# DEFINITENESS EFFECTS: THE INTERPLAY OF INFORMATION STRUCTURE AND PRAGMATICS<sup>1</sup>

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#### 1. Introduction

The intensive research that has been carried out over the past two decades on all aspects of Information Structure has had lots of positive results. The most salient one, in my opinion, has been providing us with new insights about how Information Structure (IS) shapes grammatical phenomena that were previously studied as completely unrelated to notions like Topic, Focus and Contrast (Erteschik-Shir 1997 is a major contribution to this perspective). With this situation in mind, the present paper aims to clarify the role of IS in the occurrence of definiteness effects (from now on, DEs) and the way it interacts with pragmatic inference. I will not attempt to present a full account of DEs, but rather to establish what the place of IS should be in a global approach to constraints on definiteness.

It would be obviously wrong to claim that the role of IS has not been considered before in the literature on DEs: in fact, it is customary to mention the focal status of the DP in existential sentences, as well as the thetic ('all-focus', 'all-new') nature of these constructions, and there is ample consensus on the importance of Topic / Focus articulation, not only for an account of DEs but, in a more general way, for the interpretation of indefinite DPs. However, there are still points in need of clarification, and I hope to show that a revision of data and proposals from an IS viewpoint may throw new light on old issues. My claim is that there are two ways in which IS is essential for understanding DEs, in particular when they affect anaphoric definite DPs. On the one hand, IS defines the basic grammatical environments where the DE can appear (existential contexts and unaccusative inversion): such environments are characterized by the presence of a stage topic and the interpretation of the relevant DP as a part of wide focus. On the other hand, IS defines the conditions for violations of the DE to occur: for the relevant DP to violate the constraint and still be acceptable, if it is an anaphoric definite DP, the crucial condition is that it receives a narrow focus reading, since narrow focus implies evoking a set of contextual alternatives, with the corresponding "availability readings"; this works as a sort of "survival strategy" for definiteness, i.e. a

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way to present given information as new. Here pragmatic inference plays the role of a last-resort mechanism for the resolution of interpretive mismatches. As in most studies of the Grammar / Pragmatics interaction, the ultimate goal of this paper is to specify what aspects of DEs are a part of the grammar of natural languages, and what aspects are better analyzed as derived from the interplay of grammatical and non-grammatical factors.

The paper is organized as follows. Section 2 ('Preliminary assumptions') is an overview of basic assumptions and ideas that constitute the background of the ensuing discussion. Section 3 ('The role of Information Structure') is the central part of the paper, and is further divided into three subsections: the first one deals with the interaction between IS and (in)definiteness, the second one with the role of wide focus in specifying the conditions for the DE, and the third one with narrow focus in the counterexamples to the DE. Section 4 ('Pragmatics: inferring relevant interpretations') is devoted to a discussion of the two basic tasks of pragmatic inference in accounts of DEs: one is evaluating the options the grammatical system displays for the expression of one single content, and the other is elaborating the interpretive solutions for semantic mismatches. Finally, section 5 includes both conclusions and some speculations on the family resemblance among DEs and specificity effects.

## 2. Preliminary assumptions

#### 2.1 DP-internal vs DP-external factors for DEs

If DEs are defined as constraints on the occurrence of definite DPs in certain contexts, the first point to be clarified is that there are two kinds of DEs, one due to DP-internal factors, and one due to DP-external factors. Only one type of DE is going to be discussed here, namely the type of DE where IS is involved and has a role to play. IS is obviously irrelevant for those DEs that depend only on factors internal to DP structure. A representative sample of such factors is shown in the examples in (1) and (2): in (1) nominal modifiers block the occurrence of indefinite determiners and force the insertion of the definite article, since the modifiers require uniqueness (cf. Lyons 1999: 246) –thus, these are actually "INdefiniteness effects", instead of proper definiteness effects; in (2) the presence of modifiers –an infinitival relative clause in Spanish for (2a), an evaluative adjective in postnominal position in Spanish for (2b)- excludes the definite article, in favor of indefinite determiners.

- (1)a. {\*a / the} city of Madrid
  - b. {\*a / the} tallest girl in the class
- (2) a. Tengo {una / \*la} cosa importante que hacer. (Spanish)

  Have.PRS.1SG a / the thing important that do.INF

'I have an important thing to do.'

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b. {un / #el} jugador asombroso (cf. el asombroso jugador) (Spanish)a / the player amazing (the amazing player)'an amazing player'
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The constraints illustrated in (1) and (2) result from the incompatibility of definiteness / indefiniteness with the semantic requirements of nominal modifiers. They are independent from factors external to DP structure and, therefore, will not be discussed here. By contrast, the best known cases of DE do in fact exhibit a close connection to IS: they involve existential sentences, as in (3), and certain kinds of unaccusative inversion patterns, as in (4), together with other less studied constructions. This is the kind of DE that this paper deals with.

- (3) \*There was the dog in the yard. (cf. There was a dog in the yard)
- (4) \*Il est arrivé la fille. (cf. Il est arrivé une fille) (French)

  It be.PRS.3SG arrived the girl

  'The girl arrived.'

# 2.2 The DE as a constraint on interpretations

All kinds of DE share a basic feature: the incompatibility of definiteness with a grammatical construction. Ideally, a global account of the DE should rely on a unified notion of definiteness. At the moment, there is no agreement about how this semantic notion has to be defined, and not even about whether one single notion should be established. I will assume that in fact a single notion of definiteness can be used, and I will rely on a characterization of definiteness based on the idea of uniqueness (or inclusiveness, as in Hawkins 1978): a definite determiner encodes the instruction to uniquely identify a referent by means of the descriptive content of the DP plus contextual or background information. Such an instruction is the basic linguistic meaning of definite determiners and pronouns; familiarity and givenness features are also frequently associated with the use of definite elements, but they are just the result of pragmatic inferences triggered by the encoded instruction. Now, whatever our view of definiteness may be, the point I wish to stress is that an account of the DE must be based on the meaning of definiteness. Obvious and selfevident as this assumption may seem, it is still worth mentioning, since in certain syntactic approaches to the DE it has been almost ignored. If the role of definiteness is taken as a starting point, it becomes natural to think of DEs as the manifestations of a semantic constraint. I will adopt this perspective, following Lyons' (1999:46) claim that the DE "is more likely to be a semantic or pragmatic constraint than a syntactic one". There are good reasons to consider the DE as a semantic constraint, in two senses, i.e. as a constraint that has to be explained in semantic / pragmatic terms, and as a constraint against definite interpretations of DPs -or maybe even against a subset of definite interpretations-, more than as a formal constraint against the occurrence of definite determiners<sup>2</sup>. The following are, in my view, compelling arguments in favor of a semantic view of the DE:

- 1. The literature on the DE offers extensive discussion of the well-known counterexamples to the DE in different languages (cf. Suñer 1982, Lumsden 1988, Abbott 1993, 1997, Ward and Birner 1995, Francez 2007, Bentley 2013). It is striking that there is little cross-linguistic variation at this point: the counterexamples correspond to a limited set of cases that are relatively stable (see section 3.3 for discussion). This suggests that the explanation is more likely to be semantic than purely syntactic, both because of the fact that counterexamples are widespread and because they are quite systematic. A syntactic constraint would not admit such frequent and systematic violations. Thus, the facts are more easily accommodated in a semantic approach.
- 2. The DE is in force even in cases where there are no definite determiners involved. Consider the cases of Spanish free relatives in (5) and English bare plurals in (6).
- (5) a. Hay quien no lo cree.

Have.PRS.3SG+LOC who not it believe.PRS.3SG

'There are people who don't believe it.'

b. Quien hizo esto sabía lo que hacía.

Who do.PST.3SG this know.PST.3SG it that do.PST-IMP.3SG

'The person who did this knew what (s)he was doing.'

c. No tengo a quien invitar.

Not have.PRS.1SG to who invite.INF

'I don't have anyone to invite.'

(6) There are beautiful places to visit.

Free relatives in Spanish usually display a definite reading, as can be observed in (5b), where the free relative is the sentential subject and is paraphrased as 'The person who did this'; however, in contexts like the one in (5c), they receive an indefinite reading, with narrow scope with respect to negation. In (5a) a free relative appears inside an existential sentence, and its interpretation is obligatorily indefinite: it is not possible to assign it a definite reading. This is simply an instance of the DE in existential sentences with *haber* 'have' in Spanish, and shows that the constraint holds in the absence of explicit definite determiners.

this paper.

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<sup>&</sup>lt;sup>2</sup> Some authors (for instance, McNally 1992/1997, 2011) have pointed out that there is an asymmetry between definite determiners and universal quantifiers in existential sentences that any analysis of the DE should take into account. Despite its relevance, this is an issue I cannot deal with here. Therefore, I will consider only definite DPs headed by the definite article or by demonstratives or possessives, leaving universal quantifiers out of the scope of

As for bare plurals in English, it is well known that they can receive both generic and existential readings, and this depends on the kind of predicate they are combined with (Individual-level or Stage-level). When they occur as the internal DP (the 'pivot', from now on) in a *there*-sentence, as in (6), only an existential reading is possible, i.e. the kind of reading that an indefinite DP gets. There are no determiners in bare plurals: it is the existential construction that blocks the possibility of a generic reading, and this is again a manifestation of the DE.

3. Finally, it is interesting that existential sentences, the most prominent context for DEs, constrain not only the occurrence of definite DPs, but the plausibility of specific interpretations of indefinite DPs as well. This cannot be unrelated to the facts concerning definiteness, and again suggests that it is some constraint on interpretations that is at stake. Evidence for this 'anti-specificity' effect comes from different sources, such as the anomaly of partitive DPs in *there*-sentences in English and Spanish, in (7) -I am aware of the fact that partitive indefinite DPs are not necessarily specific, but it is true that partitivity tends to favor specific readings; the impossibility of Differential Object Marking in existential pivots in Spanish and Hindi, in (8); the obligatory narrow scope reading of indefinite pivots, illustrated in (9); and the ungrammaticality of non-restrictive relatives -obtained by relativizing the pivot DP- in Spanish and Italian, as in (10).

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(7)
                  #There were two of them in the office.
        a.
                  *¿Cuáles de tus amigos hay
                                                              en el bar?
        b.
                                                                                 (Spanish)
                    Which of your friends have.PRS.3SG
                                                              in the bar
                  'Which of your friends are [there] at the bar?'
(8)
                  Había
                                    (*a) una enfermera.
                                                                                 (Spanish)
        a.
                  Have.PST.3SG
                                         a nurse
                  'There was a nurse.'
        b.
                  *Jangal meN
                                    sher-ko hE.
                                                                       (Hindi; from López 2012: 127)
                   jungle in
                                    lion-ACC is
                  'There is a lion in the jungle.'
(9)
                                             (≠ 'Many girls were not there')
        There weren't many girls.
(10)
                                                en el frigorífico,
                                                                                 (Spanish)
        a.
                  *tres latas, que había
                  three cans that have.PST.3SG in the fridge
        b.
                  *tre lattine, che c'erano
                                                      in frigo,
                                                                                 (Italian)
                  three cans that LOC be.PST.3PL
                                                      in fridge
                  'Three cans, which there were in the fridge'
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At first sight, this cluster of facts may seem completely unrelated to the DE. However, it is reasonable to assume that it originates in the same basic condition that gives rise to the prototypical DE, because dissociating the data in (7)-(10) from the DE would lead us to miss important generalizations. All the data

should be kept together if one aims to understand what kind of condition existential contexts impose on their internal DPs: the null hypothesis is that the whole set of phenomena brought together in (7)-(10), plus the classical DE, can be explained as effects of one single property of the construction; any alternative account would be, in principle, costlier and less natural. With this in mind, a brief comment on the facts is in order here.

In (7) it is shown that certain indefinite DPs, namely those that have a partitive specific reading, tend to be excluded from the pivot position of existential sentences. This implies that not only definites are excluded, but also indefinites whose interpretation is based on some kind of definiteness component –i.e. the contextually given status of the set on which the indefinite operates in partitive structures (cf. Enç 1991 for a view of the DE along these lines). The DE, thus, is not just a ban against DPs headed by definite determiners, but rather a ban against a family of interpretations that includes D-linked or partitive readings of indefinites.

The examples in (8) involve Differential Object Marking (DOM): as extensively discussed in López (2012), DOM is often incompatible with the pivot position of existential sentences –though there are counterexamples, at least in some Southern Italian dialects (cf. Bentley, Ciconte and Cruschina 2015). This is not necessarily to be interpreted as an 'anti-specificity effect', since DOM is not systematically related with specific readings of indefinites in all languages –Spanish is a good example-, but provides valuable evidence in favor of the existence of some abstract property of pivot positions in existentials that is responsible for the ban against definites, on the one hand, and (certain kinds of) specific indefinites, on the other, or even against any kind of discourse prominence that could be associated with the DP. Recall that DOM is in some sense the mirror image of the DE: DOM positions are usually characterized by definiteness and specificity, whereas DE positions exhibit exactly the opposite condition –they exclude definiteness and specificity. It is just logical to wonder whether there is some kind of connection between both phenomena, and this is why I include DOM in the discussion.

