EPP Satisfaction on Discourse Grounds: The Case of Locative Inversion

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Abstract. This article approaches locative inversion as a construction resulting from valuation of the core intentional feature [DI] (for discourse intention) by a locative constituent to obtain an event-reporting thetic statement that expresses a state of affairs located in some spatiotemporal coordinates. I argue that in languages where [DI] is an EPP feature, as is the case with Spanish, the locative is internally merged in Spec, TP, competing with the subject for this position with respect to prominence conditions. Two types of locative-inversion constructions therefore obtain: (i) core locative inversion, where the locative phrase is structurally prominent, and (ii) deictic locative inversion, where the locative phrase is nonprominent but must be merged in Spec, TP for reasons of interface economy. The article explores in detail the differences between the two and

the predicted differences between Spanish and other languages, such as English, where the EPP is

not informational but formal in nature. It also offers empirical support for Spec, TP as the landing

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site of the locative in Spanish (and, it is predicted, in other discourse-prominent languages), showing that locative inversion is not a root phenomenon in this case and can therefore be found in many contexts where standard topicalization would be ruled out.

# 1. Introduction

One of the most long-standing debates in the generative framework has hinged on the specification of the features and/or principles that motivate marked and unmarked syntactic orders. In this respect, the preverbal position of the subject in Spec,TP in languages with a typological SVO order has customarily been made to follow from a general requirement, the EPP, that could ultimately be derived from the need to value some formal feature in Spec,TP. For languages where the subject need not be preverbal or even lexical, such as Spanish, some researchers have contended that Spec,TP does not project and that the EPP is satisfied by head movement of the morphologically rich verb (see, among other works, Alexiadou & Anagnostopoulou 1998, Ordóñez & Treviño 1999, and Kempchinsky 2002). According to this view, when the subject is preverbal in these languages, it sits in a nonargumental position within the CP layer.

<sup>&</sup>lt;sup>1</sup> In Chomsky 2008 and subsequent works by Chomsky, all Merge operations are driven by edge features; in particular, edge features on nonphase heads drive External Merge, while edge features on phase heads (C and v\*) drive Internal Merge. TP is not a phase in this system, but it inherits edge features from C, thus becoming a probe. In previous stages the theory resorted to a specific principle of well-formedness, the E(xtended) P(rojection) P(rinciple), to ensure that all clauses had a structural subject in Spec,TP, and most authors still call EPP the edge feature inherited by T. It is in this restricted sense that the term will be used in this article.

I have argued elsewhere (Ojea 2017) that canonical preverbal subjects in Spanish do in fact sit in Spec,TP and that the EPP feature they value in this projection is not formal but informational in nature.<sup>2</sup> This feature, termed [DI] (for *discourse intention*), codifies the intentional status of a sentence as a categorical or thetic statement and must be adequately valued for the sentence to be a legible object at the conceptual-intentional interface. The ultimate position of the subject in Spanish will thus follow from the different options available in the language to value this feature.

This article further elaborates on that idea, exploring those cases where the feature [DI] must/may be valued by a category other than the DP subject—in particular, by a locative phrase—thus leaving the subject in its underlying position. This process, so-called *locative inversion* (LI), will offer some interesting insights into the role of informational features of this sort in establishing sentential word order. I will show that the possibilities for LI are broader in Spanish than, for example, in English, because Spanish takes a parameter that makes TP discourse sensitive. I will also discuss the role of locative mechanisms (in particular, grammatical aspect and deixis) in making a sentence intentionally adequate, with interesting consequences for the point at stake here.

In section 2, I present the theoretical basis of my proposal, discussing the role of informational features in the Minimalist Program. For this purpose, I briefly sketch the theory of core intentional features defended in Ojea 2017. Section 3 analyzes LI in Spanish, contrasting its properties with those standardly defined for LI in English and distinguishing between two types of structures,

<sup>&</sup>lt;sup>2</sup> The view that preverbal subjects in Spanish sit in Spec,TP has also been sustained, in different terms, in Masullo 1992, Uribe-Etxebarria 1992, Zubizarreta 1998, Cardinaletti 2004, and Quarezemin & Cardinaletti 2017, among other works; see Villa-García 2018 for an overview of the standard proposals in the literature in this respect.

which are defined in terms of structural prominence and pragmatic prominence: *core LI* and *deictic LI*. In the same section, I provide empirical evidence that shows that the locative constituent is, in all cases, ultimately merged in TP, where it is interpreted as the intentional base of the proposition. Section 4 offers some conclusions.

### 2. Core Intentional Features

The Minimalist Program assumes a modular approach to linguistic facts, with a computational mechanism generating an array of hierarchically structured expressions that are transferred for interpretation to two interfaces: the sensory-motor system and the conceptual-intentional system. Regarding the latter, the implication is that all sentences must be not only conceptually adequate but also intentionally adequate, something that makes it plausible to assume that some informational features have a nuclear role in the syntactic derivation.

In this respect, I argue in Ojea 2017 that information structure comprises two different types of features: core intentional features and pragmatic features. This distinction between core intentional features and pragmatic features is important because it mirrors the programmatic distinction between grammatical competence and pragmatic competence with respect to the intentional articulation of the sentence. As conceived of in Ojea 2017, core intentional features, though informational in nature, are part of our grammatical competence. They obligatorily sit in the relevant functional projections and drive the derivation to ensure that the expressions created by the generative mechanism constitute legible objects at the intentional interface even if they appear in isolation. In contrast, pragmatic features (i.e., [the different types of] topic and focus) belong to our pragmatic competence: they are features with which phrasal categories are optionally endowed to accommodate the sentence to particular communicative situations. Pragmatic features are

therefore only present in the derivation when sentences are in context, in which case, as will be made clear in section 3, they interact with core intentional features in a conspicuous way.

As part of our grammatical competence, core intentional features belong to the inventory of UG, and therefore their status in the derivation is equivalent to that of formal features: both cooperate to obtain a fully convergent object, and both determine linguistic variation. Regarding their placement, the null hypothesis is that core intentional features sit in the relevant phases, and therefore, if one adopts the static approach to phases in Chomsky 2008, there will be (at least) one core intentional feature in CP and one in v\*P.<sup>3</sup> The core intentional feature in CP marks the intentional base of a proposition, its point of departure, and is termed discourse intention [DI].<sup>4</sup>

Under this view, the phasal category CP is the locus of (i) the formal features that ultimately arrange the constituents of the sentence under agreement and (ii) the core intentional feature [DI], which allows the proposition to be legible at the intentional interface even if out of context.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> In the literature, there have also been proposals that argue for a more dynamic approach to phases in which the phasal status of a phrase is not fixed but depends on the syntactic context in which it occurs; see, among other works, Bobaljik & Wurmbrand 2005, Bošković 2016, and Gallego 2007. The ideas in this article can be accommodated in models of this sort provided the phasal status of TP is ensured.

<sup>&</sup>lt;sup>4</sup> I will not deal here with the core intentional feature in v\*P, [IF], which marks the *intentional focus* of the sentence. See Ojea 2017 for details.

