and passive causatives would just vanish. Moreover, their claim is falsified by the basic fact that reflexivization of the subject of the embedded infinitive is allowed, as shown by the grammatical reading of (63) and the following additional data from Spanish and Italian:

(i)

<table>
<thead>
<tr>
<th>(i)</th>
<th>(Spanish)</th>
<th>(Italian)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Juan la hizo <strong>se</strong> mirarse en el espejo (Maria).</td>
<td>Gianni l’ha <strong>se</strong> guardar<strong>s</strong> allo specchio.</td>
</tr>
<tr>
<td>b.</td>
<td>‘Juan made María see herself in the mirror.’</td>
<td>‘Gianni made her see herself in the mirror.’</td>
</tr>
</tbody>
</table>

[IRENE FRANCO, P.C.]

If reflexivization of the embedded infinitive is allowed, then we are forced to conclude that active causatives cannot be always subjected to lexical intransitivization.
'Juan made the culprits punish themselves/each other.'

ii. Impersonal reading (impossible in both causatives)

Intended: ‘Juan made someone/one punish the culprit.’

Given that impersonals or reflexive/reciprocal se always entail a [D] feature on agentive $v$, its presence in the embedded infinitive indicates that this infinitive has the underlying structure of an active causative. As we already know, agentive $v_2$ has to be $\varphi$-defective. The analysis for (69) is illustrated in the following tree:

\[
(70)
\]

By the activity and locality conditions in (68), 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. Importantly, the structure for the impersonal se reading is simply not derived under the system outlined in this paper. The crucial property of this situation is the $\varphi$-defectiveness of the embedded $v$ in both types of causatives. It is this property that renders the internal argument active for further thematic interpretation in the $vP_2$ domain in consonance with (68A). 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 (50), where $v$ is $\varphi$-complete and (69), where $v_2$ is fully $\varphi$-defective would not be explained. By the same token, the reflexive/reciprocal reading of (69) is derivationally captured, as well: at the point in which $v_1$ enters 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.

4.3. Prediction #2: Long-distance thematic interpretation

As shown by the sentence in (64) above (repeated as 71), passive infinitives allow for reflexivization of *hacer*. 
(71) Juan se hizo besar por María.
J. SE made kiss.INF by M.
‘Juanı made Maria kiss himı.’

This case is also directly derived under the theory of argument structure we are developing. See the following tree:

Here, the internal argument of the embedded infinitive Juan is both active and local with respect to the higher \(v_1[D]\) in consonance with (68). This is because \(vP_2\), being fully defective (i.e. “passive”), is not an intervener. Consequently, thematic association between the non-discharged \([D]\) feature on \(v_1\) and the object DP is allowed.

4.4. Prediction #3: Locality effects in thematic interpretation
The absence of reflexivization of the embedded internal argument in active causative environments constitutes a case where thematic locality is violated. See (73) and its associated structure in (74):

(73) *Juan se (le) hizo besar a María. (cf. 65)
J. SE (CL.3SG.DAT) made kiss.INF to M.
Intended: ‘Juanı made Maria kiss himı.’
As it should be evident now, the crucial difference between active and passive infinitives that accounts for the contrast between (71) and (73) 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, that creates a locality violation, as formulated in (68B), given that upper $v_{[D]}$ cannot access the domain of $vP_2$ to establish a thematic dependency with the object of the infinitive.

4.5. Prediction #4: Obviation effects and absence of double reflexives

“Obviation effects” (66) and the impossibility of having the two verbs associated with reflexive morphology (67) also violate thematic locality (except for passive causatives):

(75) *Juan se hizo llegar / trabajar / comprar un auto.

\begin{itemize}
  \item J. SE made arrive.INF / work.INF / buy.INF a car
  \item Intended: ‘Juan made himself arrive/ work / buy a car.’ (Juan = infinitive subject)
\end{itemize}

(76) *Juan se hizo besarse (por María)

\begin{itemize}
  \item J. SE made kiss.INF-SE (by M.)
  \item Intended 1 (passive): ‘Juan, made {someone, María} kiss him.’
  \item Intended 2 (active): ‘Juan, made himself, kiss him.’
\end{itemize}

That (76) with the intended reading 2, where Juan is also the agent of $v_2$, is a violation of locality is explicitly indicated by the presence of the lower clitic se. Again, given that se entails the presence of a $v_{[D]}$, $v_1$ in (77) cannot “see” the object of $vP_2$ to discharge its agentive role.
Under the intended passive reading of (76), where Juan is not the agent of the embedded infinitive, v is fully defective and, as such, is perfectly compatible with a by-phrase (e.g., por María), but not with lower se, which as I have repeatedly observed, always entails the presence of an underlying [D] feature on agentive v.

In other words, (78) mirrors the incompatibility of by-PPs in impersonal se environments we discussed with respect to (39) (repeated as 79), in which the introduction of a by-phrase within the v[D] domain produces a category clash (see 37).
b. *Se destruyeron los puentes por el enemigo.
   SE destroyed.3SG the bridges by the enemy.
   ‘The bridges were destroyed by the enemy.’

The ungrammaticality in (75) does not require any additional observation, because, as shown in (80), it also follows as a locality violation:

An important prediction of an analysis involving locality as formulated in (68B) and a default interpretation rule like (44) is that an arbitrary reading should arise whenever \( v_1[D] \) cannot discharge its thematic role to some argument DP. This prediction is false: no \( arb \) reading is attested in the ungrammatical cases that violate locality for \( v_1 \) (i.e., 73, 75 and 76 in its active reading). So there is more to be said in this respect and the next section is entirely dedicated to exploring the interactions between thematic theory and default interpretation.

To conclude what has been said so far, the intricate pattern with \textit{hacer} causatives illustrated in (63)-(67) receives a straightforward account under the simple hypothesis that the difference that underlies passive and active causatives is connected to the absence or presence of a \([D]\) feature on the embedded \( v \). The rest follows from the syntactic approach to argument structure proposed in section 3.

Before closing the discussion on causatives, let me explore a last important prediction related to the syntax of ECM constructions.

4.6. \textit{An additional prediction: ECM-constructions}

At this point, the reader might have inferred an immediate prediction arising from the theory. Concretely, it is predicted that all things being equal, two \( \varphi \)-complete vs should invert the grammatical judgments in (63)-(67) provided some structural conditions are also met. With reference to the observation in (55), the scenario to evaluate is (82c):

(81) Given a configuration like \([x^0 \ldots Z \ldots y^0]\), if \( x^0 \) and \( y^0 \) are cyclic heads of the same type, \( Z \neq C \), and \( x^0 \) and \( y^0 \) are in a potential inheritance relation, then \( y^0 \) is fully \( \varphi \)-defective.