What (9) indicates is a well-known property of existential pivots: they show narrow scope with respect to operators like negation. Again, scope is not to be directly identified with specificity, as specific readings of indefinite DPs are only in some cases a matter of scope. However, as with previous facts, the problem cannot be completely disjoint from the DE: it seems quite natural that one and the same feature of existential contexts may underlie both scope restrictions and DEs. In any case, if there is a link, which I do assume, it must be found in the semantics of the construction.

Finally, the data in (10) have not received much attention in the literature, but I think they fit nicely in the argumentation. The problem concerns non-restrictive relatives, as already mentioned. This kind of relative clauses is incompatible with non-specific antecedents, as shown by the ungrammaticality of (11a), where the antecedent is a negative DP, and (11b), where the antecedent is a weak indefinite DP.

(11) a. \*no book, which I looked for, (cf. 'no book that I looked for')

b. \*few books, which I looked for, (cf. 'few books that I looked for')

Once this is assumed, the ungrammatical status of the examples in (10) must be explained as the result of the mismatch between the requirement of non-restrictive relatives and the weak, non-specific reading of the indefinite pivot –a hallmark of existential sentences-. Notice that the same examples are well formed when the relative clause is restrictive (cf. Sp. tres latas que había en el frigorífico 'three cans that were in the fridge'): in such case there is no special requirement on the antecedent. If specific readings of indefinite pivots were available, the strings in (10) would be grammatical. Therefore, we have reasons to believe that existential contexts not only exclude definite DPs, but also specific readings of indefinite DPs. This confirms that the restriction imposed affects types of interpretations, rather than types of

determiners. It seems difficult to capture the obvious connection between the two issues in a purely syntactic fashion. The most interesting consequence of this series of facts is that an adequate account of the DE should be able to capture the analogies with the restrictions on specificity (more precisely, on specific interpretations of indefinite DPs). I will try to bring together some ideas on this point in section 5.

To sum up, I believe there is enough supporting evidence for a semantic approach to the DE. The DE, then, must be a constraint on possible interpretations, as rightly assumed in a large part of the literature. Syntax must play a major role in establishing the conditions for the DE, but the explanation of the restriction cannot be purely syntactic. What syntax does is set the conditions for the constraint to be in force, and a certain amount of cross-linguistic variation is to be found at that level (cf. section 3.2 for variation in information structure).

### 2.3 Syntactic conditions for DEs

From a syntactic point of view, the crucial generalization with respect to DEs is their association with internal arguments of predicates, i.e. with 'object' positions. No DE have been reported affecting external arguments or internal prepositional arguments. The DPs that obey the DE have to occur inside the VP, predominantly in an adjacent position to the verb, and inside the domain of focus. This syntactic condition is not new in the literature: it had already been noticed –and thoroughly investigated- in Belletti (1988), on the basis of data from Italian, and is to a certain extent covered by Diesing's (1992) Mapping Hypothesis, with the assumption that material from VP is mapped into nuclear scope at Logical Form and makes a natural domain for existential closure. The condition holds not only in existential sentences, but in virtually all the syntactic environments associated with the DE, i.e., in unaccusative inversion, in extraposition of modifiers from DPs, and in *have* constructions. There must be some reason why constraints against definiteness and specificity affect only internal arguments<sup>3</sup>. This is one of the key questions we must address; and possible answers, in line with what has previously been said on the semantic nature of the DE, should ideally establish a link between certain positions and the semantics of definiteness.

Needless to say, the DE is not found in all 'object' positions, but only in a small set of them (for instance, there are no restrictions in VP-internal positions of transitive clauses, as well as in locative inversion with fronted PPs). Thus, we need to take into account some additional syntactic condition. A factor that is systematically invoked in the syntactic literature on the DE is the relationship with the presence of expletives in preverbal subject position. In languages like English and French the DE is in fact associated with the presence of the expletives there and il (see Sheehan 2006: ch. 3, Hartmann 2008, Fischer 2013 and Zimmermann this volume for discussion), as shown in (12) and (13).

two reasons: one is to give salience to the essential condition of being VP-internal, and the other one is to keep a parallelism with other DE contexts where the relevant DPs are in fact internal arguments (cf. unaccusative inversion and complements of *have*-predicates). Notice that this implies that being predicates is not the crucial condition for pivots to be affected by the DE, as proposed in Francez (2007).

<sup>&</sup>lt;sup>3</sup> I assume that pivot DPs in existential contexts may be predicates in some languages and arguments of the existential verb in others. When they are arguments, they behave as semantically incorporated expressions, possibly composed by means of the 'Restrict' operation, in Chung and Ladusaw's (2004) terms: thus, they are taken as predicate modifiers, which means that their status is quite close to that of truly predicative pivots (cf. McNally 1992/1997, Zamparelli 2000, Francez 2007, a. o., for the view that existential pivots are predicates). Independently of their predicative or argumental status, I maintain the basic, informal idea that they occupy an 'internal argument' slot, for two reasons: one is to give salience to the essential condition of being VP-internal, and the other one is to keep a

- (12) a. There arrived {a man / \*the man}. (English)
  - b. There is {a dog / \*the dog} in the garden.
- (13) a. Il est arrivé {un homme / \*l'homme}. (French)
  - b. Il y a {un chien / \*le chien} dans le jardin.

The presence of an expletive, be it overt or covert, is considered as an essential condition for DEs in Sheehan (2006): the idea is that, if no expletive is introduced, there will be no DE. Now, despite the clear correlation between expletives and DE that English and French—i.e. non-null-subject languages—display, the idea that an expletive is required for the DE to occur raises some questions and difficulties. I would like to highlight the following points:

- a. Even assuming the correlation to be descriptively adequate, there seems to be no reason why the presence of an expletive in itself should constrain the appearance of definite DPs or definite / specific interpretations. Just stipulating that expletives are responsible for DEs does not help to explain why the two notions are connected. If expletives are analyzed as a sort of existential quantifiers, as in some classical proposals (Milsark 1977), then the incompatibility with definiteness is motivated, but I see no justification for adopting an analysis of expletives along these lines. The only way out, in my view, is assuming that the crucial factor for the DE is not the mere insertion of expletives, but some other significant property of the constructions that in some languages, under the appropriate conditions, manifests itself by means of expletives.
- b. The presence of expletives suggests that existential sentences (cf. 12b, 13b) and unaccusative inversions (cf. 12a, 13a) belong to the same kind of constructions, and in fact they share important features. However, existential and unaccusative inversions do not always pattern together with respect to the DE, as rightly pointed out in Fischer (2013). A case in point is Spanish: whereas it shows a robust DE in existential sentences, it allows for all kinds of definite postverbal subjects in unaccusative inversion, with no overt expletives in any case. This is an indication that there must be other relevant factors that possibly interact with the insertion of expletives and may be more decisive.
- c. At a purely descriptive level, the correlation does not seem to hold, if certain facts are considered: Italian, being a null subject language, has no expletives, but displays a DE in the two constructions under discussion, though it obeys different conditions than the ones relevant for French; according to Fischer (2013:42), in Old French and Old English the DE applies independently of whether an expletive is introduced or not; finally, as Vangsnes (2002) has shown, in Icelandic the DE can be observed both with an expletive in initial position and without it, and moreover, its range varies with the precise position occupied by the subject. The facts indicate that the DE cannot be entirely dependent on the presence of expletives.
- d. The main role assigned to expletives obscures the existence of similarities between existential and unaccusative inversion, on the one hand, and other contexts where the DE shows up without expletives being involved, like *have* sentences (cf. *I have two sisters* vs \**I have the sisters*), on the other. This is not necessarily a shortcoming, as the two sets of contexts could well require different accounts. However, if possible, a unified account is desirable, and the role of expletives in it is by no means clear.

To sum up, there are basically two problems with expletives as a syntactic factor for the DE: one is theoretical and has to do with the reason why expletives should be relevant, and the other one is empirical and relates to the cases in which the DE is not triggered by expletives. In my opinion, the most reasonable position with respect to this issue is trying to retain all the insights of analyses like Sheehan's (2006) while at the same time giving a response to these problems. In doing this, IS enters the picture.

As for the first problem, my proposal is that expletives, in non-null-subject languages, are relevant because they either represent 'stage topics' or indicate the presence of a stage topic -and the corresponding absence of an aboutness topic. In 'thetic sentences' -also called 'all-new' and 'all-focus' sentences- the topic that any sentence is supposed to include as a basis for assessing predication is, according to Gundel (1974) and Erteschik-Shir (1997) among others, a 'stage topic', i.e., the situation given in the context. A stage topic indicates the spatio-temporal coordinates of the predication, and it is usually context-given. The central cases of DE contexts -existential sentences and unaccusative inversions- are typically thetic. In fact, recovering some explicit or implicit location is essential for an adequate contextualization of such sentence types, even in out-of-the-blue uses (cf. Francez 2007 and Bentley, Ciconte and Cruschina 2015 for a similar view of existential sentences). Briefly, in languages that resort to expletives, it is the presence of a stage topic what underlies the insertion of such elements, according to rules that are subject to cross-linguistic variation. Thus, 'stage topic', instead of 'expletive', is the relevant notion for the DE. As stage topics are typically associated with thetic sentences, and both existential contexts and unaccusative inversions are clear examples of thetic sentences, the syntactic condition that seems to emerge as one of the key ingredients of DEs is that syntax must impose a wide focus interpretation to the sequence. Crucially, the condition is related to IS; it will be dealt with in section 3.2.

As for the issue of the lack of a systematic correlation between expletives and DEs, it is no longer a problem once the alleged correlation is seen as an indirect link ultimately dependent on IS notions. The presence of expletives actually is due to factors that play no role in an account of DEs, such as the distinction between null subject languages and non-null-subject languages. There is a considerable amount of research on how the presence of initial locatives as stage topics, explicit or implicit, licenses wide focus inversion in many languages, often with consequences for the (in)definiteness of the postverbal subject, but this is a point that I cannot discuss here (see Rigau 1997, Borer 2005, Sheehan 2006, Lahousse 2011). The assumption I wish to stress here is simply that the DE seems to be associated with one particular kind of subject inversion, and this happens to be wide focus inversion with a stage topic (most commonly found with unaccusative predicates). Expletives are nothing more than grammatical markers associated with this construction in certain languages.

To sum up, the role played by syntax in DEs amounts to the combination of the two conditions discussed so far: the DP must occur in some internal argument position, and the sentence structure must impose a thetic interpretation, with a stage topic. This ensures that the DE will affect only DPs in non-topical positions. A consequence of this view is that syntactic conditions for the DE are in fact motivated by IS (cf. Bentley 2004, 2013 for a similar view). The mediation of IS is required to understand why certain syntactic properties are related to a constraint on definiteness. So here we have a first reason for invoking IS in an account of the DE: IS is needed to define the type of grammatical environment where the DE can appear. A second reason for resorting to IS will be made clear in sections 3.2 and 3.3: I intend to show that IS is also needed to explain the conditions under which the DE is violated.

This is enough to cover, in a broad sense, the classical cases of DEs in many different languages. However, it cannot include the conditions for the DE in those languages in which the constraint is mostly induced by lexical / aspectual factors, such as Hungarian (see Szabolcsi 1984 for a seminal study, and Kiss 1995 and Maleczki 2010 for further discussion) –the same applies to constructions that involve a lexical trigger for the DE, such as *have* predications<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> I will not discuss this side of the problem here, as in this case IS does not display the major role it has in the central contexts. I assume that an account can be found for non-prototypical contexts of DEs that is compatible with the proposal in this paper.

#### 2.4 The nature of the DE

The next question is why definiteness is sensitive to the mentioned conditions. Looking for a satisfactory answer means investigating the real nature of the DE. Although it is not my aim to explore this issue in depth, some remarks are due on how the constraint is originated. I assume without further discussion that the DE results from a mismatch between the definiteness of the pivot and some semantic condition that DE contexts impose. Whatever such a condition may be, the DE results from a clash in semantic properties. There are basically two lines of thought in current approaches to the DE, and they are not necessarily incompatible: either there is a clash between the presuppositional nature of definite determiners and the felicity conditions of the construction, as the construction is intended to introduce new discourse referents that are not previously presupposed (Lumsden 1988, Zucchi 1995), or there is a clash between the referential properties of definite DPs and the requirement of the construction for the internal DP to be semantically incorporated, in some sense, or to be a property-denoting expression (McNally 1992/1997, 2011, Zamparelli 2000, Bende-Farkas and Kamp 2001). Both lines are well justified.

An account inspired by presuppositionality captures in a natural way the fact that (most) definite DPs cannot comply with the requirement to introduce new discourse referents (the Novelty Condition; cf. 3.2). In such an account, the connection with IS should be established on the basis of this requirement.