<sup>&</sup>lt;sup>5</sup> CP also serves to articulate the different types of topicalized and/or focalized constituent that are displaced to the periphery of the sentence under particular communicative conditions; see Rizzi

Jiménez-Fernández & Miyagawa (2014) propose that languages vary in terms of which type of features, agreement or discourse features, are inherited from C by T. Adapting their proposal so that only UG features, that is, formal features and core intentional features (not pragmatic features), may lower into T, languages can be classified as agreement prominent, with only formal features being inherited by T, or discourse prominent, with core intentional features also being inherited.<sup>6</sup> Spanish belongs to the discourse-prominent group and therefore [DI] is inherited by Tense, that is, the EPP is informational in nature; this makes this language particularly interesting for examining the interaction of core intentional features with the computational system.

Adopting current views in the literature, I assume that the operation External Merge constructs syntactic objects by combining lexical elements under selection restrictions. Lexical elements are specified in the Lexicon with their relevant grammatical features, that is, with phonological, semantic, and formal features, the latter being crucially involved in Internal Merge. T, which inherits agreement features from C, attracts the verb (inflected for tense and grammatical aspect in

1997 and related work for some explicit proposals on how the left periphery is hierarchically organized.

<sup>&</sup>lt;sup>6</sup> The term *discourse feature* in Jiménez-Fernández & Miyagawa's account stands for pragmatic features (i.e., topic and focus). In their approach, these features are inherited by T in discourse-prominent languages, which means that any constituent annotated as some type of topic or focus may ultimately sit in Spec,TP. As will be made clear below, my proposal differs from theirs in that what is inherited by T is the (UG) core intentional feature [DI] and, as a result, the categories that may sit in Spec,TP are drastically reduced: only referential DPs or locative PPs under strict structural or pragmatic conditions.

Spanish) and, with no further attraction, establishes an Agree relation with the DP subject, that is, the DP inflected for Case and person/number in its local c-command domain (see Contreras 1991, Olarrea 1996, Ayoun 2005, and Villa-García 2018, among other works). This means that the DP subject in Spanish can remain postverbal and value its  $\phi$  features and Nominative Case in its underlying position in the verbal projection:

$$[CP [TP T V [v*P DP_{Case/person/number} v* [VP (DP) V ...]]]]$$

The core intentional feature [DI] is also inherited by T in Spanish, which must then probe an adequate goal to value it. Two questions arise: which category or categories can value [DI] and what conditions regulate this process of valuation. Regarding the first question, one should bear in

<sup>&</sup>lt;sup>7</sup> The term *subject* is used here to refer to the DP that displays morphological agreement with the inflected verb. In Spanish, the subject thus understood does not need to be the structural subject, that is, the category that sits in Spec,TP.

<sup>&</sup>lt;sup>8</sup> I assume that postverbal subjects in Spanish have Nominative Case, not Partitive or Quirky Case (see Eguzkitza & Kayser 1999 for some discussion on this). A frequent assumption in the literature has been that when the subject is postverbal, T is still involved in Case valuation through a mechanism of Case transmission (cf. Chomsky 1981, 1986, Safir 1985, Burzio 1986, and Vikner 1995, among other works); other approaches defend the idea that, in these cases, Nominative Case can be valued directly within v\*P (cf. Zubizarreta 1998 and Belletti 2004, among other works). My proposal supports the second alternative, for reasons to be discussed in section 3.2.

mind that [DI] is the feature that serves to establish the point of departure of the proposition, and therefore it serves to organize the information structure so that it fits one of the two points of view from which, necessarily, a state of affairs can be regarded:<sup>9</sup>

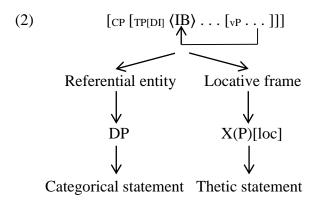
- i. The information structure can be organized as a categorical statement, an intentionally bipartite structure where an entity is named (the logical subject) and something is predicated of it (the logical predicate).
- ii. It can be organized as an event-reporting thetic statement, a single intentionally unstructured complex that merely expresses a state of affairs located in some spatiotemporal coordinates.

As the distinction stands, for scope-discourse reasons (i.e., to make an entity or a location the intentional point of departure of the proposition) the feature [DI] targets either (i) a syntactic category that embodies an entity (i.e., a referential DP) or (ii) a syntactic category that embodies a location (i.e., a locative phrase). <sup>10</sup> In the former case a categorical statement will follow, with the

<sup>&</sup>lt;sup>9</sup> The idea that statements must necessarily be categorical or thetic started with the philosophers Brentano and Marty in the 19th century and gained syntactic relevance after Kuroda 1972. The categorical–thetic distinction is crosslinguistically reflected in the grammatical component, either structurally (syntactically or morphologically) or phonologically (cf. Sasse 1987, Ladusaw 2000, and Breul 2004 for references and discussion). On the crucial role of the categorical–thetic distinction in determining word order in Spanish, see Gallego 2007 and references therein.

<sup>&</sup>lt;sup>10</sup> Following standard theories on the issue, I assume that nominal categories project a functional layer and are syntactically codified as DPs. As for the requirement for the DP to be referential in categorical statements, it follows from the presuppositional nature of the intentional base in this

referential DP constituting the logical subject; in the latter, a thetic statement is obtained, where the locative constituent frames the event in place or time. In languages like Spanish, where, as argued, [DI] is an EPP feature, this forces Internal Merge in T of the corresponding category. The two options are summarized in (2);  $\langle IB \rangle$  (for *intentional base*) stands for the category that ultimately values [DI].



The implication that follows from this process of valuation is that, in Spanish and discourseprominent languages of the same sort, the subject will be preverbal when it constitutes the intentional base of the sentence but will remain postverbal (i.e., in its underlying position after

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type of judgment: only if its reference is presupposed will it be possible to attribute some property to it.

External Merge) when the intentional base is some locative category. <sup>11</sup> This leads to the second issue: what regulates the selection of a referential DP or a locative category as the goal for [DI]?

- (i) ¿Quién ha llegado a la estación?

  who have.PRS.3SG arrive.PTCP.PRF at the station?

  'Who has arrived at the station?'
  - a. #Ha llegado Juan a la estación.have.PRS.3SG arrive.PTCP.PRF John at the station'John has arrived at the station.'
  - b. Ha llegado a la estación Juan.have.PRS.3SG arrive.PTCP.PRF at the station John'John has arrived at the station.'

Only (ib) constitutes an adequate answer to the question, which means that the subject gets narrow focus in Spanish when it appears in the rightmost position in the VP (though see Ortega-Santos 2016:20–25 for an overview of experimental studies that call this generalization into question). In the current literature, this VXS order has been explained by positing either adjunction of the subject to the right of VP (or to some functional projection dominating it) or leftward movement of all the VP-internal material past the subject. For the first type of approach, see Rizzi 1982, Burzio 1986,

<sup>&</sup>lt;sup>11</sup> Throughout this article only nonderived postverbal subjects—that is, only those subjects that remain in their underlying position—will be considered. These are different from subjects in narrow focus, as the examples in (i) show.