(82) a. \( C \varphi \ldots x \varphi \ldots v \) (allowed by (81))
b. \(C\varphi \ldots x \ldots v\varphi\) (not allowed by (81))
c. \(C\varphi \ldots x\varphi \ldots C \ldots v\varphi\)

By (81), (82c) should be allowed if either (i) there is an intervening cyclic head \(C\) between \(x\) and \(v\), as is indeed the case in (82c), or (ii) the structural conditions that trigger feature inheritance between both little \(x\)s are nor met.\(^{23}\)

ECM constructions with perception verbs constitute an ideal scenario to evaluate this prediction.\(^{24}\) A simple example is given in (83):

(83) Juan vio a María comprar ese vestido.

\(J.\) saw \(\text{ACC}\) \(M.\) buy.\(\text{INF}\) that dress

‘John saw Mary to buy that dress.’

I will not propose any particular, deep analysis of ECM constructions in Spanish. I will only notice here that the pattern in (63)-(67) can be reproduced in ECM contexts in Spanish with the following results:\(^{25}\)

\(\text{Impersonal} \ \text{se in the embedded infinitive (cf. 63): OK}\)

(84) Juan vio castigar a los culpables.

\(J.\) saw punish.\(\text{INF}-\text{SE}\) \(\text{ACC}\) 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.’

\(^{23}\) Notice, however, that even if (81) turns out to be empirically falsified in the sense that nothing would prevent two \(\varphi\)-complete cyclic heads of the same type co-occurring in a given domain, the predictions concerning the pattern at hand remain the same. In other words, it could be case that (81) is restricted to a situation where only one set of \(\varphi\)-features is made available by the numeration. Under that particular circumstance, the computational system assigns that set of features to the upper cyclic head \(x\). I will not explore here the empirical consequences of such a possible reformulation of (81).

\(^{24}\) I would like to thank Dave Embick for bringing ECM-constructions to my attention.

\(^{25}\) The following judgments are only from Río de la Plata speakers. Some Peninsular speakers do not accept (84). Indeed, Mendikoetxea (1999) explicitly claims that infinitival complements of perception verbs do not admit impersonal \(\text{se}:\)

(i) *Vimos aclamarse a los vencedores.

\(\text{saw.\(\text{1PL}\)}\) acclaim.\(\text{INF}-\text{SE}\) \(\text{ACC}\) the winners

\(\text{Intended: ‘We saw that people acclaim the winners.’}\)

[Mendikoetxea 1999: 1707]

One could be tempted to assume that the difference between Buenos Aires and Peninsular speakers could ultimately boil down to a microparameter involving the \(\text{leista}\) status of Peninsular speakers. However, an anonymous reviewer, who is a Peninsular \(\text{leista}\) speaker, accepts (84). As other Buenos Aires speakers, (s)he finds that the reciprocal-reflexive reading is more salient, but this does not block the relevant impersonal reading. A way to avoid the two readings is using unergative verbs with cognate objects. Angela Di Tullio has pointed out to me the following example, which triggers no subtle reaction across the consulted speakers:

(ii) Nunca vi bailarse un tango de esa manera.

\(\text{never saw dance.\(\text{INF}-\text{SE}\)}\) a tango of that way

‘I have never seen a tango danced that way.’

At any rate, given that \(\text{leismo}\) does not seem to be the reason behind the difference in judgments with respect to examples like (84) (and maybe (ii)), I will leave this variation problem unresolved here.
Long-distance reflexivization (cf. 64 and 65): NO

(85)  *Juan se vio besar por María.
J. SE saw kiss.INF by M.
Intended: ‘Juan saw that he was kissed by María.’

Reflexivization of the subject of the infinitive (cf. 66): OK

(86)  Juan se vio llegar / trabajar / comprar un auto.
J. SE saw arrive.INF / work.INF / buy.INF a car
Intended: ‘Juan saw himself to arrive/ work /buy a car.’ (Juan = infinitive subject)

Double reflexivization (cf. 67): OK

(87)  Juan se vio besarse a sí mismo
J. SE saw kiss.INF-SE (ACC himself)
Intended 1: ‘John saw himself to kiss himself.’

There are two basic differences between causatives and perception verbs that are at the heart of this sharp contrast. On the one hand, for the impersonal reading to be derived in (84) -but ruled out in (63) -by the activity condition (68A), it is necessarily the case that the lower v in ECM contexts is not φ-defective, as opposed to causatives. As is well-known, ECM, but not causatives allows for double accusative marking in Spanish (cf. (88) vs. (89) below), confirming then that (82c) is part of the basic analysis of causatives:

(88)  Juan la vio (a María) comprarlo.
J. CL.FEM.3SG.ACC saw (ACC M.) buy.INF-CL.MASC.3SG.ACC
‘John saw her buy it.’

(89)  *Juan la hizo (a María) comprarlo.
J. CL.FEM.3SG.ACC made (ACC M.) buy.INF-CL.MASC.3SG.ACC
‘John made her buy it.’

Now, it seems that there is more in ECM than only a φ-complete, lower v. The grammaticality of data like (86) and (87) shows that the subject of the infinitive must vacate the vP where it is first merged. This follows from the locality condition on thematic interpretation (68B). Given a structure like (90), we expect the subject of infinitive to move at least to the edge position of Z:

(90)  Cφ ... [vP1 v1[D,φ] .... [ZP SUBJ1 [vP2 t2v2[D,(φ)] (IA)] ] ]
    (where Z = a type of φ-defective C head)

In its final edge position, SUBJ is both active and local with respect to v1 and, consequently, can be interpreted as the agent of the matrix verb.

Edge effects in perception verbs are detectable in Spanish dialects with productive clitic doubling for animate DPs, as River Plate Spanish. As is well-known, this dialect optionally allows accusative clitic doubling for animate DPs that are differentially object marked by a ‘to’.

(91)  a. (La) vi a María.
    (CL.FEM.3SG.ACC) saw ACC M.
    ‘I saw Mary.’
b. *(Lo) vi el auto. (cf. vi el auto)  
(CL.MASC.3SG.ACC) saw the car  
‘I saw the car.’

A sentence like (91b) is ruled out because inanimate objects, which cannot trigger differential object marking, cannot trigger accusative doubling, either. However, in ECM constructions, differential object marking plus clitic doubling is attested (Laca 1995 and Zdrojewski 2008):

\[(92)\]  
(Lo) vi al auto chocar  
(CL.MASC.3SG.ACC) saw ACC.the car crash.INF  
‘I saw the car crashing.’

As argued by Zdrojewski (2008), this type of phenomenon, attested also in other contexts of minimal clauses, indicates that the subject of the infinitive is in an edge position, as is usual the case with other related doubling phenomena in Spanish. For our purposes here, it is enough to show that similar edge effects are hard to obtain with hacer causatives for most Río de la Plata speakers.26

\[(93)\]  
(%)Lo hizo al auto chocar.  
(CL.MASC.3SG.ACC) made ACC.the car crash.INF.  
‘(S)he made the car crash.’