As for the second theoretical option, the main argument in favor of some version of semantic incorporation (for instance, the one defended in Chung and Ladusaw 2004) is that the properties which characterize DE contexts -a) narrow scope of the postverbal DP, b) specific interpretations excluded, c) only internal arguments affected, and d) only focal positions affected- are all typical properties of incorporated arguments. Very briefly, incorporated arguments are property-denoting expressions that are interpreted as predicate modifiers or qualifiers, thus forming a unit with the predicate they are arguments of. If existential sentences require some kind of semantic incorporation of the pivot, then its denotational properties should be provided by the predicate, via binding of the discourse referent or some other device, and at least a part of definite DPs -in particular, anaphoric definite DPs- would be banned from the pivot position because they are incompatible with a mode of semantic composition that treats them like predicate modifiers. IS conditions would simply make sure that semantic incorporation will proceed smoothly. In a thetic sentence, some process of 'integration' must take place between a predicate and its arguments and adjuncts which turn the sequence into a single informational unit. If integration succeeds, no informational partitions are imposed on the sentence: crucially, there will be no (Aboutness) Topic -Comment partition. This creates an optimal scenario for semantic incorporation. It is well known that definiteness is one of the conditions that tend to block integration, due to the salient discourse status of the referents of definite DPs: this means that definite DPs will resist integration and semantic incorporation, basically because they are good candidates for discourse topics, whereas indefinite DPs will show the opposite tendency.

In what follows I will not argue in favor of any of the two mentioned lines of analysis, and I will remain neutral on this issue (although I suspect that an approach in terms of semantic incorporation could be more adequate to address the interplay with IS). The basic assumption I will rely on is that the DE originates in a semantic mismatch, and it is neither a pragmatic problem nor an IS problem itself. This, of course, does not imply that IS and pragmatics are irrelevant for a study of DEs: I intend to demonstrate that both IS and pragmatics must be taken into account, especially when trying to establish the conditions that govern the possible violations of the DE. IS and pragmatics have a prominent role when studying how speakers manage to circumvent the basic ban against definite DPs in certain environments. For clarity's sake, it is worth emphasizing that IS is a component of the grammatical system, and not a

pragmatic factor, as it is often claimed to be: the clearest evidence for such grammatical status comes from the existence of cross-linguistic variation in the syntax of topics and foci.

## 3. The role of Information Structure

#### 3.1. Topic, focus and definiteness

That IS is relevant for the appearance of DEs in existential sentences and related constructions is hardly a novel insight. It has been repeatedly pointed out that pivot DPs are typically focal and existential sentences are central cases of thetic constructions, i.e. constructions lacking an aboutness topic, typically receiving an 'all-focus' / 'all-new' interpretation. I assume that such characterization is essentially correct, and that theticity has some role to play in a study of DEs: DEs are typically associated with focal domains, and no restrictions against definiteness have ever been attested in topical positions. This is in accordance with another widely accepted idea, namely, that aboutness topics are predominantly referential and definite: compared with existential sentences, they impose the opposite condition. The somewhat simplified picture of the relations between (in)definiteness and IS that results presents DE contexts as the mirror image of topic positions. Table 1 represents this view schematically.

Topic positions	Definite DPs licensed; indefinite DPs often
	rejected
Focal positions in DE contexts	Definite DPs mostly rejected; indefinite DPs
	licensed

Table 1. (In)definiteness and IS

The way Table 1 describes the data deserves some comment. I believe it correctly captures the essence of the constraints, but a number of qualifications have to be added to get a more accurate picture of the situation. Well known evidence in favor of the dichotomy in Table 1 comes from languages without articles. Russian is a good example of how IS determines the interpretation of bare nouns in languages without articles. According to Geist (2012: ch. 4), bare NPs in Russian cannot be assigned an indefinite reading if they appear as aboutness topics: existential indefinite readings require the NP to be a part of comment (cf. Erteschik-Shir 2013). Mandarin and Cantonese are also languages without articles which systematically assign definite or generic interpretations to preverbal (topical) subjects. This confirms the existence of some kind of link between aboutness topics and definiteness (Lyons 1999: 232-236). Despite such correlation, Table 1 still misrepresents some important facts, since the notions 'topic' and 'focus' are too general. A more fine-grained typology of IS notions is needed. Let's first review the case of topics.

It is widely assumed that indefinites are typically excluded from detached or dislocated topic positions, except if they are generic or specific (cf. Reinhart 1981, Erteschik-Shir 1997, 2013, Gundel and Fretheim 2004, Endriss 2009, Dalrymple and Nikolaeva 2011). As topics must represent adequate addresses for information update, the only possibility for indefinites to count as aboutness topics seems to require a 'strong' reading, i.e. a specific or generic reading. According to such a perspective, only referential expressions can serve as aboutness topics. However, topics do not strictly impose a constraint against indefinite DPs: what topics quite often give rise to is, rather, a restriction against non-specificity, which is

not what Table 1 predicts. Moreover, in many languages left-dislocated topics even allow for non-specific indefinites, in spite of received wisdom: the examples in (14) make a representative sample –notice that left dislocation introduces new, shifted topics (cf. Leonetti 2013: 130-141 for discussion).

- (14) a. Un gelat, me' l menjaria amb molt de gust.

  An ice-cream CL.1SG-CL.MASC eat.COND.1SG with much of pleasure

  'An ice-cream, I would eat with much pleasure.' (Catalan; Vallduví 2002: 1255)
  - b. Un libro, l' ho letto.

    A book, CL.MASC read.PRF.1SG

    '(At least) one book, I read.' (Italian; Rizzi 2005)
  - c. Alguna novela, el jurado (la) va a descartar.

    Some novel the jury CL.FEM go.PRS.3SG to discard

    'Some novel, the jury will discard.' (Spanish; Leonetti 2013: 139)
  - d. Drei Filme von Hitchcock(, die) kennt jeder.

    Three films by Hitchcock them know.PRS.3SG everybody

    'Three of Hitchcock films everybody knows.' (German; Endriss 2009: 46)
  - e. Brains you are born with. A great body you have to work at. (Ward and Prince 1991)

With data like these in mind, the situation with topics becomes really puzzling: on the one hand, they seem to host even non-specific indefinites on certain occasions; on the other hand, they are known to constrain the occurrence of indefinite DPs, and in particular non-specific DPs, in some cases. As argued in Leonetti (2013), some progress can be made by distinguishing between internal, unmarked topics (for instance, preverbal subjects, or shifted objects in certain languages) and external, marked topics (dislocated phrases). The constraints against non-specific DPs are typically found in internal topics, depending on the IS rules working in each language. External topics are more permissive, as shown in (14), possibly because they overtly encode an instruction to be interpreted as addresses for information update, and such rule activates certain accommodation processes when the dislocated DPs are not prototypical aboutness topics -for instance, with non-specific indefinites- that makes them acceptable with a contrastive reading. Contrast seems to be a necessary component of the interpretation of nonreferential indefinite external topics: all examples in (14) require some kind of contrastive reading in their topics. Quite informally, contrast is the price a non-specific indefinite has to pay to be accepted as a topic. More generally, as suggested in Leonetti (2014a), contrast provides the interpreter with a reward for adjusting the interpretation of a nominal constituent in a context where "something more" is required to access the intended referent / reading, basically because it forces the interpreter to consider a range of contextual alternatives that expands the context and triggers contextual effects, in Relevance-theoretic terms.

The consequence for the simplified panorama in Table 1 is that at least two different kinds of topics must be distinguished in order to capture the correlations between topicality and definiteness / specificity; otherwise, a rather distorted view will result. Given this, it should not be surprising if the same need appears when investigating the correlations between Focus and definiteness. One of the central claims in this paper is that there is indeed a link between the DE and IS, but one that involves some notion which is more specific than the plain idea of Focus. The next two sections will be in fact devoted to explore the consequences of the distinction between wide focus and narrow (possibly restrictive or contrastive) focus. The naïve view underlying Table 1 should thus be revised and reorganized into a more articulated schema, which is well beyond the limits of this work.

It is worth including here one final observation which is related to the examples in (14) and will become relevant later on, in section 3.2: in spite of their focal nature, pivots of existential sentences can be dislocated as external topics. Quite often this operation gives ill-formed results, as shown in the examples in (15).

- (15) a. #An owl, I think that there is in the garden.
  - b. \*Un livre, il y a sur la table. (French)
    - a book it LOC have.PRS.3SG on the table

However, at least in Romance languages like Italian and Spanish, it is possible to obtain acceptable sentences with dislocated pivots under certain conditions: notice that in (16)-(17), indefinite topics are contrastive, as expected for pivots –in (16) the interpretation is equivalent to 'at least some mistakes', and in (17) it could be paraphrased as 'As for white sharks (but I will not say anything about other species)'.

- (16) Alcuni errori, ci sono, certamente.
  - Some mistakes LOC be.PRS.3PL certainly
  - 'Of course, there are some mistakes.'
- (17) Tiburones blancos, (los) hay también en el Mediterráneo.
  - sharks white them have.PRS.3SG also in the Mediterranean
  - 'White sharks, you can find in the Mediterranean too.'

In section 3.2 I intend to show that the conditions on the dislocation of pivots are actually the same as the conditions on definite pivots. This is why constructions like (16) and (17) will be relevant in the ensuing discussion.

## 3.2 Definite pivots inside wide focus

There is general consensus about the focal status of pivots in existential sentences: it is widely assumed that (a) they can never be topics (leaving apart the cases of dislocation just mentioned in section 3.1), and (b) they must introduce referents that are new to the hearer, which suggests that they must be in focus. This is known as the 'Novelty Condition' (McNally 1992/1997, 2011). A confirmation of the focal status of pivots is the ban on generic readings of indefinite DPs in existential sentences, since generic readings are typically linked to topical positions. Then, if (a) pivots are focal, (b) Focus is related with novel information, and (c) indefiniteness is also related to the introduction of new referents in discourse, Focus must be a crucial ingredient for the DE. Nevertheless, Focus in itself is not enough to account for the DE. It is quite evident that definite expressions may be under focus, or a part of focus, without problems.

Focus and definiteness are not incompatible at all: it is possible to mark definite DPs either as contrastive foci or as (parts of) informative foci.

Thus, the situation is more or less the following: Focus must be related to the DE, if the constraint only affects focal DPs, but it is obvious that not all DPs in focal positions are affected by the DE. Something more is needed to explain the distribution of DEs. Focus alone cannot provide a full answer to the main questions we face. In order to get some clarification of the issue, two aspects of the role of Focus must be better specified: 1. Which kind of focus is relevant for the constraint? 2. How is Focus connected to the interpretive conditions imposed by existential sentences? This section is devoted to a discussion of such points.

As for the first point, we can safely assume that informative focus, instead of contrastive focus, must be the relevant notion for the exclusion of definite DPs, simply because contrastive focus is perfectly compatible with definiteness (cf. contrastive focalization in Spanish: *EL PAN te dije que trajeras* 'THE BREAD I told you to bring'). Once this has been established, we can look at informative focus in more detail, and try to ascertain whether the distinction between wide focus (as sentence focus or predicate focus) and narrow focus (so called "argument focus") can throw some light on the behavior of pivots. The examples in (18) show that for indefinite pivots the distinction seems to be irrelevant: in (18a) the pivot is interpreted as a part of wide focus, whereas in (18b) it receives a narrow focus (argument focus) reading, and in both cases it is straightforwardly licensed.

(18) a. A: - ¿Qué viste allí?

What see.PST.2SG there?

B: - De todo. Incluso había una leona en el jardín.

Of everything even have.PST.3SG a lioness in the garden

'A: - What did you see there? B: - All kinds of things. There was even a lioness in the garden.'

b. A: - ¿Qué hay en el congelador?

What have.PRS.3SG in the freezer?

B: - Pues mira, hay salmón, verduras, y unos helados.

Then look have.PRS.3SG salmon, vegetables and some ice-cream

'A: - What is there in the freezer? B: - Look, there's salmon, vegetables, and some ice-cream.'

However, things look different in the case of definite DPs, in particular with definites that cannot be interpreted as first mention DPs. There is some evidence that the DE is in force when the pivot occurs as a constituent inside wide focus. At first sight, at least, this should be related to the thetic nature of existential contexts. Notice that, if this is on the right track, Focus structure –in particular, the distinction between wide focus and narrow focus- enters the picture as a condition on the insertion of definite pivots, i.e. in cases in which a mismatch arises between the pivot and the existential context.

The basic argument in favor of wide focus as a key condition for DEs –or, more precisely, for banning anaphoric definite DPs from certain contexts- is the fact that some languages show restrictions on definite

pivots with one particular syntactic schema, namely 'V + DP + Locative'. For the DE to hold, it is crucial that the pivot precedes the locative adjunct, and that both are inside the VP, integrated into wide focus. If the locative were 1. removed, 2. fronted or 3. dislocated, the DE would vanish or considerably weaken, which suggests that definiteness is in some sense incompatible with the presence of the locative only when it is explicit and occurs in the rightmost position inside the VP. As Sheehan (2006: 150) notices, these are exactly the conditions under which the expletive *there* occurs in English. Therefore, she argues, this parallelism strongly supports the existence of null expletives in VSPP order –verb + subject + prepositional phrase- in Romance null subject languages and their connection with DEs. Although I depart from such perspective, Sheehan's insights must be seriously taken into account, since they highlight the importance of wide focus inversion as the locus of DEs. I will review examples from Italian, Catalan, Portuguese and English that bear on the role of wide focus.

Italian provides us with clear examples of the effects of locatives both in unaccusative inversion and in existential sentences. Belletti (1988) showed that in unaccusative and passive structures the DE can be observed when an overt locative follows the subject, as in (19)-(20) (see also Benincà, Salvi and Frison 1988).

