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2019-05

Cruschina , S 2019 , ' Focus Fronting in Spanish : Mirative implicature and information structure ' , *Probus* , vol. 31 , no. 1 , pp. 119 146 . <https://doi.org/10.1515/probus-2018-0008>

<http://hdl.handle.net/10138/314612>

<https://doi.org/10.1515/probus-2018-0008>

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Focus Fronting in Spanish:

Mirative implicature and information structure

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Abstract: In Romance, Focus Fronting (FF) is generally related to a contrastive or corrective function. In this paper, I show that Spanish may resort to FF to express a special evaluative meaning, namely, a mirative (conventional) implicature of surprise and unexpectedness. Mirative FF is problematic for the traditional analyses of FF because it is not necessarily contrastive and does not guarantee the traditional articulation of the sentence into a new and a given part. The results of a syntactic experiment on the distribution and interpretation of FF in European Spanish show that speakers accept FF not only in the corrective but also in the mirative context. The acceptability of mirative FF thus proves that FF in Spanish is not exclusively limited to contrast linked or to information-structural requirements such as the new-old information distinction. FF may also be used to express a mirative implicature that requires a set of focal alternatives in order to be interpreted correctly.

Keywords: focus fronting, mirative focus, conventional implicature, contrast, information structure, Spanish

1. Introduction

This paper sets out a contribution to the study of information structure and to linguistic research into the use of syntactic means in the expression of surprise. I will mainly discuss

a specific syntactic construction, Focus Fronting (FF), in Spanish, examining its semantic and pragmatic characteristics.

In spite of the vast literature on information structure, and in particular on the notions of focus and topic, some aspects of the impact that these categories may have at the semantic and pragmatic level remain unclear. Their relationship and interaction with syntax is also somewhat blurred, mainly because of the (minimalist) view that information-structure notions and discourse-related features such as topic and focus do not play an active role in the syntactic derivation (see, e.g., Chomsky et al. 2017). Under this view, the syntactic phenomena that are commonly associated with these features and that lead to the reordering of the constituents within a sentence (e.g. left dislocation, FF, etc.) are to be seen as post-syntactic operations. The observed ordering constraints should thus be accounted for by means of independent syntactic and semantic principles (see Abels 2012).

Working within the cartographic approach (Cinque & Rizzi 2010), and drawing in particular on the recent work of Bianchi et al. (2015, 2016), I will defend the opposite view. An information-structure and discourse-related feature such as focus can drive the syntactic computation, building a structural configuration that facilitates a special interpretation of the utterance. In particular, I will show that a special meaning of surprise and unexpectedness can be associated with FF in Spanish. This interpretation is the result of a conventional implicature (CI) that is encoded in the syntactic structure and that is directly responsible for the triggering of FF. This claim has important consequences at the theoretical level. First, in line with the cartographic line of inquiry, pragmatic and discourse-related features are given a full-fledged syntactic status, in that they are able to guide the syntactic derivation and provide direct instructions to the interfaces. The semantic and prosodic properties associated with these features are thus transparently read off at the interfaces (Bocci 2013, Rizzi 2013). Secondly, the account developed in this paper calls for

a refinement of the traditional concept of information structure and of its grammatical impact. The focus-background partition of the sentence yielded by FF should not be reduced or assimilated to the traditional new-old information articulation of the sentence, but should rather be viewed as a syntactic mechanism that is exploited at the semantic level in order to produce special interpretive effects. As will be shown, one such effect that builds on a focus structure is the mirative import, that is, a semantic effect of surprise and unexpectedness.

The structure of the article is as follows. In Section 2, I will introduce the notion of focus and the questions that will be addressed in this article. In Section 3, I will present the phenomenon of the association between focus (in particular, FF) and surprise. In Section 4, I will provide a more detailed discussion of the relevant data, which come from a syntactic experiment on the distribution of FF in European Spanish, and which will provide a more objective view of the acceptability on the part of native speakers of the different interpretations that can be associated with FF. Section 5 will be devoted to the semantic analysis of the mirative import, which, following Bianchi et al. (2015, 2016), must be analysed as a conventional implicature. I will conclude, in Section 6, with a summary of the empirical results and with a brief discussion of the theoretical relevance of the present work to the study of focus and of information structure more generally.

2. The notion of focus

An essential notion for understanding the syntactic construction under discussion is that of focus.¹ Here, I refer exclusively to narrow focus, that is, focus on part of the sentence,

¹ This introduction to focus must be understood as a simplification, which admittedly reduces its complexity and omits several details which are not relevant to the subsequent discussion. See the references cited in this section for more details (see also Féry & Ishihara 2016 for more comprehensive overview of theoretical and experimental work on information structure, and Dufter & Gabriel 2016 for an overview of the current approaches in Romance).

typically a constituent.² Narrow focus can be defined at different levels. Prosodically, it corresponds to the constituent that bears the main prosodic prominence of the sentence (Truckenbrodt 1995, 1999, Ladd 1996, Zubizarreta 1998). Semantically “focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.” (Krifka 2007: 18). Pragmatically, it corresponds to the constituent of the sentence to which the speaker intends to direct attention (see Erteschik-Shir 1997). These properties hold for many languages, although presumably not for all – Wolof, for instance, has been claimed to lack intonational focus marking (Rialland & Robert 2001). At any rate, the level of the grammar where we find more variation is syntax.