Summing up, in this section I have demonstrated how a set of intricate facts concerning the nature of causatives are derived without adding any auxiliary assumption to the system proposed in section 2. Indeed, I think that these facts follow as specific predictions of the proposed system, under a simple analysis of Spanish causatives. These predictions are listed below:

\[(94)\]  
a. absence of impersonal se readings in passive and active causatives  
b. presence of long-distance reflexivization with passive causatives  
c. absence of reflexivization of embedded subjects in both types of causatives  
d. absence of double reflexivization with both types of causatives

The pattern attested in causatives seems to be nicely confirmed by ECM-constructions, which tend to parallel active causatives, with the crucial exception that ECMs do have impersonal se readings of the embedded infinitive, a fact that immediately follows from the different inflectional combinations that both types of constructions allow.

5. On the typology of implicit arguments

So far, I have shown that the theory of implicit arguments developed in this paper, according to which implicit arguments signal absence of Merge, not only obeys conditions of simplicity and parsimony, but has a broad empirical coverage, as well. Yet, a gap was mentioned in connection with the locality condition on thematic interpretation and the informal rule (44), repeated as (95):

\[(95)\]  
\[\text{At any rate, even for those speakers who find} \ (93) \ \text{more or less acceptable, there is still a clear contrast in favor of} \ (92). \ \text{See Di Tullio, Saab & Zdrojewski (2013) for discussion on the conditions that license clitic doubling with (in)animate DPs in Rio de la Plata Spanish.}\]
Default arb assignment (Preliminary version):

(95) For agentive \( v_{(D)} \) assign \( arb \) in absence of an agentive argument in the domain of \( v_{(D)} \).

The intuition behind (95) is that \( arb \) assignment is a default rule applying after local thematic interpretation (see Williams 1980 and Chomsky 1981 for a first approach to default arbitrary readings). However, in the way it is formulated, (95) predicts arbitrary readings in cases where this is never attested in concrete scenarios. Specifically, arbitrary readings should arise whenever locality or activity, as formulated in (68) (repeated below), fails.

(96) 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 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 \( v_{(D)} \) of the same type as \( x_{(D)} \) c-commanded by \( x_{(D)} \) and no other active argument \( A' \) local to \( x_{(D)} \) c-commands \( A \)).

Both locality and activity failures were explored in the previous section. We saw, however, that the locality failures we particularly discussed never trigger a default arbitrary reading. The aim of this section is, then, exploring some aspects of arbitrary readings and their implications for the typology of implicit arguments.

Most of the observations that follow have a conjectural character. Put differently, I will not offer here an explicit semantics for the syntax I have proposed for implicit arguments. Having clarified this, in what follows, I will suggest some connections between syntax and predication structure which could shed some light on the empirical domains already explored and beyond. In this respect, I will first make a crucial division between implicit arguments, namely, default arguments and understood arguments. Then, I will try to demonstrate that default arguments require some costly repair strategy at the C-I interface that does not apply for understood arguments (section 5.1). In section 5.2, I extend the typology of default arguments to arbitrary plural subjects in Spanish and, in particular, to impersonal passives in Germanic languages. As we will see, the system of arbitrary interpretation to be proposed has some interesting empirical consequences for the so-called Visser’s Generalization. In section 5.3, the typology of understood arguments is extended to some types of implicit objects in Spanish. It is shown that understood agents and objects have different properties only because of the syntactic domain in which they are associated: The \( v \) or Root domain, respectively. Finally, section 5.4 is dedicated to discussing a last piece of evidence in favor of the distinction between default and understood arguments. Concretely, I show that only understood arguments are suitable correlates for sluicing of the sprouting type.

5.1. Default vs. understood arguments

Let us start with the data in (97) (see 75 above), and its associated tree in (98):

(97) *Juan se hizo llegar / trabajar / comprar un auto.

J. SE made arrive-INF / work-INF / buy-INF a car

Intended: ‘Juan made himself arrive/ work / buy a car.’ (Juan = infinitive subject)
The sentences in (97) illustrate a locality violation, whose result is the impossibility of having a reflexive reading of the embedded subject. Such a failure should activate (95) giving a default arb interpretation of the matrix subject. Yet, this is not the case: the sentences at hand are not read as ‘one/someone made Juan arrive / work/ buy a car’. Instead, when possible, each of these sentences assigns arb to the embedded subject; i.e., a passive causative reading arises. This is particularly clear in the case of the transitive Juan se hizo comprar un auto (‘Juan made someone buy a car for him, ’), but is also the first reading you obtain with the unergative trabajar ‘to work’ and the unaccusative llegar ‘to arrive’ in those Spanish dialects that allow for transitivization of these verbs (see Pujalte 2013 for details). In River Plate Spanish, for instance, the transitive use of to work in examples like Juan trabajó a Pedro (Lit.: ‘John worked Pedro.’) means that Juan tried to take some advantage from Pedro by talking to him. Crucially, for those speakers that have this use of trabajar, this is also the first reading they get in causative contexts like (97). One can also force the reflexive reading between the matrix and the embedded subject by explaining to the speakers the intended meaning, but there is no way in which a default arb can be assigned to the matrix subject. Therefore, as formulated, (95) is falsified at least for v[D]. It turns out then that we cannot collapse the arb readings for v and v[D], as intended in (95).

An alternative to (95) could be to claim that v and v[D] create two radically different scenarios as far as arbitrary readings are concerned. Intuitively, an agentive v with a non-discharged [D] feature has, after all, the flavor of being an illegible object at the C-I interface, and not only at PF, as I have claimed so far. So an interpretative interface strategy should apply for that particular type of v. In turn, an agentive v without a subcategorization feature, instead, induces no conflict at the interfaces.

27 This is even more clear with the verb dejar ‘to let’, as exemplified in (i):

(i) Juan se dejó trabajar (por Pedro)
    J. SE let work.INF by P.

    In this sentence, the only available reading is, again, the idiomatic one (i.e., ‘John, let Peter cheat him.’).
because, being so defective, there is no formal feature triggering any sort of operation. The logic behind this reasoning entails accepting the following statements:

(99)  
  i. Syntactic theta-role assignment requires local (syntactic) computation triggered by subcategorization features.
  ii. *arb* default reading for agentive \(v[D]\) requires costly computation at the C-I interface.
  iii. *arb* default reading for fully defective agentive \(v\) requires no additional, costly computation, because it is a legible object at the interfaces.