- (19) È entrato {un ladro / \*il ladro} dalla finestra. (Cf. È entrato il ladro)

  Be.PRS.3SG entered a thief / the thief from-the window

  '{A thief / The thief} entered through the window.'

  (20) È stato messo {un libro / \*il libro} sul tavolo. (Cf. È stato messo il libro, sul tavolo)

  Be.PRS.3SG been put a book / the book on-the table
  - '{A book / The book} has been put on the table.'

In Belletti's analysis, the contrast between VSPP (with DE) and VS (without DE) has to do with the syntactic position of the inverted subject: it occurs in the pivot position –an internal argument slot- only in the first case. In VS, the subject could also appear in a higher position, adjoined to VP, as any other postverbal subject in a null subject language (in other versions of the proposal, this position is the specifier of a low Focus Phrase). According to Belletti, once the subject is not inside the VP, the DE vanishes. I will choose a slightly different interpretation of the facts: in my view, the DE holds when the DP is included in the domain of wide focus.

According to Leonetti (2008), the same kind of contrast between final and non-final position for definite DPs is found in existential sentences in Italian (and Catalan). Again, the definite DP –the pivot- is acceptable only if the final locative PP is removed or dislocated (cf. the Coda Constraint in Leonetti 2008: 144), as shown in (21) and (22) –except in so-called 'eventive existentials'<sup>5</sup>, where definite pivots are

construction should be in each language (see Villalba 2013 for Catalan), but it is sure that eventive existentials should be distinguished from proper existentials, and the distinction reflects Sasse's (1987) previous distinction between 'entity-central' and 'event-central' thetic sentences (valuable proposals can be found in Lambrecht 2002 and Dobrovie-Sorin and Beyssade 2004/2012 for French, and De Cesare 2006 and Cruschina this volume for Italian). I

will not deal here with this kind of violations of the DE.

<sup>&</sup>lt;sup>5</sup> Eventive existentials are clear counterexamples to the DE in languages like French, Catalan, Italian and English: in this case, instead of asserting the presence of some entity somewhere, the sentence introduces a whole situation that is taking place at some moment and place, as in English examples like *There is that man on the phone again* or *There is John waiting at the door for you*, from Lyons (1999: 239). It is not completely clear what the syntactic analysis of the

perfectly compatible with the coda; the ill-formed sentences in (21) and (22) are marked with '??', instead of an asterisk, because the anomaly is subtle and sometimes difficult to perceive for speakers, as it depends on Focus structure and intonational contour.

(21)a. ??C'è quel problema nelle prime pagine<sup>6</sup>.

LOC be.PRS.3SG that problem in the first pages

b. C'è quel problema, nelle prime pagine. / C'è quel problema. / Nelle prime pagine, c'è quel problema.

'??There is that problem (in the first pages).'

(22) a. ??Hi havia el degà a la reunió<sup>7</sup>.

Loc have.PST.3SG the dean to the meeting

b. Hi havia el degà, a la reunió. / A la reunió, hi havia el degà. / Hi havia el degà.

'The dean was present at the meeting.'

So far, Italian and Catalan show that the DE is in force when the offending definite DP is followed by a locative phrase, whereas it is not when the DP occupies the rightmost position in the core sentence. Although this pattern cannot be found in every language, due to factors that I will discuss in section 4.1, it is certainly not a mere coincidence, and, moreover, it is significant for the connection between IS and the DE. Before discussing the implications of this fact, it is worth adding some cross-linguistic evidence of the presence of the pattern.

Sheehan (2006: 149ff) points out that in European Portuguese postverbal definite subjects in unaccusative inversion are not licensed if followed by an overt locative; when the locative is not in the final position, the definite subject is acceptable, as shown in (23).

(23) Chegou Galguém / \*o João } ao colégio.(Cf. Chegou o João / Ao colégio chegou o João)

Arrive.PST.3SG someone / the João to-the school

'{Someone / João} arrived at school.'

Thus, the DE can be noticed only in VSPP wide focus inversion, but not in the VS pattern. This reproduces the situation already described in Italian subject inversion. As for existential sentences, in European Portuguese the DE is quite strong, due to the division of functions between sentences with *haver* –DE in force- and sentences with *estar* –no DE-, like in Spanish (cf. section 4.1); counterexamples are not so common. Nevertheless, they are not impossible to find, and it is significant that definite pivots

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<sup>&</sup>lt;sup>6</sup> Needless to say, a reading of *nelle prime pagine* 'in the first pages' as a nominal modifier must be excluded. In such case, the PP would not be a coda, and the definite DP would be fully acceptable.

<sup>&</sup>lt;sup>7</sup> The Catalan data were first pointed out in Rigau (1994, 1997).

in European Portuguese are, again, not followed by any coda: they appear in the final position. The examples in (24) were collected from a journalistic corpus (I am grateful to Fátima Oliveira for providing me with the data), and confirm the validity of the generalization: definite DPs circumvent the DE when they receive a narrow focus reading in final position (but the DE holds when they appear inside wide focus). Notice that the examples in (24) are analogous to the well-known 'list' readings of existential sentences in English (cf. section 3.3).

(24) a. Para sobremesa, além de fruta, havia os doces seguintes: leite creme,

For dessert, apart of fruit, have.PST.3SG the sweets following: custard,

mousse e pudin de café.

mousse and pudding of coffee

'As dessert, apart from fruit, there were the following sweets: custard, mousse and coffee pudding.'

b. ...nessa altura também havia os bares gregos, onde...
in that time also have.PST.3SG the bars Greek, where...

'At that time there were also the Greek bars, where...'

c. Do lado da Morais, havia os empregados e o caixeiro, ...
on the side of Morais have.PST.3SG the employees and the cashier

'On the side of Morais, there were the employees and the cashier...'

Finally, even English offers some support for a generalization about the non-final position of the offending DP in DE contexts. Safir (1982) points out that in presentative *there*-constructions certain contrasts arise that seem to reproduce the same pattern that is found in Italian and Portuguese; the relevant examples are in (25)—quoted in Belletti (1988)-.

- (25) a. \*There hung the coat on the wall.
  - b. There hung on the wall the flag of the country that John had fled.

Both Safir and Belletti suggest that the definite DP appears in different positions in (25a) and (25b): a position that is internal to VP in (25a), where the DE holds, and one that is adjoined to VP in (25b), where the DE is not in force. Moreover, the "heavy" nature of the DP in (25b) favors its rightmost position. I agree with the original intuitions, and it may well be true that different positions are involved in the contrast, but I believe that the crucial distinction is related to IS: only in (25a) is the definite DP inside wide focus. This applies to the whole variety of facts reviewed<sup>8</sup>.

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<sup>&</sup>lt;sup>8</sup> An additional piece of evidence that is worth mentioning comes from Basque. Etxeberria (2012) confirms that the DE is found in Basque, as shown by the ungrammatical status of (i), but he crucially points out that in the varieties

The surface generalization that emerges from the data is the following: definite DPs are excluded in DE contexts when they are followed by another constituent inside the VP, while they manage to "survive" when they occur in the rightmost position. It seems that definite pivots —or at least the most referential and discourse-linked among them- tend to avoid the internal position followed by the coda because they cannot be licensed in a DE context if they remain inside the domain of wide focus. When definite pivots occur in the rightmost position, they are naturally interpreted as narrow foci, thus avoiding to be included in wide focus. In section 3.3 I show that this is in fact a systematic feature of a well defined class of DE violations.

The fact that it is wide focus what really determines the exclusion of definite DPs fits quite naturally in an approach to the DE based on some variety of semantic incorporation. If the domain of Focus extends all over the sentence, a single informational unit is obtained, and some kind of integration between predicate, arguments and modifiers is needed. This results into an optimal context for semantic incorporation. As definiteness is a factor that hinders integration, in particular with anaphoric and discourse-linked definites, it will predictably produce a mismatch in contexts requiring semantic incorporation.

Simply assuming that IS rules may vary from one language to another, certain apparent problems with cross-linguistic variation can be integrated under this approach. In the Romance domain, not all languages behave like Italian and Catalan in unaccusative inversion patterns. Whereas Italian, Catalan and Portuguese show a DE in VSPP order, as shown in (19)-(20) and (23), in Spanish and Romanian the restriction is absent, and definite postverbal subjects are allowed both in VS and in VSPP orders, as shown in (26)-(27).

(26) Ha entrado el ladrón por la ventana. (Spanish)

Have.PRS.3SG entered the thief for the window

'The thief entered through the window.'

(27) A intrat Ion prin geam. (Romanian)

Have.PRS.3SG entered Ion through window

'Ion entered through the window.'

that create existentials by means of locative inversion, a definite pivot is allowed when the locative coda is topicalized, and a comma is introduced between the coda and the pivot, which gives rise to the contrast between (ii) and (iii). This strikingly reproduces the pattern already observed in Italian and Catalan. Though it seems that the facts can be again derived from the interaction of definiteness and wide focus, I leave this issue for future research.

(i) \*Zopan eulia dago. soup.DEF.in fly-Def be.PRS.3SG '\*There is the fly in the soup.'

(ii) \*Atean gizona dago.
Door.DEF.in man.DEF be.PRS.3SG

"There is the man at the door."

(iii) Atean, gizona dago Door.DEF.in man.DEF be.PRS.3SG The absence of DE in the VSPP pattern in Spanish and Romanian represents a problem for the generalization on wide focus, since a definite DP is allowed in a grammatical context that is typically associated with a wide focus reading (see Leonetti 2014b for an analysis of VSX order in Romance). Nevertheless, there is a simple explanation for such contrast. In Romance, VSX is a marked pattern that needs a thetic / wide focus interpretation. Italian and Catalan, being languages that need to resort to explicit marking of informational partitions in marked word orders -by means of dislocation, focalization, clefts..., tend to exclude the formation of complex strings without partitions, and are strongly sensitive to factors that favor or hinder integration -like definiteness (recall the natural association of definiteness and topics). Spanish and Romanian represent, among the Romance languages, the opposite behavior: they are quite permissive with the formation of informational chunks in marked word orders, in the sense that they do not need to establish informational partitions by means of dislocations or cleft structures, so that VSX sentences are allowed with a wide focus reading, i.e. as single informational chunks, without problems. I assume that this is essentially the reason why Italian and Catalan lack VSX order, whereas Spanish and Romanian display it: Spanish and Romanian allow for wide focus readings of sentences that would need some Topic - Comment or Focus - Background partition in other Romance languages (for instance, VSX sentences). Due to this IS feature, they are not particularly sensitive to factors like definiteness in sentences requiring informational integration, and thus wide focus VSX inversions are acceptable even with definite postverbal subjects. Then, it is this feature of IS -tolerance to complex strings without informational partitions- what guarantees that VSPP sentences will show no DE in Spanish and Romanian. This type of cross-linguistic variation is perfectly compatible with what we know about DEs. And once again, some aspects of DEs appear to be dependent on certain features of IS.

One last set of data must be introduced here, in order to enrich the empirical basis of the generalization on wide focus. The data concern the possibility of dislocating an indefinite pivot DP in an existential sentence in Spanish and Italian (cf. section 3.1). Left dislocation of the pivot implies introducing a resumptive element in the construction: the resumptive is an accusative clitic in Spanish, and a null pronoun (*pro*) in Italian. The contrasts in (28) and (29), where the dislocated contrastive topics are optional, suggest that the operation is subject to strict conditions.

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(28) a. ??(Un problema,) lo hay en la oficina. (wide focus)

A problem CL have.PRS.3SG in the office
b. (Un problema,) lo hay, (en la oficina). (coda as given information)
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'There is a problem at the office.'

(29) a. ??(Alcuni errori,) ci sono pro nelle prime pagine. (wide focus)
 some mistakes Loc be.PRS.3PL in.the first pages
 b. (Alcuni errori,) ci sono pro, (nelle prime pagine). (coda as given information)

'Some mistakes, you can find in the first pages.'

Resumptive elements associated to (explicit or implicit) dislocated topics seem to be acceptable either when the coda is topical and given –it may be implicit or detached- or when the coda is under narrow focus. In the first case, the sentence can be used as an answer to a question like 'Are there problems at the office?' or 'Are there mistakes in the first pages?'; in the second, it can be an answer to a question like 'Where do you think there are problems now?' or 'Where can I find some mistakes?'. In both situations,

represented by (28b) and (29b), an informational partition is established between the coda and the rest of the construction, and the resulting sentence is acceptable. In (28a) and (29a), on the contrary, the coda is not separated as a topic or as a narrow focus, and a wide focus reading is assigned to the sentence; it could be an answer to a question like 'Have you identified some problem?' or 'Did you find some mistakes?'. The result is an awkward utterance. This implies that the presence of the coda imposes the same conditions both to the insertion of definite pivots and to dislocation of the pivot. Both phenomena obey the Coda Constraint. Further confirmation of the constraint is found in existential sentences that accept only an 'all-new' reading, like the exclamations in (30): dislocation of the pivots and the corresponding insertion of a resumptive are forbidden, as shown in (31).