At this point, it is crucial to distinguish between context-independent and context-sensitive sentences in order to maintain the broader distinction between grammatical competence and pragmatic competence when evaluating the role of information structure in the derivation. Recall that [DI] is a UG feature present in all sentences, which means that the categorical—thetic distinction should not be associated with contextual requirements imposed on the derivation (i.e., with marked structures). Rather, this distinction will condition word order in discourse-prominent languages even in sentences that initiate the discourse or appear in isolation, constituting a discourse in themselves: *D sentences*. D sentences are all new informationally and, as such, are possible answers to a question of the type *What is happening?*, which is standardly used as an indication that the sentence displays an unmarked (canonical) order of constituents. Consider, in this respect, the following sentences.

- (3) ¿Qué pasa? ('What is happening?')
  - a. Juan ha llegado a la estación.John has.PRS.3SG arrived.PTCP.PRF at the station'John has arrived at the station.'
  - b. Ha llegado Juan a la estación.has.PRS.3SG arrive.PTCP.PRF John at the station'John has arrived at the station.'

and Roberts 1987, among other works, and for the second, Kayne 1994, Chomsky 1995, Pinto 1997, and Ortega-Santos 2016, among other works.

Sentences (3a) and (3b) are both D sentences—there are no previous contextual assumptions imposed on them—and the only difference between the two is the way in which the proposition is intentionally conceived of in each case: as a categorical statement (3a), with a logical subject and a predicate (i.e., an entity, John, is named and the event of arriving is predicated of it), or as a thetic statement (3b), just describing an eventuality framed in time/place (i.e., the entity John is, in this case, simply involved as part of the event). The different word order they display therefore follows from the fact that the DP subject Juan has been targeted as the intentional base in (3a) and not in (3b). Given that in D sentences there are no contextual requirements on the choice of one intentional base or another, the null hypothesis is that in this case valuation of [DI] is strictly regulated by the computational mechanism, only attending to the particular output of External Merge. In particular, in Ojea 2017 I argue that this process of valuation is effected under conditions of structural prominence, an optimal way to link the structure obtained after External Merge with the intentional module. This means that, in the absence of particular discourse considerations, TP must probe the most prominent nominal or locative constituent in the structure, that is, the first referential DP or locative phrase in its local c-command domain.<sup>12</sup>

Assuming a VP projection organized in terms of thematic prominence, the external argument—projected in the specifier of v\*P—will be the most prominent structurally and thus the unmarked

<sup>&</sup>lt;sup>12</sup> As argued in footnote 10, the intentional base must express an existing reference, an individual or a set, which means that it must also be semantically prominent (i.e., be situated high in the referential hierarchy; cf. Haude & Witzlack-Makarevich 2016). This explains why bare NPs, which always have an existential reading in Spanish, cannot be structural subjects in this language.

intentional base in Spanish (i.e., probing any other constituent in the VP would provoke an intervention problem):<sup>13</sup>

(4) 
$$[TP[DI]$$
  $T[v*P External argument(IB) v*[VP...]]]$ 

The argument structure of the predicate will therefore have a crucial role in determining the ultimate intentional status of D sentences as categorical or thetic, the relevant divide being if the verb has an external argument (and if so, of what type) or lacks one. We can establish three verbal classes along these lines:

Class 1: verbs that have a nominal external argument (a DP). This class comprises transitive verbs (*escribir* 'write', *guardar* 'keep', *fumar* 'smoke') and unergative verbs (*trabajar* 'work', *aplaudir* 'applaud', *dormir* 'sleep').

Class 2: verbs that have a locative external argument (a PP). This class includes impersonal verbs such as *faltar* 'lack', *sobrar* 'exceed', and *ocurrir* 'occur', where the locative phrase indicates the place in which the event or state originates.<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> On the definition of *external argument* and for discussion of its thematic and structural prominence, see Bresnan & Kanerva 1989, Grimshaw 1990, Koopman & Sportiche 1991, Levin & Rappaport Hoyay 1995, and Fernández Soriano 1990, among other works.

<sup>&</sup>lt;sup>14</sup> See Fernández Soriano 1990 and references therein for some empirical evidence of the external-argument status of the locative phrase in these cases. For simplicity, I am leaving aside here the group of psychological verbs that have a dative experiencer structurally higher than the

Class 3: verbs that lack any external argument, that is, so-called unaccusative verbs, such as *llegar* 'arrive', *venir* 'come', and *florecer* 'flourish'.

With a class 1 verb, since the external argument (i.e., the structurally most prominent argument) is a DP, this DP will necessarily be targeted as the intentional base, forcing a categorical reading of the D sentence:

- (5) Lorca escribió algunos de sus mejores poemas en Nueva York.

  Lorca write.PST.3SG some of his best poems in New York

  'Lorca wrote some of his best poems in New York.'
- (6) Mi padre trabajó en la Universidad de Oviedo durante dos años.

  my father work.PST.3SG in the University of Oviedo for two years

  'My father worked at the University of Oviedo for two years.'

In contrast, with a class 2 verb, the external argument being a locative phrase, the locative will be the intentional base, producing a thetic statement:

DP subject (*gustar* 'like', *preocupar* 'worry', *molestar* 'bother'). Note that a dative external argument of this sort can be understood as a mental location (see Landau 2010 and Cornilescu 2015, among other works), and therefore these verbs could ultimately be integrated into class 2 (see Fernández Soriano 1990 for other similarities between the two).

(7) Aquí falta un vaso.

here lack.PRS.3SG a glass

'A glass is missing here.'

Finally, in the case of unaccusative verbs (class 3), which, by assumption, have no external argument, v\*P does not project and all the constituents in the VP are in the same minimal domain. This means that they are equally prominent and thus equal candidates for the intentional base; that is, they are structurally equidistant from the external attractor T (see Chomsky 1995, Collins 1997, and Rizzi & Shlonsky 2006, among other works). In this case, [DI] can attract either a nominal constituent or a locative constituent. As I argue in Ojea 2017, the latter option includes the verb when it enters the Numeration in the perfective aspect (*escribió* 'wrote'/*ha escrito* 'has written') or the progressive aspect (*está escribiendo* 'is writing'), because the aspectual morphology in these cases adds a [loc] feature to the lexical structure of the verb: 16

<sup>&</sup>lt;sup>15</sup> On unaccusative verbs see, among other works, Perlmutter 1978, Burzio 1986, Levin & Rappaport Hovav 1995, De Miguel 1999, and Mendikoetxea 1999. The structural equidistance of the internal arguments of unaccusatives has been syntactically instantiated in the analyses put forward in Hoekstra & Mulder 1990 and Irwin 2012, among other works, where the unaccusative verb takes a small clause as its complement.

<sup>&</sup>lt;sup>16</sup> This locative feature expresses temporal location: perfective aspect marks the temporal bounds of the predicate and progressive aspect its middle time (see Smith 1991, Mateu & Amadas-Simon 1999, Demirdache & Uribe-Etxebarria 2000, 2004, Mateu 2002, and Stowell 2007, among other works).

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$$(8) \qquad [_{CP} \left[_{TP} \ T_{[DI]} \left[ v_P \ DP \ V_{([loc])} \ PP_{[loc]} \right] \right]$$

Examples (9)–(11) illustrate these three possible goals for [DI] with an unaccusative verb. Based on the structure in (8), targeting a verb in the perfective or progressive aspect for valuation of [DI], as in (10), is in fact a more economical option for obtaining a thetic statement than targeting a locative argument, since the verb independently needs to move to T to value the formal features there. This is why the word order in (11) only obtains in D sentences when the verb appears in the imperfective aspect (see Ojea 2017 for details).