What is entailed here is a different source for the *arb* readings each type of \(v\) expresses. The fact that the first reading arising in examples like (97) is the passive one, where the subject of the infinitive is *arb*, seems to be a good indication that implicit agents in passives are entirely determined by principles of local computation. On the opposite side, the *arb* reading of a \(v[D]\) requires additional computation at the interfaces. As a minimum, an additional syntactic searching for this kind of \(v\) is implied by (99i), but not for fully defective \(v\). In effect, the presence of a non-discharged [D] feature for a given head induces syntactic computation by thematic reasons and, as a last resort, default interpretation whenever syntax fails to produce the right input for the interfaces. So default readings in this respect might be seen as the semantic-pragmatic counterpart of clitic insertion at the PF interface (see the discussion in 3.2 in connection to (27)). Implicit arguments of the passive type, instead, do not trigger (99i); they are sent to the interfaces where they are perfectly legible objects. Regarding LF, a \(v_{[agentive]}\) may be existentially closed via LF procedures of the usual type (see, for instance, Chierchia 2004, although other alternatives are available).

This alternative to (95) implies a new typology of arbitrary subjects, in particular, and of implicit arguments in general. For reasons that will become clear shortly, I think that it could be useful to call understood agents/arguments to the objects deriving from (99iii) and to avoid the term default *arb* for this particular type. Such a denomination should be applied only to true default arguments, i.e., those arising as a repair interface strategy (99ii). Let us call this type default arguments. Absence of Merge, then, leads us to formulate the following typology of implicit arguments:

(100)  
  i. **Default arguments**: The result of a Merge failure. This produces an illegitimate object, \(v[D]\), that triggers repair strategies at the interfaces.
  ii. **Understood arguments**: The result of free category assignment in the numeration. This produces a legitimate object, \(v\), which triggers no repair strategy at the interface.

However, even if these conjectures are correct, we are still left with the problem of providing the right mechanism for default interpretations. Deleting the parentheses in (95) and specifying that the argument should be a DP, as in (101), is not enough to produce the right results.

*Default arb assignment (second version):*

(101)  
For agentive \(v[D]\) assign *arb* in the absence of an agentive DP in the domain of \(v[D]\).
Again, under this formulation the general absence of arbitrary readings in cases where thematic locality is violated are not explained. As for (97), it is important to note that it is not the case that the understood subject of the infinitive is in competition with the default argument of hacer, because as we saw with respect to (76), a default interpretation is impossible, even though the passive reading of the embedded subject is blocked by the presence of the lower reflexive clitic:

(102) *Juan se hizo besarse
    J. SE made to.kiss.SE
    Intended: ‘John, made himself, kiss him,’

Therefore, I propose the following reformulation of (101):²⁸

(103) Default agents (at the C-I interface):
    For any agentive v[D], assign arb in absence of a “subject” in the C-domain of v[D].

Now, all the cases seen so far, where arb is not allowed as a repair strategy (e.g., (97) and (102)), are correctly captured. Just for the sake of illustration, consider (97) and its associated tree in (98). A locality conflict arises at the vP₁ level, because its head cannot access vP₂ for discharging an agent role to the subject of the infinitive. The derivation, however, proceeds and nothing prevents the external argument of vP₂ from being valued as nominative by C. At PF, the non-discharged [D] feature on v₁ can be repaired under clitic insertion, as proposed in Pujalte & Saab (2012). Yet, at the C-I interface, arb cannot be assigned because there is a subject present in the C-domain, namely, Juan. The final result is that these particular sentences, although PF convergent (and, by extension, S-M convergent), are not C-I convergent. Put differently, we have a subject without the thematic role associated to its predicate. A revealing conclusion regarding the way in which the interface proceeds in this particular case is that tracing back the derivation to evaluate if the subject at hand was correctly theta-role assigned is not possible. The interface only allows for a type of computational inference, which connects subjects to thematic roles.

The notion of subject in (103) plays a crucial role in the computation that the interface can perform. As far as I can tell, this is based on case assignment and not on grammatical function, thus confirming the idea that case is a more primitive notion than grammatical function (Bobaljik 2008 and the references therein). A fundamental piece of evidence is passive se constructions in Spanish and other Romance languages (see Pujalte & Saab 2012 for references and discussion):

(104) Se cerraron las puertas a propósito.
    SE closed.3PL the doors. 3PL to purpose
    ‘The doors were closed on purpose.’

²⁸ One can wonder why LF does not provide a [D] object to satisfy v[D]. This operation would work as the exact LF-counterpart of se-insertion at PF. The first problem with such a solution would be conceptual: Inserting a morphosyntactic feature at LF departs from considerations of optimal design. But putting aside this type of considerations, this solution would reintroduce the problem discussed with respect to (97)/(98). If an LF-argument of the [D] type were introduced whenever LF finds an unsatisfied v[D], then the absence of a legitimate arbitrary reading for (97)/(98) (i.e., ‘One/someone made Juan arrive / work / buy a car’) would not be derived. This shows that the problem involves predication theory in a broad sense and not only thematic roles.
The sentence in (104) is passive in the sense that there is verbal agreement with the internal argument, but is active in the sense given to this term in this paper: the presence of *se* indicates underlying *v*\(_{DJ}\). Crucially for the point I am making here, (104) has a type of animacy / person constraint (see (105), and D’Alessandro 2007 for detailed discussion on this restriction), which can arguably be connected to some \(\phi\)-defective relation between the “subject” and the verb (as proposed by Pujalte & Saab 2012). Whatever is the ultimate explanation of this defectiveness, it seems to have important consequences for case assignment. First, notice that overt nominative marking cannot occur in passive *se* contexts in Spanish:

(105)  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 I  
Intended: ‘I was found.’

(b–c OK as reflexives; see Pujalte & Saab 2012)

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

(106)  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.’

A similar situation occurs with respect to proper nouns (cf. 105b), which can only occur in the impersonal *se* configuration under differential object marking, a property of accusative objects:

(107)  Se encontró a Juan  
SE found.3sg acc J.  
‘Juan was found.’

The basic generalization behind these facts is that only those objects which are not overtly marked for accusative case are allowed to show *verb-subject* agreement effects. This is in consonance with Bobaljik’s (2008) claim that morphological case can interfere with overt agreement. We can then interpret the passive *se* pattern as follows. The internal argument of a passive *se* construction is not syntactically valued as nominative; let us assume that either it could be syntactically valued as accusative or inherently case marked in the syntax. Under both options, it turns out that it can never receive the agentive role, given the activity condition (96A). The abstract representation of passive *se* in the *v*\(P\) domain is illustrated in (108):
At the PF interface, the derivation proceeds via inserting *se* and triggering morphological subject agreement, a relation potentially blocked by the activation of another PF-phenomenon like accusative marking. A simplified final PF representation could be as follows:\(^\text{29}\)

\[
\begin{array}{c}
\text{(109) } \\
\text{CP} \\
\text{TP} \\
\text{T} \\
\text{vP} \\
\text{v_SE} \\
\text{vP} \\
\text{DP_{theme} \rightarrow inactive (syntactically accusative or inherently case marked)}}
\end{array}
\]

\[
\begin{array}{c}
\text{Morphological agreement} \\
\text{DP_{-nominative}}
\end{array}
\]

On the C-I interface side, (103) is activated by the presence of the non-discharged [D] feature on \(v\). In contrast with what we just observed in connection with reflexives (see, e.g., (98) and similar structures), the interface is forced to assign a default interpretation because no “subject” was found during the search. This is why, then, (104) but not, for instance, (97), has a default arbitrary interpretation connected to \(v[D]\).