(30)una serpiente en la cocina! ¡Hay a. Have.PRS.3SG snake in the kitchen b. C'è in cucina! un serpente Loc be.PRS.3SG a snake in kitchen 'There is a snake in the kitchen!' (31)??La hay en la cocina. CL have, PRS, 3SG in the kitchen in cucina 9 b. ??C'è pro Loc be.PRS.3SG in kitchen

It seems that the only possibility for a definite resumptive to occur in an existential construction is to be kept apart from the locative coda in IS: whenever the resumptive and the coda happen to appear together inside the domain of wide focus, there is a clash. The clash is surely due to the association between the resumptive and the topic: if the resumptive links a topic with an internal position in the sentence, it cannot be taken as a part of wide focus at the same time, because a contradiction would arise. What is relevant here is that in existential sentences both the dislocation of the pivot as a topic and the insertion of definite pivots are constrained by IS conditions, and by the same IS conditions: both operations are incompatible with a wide focus interpretation in which focus encompasses the whole string, but compatible with an informational partition that isolates the coda as a topic or as a narrow focus. Moreover, the parallelism suggests that restrictions on topics and restrictions on definite DPs are just two manifestations of one single property of existential sentences, the one that lies behind the DE. Things are a bit more complicated than what I presented here (see Leonetti forthcoming for details), but this is enough to confirm the generalization on wide focus. If the wide focus / narrow focus distinction turns out to be so productive, then it is necessary to look at the effects of narrow focus as well.

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<sup>&</sup>lt;sup>9</sup> Notice that in (29) and (31b) an interesting interaction between the DE and *pro-drop* can be observed: as the null pronominal subject is interpreted as definite and anaphoric, it is excluded from the existential context, but if the partitive clitic *ne* is used, an indefinite interpretation of the pronominal pivot is guaranteed, and thus the sentence is perfectly acceptable (cf. *Forchette? ??Ci sono in cucina*, with a wide focus reading vs *Forchette? Ce ne sono in cucina* 'Forks? There are some in the kitchen'). This confirms that there is in fact a DE in Italian existentials when the coda is inside wide focus. Pro-drop is allowed if there is no coda or if the coda is under narrow focus. See Burzio (1986:129) for some observations on pro-drop in existentials.

#### 3.3 Narrow focus and contrast

This section aims at presenting evidence that a number of typical DE violations are associated with narrow focus on the pivot. Counterexamples to the DE actually fall into two main classes, which will turn out to be decisive for a better understanding of the problem (cf. Lumsden 1988, Abbott 1993, Ward and Birner 1995, Francez 2007). One group contains instances of so-called 'self-establishing definites', i.e. definite DPs that are not anaphoric and may establish new discourse referents, thus conforming to the basic requirement that pivots must be hearer-new. In this kind of definite DPs the uniqueness condition is satisfied by means of DP-internal material, since the descriptive content of the DP is rich enough to identify a unique referent, so that there is no need to look for uniqueness-supporting information in the speech situation or in the preceding discourse. Actually this is the crucial factor that allows them to be used as 'first mention definite DPs' and to introduce new discourse referents. This group includes a series of well-known cases: superlatives, cataphoric definites, definites and universal quantifiers with 'kind' or 'type' readings, and weak definites. The classical English examples reproduced in (32) are a representative sample of the first type of DE violations.

- (32) a. There is the strangest bird in that cage.
  - b. There was the usual crowd at the beach last Sunday.
  - c. There was the smell of pot all over the apartment.
  - d. There is every reason to be suspicious.
  - e. There is the outline of a human face hidden in this puzzle.

This kind of definite pivots can be found even in languages that display a robust DE, like Spanish (Leonetti 1999: 816-817): they represent a straightforward way for definites to fit in existential contexts avoiding the emergence of a serious mismatch between the construction and the pivot. In fact they don't need any particular contextual condition to appear, and may be classified among "non-contextualized existentials", following the generalization in Abbott (1993: 45): "...any NP which can be interpreted as introducing a new entity into the discourse should be possible in a non-contextualized existential."

A second group of counterexamples to the DE, equally well known, concerns anaphoric definite DPs, demonstratives, names and even pronouns, i.e. the kind of definites that cannot be used to introduce new referents and are thus excluded as 'first mention definites' –in a few words, discourse-linked definite DPs, i.e. the most reluctant expressions to be included in an existential context. Let's assume, for simplicity's sake, that a clear distinction can be drawn between 'self-establishing definites' and 'anaphoric' definites. This second group of cases shows two salient properties that have been widely discussed in the literature (in particular, in McNally 1992/1997: §5.2, Abbott 1993, Ward and Birner 1995, Hu and Pan 2007: 136, Bentley 2013: 700-702): one is the need for a specific context, which makes them "contextualized existentials", in Abbott's terms; the other is a restricted set of special readings that we can dub 'enumerative' or 'availability' readings (this comprises 'list' readings and reminders, just to mention different terms that have been used in the literature). The need for a special context means that contextualized existentials cannot initiate a discourse –in fact they typically occur as reactions or responses to other utterances-, and have the function of drawing the addressee's attention to the existence

of some entity or entities with respect to a set of contextual assumptions, either because the entities have been forgotten or overlooked, or because they are available and suitable for some previously established purpose or goal. The three classical English examples in (33), from Rando and Napoli (1978) and Abbott (1993), illustrate the major features of contextualized existential sentences or 'list existentials'.

- (33) a. A: Is there anything to eat?
  - B: Well, there's the leftover chicken from last night.
  - b. A: I guess we've called everybody.
    - B: No, there's still Mary and John.
  - c. A: How many people know about this?
    - B: There's me and there's you. That's all.

It is clear that this group of counterexamples to the DE must be kept apart from the first group, as it represents a radical mismatch between the definiteness of the pivot and the requirements of the construction—the pivot does not conform to the novelty condition. The facts are particularly relevant for an analysis of DEs in connection with IS. Actually, most of the data discussed in this paper have to do with the behavior of 'anaphoric' definite DPs. First of all, it is important to recall that they reproduce a systematic pattern, since they can be detected in many different languages, and not only in existential sentences, but also in other DE contexts such as possessive constructions with the equivalents of *have*. The examples in (34)-(36), from Bentley (2013: 701-702), confirm that 'list / availability' readings are associated with discourse-linked definite DPs in DE environments in French, Brazilian Portuguese and Catalan; the examples in (37)-(38) show that the pattern is the same in Spanish and Italian, despite the different distribution of the DE in the two languages. The data are all from the Romance domain, but they suffice to show that the phenomenon appears every time that an anaphoric definite DP is used in a DE context (notice that the definite DP refers always to a set of children already established in discourse).

(34) a. Nous ne pouvons pas divorcer: il y a les enfants. (French)

We NEG can.PRS.1PL NEG divorce it Loc have.PRS.3SG the children

'We cannot divorce: there's the children.'

b. Nous ne pouvons pas divorcer: nous avons les enfants.

We NEG can.PRS.1PL NEG divorce we have.PRS.1PL the children

'We cannot divorce: we have the children.'

(35) a. Não podemos nos divorciar: tem nossos filhos. (Brazilian Portuguese)

<sup>10</sup> It is not impossible to obtain an 'availability' reading with an indefinite pivot, as pointed out in McNally (1992: 193), especially if the indefinite DP is specific. However, in such cases the reading is much less salient than with anaphoric definites.

NEG can.PRS.1PL CL divorce have.PRS.3SG our children

'We cannot divorce: there're our children.'

b. Não podemos nos divorciar: temos as crianças.

NEG can.PRS1PL CL divorce have.PRS.1PL the children

'We cannot divorce: we have the children.'

(36) a. No ens podem divorciar: hi ha els nens. (Catalan)

NEG CL can.PRS.1PL divorce LOC have.PRS.3SG the children

'We cannot divorce: there're the children.'

b. No ens podem divorciar: tenim els nens.

NEG CL can.PRS.1PL divorce have.PRS.1PL the children

'We cannot divorce: we have the children.'

(37) No podemos divorciarnos: tenemos a los niños<sup>11</sup>. (Spanish)

NEG can.PRS.1PL divorce have.PRS.1PL to the children

'We cannot divorce: we have the children.'

(38) a. Non possiamo divorziare: ci sono i bambini 12. (Italian)

NEG can.PRS.1PL divorce Loc be.PRS.3PL the children

'We cannot divorce: there're the children.'

b. Non possiamo divorziare: abbiamo i bambini.

NEG can.PRS.1PL divorce have.PRS.1PL the children

'We cannot divorce: we have the children.'

A second crucial fact, already noted in Rando and Napoli (1978), Lumsden (1988: 216-219), Abbott (1993) and Leonetti (2008: 144-145), is the absence of the locative coda in 'contextualized' existentials with definite pivots: the pivot is systematically the rightmost constituent, as can be observed in (33)-(38). In Abbott (1993) it is claimed that this is due to the given status of the coda in this kind of examples; in Leonetti (2008) the absence of the coda is analyzed as a particular case of the Coda Constraint, already discussed in section 3.2. This grammatical condition should ideally be derived from a global account that captures the whole cluster of properties of 'contextualized' existentials.

<sup>11</sup> In Spanish the existential construction with *haber* is incompatible with anaphoric definites (\*Hay los niños), but the 'list / availability' reading shows up with *tener* 'have'. This point will be discussed in section 4.1.

<sup>&</sup>lt;sup>12</sup> (38a) is ambiguous in Italian: it can receive an availability reading, but a locative reading is possible too.

The systematic occurrence of 'list / availability' readings suggests that they emerge as the interpretive solution to the semantic incompatibility between the pivot and the grammatical context –along the lines of the pragmatic accounts in Lumsden (1988), McNally (1992) and Abbott (1993). I believe that this idea is worth developing to find an explanation for the two salient properties mentioned before: the 'contextualized' status of the sentences with definite DPs in (33)-(38), and the appearance of 'availability' readings. Some interesting questions arise at this point: why is a special contextualization required? And why does the context involve a particular set of assumptions instead of others? Why are notions like 'list' or 'reminder' relevant? Notice that 'list' and 'reminder' look like intuitive and superficial characterizations of something that still has to be integrated in the grammar of existential contexts (cf. Abbott 1993: 43 and Hu and Pan 2007: 141-142 for some criticism of such characterizations); in fact, it is possible to have lists in non-contextualized existentials as well.

In Rando and Napoli's (1978) proposal, examples like those in (33) escape the DE because it is not the (given) referent of the pivot that is introduced, but rather the list of entities where it belongs, counting the list as new information and thus obeying the Novelty Condition. In a few words, the members of the list may be familiar and given, but the list itself fits adequately in the existential environment. Now, such solution has some appeal, but it is still unsatisfactory: the notion of a list is not restrictive enough, it cannot capture the interpretations of all the relevant examples -as Hu and Pan (2007: 142) note on the basis of Chinese data, what is asserted is not the existence of a list, but the existence of a membership relation between an entity and a presupposed set, which seems a more efficient characterization of the problem-, and it is not clear how it emerges. Abbott (1993: 43) suggests that 'list' readings are the result of "the assertion of the existence of an item whose existence is presupposed". My proposal is in line with Abbott's, but gives a central role to IS. In a nutshell –as advanced in Leonetti (2008: 154-157)-, the idea is that the set of counterexamples to the DE known as 'contextualized' existentials can be defined as the set of existential sentences where an anaphoric definite pivot occurs under narrow focus. 'List / availability' readings are simply the result of placing a definite pivot under narrow focus. The need for narrow focus automatically explains the absence of a locative coda, since the pivot must occur in the rightmost position to be interpreted as narrow focus in a natural way, so that the coda has to be implicit or dislocated. What follows in this section is devoted to reviewing some empirical evidence supporting this idea and to elaborating some of its consequences (see section 4.2 for additional comments).

1. The first piece of evidence in favor of the role of narrow focus obviously comes from the data supporting the Coda Constraint in languages like Italian and Catalan. It is usual to assume that the DE is not present in these languages, given the well-formedness of examples like the following:

(39) a. C'è Gianni.

LOC be.PRS.3SG Gianni

b. Hi ha en Joan.

LOC have.PRS.3SG the Joan

'There is John.'

In Leonetti (2008) it is claimed that the absence of DE is only illusory, and depends on the presence of the locative coda, as already observed in examples (21)-(22). If we exclude so-called 'eventive existentials' and weak definites with 'kind / type' readings, the data confirm that all alleged cases of violation of the DE in Italian and Catalan display definite pivots that happen to occur as narrow foci, in final position. The generalization may be somewhat obscured by the intriguing status of the *esserci* construction in Italian, since it seems to conflate the properties of existentials and 'pseudo-existential locatives', as

argued for in Zamparelli (2000) –see Cruschina this volume and section 4.1. for details; however, it is robust enough to take it as a manifestation of a general tendency.

2. The counterexamples to the DE in Hebrew analyzed in Ziv (1982) show that when anaphoric definite DPs are involved they must be under narrow focus. Ziv (1982: 75-77) claims that (40a) and (40b) are adequate as responses to questions like 'Who is teaching linguistics at MIT?' and 'What's in the brown closet?', which implies that the sentences are equivalent to 'list' / 'reminder' *there*-sentences in English, and, moreover, that the definite pivots are narrow foci.

```
(40)
                yeš šam et
                                 xomski /
                                                 yeš et
                                                         xomski
                                                                          be
                                                                                   am ay ti
        a.
                'be' Loc Acc
                                Chomsky /
                                                 'be' ACC Chomsky
                                                                                  MIT
                                                                          at
                'There is Chomsky, (at MIT).'
        b.
                yeš ba'aron
                                haze et hame'il haxadaš šelxa
                'be' in the closet this ACC the coat the new your
```

'In this closet there's your new coat.'