- (9) El AVE no llega / ha llegado a la the AVE not arrive.PRS.3SG have.PRS.3SG arrive.PTCP.PRF at the estación central.
  - station central

'The high-speed train does not arrive/has not arrived at the central station.'

(10) No ha llegado el AVE a la estación not have.PRS.3SG arrive.PTCP.PRF the AVE at the station central.

central

'The high-speed train has not arrived at the central station.'

(11) A la estación central no llega el AVE.

at the station central not arrive.PRS.3SG the AVE

'The high-speed train does not arrive at the central station.'

In sum, the position of the subject with respect to the verb in Spanish D sentences crucially depends on the argument structure of that verb, that is, on which of its arguments is the most prominent structurally, thus qualifying as the intentional base to value [DI]. Whereas transitives and unergatives unmarkedly have preverbal subjects (the DP subject being the unmarked intentional base in these cases), other verbs like *faltar* or *sobrar* unmarkedly have a locative phrase in Spec,TP, the subject remaining in its underlying position. As for unaccusative verbs, structural equidistance correctly predicts both orders to be possible.

The crucial point is that all these orderings are regulated by the computational mechanism, irrespective of any pragmatic consideration. Under this view, the phenomenon of LI in Spanish (as in (7) and (11)) can be one of the unmarked options for valuing a core intentional (EPP) feature. In the next section I will discuss the distinctive properties of LI that follow from this fact in Spanish and, we predict, in discourse-prominent languages of the same type. I will also explore the discourse conditions that may allow a locative PP to value [DI] in this language even when it does not constitute the unmarked option structurally (i.e., even with a class 1 verb).

#### 3. Locative Inversion

Assuming the theory of core intentional features presented in section 2, LI must be understood as an operation basically motivated by convergence at the intentional interface. Significantly, LI is common to many typologically different languages (see Bresnan & Kanerva 1989, Freeze 1992,

and Bresnan 1994, among other works), a fact that follows naturally from the assumptions made so far: only a referential DP (i.e., the subject) or a locative category can value the obligatory feature [DI], which means that locative PPs—but not, for example, manner PPs—are likely to be found crosslinguistically competing with the subject for the same position.

The term *locative* subsumes spatial and temporal locations (see Birner 1996). In LI the locative constituent sits in a preverbal position while the subject is postverbal. I will still use the term *inversion* for convenience, even though properly speaking there is no inversion of the subject in discourse-prominent languages: [DI] is inherited by T, the locative internally merges in this category to value it, and the subject simply remains in its underlying position after External Merge.

Standard accounts of LI have traditionally put the emphasis on the discourse conditions that regulate it. In particular, seminal studies of LI, mainly based on English examples, agree on three main properties:

- i. The construction has a presentational function, and the subject is (re)introduced in the part of the scene that the preposed locative refers to (see Bresnan 1994). This postverbal subject, though, does not need to appear rightmost in the sentence, as the informational focus (see Culicover & Levine 2001 for discussion):
- (12) Into the room walked Robin carefully. (Culicover & Levine 2001:292)
  - ii. The verb must be informationally light, not contributing new information to the discourse (see Levin & Rappaport Hovav 1995 and references therein). This means that the only possible verbs in the construction, besides copulative *be*, are (unaccusative) verbs of appearance, existence, and inherently directed motion, as in (13); unergative verbs that

impose strict selectional restrictions on their arguments, such as *flutter*, typically predicated of *bird wings* and *flags*, as exemplified in (14a); and unergative verbs that appear with arguments that are prototypically characterized by the activity or process they describe, as in (14b) (where, according to Levin & Rappaport Hovav 1995:256, the argument *girls* can be prototypically characterized by the activities that *chatter* and *sing* describe).

- (13) a. Over her shoulder **appeared** the head of Jenny's mother.
  - b. At night, under the lights [...] **existed** that stricken awareness of a dire event ...
  - c. ... out of the house **came** a tiny old lady ...

(Levin & Rappaport Hovav 1995:220, 221)

- (14) a. ... in this lacey leafage **fluttered** a number of grey birds with black and white stripes and long tails.
  - b. ... around them **chattered** and **sang** many girls ...

(Levin & Rappaport Hovav 1995:255, 256)

- iii. Only locative arguments, not adjuncts, trigger LI (Bresnan 1994 and Pinto 1997, among other works):
- (15) \*On the corner stood up a woman.

(Bresnan 1994:82)

The discourse interpretation of LI (property (i)) results from the fact that a locative constituent marks the starting point of the proposition intentionally, thus forcing a thetic judgment, where the subject is presented just as a participant in the scene being asserted.

As for properties (ii) and (iii), the majority of the analyses of LI in English make them follow from the fact that the locative phrase sits in TP at some point of the derivation, preventing the DP subject from moving there (Stowell 1981, Den Dikken & Naess 1993, Bresnan 1994, Culicover & Levine 2001, and Rizzi & Shlonsky 2006, among other works). On the one hand, this would serve to account for the subject-like properties of the locative phrase (e.g., its behavior with respect to the *that*—trace filter, the fact that it may undergo raising, and the fact that it does not produce weak-crossover effects; see Culicover & Levine 2001). On the other, it would explain why LI is restricted to unaccusative verbs of appearance and existence and verbs that have been "unaccusativized" in the sense of Torrego 1989 (see the subsection below on this): the subject (interpreted as the argument of which the location, change of location, or direction expressed by the locative is predicated; see Bresnan 1994:80) is generated VP internally in these cases and can thus remain there to be read as novel information.

This view of LI as movement into TP has customarily been adopted for Spanish as well, and most proposals in this light also put the emphasis on the type of verb that allows a locative phrase

<sup>&</sup>lt;sup>17</sup> Independently of its connection to the subject position, the theory advocated here predicts that the locative must ultimately be internally merged in CP to value the [DI] feature there; this ultimate placement of the locative in the left periphery has also been a common assumption in the literature (see Stowell 1981, Den Dikken & Naess 1993, Bresnan 1994, and Rizzi & Shlonsky 2006, among other works).

to compete with the subject for that position (see Torrego 1989, Ortega-Santos 2005, and references therein). Alternatively, other researchers have defended an analysis of LI in Spanish according to which the locative directly moves to CP (thus patterning with topicalization), the prediction being that, unlike the case of English, no syntactic restrictions should hold in terms of the argumental valence of the verb or the fronted PP (see Kempchinsky 2001, 2002 and references therein). Note, though, that analyses of this latter type rely heavily on the idea that Spec, TP does not need to be projected in Spanish, which implies that the differences between the properties of English and Spanish LI should be treated as differences in the syntax of the sentence, not in the syntax of the construction.