I conclude then that the best version of (103) makes reference to case and not to agreement or grammatical functions:

\[
\begin{array}{c}
\text{(110) Default agents (Final):} \\
\text{For any agentive } v[D], \text{ assign arb in absence of a nominative subject in the C-domain of } v[D].
\end{array}
\]

The general picture arising from the preceding discussion leads to the important conclusion that there is a difference in the computations of arguments in general. Being the result of syntax, thematic interpretation, a type of A-dependency, proceeds under the conditions on locality and activity at the vP level expressed by (96). Being the result of the C-I interface, default arguments are computed at the CP level. This scenario is sketched in (111):

\[
\text{We are assuming that C agrees directly with the DP, but there are other alternatives, which are worth exploring as well (e.g., C-v agreement, see Rodríguez-Mondoñedo 2007).}
\]
From the arguments made so far, we can conclude that understood arguments pattern similarly to any other syntactic (non-)overt arguments, although they are the result of absence of Merge. As already implied by (99iii), the obvious prediction is that (110) is irrelevant for understood arguments. This is easily demonstrated by a simple passive sentence, like (112), where the internal argument receives nominative case, but it does not intervene in the understood reading of the agentive v. This is because the absence of a [D] feature on v results in no additional computation related to uninterpretable features being triggered.30

(112) Yo fui castigado.  
I was punished.MASC.SG  
‘I was punished.’

5.2. Extensions and implications

It seems that (110) can be extended to arbitrary plural subjects in Spanish and also to impersonal passives in Germanic languages.31 Consider first the example in (113):

(113) Llaman a la puerta. Creo que es Juan.  
call.3PL to the door believe.1SG that is J.  
‘There is someone at the door. It may be Juan.’

Here, the arbitrary reading can be directly attributed to the absence of a nominative subject in the C domain of the first clause. As noticed by Cinque (1988), these plurals cannot have any referential import, as witnessed by the continuation in (113) with an individual referent for the third plural person. Indeed, as is well-known, adding an overt plural subject, ellos ‘they’, makes the sentence fully referential and its continuation in (113) infelicitous. So it has to be the case that arbitrary plurals are default arguments in the sense defined in this paper (see 100).

As for impersonal passives, a default reading for the main subject arises in examples like (114). Such a default arb interpretation licenses, in turn, obligatory control.32

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30 Whenever a by-phrase is present in analytical passives the understood agent is referentially linked to the content of such an agentive phrase.  
31 I would like to thank an anonymous reviewer for calling my attention to the connection between arbitrary plural subjects and (110).
(114) a. Er werd geprobeerd om eekhoorns te vangen. (Dutch)
there was tried squirrels to catch.
‘(Lit.) There was tried to catch squirrels.’

b. Es wurde versucht, Eichhörnchen zu fangen. (German)
it was tried squirrels to catch.
‘(Lit.) It was tried to catch squirrels.’

[van Urk 2013: 170]

However, these control structures become ungrammatical under the presence of a nominative subject within the main C domain. This falls under well-known effects of the so-called Visser’s Generalization (Visser 1963-1973); i.e., “the observation that verbs whose complements are predicated of their subjects do not passivize” (Bresnan 1982: 402):

(115) a. *De leraren werden overtuigd om ze te mogen kietelen. (Dutch)
the teachers were convinced them to may. tickle.
‘(Lit.) The teachers were convinced to be allowed to tickle them.’

b. *Der Lehrer wurde gebeten, ihn zu kitzeln dürfen. (German)
the teacher was begged him to tickle. may.
‘(Lit.) The teacher was begged to be allowed to tickle him.’

[van Urk 2013: 171]

As noticed by van Urk (2013), what produces Visser’s effects is nominative assignment and not movement to Spec,TP, as shown by the following German example, where the nominative subject remains in a vP internal position:

(116) *... weil ja noch nie ein Lehrer, gebeten wurde, ihm zu kitzeln dürfen. (German)
as yet never a teacher, begged him to tickle. may.
‘(Lit.) . . . as a teacher was never begged to be allowed to tickle him.’

[van Urk 2013: 172]

This entire set of facts leads van Urk to reformulate Visser’s Generalization in the following way:

Revised Visser’s Generalization

(117) Obligatory control by an implicit subject is impossible if an overt DP agrees with T.

[van Urk 2013: 172]

32 The connection between impersonal passives in Germanic languages and passive/impersonal se constructions in Romance is not a novelty; see, for instance, Chierchia (2004) and, in particular, Dobrovie-Sorin (1998) and Schäfer (2008).
As stated, van Urk argues, Visser’s Generalization provides evidence for the syntactic presence of an implicit argument in passives. The motivation for such a claim is that the properties of the T node and its connection to the Agree operation (i.e., narrow syntax properties) determine the (im)possibility of obligatory control. It seems to me that this conclusion only follows under particular assumptions on Control and Agree but it is not forced by the empirical facts, which can, indeed, be captured straightforwardly under the theory of implicit arguments proposed in this paper. The basic difference between impersonal and regular passives is that only the former triggers (110). Thus, impersonal passives have an agentive default interpretation for their subject position, which makes subject control perfectly coherent with Visser’s Generalization. Now, the infinitival complement and the main verb are predicates of the same subject. In regular passives, instead, (110) is never triggered because a nominative subject is already present, one which produces Visser’s effects. We are led to conclude that understood agents cannot participate in obligatory subject control structures because this would violate basic constraints on predication theory. Notice, moreover, that (110) predicts, again, that agreement should not interfere with control whenever case is not involved. Put differently, Visser’s Generalization as revised by van Urk in (117) is too strong. This is confirmed by cases of long-distance agreement in passive se environments. Recall that (104), a typical example of passive se in Spanish, triggers (110) regardless of subject agreement. As noticed in the NGRALE, several subject control verbs (e.g., lograr ‘to achieve’, conseguir ‘to manage’, intentar ‘to try/to attempt’, and tratar de ‘to try/to attempt’) allow for long-distance agreement in se passive sentences.\footnote{The NGRALE advises against these sentences for normative reasons, even when they are attested not only in oral conversations but also in written texts of different sorts.}

(118) a. [...] se lograban hacer obras excepcionales [...] 
    SE succeeded.3PL do.INF plays exceptional
    ‘[…] People managed to do exceptional plays […]’

b. [...] se consiguieron cambiar un total de 31 
    SE managed.3PL change.INF a total of 31players 
    contratados […] 
    ‘[…] we/one managed to change a total of 31 contracts […]’

c. [...] se intentan establecer acciones conjuntas […] 
    SE try.3PL establish actions joint
    ‘[…] we/one tries to establish joint actions […]’

d. [...] se tratan de confundir las amistades cercanas […] 
    SE attempt.3PL of confuse.INF the friendships close 
    ‘[…] someone attempts to confuse close friendships […]’

[adapted from NGRALE 2009: 2121-2122]
The behavior of passive se in subject control environments is problematic for Visser’s Generalization as formulated in (117), but fully predicted by (110):arb is assigned as the subject of main C in absence of a nominative subject satisfying the theta-role encoded in main \(v_{[D]}\). Now, both the infinitive and the main predicate apply to the same “subject”.