Ziv considers other cases of definite pivots that do not obey the condition on narrow focus, like the DP hamexonit hazot 'this car' in (41), but notices that here the DP has a kind reading, equivalent to 'this model'. The corresponding IS assigns narrow focus to the locative, and maintains the pivot inside the background constituent. This is possible because the pivot gets a kind reading, thus behaving like a weak definite, perfectly acceptable in the existential context. Such definite pivot needs no special licensing through narrow focus. Despite Ziv's claim that sentences like (41) are actually more locative than existential, because of the DE violation, I believe we can still analyze them as common existentials: in fact, very similar data can be found in Spanish haber-sentences with accusative clitics as pivots.

- (41) yeš et hamexonit hazot ecel kol soxen ba'arec.

  'be' ACC the car this at every dealer in the country

  'This car can be found at every dealer in the country.'
- 3. The next piece of evidence for narrow focus as a licensing mechanism for anaphoric definite DPs can be found in French. Zimmermann (this volume) carefully reviews all kinds of attested cases of violations of the DE in French unaccusative sentences, and finds out that the pivot "is freely allowed to be definite under (at least) one of the following conditions":
- use of restrictive *ne...que* 'only':
- (42) Il n' arrive que les filles.

  It not arrive.PRS.3SG that the girls

  'Only the girls arrive.'

- use of the verbs rester 'remain' and manquer 'lack':
- (43) Il reste / manque les filles.

It remain.PRS.3SG / be-missing.PRS.3SG the girls

'There remain the girls / The girls are missing.'

- 'cataphoricity' of the DP:
- (44) Il a été vole à la bibliothèque les livres suivants <sup>13</sup>:...

  It have.PRS.3SG been stolen at the library the books following

  'The following books were stolen at the library....'
- list item status of the DP (enumerative use):
- (45) Il a dormi ici Jean, Paul et François.It have.PRS.3SG slept here Jean, Paul and François'Jean, Paul and François slept here.'
- restrictive complements in the DP ('post-determination'):
- (46) Il arrive les filles les plus belles du monde.

  It arrive.PRS.3SG the girls the most beautiful of-the earth

  'The most beautiful girls in the world arrive.'
- 'genericity' / non-referentiality of the DP / participation in idiomatic expressions:
- (47) Il lui venait la sueur au front.

  It him/her come.PST.3SG the sweat to.the forehead

  'It brought the sweat to his/her brow.'

Descriptive grammars usually offer a list of contexts and factors like this, instead of a unified account of the availability of definite DPs. However, such account is not difficult to obtain, if one realizes that the factors are essentially the same ones already pointed out for the DE in English. More precisely, cataphoricity, restrictive complements and genericity / non referentiality belong to the series of factors characterizing the group of expressions we dubbed 'self-establishing definites' –a group that includes weak definites, superlatives and kind readings, and all 'first mention' definite DPs. Such group is not particularly relevant here: it represents the kind of DE violations that is commonly found in different languages, with DPs that comply with the Novelty Condition. More interesting is noticing that the use of restrictive *ne...que*, *rester* and *manquer*, together with 'list' / enumerative uses, gives rise to a compact set of cases that share an important property: the postverbal definite DP is focused, and in particular it must be interpreted as narrow focus, mostly with a contrastive value (the same applies to simple examples like

<sup>&</sup>lt;sup>13</sup> In (44) the verb is not unaccusative itself, but the construction fits in the list adequately due to the unaccusative properties of passive sentences.

Il est arrivé l'électricien 'The electrician arrived'). Of course, the DP —a definite DP that typically receives an anaphoric interpretation- occurs in the rightmost position. Enumerative readings are the same phenomenon we just discussed for other languages, and ne...que has the same effects as the focal adverbs I will mention below: the facts are the same again, and definite DPs are licensed by narrow focus and contrast in a context where indefinite expressions are clearly preferred. The pattern is the same in enumerative existential sentences with avoir (cf. Dobrovie-Sorin and Beyssade 2012: 110). Narrow focus reveals itself as a systematic factor in a well defined set of counterexamples to the DE. Moreover, postverbal definite DPs with enumerative readings display a number of common properties with inverted subjects appearing in the French construction Lahousse (2011) dubs as focus inversion: this kind of inversion pattern is characterized by narrow, contrastive focus on the subject.

4. An additional argument for the crucial role played by narrow focus is provided by the insertion of focus particles and focal adverbials with anaphoric definite DPs in certain languages. Catalan is a good example. As I already mentioned, Catalan allows for definite descriptions and names to occur as pivots in *aver-hi* constructions, but typically excludes personal pronouns, as shown in (48) —which is to be expected, if pronouns are the least prone elements to be inserted in an existential context.

(48) \*Hi ha ell (al pati).

LOC have.PRS.3SG he at-the courtyard

'There's him (in the courtyard).'

Interestingly, in spontaneous use and even in the written language it is possible to find cases of pronominal pivots, always in final position, without coda, and under the scope of a focal adverb like *només* 'only', as in (49) (I am grateful to Xavier Villalba for providing me the data; cf. Villalba this volume):

(49)A Itàlia els Rafael Azcona representa la literatura cinematográfica. a. Rafael Azcona represent.PRS.3SG the literature cinematographic at Italy the millors escriptors escrivien per al cinema, però a Espanya, gairebé només hi writers write.PST.3PL for the cinema, but at Spain, almost only Loc best ell. (El Punt, 23-12-11) ha have.PRS.3SG he

'Rafael Azcona represents the literature for cinema. In Italy the best writers used to write for cinema, but in Spain there was hardly anyone else apart from him.'

Keane o Arctic Monkeys tenen bones cançons, però pel que fa
 Keane or Arctic Monkeys have.PRS.3PL good songs but for.the that do.PRS.3SG
 a personalitats, només hi ha ella. (El Periódico, 24-6-11)
 to personalities, only Loc have.PRS.3SG she

'Keane or Arctic Monkeys have good songs, but as for personalities, there's only her.'

If narrow focus is essential for a strong pronoun to survive in an existential environment, here the focal adverb conspires with the rightmost position to make sure that the pronoun receives a narrow focus reading, enriched by contrast. The role of the focal element can be expected to be decisive in the licensing of strong pronouns as pivots (this was already pointed out in Beaver, Francez and Levinson 2005).

Hu and Pan (2007) show that certain significant cases of violation of the DE in Chinese –excluding those related to eventive existentials- include a definite pivot not followed by a coda, and crucially associated to a focus particle like *hai* 'in addition', as in (50):

(50) Hai you neige ren / Zhangsan.

In-addition have that man / Zhangsan

'There is in addition that man / Zhangsan.'

It seems clear that Chinese confirms the generalization: if an anaphoric / given definite pivot is acceptable in an existential sentence, it must be under narrow focus.

5. Finally, there is an observation made in Hartmann (2006) concerning 'list' readings in English that fits nicely into this discussion. Hartmann claims that the distinction between existential and 'list' readings in there-sentences parallels the distinction between predicational (John is a good friend) and specificational (My best friend is John) readings in copular sentences. Specification opens a list of which the referent of the postcopular DP is a member. The same interpretive operation is at work in 'list' readings. The simplest way to capture the parallelism is resorting to Focus structure: what the two constructions have in common is just narrow focus on the postverbal definite DP, and it is narrow focus that is responsible for the contextual emergence of something like a list –a point I deal with in what follows.

Now that some cross-linguistic evidence for the role of narrow focus has been presented <sup>14</sup>, it is possible to show that narrow focus is the key notion to understand the pervasive phenomenon of 'list' / 'availability' readings in counterexamples to the DE. My claim is that all properties of such readings can be derived from narrow focus. The more salient syntactic feature is the absence of a locative coda in 'contextualized' existentials, and it has already been shown to be a consequence of Focus structure. As for the remaining properties, they will be discussed in section 4.2 and explained as pragmatic elaborations of narrow focus.

## 4. Pragmatics: inferring relevant interpretations

<sup>&</sup>lt;sup>14</sup> Notice that even in a language like Hungarian, where constraints on definiteness are strongly dependent on aspectual and lexical factors, narrow focus is able to "neutralize" the DE under appropriate conditions (cf. Szabolcsi 1984, Kiss 1995, a. o.).

#### 4.1 Competition between candidates

This section aims at clarifying what the role of pragmatics is in the distribution of the DE. I assume that, under normal circumstances, pragmatic inference cannot override syntactic constraints and turn ungrammatical sentences into grammatical ones. However, it can still play a major role in adjusting interpretations in context and accounting for facts that are not completely determined by the grammatical system <sup>15</sup>. Simplifying a bit, pragmatic inference is crucial in two facets of interpretation: one is the selection of the relevant reading of a sentence on the basis of the set of possibilities offered by the grammar for the expression of a certain propositional content, and the other one is the resolution of interpretative mismatches by reaching an adequate interpretation that is compatible with the context and the semantics of a construction. I briefly deal with the first issue in what follows; the second aspect will be discussed in section 4.2.

Consider the data in (51) and (52) from Spanish and Sardinian respectively:

```
(51) *Había {el rey / él / Felipe}.

Have.PST.3SG the king / him / Felipe

'There was {the king / him / Felipe}.'

(52) *B' ada Juanne. (from Bentley 2004: 76)

LOC have.PRS.3SG Juanne

'There's Juanne.'
```

The strongly deviant status of (51) and (52) shows that the DE is particularly robust in Spanish and Sardinian, if the two languages are compared with English and French, for instance, where the equivalent sentences with be and avoir are acceptable, with an 'availability' reading (cf. There was the king; Il y avait le roi). The question is why 'availability' readings for definite pivots cannot "save" existential clauses with haber 'have' in Spanish and with áere 'have' in Sardinian, while being systematically acceptable in other languages. There is a simple and natural answer to such question: the constraint must be related to the presence of alternative ways of expressing the same content in Spanish and Sardinian, i.e. to the competition between alternative syntactic forms for one single meaning. In Spanish the competition involves the two verbs haber 'have' and estar 'be': while haber has specialized as an exclusively existential predicate, estar is a copular verb, and thus, as the straightforward way to express a locative predication. As expected, the DE shows up only in haber sentences. Estar is compatible with all kinds of definite DPs: in (53), 'availability' readings are among the possible interpretations of the sentence, together with locative readings.

<sup>&</sup>lt;sup>15</sup> I assume that the role of pragmatic inference in utterance interpretation is essentially the one established in Relevance Theory (cf. Sperber and Wilson 1986 / 1995, Clark 2013).

(53) Está {el rey / él / Felipe}.

Be.PRS.3SG the king / him / Felipe

Given this situation, it is reasonable to think that the strength of the DE with haber -i.e. the systematic exclusion of definite anaphoric DPs as pivots- is due to the impossibility of obtaining 'availability' readings that could be more easily obtained with estar: forcing the insertion of an anaphoric definite pivot with haber is a costlier option than using it with estar, since haber imposes conditions on pivots typically, that they cannot be previously identifiable, in Bentley's (2004) terms- that estar does not require. Such conditions imply that some kind of reinterpretation or interpretive adjustment is needed in the case of haber in order to license the definite pivot (cf. 4.2), whereas no extra cost is implied in combining a definite subject DP with estar. Thus, 'availability' readings of definite pivots are excluded with haber for economy reasons 16. The reasoning is essentially the same as that which allows us to explain, for instance, why coreferential readings of strong pronouns in null subject languages -i.e. the readings that build topic continuity- are usually discarded in contexts where a null pronoun could be used instead of an overt one: in contexts where a null pronoun is a grammatical option, it will represent the optimal tool to convey a coreferential reading because it will be the simplest and most economical way to obtain such reading, with overt pronouns limited to the expression of non-coreferential readings -topic shift-, due to their marked status; if no additional factors intervene, a coreferential reading for overt pronouns will thus be highly dispreferred. In a few words, if more than one form is available to express a single meaning, the unmarked formal option -the most economical one compatible with that meaningshould be the optimal solution. The mechanism I am invoking may remind the reader of similar devices operating in Optimality-theoretic accounts of the syntax – semantics interface (cf. Blutner, Hendriks and de Hoop 2006). However, there is at least a significant difference with respect to such accounts: in my view, economy considerations involved in the competition between alternative forms interact with general pragmatic principles, and not directly with syntactic principles 17. Notice that, if this is right, the evaluation of the competing options, and the consequential blocking of the costly interpretive solution in favor of a simpler one, are not a part of the grammatical system, but rather inferential operations performed on the output of grammatical rules. As is well known, under certain conditions pragmatic inferences can become conventionalized and integrate into the grammar.

In Sardinian we find a parallel competition in presentational sentences between two options, one with 'have' –without agreement between the verb and the pivot- and one with 'be' –with agreement between the verb and the pivot. The DE appears with 'have', but not with 'be', as proved by the contrast between (52) and (54); as expected, definite pivots with 'be' can receive 'availability' readings.