In the proposal that I defend here, the functional skeleton of the sentence is uniform crosslinguistically and the relevant differences in word order follow from, among other things, the ultimate placement of the feature [DI] that organizes the intentional structure of the sentence, that is, whether it remains in CP or is inherited by TP. Thus, in an agreement-prominent language such as English, TP only inherits formal features from C, forcing a DP with Case, person, and number features to appear in Spec,TP; consequently, D sentences in such a language will necessarily have SVO order, and a prepositional phrase will never be a means of EPP satisfaction in such sentences. As for the feature [DI], it remains in C in English and is thus unmarkedly accessed at the interfaces,

<sup>&</sup>lt;sup>18</sup> Significantly, in the sentences that Kempchinsky 2001 uses to exemplify this "unrestricted" nature of Spanish LI, the locative appears with a demonstrative (e.g., *En esta oficina trabajan los contables* 'In this office work the accountants'). See the subsection below for a principled explanation of this fact.

D sentences being intentionally signaled as categorical or thetic at the phonological interface.<sup>19</sup> LI therefore constitutes a costly means of valuing [DI] in this language, and this is why it is possible only under very specific discourse conditions that affect the verb, the subject, and the relevant locative phrase.

In contrast, Spanish is a discourse-prominent language where [DI] ultimately sits in Spec,TP; that is, the EPP is informational in nature. As argued, locative phrases freely compete with the DP subject as intentional bases here, and this is what makes LI less restricted in Spanish than in English: LI will be possible, in both D sentences and context-annotated sentences, whenever the locative phrase is a more economical option than the subject for valuing [DI]. As will be made clear in the next subsection, the cost of making the locative the intentional base in some cases must be evaluated not only in terms of computational economy but also in terms of interface economy. To explore this, I will first draw a distinction between LI with a class 2 or class 3 verb, where the locative PP is structurally prominent (and therefore the unmarked intentional base), and LI with a class 1 verb, where the DP subject is more prominent than the locative. I will term the former type of LI the *core* type and the latter the *deictic* type.

<sup>&</sup>lt;sup>19</sup> In English, pitch reflects the bipartite–single intentional partition of D sentences: in categorical statements, both the subject and the predicate in VP receive high pitch (e.g., *MAry is SINGing*), whereas in thetic statements only the subject does (e.g., *The BRITish are coming*). See Sasse 1987 for details.

# 3.1. Core and Deictic LI in Spanish

When the verbal predicate in the sentence belongs to class 2, that is, to the class of impersonal verbs that have a locative external argument in Spanish, TP unmarkedly targets that locative for valuation of DI, and thus LI obtains even in D sentences:

- (16) a. En el escenario faltaba la orquesta.

  in the stage lack.PST.IPFV.3SG the orchestra

  'The orchestra was missing on the stage.'
  - b. #La orquesta faltaba en el escenario.

    the orchestra lack.PST.IPFV.3SG in the stage
- in this list exceed.PRS.3SG one reference

  'One reference is not needed on this list.'
  - b. #Una referencia sobra en esta lista.

    one reference exceed.PRS.3SG in this list
- (18) a. En las carreteras comarcales ocurrieron muchos accidentes in the roads local occur.PST.3PL many accidents el año pasado.

  the year last

  'Many accidents occurred on local roads last year.'

#Muchos accidentes ocurrieron en las carreteras comarcales
 many accidents occur.PST.3PL in the roads local
 el año pasado.
 the year last

As I discussed in section 2, valuation of core intentional features is strictly regulated by the computational mechanism in D sentences. Since the locative PP is thematically and structurally more prominent than the subject in (16)–(18), it is this PP that unmarkedly satisfies the EPP feature in Spec,TP. The subject remains in its underlying position in the verbal phrase and can only be preverbal if it is appropriate for the subject to be topicalized or focalized (cf. the (b) examples, which, as D sentences, are infelicitous).

The situation is similar in the case of unaccusative verbs (class 3), but here all the constituents in the verbal phrase are structurally equidistant, and accordingly both the locative PP and the referential DP can be unmarkedly targeted as intentional bases:

- (19) a. A la estación central no llega el AVE.

  at the station central not arrive.PRS.3SG the AVE

  'The high-speed train does not arrive at the central station.'
  - b. El AVE no llega a la estación central.

    the AVE not arrive.PRS.3SG at the station central
- (20) a. En este tipo de terreno florecen los rosales.

  in this type of ground flourish.PRS.3PL the rosebushes

'Rosebushes flourish in this type of ground.'

- b. Los rosales florecen en ese tipo de terreno.

  the rosebushes flourish.PRS.3PL in this type of ground
- (21) a. A las seis de la mañana suena el despertador. at the six of the morning go.off.PRS.3SG the alarm.clock 'The alarm clock goes off at six in the morning.'
  - b. El despertador suena a las seis de la mañana. the alarm.clock go.off.PRS.3SG at the six of the morning

Thus, when the verbal predicate is impersonal or unaccusative, the locative constituent is targeted as the only possible intentional base (examples (16)–(18)) or in alternation with the DP subject (examples (19)–(21)), respectively. In other words, LI is not a stylistic operation in these cases but one of the unmarked (canonical) options available in the grammar of Spanish to satisfy an EPP feature that is informational in this language. These cases—which may be labeled core-LI constructions—involve no grammatical restrictions on the preverbal PP or on the postverbal subject (e.g., there is no definiteness effect on the DP; see Sheehan 2006 and Corr 2012 2016 and references therein).

The grammatical aspect of most of the verbs in examples (16)–(21) is imperfective, but this is not a restriction on the construction either. In the case of impersonal (class 2) verbs, it has to do with the fact that most of them are atelic predicates and therefore more naturally inflected for imperfective aspect (see Ojea 2003 and references therein). As for unaccusatives, as argued in section 2, the LI construction in D sentences is only possible with verbs in the imperfective aspect

for reasons of economy: if the verb were in the perfective aspect (i.e., with a locative feature in its lexical structure), it would be equally prominent as the other two potential intentional bases but more economical in derivational terms than the locative argument, thus the unmarked option for obtaining a thetic statement:<sup>20</sup>

- (22) Ha llegado el AVE a la estación central.

  have.PRS.3SG arrive.PTCP.PRF the AVE at the station central

  'The high-speed train has arrived at the central station.'
- (23) Han florecido los rosales en mi jardín.

  have.PRS.3PL flourish.PTCP.PRF the rosebushes in my garden

  'Rosebushes have flourished in my garden.'
- (24) Ha sonado el despertador a las seis de la mañana. have.PRS.3SG go.off.PTCP.PRF the alarm.clock at the six of the morning 'The alarm clock has gone off at six in the morning.'

<sup>&</sup>lt;sup>20</sup> The role of locative features in the derivation of thetic statements has always been emphasized in the literature. The view advocated here differs from the standard view in that the verb in the perfective or progressive aspect serves as an adequate intentional base (as in (22)–(24)), thus avoiding the use of a null locotemporal category in Spec,TP (Pinto 1997, Tortora 1997, 2001, Sheehan 2006, 2010, Corr 2016) or of a null stage topic, as in Erteschik-Shir 1997's discourse-based articulation of the sentence.

It should also be noted that most of the verbs in examples (16)–(21) have a locative component in their meaning and are semantically light (i.e., they do not imply any agentivity). These instances of core LI therefore capture Bresnan's (1994) observation that in this construction the subject is the argument of which the location, change of location, or direction is predicated. Significantly, though, the corresponding D sentences in English present the unmarked order subject–verb–locative, LI being only possible in this language under strict contextual conditions.