Evidently, as stated, (110) is still too informal and conjectural. The nature of \(arb\) is left in a rather vague way. I will remain agnostic with respect to two basic options, namely, (i) that \(arb\) is a (free) variable introduced later at some point of the semantic derivation beyond LF or (ii) that \(arb\) is a mere entailment forced by the unarticulated (i.e., defective) nature of sentences with unsatisfied [D] features within their thematic domain. I will also leave open the question of how formal case is connected to predication structure. A full solution to all these problems will arguably alter (110) in its present formulation. At any rate, I think that the difference between default and understood arguments, even if an explicit semantic has still to be given, deserves serious consideration. In fact, other important predictions also would follow from this cut between understood and default arguments. One worth mentioning involves the arbitrary interpretation of implicit arguments. If the system outlined here is on the right track, there is nothing in the nature of understood arguments triggering the arbitrary, human reading. The “arbitrary” reading of an understood agent is just the consequence of the particular interpretation of \(v_{[agentive]}\) and nothing else. In other words, understood arguments do not possess a univocal semantic interpretation; their particular semantic import follows from the syntactic positions to which they are associated. Instead, default arguments seem to encode an inherent human and arbitrary reading. Therefore, we expect understood arguments to be subject to the general conditions that apply within the \(vP\) level. I will explore this aspect of the theory in the next section.

5.3. Interpretation domains for understood arguments

Understood objects are a good case to evaluate this prediction. As is well-known, the idea that there is a type of \(pro_{arb}\) that can be licensed in subject or object positions depending on general UG principles and parametric variation has received a standard consensus since Rizzi’s (1986) work on null objects in Italian (see also Cinque 1988).

A basic fact about objects in Romance is that se insertion is not an available strategy to rescue a putative, non-discharged [D] feature in the Root domain. In this respect, compare the pattern in (120) with (121), taken from Pujalte & Saab (2012):

(120) a. Se compró eso.
   SE bought.3SG that
   ‘That was bought. / Someone bought that.’

b. Se hizo eso.
   SE made.3SG that
   ‘That was done. / Someone did that.’

b. Se cortó eso.
   SE cut.3SG that
   ‘That was cut. / Someone cut that.’
According to Pujalte & Saab (2012), the contrast between these sentences is accounted for because of locality conditions applying at the morphological level. In somewhat simplified terms, clitic insertion at PF cannot apply to a given Root\([D]\) position because at the point in which clitic insertion may apply, that [D] feature is in the complement of the cyclic head \(v\) and, consequently, inaccessible to further computation given well-established phase conditions at PF (Marvin 2002 and Embick 2010, among others).

Assuming this is the case, a revealing conclusion arises with respect to the nature of implicit argument; namely, [D] features in Root position should not be allowed in the general case. Therefore, (123) is deduced:

---

34 Of course, if phases are dynamic and can be altered by different sorts of syntactic mechanisms, then default objects would be licensed in particular contexts. Se insertion in analytical passives environments could be a case at hand:

(i) \(\text{Cuando se es castigado...}\)
\(\text{when SE is punished.MASC.PL}\)
‘When one is punished...’

Pujalte & Saab (2012), however, provide some arguments in favor of the idea that se in (i) is satisfying a T property and not a Root one. When compared with regular impersonal se sentences, cases like (i) have two remarkable characteristics. On the one hand, they are not allowed in episodic environments and, on the other, they cannot occur in infinitival absolute clauses:

(ii) \(\text{*Ayer se fue castigado. (cf. (25))}\)
\(\text{yesterday SE was punished}\)
Intended: ‘Yesterday, someone/one was punished.’

(iii) \(\text{*A serse castigado...}\)
\(\text{to.the be-INF-SE punished}\)
(cf. \(Al \text{ castigarse a los culpables...} \) ‘When the culprits are punished....’)

---
In the general case, default objects are ruled out by locality conditions on cyclic computation.

In other words, (110) does not apply to Root position just because a [D] feature on a Root cannot remain unsatisfied under normal circumstances. The conclusion is that -modulo well-known cases of topic-deleted objects; Huang 1984, Raposo 1986, Campos 1986 and Suñer & Yépez 1988, among many others-, other cases of null objects like the ones in (124) can only be either understood arguments or null generic objects, the choice between these two options being subject to parametric variation.  

A-dependency tests as the ones discussed in section 3.2 suggest that Italian, but not Spanish, allows for null generic objects. So, I will assume that Spanish does not license null generics in object position and that the examples in (124) are derived as Pujalte & Saab, then, propose that both characteristics are accounted for if se is indicating some unsatisfied property of the T node (see their work for details). Under this account, these instances of clitic insertion do not correlate with default objects. Yet, they do not account for the basic fact that sentences like (i) are predicated of some generic derived subject. This can be further confirmed by the fact that (i) triggers Visser’s effect:

(iv)  
\[*Cuando \; se \; es \; desead0 \; trabajar...\]  
\[ \text{when se is wished work.INF} \]  
Intended: ‘When one wishes to work...’

Compare with object control verbs:

(v)  
\[Cuando \; se \; es \; obligado a \; trabajar...\]  
\[ \text{when se is forced to work.INF} \]  
‘When one is forced to work...’

The sentence in (iv) is directly ruled out as a violation of Visser’s Generalization in its original formulation. Notice, indeed, that it is not accounted under the revision proposed in (117) by van Urk (2013); i.e., no overt DP is in an Agree relation with main T. The sentence in (v), in turn, is unproblematic: both predicates apply to the same subject. I will open the problem of how to account for the interpretation of arbitrary derived subjects in contexts like this. Much will depend on the way in which the present theory explains control sentences, and, of course, the syntactic distribution of null generics (see section 3.3).

If null generics and topic-drop phenomena are related as discussed in footnote 20, then we must only distinguish null topics from understood arguments.

Clear tests dividing Spanish from Italian are binding and secondary predication. Rizzi’s famous (ia / iib) are reproduced in the Spanish (b) examples. Notice that I use singular objects in the Spanish examples, because, as is well-known, arbitrary arguments in this language, unlike Italian, triggers default singular third person agreement, as explicitly shown in impersonal se constructions (see, for instance, example (i) in footnote 19). At any rate, the examples are still ungrammatical in Spanish if plural secondary predicates are substituted for the singular ones in the (b) examples.