(54) B' este Juanne. (from Bentley 2004: 76)

LOC be.PRS.3SG Juanne

-

<sup>&</sup>lt;sup>16</sup> A potential problem for this account comes from the behavior of the verbs *aver* 'have' and *esser* 'be' in Catalan: the use of *esser* in locative predications does not block the possibility of having 'availability' readings in definite pivots with *aver* (cf. Rigau 1994, 1997). The division of labor between the two verbs is possibly different from the one we find in Spanish with *haber* and *estar*: in fact, the typical 'availability' readings are not possible with *esser*, but they are with *aver*, so that a dividing line between the two options can still be drawn. European Portuguese represents another instance of the same basic problem. I leave this issue for future research.

<sup>&</sup>lt;sup>17</sup> Of course, I do not intend to claim that economy principles are always irrelevant for syntax.

As Bentley (2013) notes, Sardinian displays a system of differential encoding of the pivot, controlled by definiteness and specificity. Both agreement and the 'be' vs 'have' alternation, in fact, encode "the cognitive status in discourse" of the entities denoted by the pivot DP (Bentley 2004: 66). The construction with 'have' is associated to a requirement on pivots: they must denote "brand new unanchored" referents (Bentley 2004: 87); the construction with 'be' does not include any condition, and freely accepts definite DPs. Thus, the contrast between (52) and (54) in Sardinian can be explained along the same lines as the corresponding one in Spanish: the use of anaphoric definite pivots with 'have' is barred because the same content can be expressed at no extra cost with 'be'. Languages like English and French, on the other hand, display 'availability' readings for definite pivots in existential sentences because there is no competition with alternative grammatical options that preclude the insertion of definite pivots. These facts can be treated by allowing pragmatic inference to choose certain grammatical options and discard others for economy reasons.

A different problem is posed by the (partial) conflation of existential and locative syntactic patterns in languages like Italian (cf. Zamparelli 2000, Remberger 2009, Bentley 2013, Cruschina this volume). The fact that *esserci* sentences with definite pivots can be taken as proper existentials or as locatives has recently been considered as one of the reasons why the DE in Italian looks like a "soft" constraint that can only be detected under very restrictive conditions: if the same syntactic form is used to convey both kinds of interpretation, and locative predication does not exhibit any restriction against definite DPs, then it becomes difficult to ascertain under what circumstances the DE still holds. The central problem concerns the status of sentences like (55):

(55) C'è tua sorella.

LOC be.PRS.3SG your sister

'There's your sister. / Your sister is there.'

On the one hand, treating (55) as a sort of 'inverse locative', following Zamparelli (2000) and Cruschina (this volume), straightforwardly explains the presence of the definite DP as an inverted, focussed subject, and the locative reading. On the other hand, true existentials in Italian, according to Bentley (2013: 700), accept 'availability' readings, as indicated in the gloss for (55), which means that the sentence is actually ambiguous. The locative interpretation does not block the 'availability' one. A discussion of this particular issue is beyond the limits of this paper. Despite its interest, I leave it for future research.

### 4.2 Solving interpretive mismatches

The second relevant task of pragmatic inference in the domain of DEs –as in any other grammatical domain, actually- is the resolution of interpretive mismatches. In this case mismatches result from the use of a definite DP, and in particular an anaphoric definite DP, in a DE context. As already pointed out, I assume that violations of the definiteness constraint do not correspond to syntactic ill-formedness, but rather to semantic anomaly, which allows for resolution mechanisms to operate under certain contextual conditions and give rise to acceptable interpretations, in the same way that coercion and accommodation operations produce acceptable readings of otherwise anomalous strings. I will consider only existential

sentences, although the phenomenon extends to unaccusative inversion –as shown for French in section 3.3- and other constructions.

'Availability' readings in 'contextualized' existentials represent the central case of mismatch resolution, and the key factor is narrow focus on the pivot DP, as advanced in 3.3. The previous discussion has shown that 'availability' readings are a systematic phenomenon, and not just an isolated, language-specific fact. If they cannot be found in languages like Spanish, it is due, as pointed out in section 4.1, to the competition of some other construction that takes their discourse function (cf. Spanish \*Hay tus padres vs Están tus padres 'There are your parents'). Let's take again example (55) in Italian as a typical case of existential sentence with an 'availability' reading –if it is used as an answer to something like Who can we leave the children with?, though it might have other possible readings as well, such as a presentative one 'Your sister is {here / there}'.

(55) C'è tua sorella.

LOC be.PRS.3SG your sister

'There's your sister.'

The definite DP tua sorella occupies the rightmost position in the sentence and is assigned narrow focus. What are the consequences of focus? As is well known, focus on a constituent introduces a set of contextual alternatives that are relevant for the interpretation of such constituent. In (55), the hearer's sister must be taken as a member of the set of possible candidates to satisfy a condition in the context -for instance, possible candidates to take care of the hearer's children. The set of alternatives must be already given in the context; otherwise, it has to be pragmatically accommodated, which is costlier. Once this is taken into account, it is not difficult to realize (a) why this particular use of existential sentences typically needs a special context, and (b) why it is precisely 'availability' readings that emerge. As for the second issue, the relevance of lists and enumerations -just to mention the notions traditionally invoked in the literature- is due to the emergence of contextual alternatives: lists are nothing more than sets of alternatives for previously established purposes, and 'availability' means that one alternative can be chosen among others. Recall that the crucial condition is not the existence of a list, but rather the possibility to infer a relation between an entity and a set of entities. The family of readings triggered is simply the kind of readings that can justify a narrow focus on a definite pivot. With respect to the need for a special context, it seems to be another effect of narrow focus and contrast. In order to get a felicitous use of the definite pivot, some clue must be provided about the reason why the set of alternatives is relevant for interpretation, and about the way it fits in the conversational exchange. Thus, the set of alternatives must be somehow salient in the context. This explains why 'availability' readings are so strongly context-dependent and cannot appear in out-of-the-blue uses of existential sentences. So far, the main properties of this kind of readings can be traced back to narrow focus. But one question still needs to be addressed: how is the mismatch between the given status of the definite pivot and the Novelty Condition solved? Narrow focus plays a central role here too. Though it is obviously true that the referent of an anaphoric definite DP is given, the relation between the focused pivot and the context is new information: in (55) the fact that the hearer's sister could take care of the children is presented as hearernew, in accordance with the Novelty Condition. Focus on the pivot forces the interpreter to infer an adequate background where the referent can be considered as a candidate to fulfill some role. In this way, the interpretation is pragmatically adjusted to comply with the condition imposed by the construction, thus avoiding an interpretive mismatch: the referent of the pivot is given, but its relation with the local context is (presented as) novel. Pragmatic inference, as in many other similar cases, provides the material that is needed to solve the mismatch. In this sense, 'availability' readings, far from representing a

different kind of construction, are a particular case of a more general pragmatic phenomenon affecting regular existential sentences (cf. McNally 1992: 194).

### 5. Conclusions / Speculations

As I mentioned in the introduction, the goal of this paper is not to offer a full account of DEs, but rather to discuss the role of IS notions and of pragmatic inference in the occurrence of DEs. In order to set the basis of the discussion, in section 2 I presented a list of assumptions that I take as well established points. I reproduce them here, with some of their consequences:

- 1. The DE is not a syntactic constraint: it is a condition on interpretations, and should be explained in semantic / pragmatic terms.
- 2. It results from a mismatch between the definiteness of the pivot DP and some semantic condition which DE contexts impose, whatever it is (a Novelty condition, or a requirement for semantic incorporation, among other possibilities). A crucial consequence of this idea is that the DE will not show the typical robustness of syntactic constraints: being the result of an interpretive mismatch, it may be overridden if some "repair" mechanism is able to license the occurrence of a definite DP in a DE context, under the appropriate conditions. In fact, the counterexamples to the DE are widespread, as the literature on the topic has often pointed out.
- 3. DEs obey certain syntactic conditions that are actually rooted in IS: they affect only DPs occurring in internal argument positions, thus typically focal positions, and in the most representative contexts existential sentences and unaccusative inversion- such DPs must be part of wide focus in thetic, 'all-focus' sentences with a stage topic. DEs are never associated with topical positions. There must be a crucial connection between the semantic condition that DE contexts impose on their pivot DPs and the focal nature of those DPs –a connection that still has to be uncovered (one possibility is that IS paves the way for semantic incorporation of pivots).

Once these assumptions are made explicit, it is possible to look at the role of IS in detail. This has been the aim of section 3. There are two ways in which IS is crucial for DEs: on the one hand, IS defines the basic grammatical environments where the DE can appear (cf. 3.1); on the other, it defines the conditions for violations of the DE to occur (cf. 3.2). My basic claim is that we need to resort to fine-grained distinctions among types of topics and types of foci to discover some correlation between IS and (in)definiteness. The distinction between wide and narrow focus turns out to be quite productive. As for the environments where DEs appear, it is well known that DEs are related to conditions on information focus. More precisely, anaphoric definite pivots are banned from existential contexts when they are inside wide focus, in particular when followed by the locative coda. Some facts from Romance languages illustrate this point. This is how IS sets the limits for the DE to arise. Intuitively, wide focus is relevant because it implies that some kind of integration process must take place between the verb and the rest of the constituents, and definiteness is a factor that may block integration into a single informational chunk. Conversely, the presence of some informational partition in the DE context may alter the acceptability of definite DPs: there is evidence from different languages supporting the idea that when anaphoric definite pivots are under narrow focus, typically in the rightmost position, the DE vanishes. The widely discussed phenomenon of 'list' / 'availability' readings is the most salient manifestation of this factor. And this is how IS sets the conditions for the DE to be overridden -in the case of anaphoric definite DPs, i.e. those definite DPs that cannot comply with the Novelty Condition. Needless to say, a full account of the interaction of IS and the semantics of DE environments is still to develop, but these observations on Focus structure may throw some light on the problem.

The main question raised by the role of narrow focus is why and how it has the effects it has. Here is where pragmatics enters the picture. I do not consider IS as a pragmatic matter, as several linguists tend to do: it is rather a component of the grammatical system. Nevertheless, it interacts with pragmatic inference: pragmatic principles allow speakers and hearers to take IS marking as the input of the inferential system in the search for relevant interpretations. In section 4, I have suggested that pragmatic inference is responsible for two aspects of the distribution of DEs: one is the resolution of cases of competing candidates for the expression of a single meaning, and the other is the resolution of interpretative mismatches -more precisely, mismatches between a DE context and an anaphoric definite DP. In the first case, the inferential system selects one candidate as the optimal pairing of form and meaning, and discards its competitors on the basis of economy considerations: this is why anaphoric definite pivots are excluded in "differential pivot marking" systems like Spanish and Sardinian. In the second case, pragmatic inference contextualizes the interpretation of anaphoric definite pivots in DE contexts by elaborating the consequences of their occurring under narrow focus; the result is an 'availability' reading based on the salience of a set of contextual alternatives for the denotation of the definite DP. In a few words, 'availability' readings arise as the result of a 'last-resort' inferential mechanism that (under appropriate conditions) solves the incompatibility between the definite DP and its linguistic context. Such a survival strategy cannot work when the DP is under wide focus. Narrow focus and contrast are able to license the presence of overt DPs in environments that would otherwise exclude them (cf. Leonetti 2014a for an overview of the effects of contrast, and Sheehan 2006: 192 for a version of an original idea by Adriana Belletti according to which focus may assume the role of Case in rendering a DP visible). Pragmatics, thus, has a noticeable role in the licensing of definite pivots in existential contexts.

It is quite obvious that this approach to DEs puts considerable emphasis on IS, on the one hand (along the lines of other recent proposals like Bentley 2013), and on the semantics - pragmatics interface, on the other hand. As a consequence, a large part of the sentences which were considered plainly ungrammatical, as violations of the DE, in the previous literature are analyzed as well formed strings that contain a semantic mismatch; such mismatches may in some cases be repaired by inferentially adjusting the interpretation. Another consequence of emphasizing the role of IS and the semantics - pragmatics interface, instead of placing the burden of explanation on syntax, is that of reinforcing the connections between DEs and so-called 'specificity effects', i.e. the correlations between certain grammatical contexts and the specific interpretation of the indefinite DPs appearing in them (treating DEs as special cases of specificity effects is by no means a novel proposal: cf. Enç 1991 and Kiss 1995, a. o. for elaborations of the idea). If we limit our attention to DP-external factors, the expected connection is essentially the following one: DE contexts -contexts where definite (and specific) DPs tend to be excluded- are the mirror image of contexts triggering specificity effects -contexts where specific readings of indefinite DPs are forced. A case in point is provided by Differential Object Marking (DOM): marked objects in DOM languages are typically associated with definite / specific readings (cf. the brief comment in section 2.2). Another well-known case is represented by preverbal subjects in certain languages, especially with stative predicates: definite / specific subjects are usually preferred. The correlation between DEs and specificity effects is strengthened, in my view, by two important facts. The first one is that, in most cases of specificity effects, specificity is not encoded by the construction, but pragmatically inferred to adjust the interpretation of indefinite DPs to the requirements of the linguistic context; if specificity is thus a class of epiphenomena, it is triggered by conditions / features that are themselves unrelated to specificity (for instance, topicality, or discourse prominence). The second fact is that, at least in a significant number of cases, the basic conditions / features that trigger specificity effects are related to definiteness (in clitic doubling) and/or IS (in DOM, cf. Dalrymple and Nikolaeva 2011, and in object scrambling and internal topics in certain languages, typically in preverbal subjects 18 in languages like Tagalog, cf. Sabbagh 2009:

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<sup>&</sup>lt;sup>18</sup> In Romance languages, specificity effects have been noticed in preverbal subjects, in particular with unaccusative predicates in contexts where the two grammatical options –preverbal and postverbal position- are in competition. The preverbal position is a marked option for unaccusatives, and thus deserves a marked reading that justifies it and

706). Notice that specificity effects are typically forced in topical positions: marked objects and preverbal subjects –at least in SVO languages- are topical. This confirms that these contexts are the mirror image of DE contexts, and the underlying conditions that are responsible for the effects pertain to IS: a certain kind of focus domain sets the conditions for DEs, and a certain kind of (aboutness) topic positions sets the conditions for specificity. The conclusion is that IS is behind both families of interpretive effects. A unified account of all of them should then be possible, with an adequate level of abstraction. The central idea is that constraints on definiteness and specificity result from the necessity to make DP interpretation compatible with the requirements of the grammatical contexts. Determining the nature of such semantic requirements still represents a thorny and intriguing problem. However, it seems clear that they are somehow related to IS, and that pragmatic inference is crucial to understanding how speakers adjust DP interpretation to comply with them.