An appropriate communicative situation may also allow a locative PP to value the informational EPP feature [DI] in Spanish in those cases where it does not constitute the (or an) unmarked option structurally: that is, when it appears with a verb of class 1. This is because the pragmatic structure of the sentence conditions valuation of [DI] in a crucial way when sentences are in context. As standardly assumed (see Reinhart 1981), in the dynamics of language use the intentional status of a sentence relies on which part of the information state is shared by the speaker and the hearer at a given point (i.e., the common ground) and on which file card is activated as the starting point for the rest of the proposition in that context. As argued in section 2, when in context, some syntactic constituents are endowed with pragmatic features like [X topic] or [X focus], activated by previous discourse conditions.<sup>21</sup> Adopting the classification of topics in Bianchi & Frascarelli 2010, I assume that in a particular communicative situation a constituent can be annotated as an *aboutness*-

 $<sup>^{21}</sup>$  X stands for any of the different types of topic or focus discussed in the relevant literature. I will not address here the nontrivial question of how exactly these pragmatic features enter the derivation when the sentence is in context; see Zubizarreta 1998 and López 2009 for well-motivated proposals in this respect.

shift topic (A topic), a contrastive topic (C topic), or a given (or familiar) topic (G topic). As Bianchi & Frascarelli argue, the first two types of topics pertain to the dimension of what Krifka (2007) terms common-ground management, that is, they mark the sequence of conversational moves that condition the development of the common ground. In particular, an A topic provides an instruction on how to update the propositional common ground, and a C topic serves to create oppositional pairs with respect to other topics; see Frascarelli & Hinterhölzl 2007 and Bianchi & Frascarelli 2010 for details.

G topics, in contrast, are contextually entailed and relate to the dimension of common-ground content, that is, to the truth-conditional information accumulated up to a given point in the conversation (see Krifka 2007). They therefore neither affect the conversational dynamics nor are phonologically signaled; besides, as Bianchi & Frascarelli (2010) contend, for a constituent to be annotated as a G topic it must corefer with a salient antecedent. All this arguably makes G topics more prominent pragmatically than the other two, prominence understood here as explicit connection with the common ground (i.e., G topics can become the starting point of the proposition with very little retrieval cost).

One can then assume that, in context-dependent sentences, [DI] is valued by a G topic that updates one file card already in the common ground to make it the point of departure of the new proposition. In other words, whereas in D sentences [DI] probes a nominal or locative constituent under conditions of structural prominence, when the sentence is in context [DI] probes a nominal or locative constituent under conditions of pragmatic prominence.<sup>22</sup> Two possibilities then follow:

<sup>&</sup>lt;sup>22</sup> According to this view, the only pragmatically annotated constituents that can serve as intentional bases (and thus be internally merged in Spec,TP in Spanish) are DPs or locative PPs

(i) pragmatic prominence and structural prominence concur (i.e., the most prominent constituent pragmatically is also the most prominent structurally), or (ii) pragmatic prominence and grammatical prominence clash (i.e., the most prominent constituent pragmatically is not the most prominent structurally).

Consider, in this regard, the following sentences.

- (25) En Barcelona<sub>[G topic]</sub> ha ocurrido un accidente.

  in Barcelona have.PRS.3SG occur.PTCP.PRF an accident

  'An accident has occurred in Barcelona.'
- (26) A Salamanca<sub>[G topic]</sub> ya han llegado las cigüeñas. at Salamanca already have.PRS.3PL arrive.PTCP.PRF the storks 'Storks have already arrived in Salamanca.'
- (27) #En Madrid<sub>[G topic]</sub> vivió mi hermana durante su juventud.

  in Madrid live.PST.3SG my sister during her youth

  'My sister lived in Madrid during her youth.'
- (28) #En Harrods<sub>[G topic]</sub> compran los turistas muchos suvenires.

  in Harrods buy.PRS.3PL the tourists many souvenirs

labeled as G topics. A topics and C topics, in contrast, will be targeted into the (articulated) CP projection.

'Tourists buy lots of souvenirs in Harrods.'

If a sentence is integrated into a context where the common ground includes a recent reference to *Barcelona*, *Salamanca*, *Madrid*, or *Harrods*, a locative PP embedding such a referent can be annotated as [G topic] and targeted as the intentional base. With verbs of class 2 and class 3 (examples (25) and (26)), there seems to be no problem with this locative valuing [DI]. Significantly, in these cases there is no conflict between grammatical prominence and pragmatic prominence, since the G topic is also the structurally most prominent category in the VP (i.e., they are cases of core LI, also possible in D sentences).

A conflict in prominence occurs in the case of (27) and (28), though.<sup>23</sup> The DP subject, as the external argument of the verb, is more prominent structurally than the locative PP in these cases

<sup>23</sup> Obviously, different communicative situations may force different pragmatic readings. For example, the word order in sentences (27) and (28) is perfectly possible with the locative PP as a contrastive topic/focus with an intonational break. On the other hand, in (26)–(28), under different contextual conditions, the DP subject could have been annotated as the G topic and the locative as a C topic, with the consequent informational, phonological, and structural differences (recall that C topics move to CP; that is, they appear higher in the structure than G topics):

(i) [Talking about storks and about (a set of) alternative places related to them]

A Salamanca<sub>[C topic]</sub>, las cigüeñas<sub>[G topic]</sub> ya han llegado

to Salamanca the storks already have.PRS.3SG arrive.PTCP.PRF

(see (4)). If the PP is annotated as [G topic], interface economy will interfere with computational economy, since the interface need to make the PP the intentional base will force the use of a costly derivation (on interface economy, see Reinhart 2006). This is why LI is not possible in such cases unless it is perceived as an indispensable operation to mark the intended givenness: the locative will only be targeted as the intentional base if it unambiguously reactivates some referent in the

(pero al Norte todavía no).

but to.the North so.far not

'In Salamanca, storks have already arrived (but in the North, they have not yet).'

(ii) [Talking about my sister and about (a set of) alternative places related to her]

En Madrid<sub>[C topic]</sub>, mi hermana<sub>[G topic]</sub> vivió durante su

in Madrid my sister live.PST.3SG during her

juventud (en Barcelona, después de casarse).

youth in Barcelona after of get.married

'In Madrid, my sister lived during her youth (in Barcelona, after her marriage).'

(iii) [Talking about tourists and (a set of) alternative places related to them]

En Harrods<sub>[C topic]</sub>, los turistas<sub>[G topic]</sub> compran muchos

in Harrods the tourists buy.PRS.3PL many

suvenires (pero en Selfridges compran pocos).

souvenirs but in Selfridges buy.PRS.3PL few

'In Harrods, tourists buy lots of souvenirs (but in Selfridges they buy few).'

near discourse—that is, if it is discourse-linked to a previous antecedent through some deictic mechanism. Compare, in this respect, (27) and (28) with (29) and (30).

- (29) **Precisamente** en Madrid vivió mi hermana durante su juventud.

  precisely in Madrid live.PST.3SG my sister during her youth

  'Precisely in Madrid my sister lived during her youth.'
- (30) En **esta** tienda compran los turistas muchos suvenires. in this shop buy.PRS.3PL the tourists many souvenirs 'In this shop tourists buy lots of souvenirs.'