(i)  
\[a. \; La \; buona \; musica \; reconcilia ___ \; con \; se \; stessi. \]  
\[\text{the good music reconciles with themselves} \]  
\[\text{(Italian)}\]  
\[b. \; *La \; buena \; música \; reconcilia \; con \; si \; mismo. \]  
\[\text{the good music reconciles with himself} \]  
\[\text{(Spanish)}\]  
Intended: ‘Good music reconciles one with oneself.’

(ii)  
\[a. \; un \; dottore \; serio \; visita ___ \; nudi. \]  
\[\text{a doctor.MASC.GP serious visits naked.PL} \]  
\[\text{(Italian)}\]  
\[b. \; *Una \; doctora \; seria \; visita ___ \; desnudo \]  
\[\text{a doctor.FEM.GP serious.FEM visits naked.MASC.GP} \]  
\[\text{(Spanish)}\]  
Intended: ‘A serious doctor visits naked people.’
cases of understood objects (although my argument would remain the same, if Spanish licensed null generics):

(124) a. Los fantasmas asustan.
    the ghosts frighten.3PL
    ‘Ghosts frighten.’
b. La lectura ayuda.
    the reading helps
    ‘Reading helps.’
c. El psicoanálisis cura.
    the psychoanalysis cures
    ‘Psychoanalysis cures.’

What follows from Rizzi and Cinque’s classical works on proarb is that examples of this sort should form a minimal pair with impersonal se constructions, where a similar generic and human reading is obtained but where, at the same time, clitic insertion is mandatory (120). However, this does not seem to be on the right tack. The fact that the Spanish objects in (124) are interpreted as [human, (generic)] is linked to the semantic of these particular verbal Roots and to some aspectual and tense conditions that apply quite generally (although both conditions are independent of each other). Put differently, the semantics of understood objects essentially depends on Roots. So the following sentences can or cannot have a human, arbitrary reading with respect to the objects up to particular Roots and other relevant conditions on interpretation. A sentence like (125a), for instance, can have both readings for obvious reasons, although the human reading is not obtained in (125b), or is hard to get in (125c).

(125) a. Ese cuchillo corta.
    that knife cuts
    ‘That knife cuts.’
b. Juan come bien.
    J. eats well
    ‘Juan eats well.’
c. Esto no limpia.
    this not cleans
    ‘This does not clean.’

That the Root domain triggers particular interpretations is by no means a new observation; it was made in several empirical areas in the Distributed Morphology framework (see Embick & Marantz 2008 for a general overview). Well-known cases of conventional readings of understood objects (e.g., John drinks, or the Spanish (119b) related to physiological processes; e.g., Juan se hizo encima, ‘Juan messed his pants’) are also accounted for in this framework as Root-related phenomena. Thus, we can simply extend this empirical observation to derive the different degrees of systematic readings arising in the domain of understood arguments intra and across languages.
In turn, default readings, to the extent they are available, are systematic and directly predictable from (110). I know of no example where this is not the case for real cases of default arguments (impersonal or passive se).

5.4. More evidence: Interactions with sluicing

Before closing this section, let me introduce an interesting piece of evidence in favor of the basic distinction between understood and default arguments that comes from sluicing of the sprouting type (Chung, Ladusaw & McCloskey 1995), which is a variety of sluicing licensed by implicit correlates in general:

(127) a. Juan comió, pero no sé qué.
    J. ate but not know.1SG what

    ‘Juan ate but I don’t know what.’

To the best of my knowledge, the question of which types of implicit argument can license sprouting has not been explored at length in the literature (although see AnderBois 2012 for an interesting recent proposal), specially, in the Romance area. As is well known, some implicit arguments seem to behave as implicit adjuncts in allowing for sprouting. However, this is not entirely correct: Default arguments as defined here do not allow sprouting. Compare, in this respect, (128) with (129):

(128) a. *Finalmente, se castigó a los culpables,
    finally SE punished ACC the culprits

    aunque no sé quién castigó a los
    although not know.1SG who punished ACC the
    culprits.

tended: ‘Finally, someone punished the culprits, although I don’t who.’

b. *Asaltaron a Juan, pero no sé quién/quiénes
    assaulted.3PL ACC J. but not know.1SG who/who.PL

    quién/quiénes asaltó/asaltaron a Juan.
    by who/who.PL assaulted.3SG/assaulted.3PL ACC J.

    Intended: ‘John was assaulted, but I don’t know who by.’

(129) a. Los culpables fueron castigados, pero no sé
    the culprits were punished but not know.1SG

    por quién fueron castigados.
    by who were punished

    ‘The culprits were punished but I don’t know who by.’

37 The sentences in (128) are grammatical in non-elliptical contexts. In (129), I have included a case of sprouting with an adjunct remnant (see 129c) just to show that understood arguments, as is well-know, pattern like adjuncts in this respect.
b. Este cuchillo corta, pero no sé qué tipo de materiales corta.
   ‘This knife cuts, but I don’t know which kind of materials.’

   c. Juan compró ese libro, pero no sé cuándo lo compró.
   ‘Juan bought that book, but I don’t know when.’

Interestingly, examples like (128) contrast also with the so-called definite implicit arguments, discussed at length by Recanati (2007), which are infelicitous in sprouting when uttered in an out-of-the-blue context:

   (130) #Llueve, pero no sé dónde.
   ‘#It is raining, but I don’t know where.’

Yet, although infelicitous, (130) is not ungrammatical in any relevant sense. Notice, moreover, that the ungrammaticality in (128) cannot be attributed to the existence of some putative pro\textsubscript{arb} underlying impersonal se sentences, because arbitrary objects in generic sentences like (124) can, under the right conditions, license sluicing:

   (131) a. La lectura ayuda, pero no sé a qué tipo de gente ayuda.
   ‘Reading helps, but I don’t know what kind of people.’

   b. Dicen que el psicoanálisis cura, pero no sé realmente a quién cura.
   ‘It is said that psychoanalysis cures, but I really don’t know who.’

The generalization that seems to emerge from this set of contrasts can be stated as follows:

(132) Default arguments are not suitable correlates for licensing sprouting.