#### References

- Abbott, Barbara. 1993. A pragmatic account of the definiteness effect in existential sentences. *Journal of Pragmatics* 19.1: 39-55.
- Abbott, Barbara. 1997. Definiteness and existentials. Language 73.1: 103-108.
- Beaver, David, Itamar Francez and Dmitry Levinson. 2005. Bad subject: (Non-)canonicality and NP distribution in existentials. *Proceedings of Semantics and Linguistic Theory* 15: 19-43.
- Belletti, Adriana. 1988. The case of unaccusatives. Linguistic Inquiry 19.1: 1-34.
- Benincà, Paola, Giampaolo Salvi and Lorenza Frison. 1988. L' ordine degli elementi nella frase e le costruzioni marcate. In Lorenzo Renzi (ed.). *Grande grammatica di consultazione*, vol. I. Bologna: Il Mulino, 115-225.
- Bentley, Delia. 2004. Definiteness effects: evidence from Sardinian. *Transactions from the Philological Society* 102.1: 57-101.
- Bentley, Delia. 2013. Subject markedness and definiteness effects in Romance *there*-sentences. *Language* 89.4: 675-712.
- Bentley, Delia, Francesco Ciconte and Silvio Cruschina. 2015. *Existential Constructions: a Comparative Investigation into Romance Dialects of Italy*. Oxford: Oxford University Press.
- Birner, Betty and Gregory Ward. 1995. Definiteness and the English existential. Language 71: 722-742.
- Blutner, Reinhard, Petra Hendriks and Helen de Hoop. 2006. Optimal Communication. CSLI: Stanford.
- Borer, Hagit. 2005. The Normal Course of Events. Structuring Sense, vol. II. Oxford: Oxford University Press.
- Burzio, Luigi. 1986. Italian Syntax. Dordrecht: Reidel.

triggers discourse-related effects. Here again competition between available options determines the preferred reading (cf. section 4.1).

- Chung, Sandra and William Ladusaw. 2004. Restriction and Saturation. Cambridge (Mass.): MIT Press.
- Clark, Billy. 2013. Relevance Theory. Cambridge: Cambridge University Press.
- Cohen, Ariel and Nomi Erteschik-Shir 2002. Topic, Focus, and the interpretation of bare plurals. *Natural Language Semantics* 10.2: 125-165.
- Cruschina, Silvio. this volume. Pseudo-existentials and Definiteness Effects in Italian.
- Dalrymple, Mary and Irina Nikolaeva. 2011. Objects and Information Structure. Cambridge: CUP.
- De Cesare, Anna Maria. 2006. Sul cosiddetto *c'è presentativo*. Forme e funzioni. In Anna Maria De Cesare and Angela Ferrari (eds.). *Lessico*, *grammatica*, *testualità*. *Acta Romanica Basiliensia* 18, University of Basel, 127-153.
- Dobrovie-Sorin, Carmen and Claire Beyssade. 2004/2012. *Redefining Indefinites*. Dordrecht: Springer. (English version of *Définir les indéfinis*, CNRS, 2004)
- Enç, Mürvet. 1991. The semantics of specificity. Linguistic Inquiry 22.2: 1-25.
- Endriss, Cornelia. 2009. Quantificational Topics. A Scopal Treatment of exceptional Wide Scope Phenomena. Dordrecht: Springer.
- Erteschik-Shir, Nomi. 1997. The Dynamics of Focus Structure. Cambridge: Cambridge University Press.
- Erteschik-Shir, Nomi. 2013. Information structure and (in)definiteness. In Patricia Cabredo-Hofherr and Anne Zribi-Hertz (eds.). *Crosslinguistic Studies on Noun Phrase Structure and Reference*, Syntax and Semantics volume 39. Leiden: Brill, 23-50.
- Etxeberria, Urtzi. 2012. Quantification in Basque. In Edward Keenan and Dennis Paperno (eds.). Handbook of Quantifiers in Natural Languages. Dordrecht: Springer, 83-164.
- Fischer, Susann. 2013. Unaccusatives, existentials and the Definiteness Restriction: explorations of the syntax- semantics interface. In Sofiana Chiriacescu (ed.). *Proceedings of the VI NEREUS International Workshop "Theoretical implications at the syntax / semantics interface in Romance"*. Arbeitspapier Nr. 127. Fachbereich Sprachwissenschaft Universität Konstanz, 33-53.
- Francez, Itamar. 2007. Existential Propositions. PhD dissertation, Stanford University.
- Geist, Ljudmila. 2012. *Indefiniteness and Specificity: Lexical Marking and Information-structural Conditions*. Habilitationschrift, University of Stuttgart.
- Gundel, Jeannette. 1974. *The Role of Topic and Comment in Linguistic Theory*. PhD dissertation, University of Texas at Austin.
- Gundel, Jeannette and Thorstein Fretheim. 2004. Topic and Focus. In Laurence Horn and Gregory Ward (eds.). *The Handbook of Pragmatics*. Oxford: Blackwell, 175-196.
- Hartmann, Jutta. 2006. Well, there's the list reading. In Jakub Dotlacil and Berit Gehrke (eds.). *UiL OTS Working Papers in Linguistics*. Utrecht Institute of Linguistics. 1-15.
- Hartmann, Jutta. 2008. *Expletives in Existentials. English* there *and German* da. LOT Dissertation Series 181. Utrecht: LOT.
- Hawkins, John. 1978. Definiteness and Indefiniteness: a Study in Reference and Grammaticality Prediction. London: Croom Helm.

- Hu, Jianhua and Haihua Pan. 2007. Focus and the basic function of Chinese existential *you*-sentences. In Ileana Comorovski and Klaus von Heusinger (eds.). *Existence. Semantics and Syntax*. Dordrecht: Springer, 133-145.
- Kiss, Katalin E. 1995. The Definiteness Effect revisited. In István Kenesei (ed.). *Approaches to Hungarian V.* Szeged: JATE, 63-88.
- Lahousse, Karen. 2011. Quand passent les cigognes. Paris: Presses Universitaires de Vincennes.
- Lambrecht, Knud. 2002. Topic, focus and secondary predication. The French presentational relative construction. In C. Beyssade et al. (eds.). *Romance Languages and Linguistic Theory* 2000, 171-212. Amsterdam: John Benjamins.
- Leonetti, Manuel. 1999. El artículo. In Ignacio Bosque and Violeta Demonte (eds.). *Gramática descriptiva de la lengua española*, vol. I, 787-890. Madrid: Espasa.
- Leonetti, Manuel. 2008. Definiteness effects and the role of the coda in existential constructions. In Alex Klinge and Henrik Høek Muller (eds.). *Essays on Nominal Determination. From Morphology to Discourse Management*. Amsterdam: John Benjamins, 131-162.
- Leonetti, Manuel. 2013. Information structure and the distribution of Spanish bare plurals. In Johannes Kabatek and Albert Wall (eds.). *New Perspectives on Bare Noun Phrases in Romance and beyond*, 121-155, Amsterdam: John Benjamins.
- Leonetti, Manuel. 2014a. On contrastive readings in the interpretation of NPs/DPs. In Sofiana Chiriacescu (ed.). *Proceedings of the VI NEREUS Workshop 'Theoretical implications at the Syntax / Semantics interface in Romance'*. Arbeitspapier 127. Fachbereich Sprachwissenschaft, Universität Konstanz, 99-116.
- Leonetti, Manuel. 2014b. Spanish VSX. In Karen Lahousse and Stefania Marzo (eds.). *Romance Languages and Linguistic Theory* 2012. Amsterdam: John Benjamins.
- Leonetti, Manuel. Forthcoming. Pronominal pivots in existential sentences.
- López, Luis. 2012. Indefinite Objects. Cambridge (Mass.): MIT Press.
- Lumsden, Michael. 1988. Existential Sentences. Their Structure and Meaning. London: Routledge.
- Lyons, Chris. 1999. Definiteness. Cambridge: Cambridge University Press.
- Maleczki, Márta. 2010. On the definiteness effect in existential sentences: data and theory. In Enikó Németh and Károly Bibok (eds.). *The Role of Data at the Semantics-Pragmatics Interface*, 25-56, Berlin: Mouton De Gruyter.
- McNally, Louise. 1992/1997. A Semantics for the English Existential Construction. New York: Garland.
- McNally, Louise. 2011. Existential sentences. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.). *Semantics. An International Handbook of Natural Language Meaning*, vol. 2. 1829-1848, Berlin: Mouton de Gruyter.
- Milsark, Gary. 1977. Towards an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3.1: 1-29.
- Rando, Emily and Donna Jo Napoli. 1978. Definites in there-sentences. Language 78.
- Reinhart, Tanya. 1981. Pragmatics and linguistics: an analysis of sentence topics. Philosophica 27: 53-94.

- Remberger, Eva-Maria. 2009. Null subjects, expletives and locatives in Sardinian. In Georg Kaiser and Eva-Maria Remberger (eds.). *Proceedings of the workshop 'Null subjects, expletives and locatives in Romance'*. Konstanz: Fachbereich Sprachwissenschaft der Universität Konstanz, 231-261.
- Rigau, Gemma. 1994. Catalan presentational sentences and the properties of Agr nodes. In Guglielmo Cinque et al. (eds.). *Paths towards Universal Grammar*. Washington DC: Georgetown University Press, 343-359.
- Rigau, Gemma. 1997. Locative sentences and related constructions in Catalan: ésser / haver alternation. In Amaya Mendikoetxea & Miriam Uribe-Etxebarría (eds.). Theoretical Issues at the Morphology Syntax Interface, 395-421. Bilbao: Universidad del País Vasco.
- Rizzi, Luigi. 2005. On some properties of subjects and topics. In L. Brugè et al. (eds.) *Proceedings of the XXX Incontro di Grammatica Generativa*. Venice: Ca'Foscarina, 63-82.
- Sabbagh, Joseph. 2009. Existential sentences in Tagalog. *Natural Language and Linguistic Theory* 27: 675-719.
- Safir, Ken. 1982. Syntactic Chains and the Definiteness Effect. PhD dissertation, MIT.
- Sasse, Hans-Jürgen. 1987. The thetic / categorical distinction revisited. Linguistics 25: 511-580.
- Sheehan, Michelle. 2006. *The EPP and Null Subjects in Romance*. PhD Dissertation, University of Cambridge.
- Sperber, Dan and Deirdre Wilson. 1986 / 1995. Relevance. Oxford: Blackwell.
- Suñer, Margarita. 1982. The Syntax and Semantics of Spanish Presentational Sentence-Types. Washington, DC: Georgetown University Press.
- Szabolcsi, Anna. 1984. From the Definiteness Effect to lexical integrity. In Werner Abraham and Sjaak de Meij (eds.). *Topic, Focus and Configurationality*. Amsterdam: John Benjamins, 321-348.
- Vallduví, Enric. 2002. L' oració com a unitat informativa. In J. Solá et al. (eds.). *Gramàtica del català contemporani*, vol. 2. Barcelona: Empùries, 1221-1279.
- Vangsnes, Øystein. 2002. Icelandic expletive constructions and the distribution of subject types.
- Villalba, Xavier. 2013. Eventive existentials in Catalan and the topic focus articulation. *Italian Journal of Linguistics*.
- Villalba, Xavier. this volume. Definiteness Effect, pronouns, and information structure in Catalan
- Ward, Gregory and Ellen Prince. 1991. On the topicalization of indefinite NPs. *Journal of Pragmatics* 16. 167-177.
- Zamparelli, Roberto. 2000. Layers in the Determiner Phrase. New York: Garland.
- Zucchi, Alessandro. 1995. The ingredients of definiteness and the definiteness effect. *Natural Language Semantics* 3: 33-78.