The deictic adverbial *precisamente* 'precisely' in (29) and the demonstrative *esta* 'this' in (30) explicitly link the locative PP to the referent in the common ground, thus allowing a syntactically nonprominent G topic to value [DI]. As the verbs in (29) and (30) demonstrate, this is irrespective of the type of verbal predicate in the sentence: agentive verbs, both unergative and transitive—further examples are given in (31)–(33) and (34–36), respectively—will be freely found in LI in Spanish provided the locative G topic is deictically connected to the common ground. For convenience, I will refer to this possibility as *deictic LI*.

(31) **Precisamente** en la Universidad de Oviedo trabajó

precisely in the University of Oviedo work.PST.3SG

mi padre hace dos años.

my father ago two years

'Precisely at the University of Oviedo, my father worked two years ago.'

- (32) En **este** proyecto colaboraron muchas personas.

  in this project contribute.PST.3PL many people

  'Many people participated in that project.'
- in that precise moment applaud.PST.3SG all the audience 'Precisely then, the whole audience applauded.'
- (34) En **ese** sótano guardaba mi vecino su bicicleta. in that cellar keep.PST.IPFV.3SG my neighbor his bicycle 'In this cellar, my neighbor used to keep his bicycle.'
- (35) **Precisamente** en Nueva York escribió Lorca algunos de sus mejores poemas.

  precisely in New York write.PST.3SG Lorca some of his best poems

  'Precisely in New York, Lorca wrote some of his best poems.'
- (36) En **esa** fiesta fumó Pedro su último cigarrillo. in that party smoke.PST.3SG Pedro his last cigarette 'In that party, Peter smoked his last cigarette.'

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This obviously contradicts the assumption that the verbs in LI must necessarily be unaccusative or informationally light. <sup>24</sup> And, contrary to what has been assumed in the literature (see Torrego 1989, Rigau 1997, and Mendikoetxea 2006), agentive verbs need not be "unaccusativized" to appear in the construction either. Admittedly, pragmatic factors such as the lightness of the verb or the indefiniteness of the subject conspire in the selection of the intentional base in discourse, the requirement being that this be the most prominent of all pragmatically. Restrictions should nonetheless be defined in terms of which factors force a particular intentional base, not which type of verb heads the construction. Consider, in this respect, the well-known facts noted by Torrego (1989:255):

- (37) a. \*(Aquí) han dormido animales.

  here have.PRS.3PL sleep.PTCP.PRF animals

  'Here have slept animals.'25
  - b. \*(En este parque) juegan niños.in this park play.PRS.3PL children'In this park play children.'
  - c. \*(En este árbol) anidan cigüeñas.

    in this tree shelter.PRS.3PL storks

    'In this tree storks shelter.'

<sup>&</sup>lt;sup>24</sup> As argued above, this is nonetheless a strong restriction in English LI due to the different locus of [DI] in this language.

<sup>&</sup>lt;sup>25</sup> The English translation of examples (37a–c) is the one offered by Torrego.

According to Torrego, the VS order that is possible in these cases, when the preverbal PP is projected, is possible because this PP serves to express overtly a spatiotemporal argument covertly present in unaccusative verbs; in other words, it serves to shift the unergative verb into the unaccusative class, the only class that, she argues, can license postverbal bare-NP subjects. Under the analysis entertained here there is no need for such a shift, and the facts follow directly from the assumptions made so far. As assumed, the EPP feature [DI] must be valued in Spec, TP by a referential DP or by a locative constituent under prominence conditions. In the sentences in (37), the external argument of the verb (i.e., the structurally most prominent argument) is a nonreferential bare NP and therefore does not qualify as an adequate goal for [DI] (see footnote 12 and, for details, Ojea 2017). As a result, only if the locative PP is targeted and merged in TP will the sentence be convergent at the intentional interface. Note, incidentally, that the locatives in the examples are deictic, that is, pragmatically prominent in the sense employed here, and this is what ultimately allows them to qualify as adequate intentional bases. Deixis therefore ensures that a thetic statement will be possible, should the context require it, even in those cases where structural (or lexical) conditions would preclude a locative intentional base.

Summing up so far. In a discourse-prominent language such as Spanish, T inherits the core intentional feature [DI] from C. The EPP is therefore informational in nature and can be satisfied by a referential DP or by a locative phrase, both of them competing for the Spec,TP position under prominence conditions. In this Spanish differs from English, where the EPP is formal and necessarily forces a DP category into TP for agreement. As argued, the feature [DI] remains in C in English and this makes LI a marked (stylistic) operation similar to topicalization, given that in both cases the constituent ultimately lands in a nonargumental projection in the left periphery (see

footnote 17). If my proposal is on the right track, there is no need for such a move in Spanish: the preverbal PP in LI gets interpreted appropriately in Spec,TP since the feature [DI] makes T discourse sensitive. This idea that T is a syncretic category that bears not only agreement features but also discourse features in null-subject languages has been pervasively defended in the literature (see, among other works, Masullo 1992, Uribe-Etxebarria 1992, Zubizarreta 1998, Gallego 2007, Jiménez-Fernández & Miyagawa 2014, Ortega-Santos 2016, and Villa-García 2018). My proposal adopts this view, but it restricts the type of informational features that T may host to the UG feature [DI]; accordingly, only two types of constituents can internally merge in Spec,TP under conditions of structural and/or pragmatic prominence: DPs and locative phrases. The implication is that, contrary to the situation in English, preverbal PPs in Spanish LI will have, syntactically and phonologically, more in common with canonical DP subjects (given that they sit in the same position) than with topicalized phrases. I will show this in the next subsection.

## 3.2. LI in Spanish as Movement into Spec,TP

In Spanish, the locative PP in LI is not phonetically framed as an independent prosodic constituent with a prominent H\* pitch accent, as we would expect it to be if it were in a nonargumental position in the clause periphery (cf. Rizzi & Bocci 2017). Moreover, it freely undergoes (locative) subject

raising, serving as the intentional base of both the subordinate clause and the main clause with verbs of the *parecer* 'seem' type:<sup>26</sup>

- (38) En la mesa parecen faltar los cubiertos de postre.

  in the table seem.PRS.3PL lack.INF the cutlery of dessert

  'Dessert cutlery seems to be missing from the table.'
- (39) En su jardín parecen florecer los rosales sin problema. in her garden seem.PRS.3PL flourish.INF the rosebushes without problem 'Rosebushes seem to flourish in her garden without a problem.'
- (40) En esta universidad parece haber trabajado su in this university seem.PRS.3SG have.INF work.PTCP.PRF her padre hace unos años.

  father ago some years

  'Her father seems to have worked in this university some years ago.'

<sup>&</sup>lt;sup>26</sup> In English, where [DI] is not an EPP feature, a locative phrase may also appear in raising constructions; note, though, that even in these cases the locative is generally compatible with expletive *there* in the subject position, something that hints at an ultimate left-periphery position:

<sup>(</sup>i) On the wall (there) seemed to be hanging a picture of Robin.