There are various ways in which (132) can be handled. Under the particular approach to sprouting proposed in Saab (2008), for instance, regular cases of sprouting are derived assuming that copies and elliptical constituents form a natural class of syntactic objects. Thus, whenever wh-movement takes place the trace left by this operation is elliptical and not computed for other ellipsis operations taking place during the derivation. For a simple case of sprouting like (127), then, the identity condition applied to the Root domain only calculates identity of Roots, which in this case is satisfied. Interestingly, identity cannot be satisfied in cases like (128) simply
because the v head in the antecedent and in the ellipsis sites are not identical (i.e., v[D] in the antecedent ≠ v[D1] in the ellipsis site).\(^{38}\)

Another alternative to the problem will just claim that while understood arguments introduce some type of LF quantification, default arguments do not, at least in episodic environments, which are the relevant ones for sprouting. If this is correct, the ungrammaticality of the examples in (128) would be connected, among other alternatives, to a failure of the mutual entailment condition in ellipsis, which requires mutual entailment between the antecedent and the elided clause under some sort of existential closure (see Merchant 2001). As noticed in AnderBois (2012) (see also Chung 2006), however, such an approach would require important qualifications in order to account for sprouting cases where there is no existential entailment in the antecedent clause (e.g., John arrived, but I don’t who with).\(^{39}\)

At any rate, if default arguments had an expletive character at LF, then I think that the basic contrasts would follow. This conjecture is in consonance with the idea that (110) applies beyond LF. This, of course, will work only under the assumption that the identity condition on ellipsis is calculated at LF and not beyond. At any rate,

\[^{38}\] Under the assumptions made in this paper, this amount to say that the argument structure properties of the antecedent clause and of the ellipsis site are not identical. Thus, (128) is derived as an argument structure mismatch under ellipsis (see Merchant 2013 for detailed discussion). This seems to be confirmed by the fact that the following passive sentences in German do not license sprouting, either:

\[^{39}\] A promising line in this respect is the general approach to sluicing pursed in AnderBois (2011), according to which the antecedent of a given sluicing sentence must have, like the sluicing clause, an inquisitive component. In effect, according to AnderBois, a sentence containing a (c)ovet indefinite (or, more generally, some sort of existential quantification, including quantification over events) contributes to the meaning of the sentence by adding some inquisitive component; i.e., it makes salient the issue of which individual (or event) instantiates the property denoted by the sentence at hand. Given that question meanings are inherently inquisitive, we can conclude that mutual entailment must be defined in such a way as to include not only the truth-conditional information of a given sentence but also its inquisitive meaning. Then, a way of ruling out the examples in (128) would be to claim that default arguments are pragmatically anti-inquisitive, i.e., default arguments would have the opposite pragmatic effect that overt indefinites or understood arguments have. I would like to thank Scott AnderBois for suggesting me this line of analysis.

(i) *Es wurden die Schuldigen bestraft, aber ich weiß nicht wer.

The culprits were punished but I don’t know who.’

(ii) Es wurden die Schuldigen bestraft, aber ich weiß nicht, wer sie bestraft hat.

The culprits were punished, but I don’t know who punished them.’

(iii) *Es wurde (der) Hans angegriffen, aber ich weiß nicht wer.

Hans was attacked, but I don’t know who by.’

(iv) Es wurde (der) Hans angegriffen, aber ich weiß nicht wer.

Hans was attacked, but I don’t know who attacked him.’

Unlike (128a), however, the sentences in (i)-(iv) show a radical formal change between the antecedent sentence, which is formally passive, and the ellipsis site, which is in the active form. I would like to thanks Luis Vicente, who elicited the judgments in (i)-(iv) from German speakers.
regardless of the ultimate explanation for (132), the contrast in (128) and (129) constitutes a clear piece of evidence for the distinction made in this paper.

To conclude, the idea that \textit{arb} readings form a type of natural class that includes at least default and understood arguments is not correct. This is, of course, not surprising, given the different formal source that introduces both types of arguments. What I think is a remarkable consequence of the discussion in this section is how that difference is computed at the syntactic level and at the interfaces. If the conjectures made in this section are correct, then the very basic fact that understood arguments largely outnumber default arguments fits nicely within the framework proposed in this paper, according to which default arguments entail complex (and probably costly) interactions between the computational system and the interfaces that connect the Language Faculty with the external systems.

6. Conclusions

In this study, I have shown, \textit{pace} Landau (2010), that most cases of what is commonly known as \textit{implicit arguments} do not belong to the inventory of syntactic primitives, but are derived from the null hypothesis that absence of Merge is a permitted syntactic option, even in cases when it is expected.

(133) \textit{Null hypothesis}: Implicit arguments simply signal the absence of a (sometimes expected) application of the operation Merge. In other words, at least in the ideal case implicit arguments have no syntactic representation.

Further inquiry into this research program would decide if (131) remains unaltered or not for other cases of implicit arguments in Spanish and other languages (see section 5 for some suggestions). For the time being, the outlined system I suggested seems to be largely confirmed by its empirical coverage. In other words, a theory with (133) at its heart has a strong predictive power. In the empirical domain I have addressed here, its capacity to derive the following set of empirical generalizations has been demonstrated:

\textit{Passives and impersonal constructions (cf. 52)}:

(134) a. the complementary distribution between \textit{v}-related \textit{se} and \textit{by}-phrases
b. the correlation between \textit{by}-phrases and fully defective \textit{v} in passives and event nominalizations
c. the correlation between passive and nominal morphology and the absence of accusative marking
d. the absence of A-dependencies with implicit agents in analytical passives and episodic impersonal \textit{se} constructions
e. the syncretism pattern between impersonals and reflexives/reciprocals

\textit{Causatives (cf. 94)}:

(135) a. absence of impersonal \textit{se} readings in passive and active causatives
b. presence of long-distance reflexivization with passive causatives
c. absence of reflexivization of embedded subjects in both types of causatives
d. absence of double reflexivization with both types of causatives

Of course, an alternative theory where syntactic implicit arguments are introduced to derive the same patterns (134)/(135) could be shown as extensionally equivalent.
At any rate, the burden of the proof remains on those that would defend such an alternative view.

Finally, a possible objection to the approach I have suggested here of the type “we need null generics after all” (see section 3.2) cannot be seriously taken, not only because it entails generalizing the worst-case scenario, but also because the opposite is also true with respect to (133). In other words, an absence-of-Merge approach also seems to be unavoidable in some particular cases, as explicitly recognized by those researchers that believe that extending the ontology of empty categories is a good way to proceed (Landau 2010 being an explicit example).

I believe that part of the discussion on implicit arguments has sometimes been misleading and not well founded because the null hypothesis in (133) does not occupy the place it deserves in the broad debate on silent entities in grammar. If the arguments made here can be proven as essentially correct, we will have contributed to this debate giving a step further in our understanding of such entities.

References


Barbosa, Pilar. 2010. Partial pro-drop as null NP anaphora. Talk given at NELS 41, UPenn.


The motivation for this might be found in the particular architectural claim behind (133) that Merge can be a fallible operation, a maybe controversial (or, at least, underexplored) claim. See Preminger (2014), however, for a similar architectural claim in the domain of agreement.

http://dx.doi.org/10.1093/acprof:oso/9780199257652.003.0002


http://dx.doi.org/10.7551/mitpress/9780262062787.003.0007


Marvin, T. (2002). Topics in the stress and syntax of words. PhD. Diss., MIT.


Müller, G. (2010). On deriving CED effects from the PIC. *Linguistic Inquiry* 41, pp. 35-82. [http://dx.doi.org/10.1162/ling.2010.41.1.35](http://dx.doi.org/10.1162/ling.2010.41.1.35)