(41) Precisamente en Nueva York parece haber escrito

precisely in New York seem.PRS.3SG have.INF write.PTCP.PRF

Lorca algunos de sus mejores poemas.

Lorca some of his best poems

'Lorca seems to have written some of his best poems precisely in New York.'

Examples (38) and (39) are cases of core LI as described in section 3.1: the PP is the unmarked intentional base of the complement clause and, therefore, it also becomes the unmarked structural subject of the raising verb. In (40) and (41), though, the structurally nonprominent PP requires a deictic mechanism to value [DI]; if this deictic category were not present, the sequence would only be convergent on a focused reading of the locative:

- (42) #En la Universidad de Oviedo parece haber trabajado
  in the University of Oviedo seem.PRS.3SG have.INF work.PTCP.PRF
  su padre hace unos años.
  her father ago some years
  - 'Her father seems to have worked in the University of Oviedo some years ago.'
- (43) #En Nueva York parece haber escrito Lorca in New York seem.PRS.3SG have.INF write.PTCP.PRF Lorca alguno de sus mejores poemas.
  some of his best poems
  'Lorca seems to have written some of his best poems in New York.'

Another piece of evidence for LI as movement into Spec,TP in Spanish is the fact that the construction is possible in all kinds of sentences, that is, it is not a root phenomenon, as standard types of topicalization are.<sup>27</sup> Thus one may find LI in central adverbial clauses, as in (44); in complement clauses that are not endowed with assertive force, such as the factive clause in (45); in complement clauses of negative predicates, as in (46); and in complement clauses of antifactive predicates, as in (47) (cf. Haegeman 2004 and Meinunger 2004, among other works, for a discussion of the types of embedded clauses that do not have assertive force). In all these cases both core LI (the (a) examples) and deictic LI (the (b) examples) are possible.

- (44) a. Si en mi casa falta café, voy inmediatamente if in my house miss.PRS.3SG coffee, go.PRS.1SG immediately a comprar=lo.

  at buy.INF=it

  'If there is no coffee in my house I immediately go out to buy it.'
  - b. Si en esa universidad ha trabajado tu padre,
    if in that university have.PRS.3SG work.PTCP.PRF your father,
    ¿por qué no matriculas en ella a tu hijo?
    why not enroll.PRS.2SG in it at your son?
    'If your father has worked in that university, why don't you enroll your son in it?'

<sup>&</sup>lt;sup>27</sup> In English, as argued in Stowell 1981, among other works, the situation is just the opposite: LI is infelicitous in structures that disallow embedded topicalization.

- (45) a. Lamento que en tu biblioteca falte
  regret.PRS.1SG that in your library miss.SBJV.PRS.3SG
  el libro de Chomsky.
  the book of Chomsky
  - 'I regret that Chomsky's book is missing in your library.'
  - b. Lamento que en ese local haya

    regret.PRS.1SG that in that place have.SBJV.PRS.3SG

    tenido tu hermano una experiencia tan mala.

    have.PTCP.PRF your brother an experience such bad

    'I regret that your brother has had such a bad experience in that place.'
- (46) a. Ignoro si en las carreteras locales ocurren muchos accidentes.

  ignore.PRS.1SG if in the roads local occur.PRS.3PL many accidents

  'I'm unaware if there occur many accidents on local roads.'
  - b. Ignoro si en esa tienda compran los turistas muchos suvenires. ignore.PRS.1SG if in that shop buy.PRS.3PL the tourists many souvenirs 'I'm unaware if tourists buy many souvenirs in that shop.'
- (47) a. Espero que en la mesa no falten los hope.PRS.1SG that in the table no miss.SBJV.PRS.3PL the cubiertos de postre.

  cutlery of dessert

'I hope that the dessert cutlery is not missing from the table.'

b. Espero que en ese momento no aplauda nadie.

hope.PRS.1SG that in that moment no applaud.SBJV.PRS.3PL no.one

'I hope that no one applauds at that moment.'

Finally, the locative constituent can be extracted out of the two members of a conjunction, a strong argument for structural subjecthood according to Bresnan 1990; again, this observation applies to both core LI and deictic LI:

- (48) a. Allí es donde llueve y faltan paraguas.

  There is where rain.PRS.3SG and miss.PRS.3PL umbrellas

  'That is the place where it rains and there are no umbrellas.'

  (Fernández Soriano 1990:110)
  - b. Aquí escriben los compositores (las obras) y ensayan
    here write.PRS.3PL the composers the plays and rehearse.PRS.3PL
    los instrumentistas (su ejecución).
    the players their performance
    'This is the place where the composers write (the plays) and the players rehearse (the musical performance).'

All the facts reviewed above show that, in Spanish, the locative phrase in LI is internally merged in Spec,TP and remains there. This in turn implies that this position cannot be involved in

Nominative Case transmission to the DP subject (see footnote 6). The analysis of LI proposed here therefore argues for a VP-internal direct Case marking of postverbal subjects in Spanish.

## 4. Concluding Remarks

In this article I have shown that the basic properties of LI in Spanish fall out as a consequence of the parametric option that this language takes as to what types of features are inherited by T from the CP phase. Spanish T inherits not only formal features but also the core intentional feature [DI], valued under prominence conditions by a DP or a locative constituent. Under this view, LI is an EPP-satisfaction option in Spanish, either unmarkedly (core LI) or when contextually forced (deictic LI), and it constitutes a productive mechanism for obtaining an event-reporting thetic statement.

I have also shown that LI in Spanish differs in this respect from LI in languages such as English, where only formal features are inherited by T and the locative ultimately merges in the left periphery. The locus of the core intentional feature [DI] is therefore a source of parametric variation, and one would expect that in languages that take the same parameter as Spanish, the properties of LI would be similar in the relevant aspects. This seems to be the case with discourse-prominent languages such as Romanian, Italian, and Brazilian Portuguese, where, as in Spanish, LI is possible with verbs other than light verbs, the locative seems to be projected in an argumental position—in Brazilian Portuguese it may even agree (optionally) with the verb—and deixis plays an important role in the construction (see Giurgea 2017 for Romanian, Pinto 1997 for Italian, and Quarezemin & Cardinaletti 2017 for Brazilian Portuguese):

- (49) Aici cântă copiii muzică de cameră sâmbăta seara.
   here play.PRS.3PL children music of chamber Saturday evening
   'Here the children play chamber music on Saturday evenings.' (Giurgea 2017:293)
- (50) In questa casa ha vissuto un poeta.

  in this house have.PRS.3SG live.PTCP.PRF a poet

  'A poet has lived in this house.' (Pinto 1997:69)
- (51) Naquela loja vende/vendem livros.

  in.that store sell.PRS.3SG/sell.PRS.3PL books

  'In that store, books are sold.' (Quarezemin & Cardinaletti 2017:384)

Deeper examination of the properties of LI crosslinguistically will thus prove to be fertile ground for discoveries about the effects of core intentional features not only on word order but also on linguistic variation. Ultimately, this will serve to sustain the distinction advocated here between purely informational features (i.e., pragmatic features such as topic or focus), which mark the integration of a sentence into a context with other sentences, and core intentional features such as [DI], which belong to the UG inventory and, as such, constitute an integral part of the computational mechanism.

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