Some languages mark the focus constituent by means of displacement to a special (usually more prominent) position within the sentence, while others leave it in its in-situ position (i.e. the position that the focus constituent would normally occupy even if it were not a focus). Let us now concentrate on Spanish.

2.1. Marking narrow focus in Spanish

It has been observed that in Spanish the focus constituent must be the rightmost element, namely, it must appear at the end of the clause (Contreras 1976, Zubizarreta 1998, 1999, Gutiérrez-Bravo 2008). This is not obvious in the case of a focal direct object or any other constituent that would independently occur clause-finally (1). By contrast, focalization of a subject (2) provides direct evidence and support to the clause-final condition (Gutiérrez-Bravo 2008: 381–383):

² Although the notion of narrow focus may embrace the predicate as a syntactic constituent, in Romance the phenomenon of FF does not involve finite verbs (on the range of constituents that are amenable to FF in Romance, see Cruschina & Remberger 2017).

- (1) a. ¿Qué se compró María?
 was REFL buy.PST.3SG Mary
 ‘What did Mary buy (for herself)?’
- b. María se compró **una calculadora**.
 Mary REFL buy.PST.3SG a calculator
 ‘Mary bought a calculator (for herself).’
- (2) a. ¿Quién compró los discos?
 who buy.PST.3SG the records
 ‘Who bought the records?’
- b. Los compró **una muchacha**.
 them.CL buy.PST.3SG a girl
- c. Los discos los compró **una muchacha**.
 the records them.CL buy.PST.3SG a girl
 ‘A girl bought them/the records.’
- (3) a. **#Una muchacha** los compró.
 a girl them.CL buy.PST.3SG
- b. **#Una muchacha** compró los discos.
 a girl buy.PST.3SG the records

A traditional way to elicit a narrow focus is by means of a wh-question, as in (1a) and (2a). In the answer, as well as in all examples below, the focal constituent is marked in bold and the metrically strong syllable indicating the position of the nuclear pitch accent, that is, the pitch accent of the utterance that is perceived as the most prominent, is marked by small

capitals. As shown in the examples, only answers with clause-final focal constituents are pragmatically felicitous answers to the relevant questions (1b-2b,c).³ Answers containing a focal preverbal subject, such as those in (3), are infelicitous in the given context (i.e. as answers to the question in (2a)).⁴ The clause-final requirement does not have to be understood in linear terms: the focus constituent in the rightmost position of the clause can in fact be followed by given, right-dislocated constituents, as shown in (4b) and (5b):

- (4) a. ¿Quién compró los discos?
 who buy.PST.3SG the records
 ‘Who bought the records?’
- b. Los compró **una muCHa**cha, los discos.
 them.CL buy.PST.3SG a girl the records
 ‘A girl bought the records.’
- (5) a. ¿Quién invitaron a la fiesta?
 whom invite.PST.3PL to the party
 ‘Who did they invite to the party?’

³ It should be noted that (2c) involves the left dislocation of the given object, which is resumed by the clitic *los* attached to the verb. In fact, the given object could be omitted from the sentence since the resumptive clitic would be enough to establish the relevant reference, as shown in (2a). As pointed out by an anonymous reviewer, a fourth option can be added to the set of pragmatically felicitous answers in (2), that is VOS:

(i) Compró los discos **una muCHa**cha.
 buy.PST.3SG the records a girl

This option is rather marked and only marginally accepted, possibly also depending on dialectal variation. It is not mentioned in Gutiérrez-Bravo (2008), but see Zubizarreta (1998) and Gabriel (2010) for a discussion of this word order.

⁴ The judgements in (3) are from Gutiérrez-Bravo (2008). According to Zubizarreta (1998) and Gutiérrez-Bravo (2008) among others, and as will be discussed in the following section, the examples in (3) with a preverbal focus are grammatical if the focus receives a contrastive or emphatic interpretation (see Zubizarreta 1998). Recent empirical work, however, has thrown some doubt on these judgements, showing that the preverbal position is not necessarily restricted to contrastive focus or emphasis, either for subjects or for other constituents (Gabriel 2010, Uth 2014, Heidinger 2015, Jiménez-Fernández 2015a,b, Hoot 2016).

b. Invitaron **a** **MARCOS**, a la fiesta.

invite.PST.3PL ACC Mark to the party

‘They invited Mark to the party.’

Let us examine the focal properties of this last example. The focus constituent *a Marcos* is prosodically prominent: it bears the nuclear pitch accent of the sentence. Semantically, focus on this constituent tells us that it was Marcos who was invited and not other possible alternatives that would be relevant in that specific context (e.g. Maria, Esteban, Luca, etc.). It is also clear that, pragmatically, this is the most important and significant constituent of the sentence: ellipsis may in fact apply, deleting the given part of the sentence and leaving the focus as the only uttered constituent.⁵ Syntactically, however, nothing special happens: *a Marcos* is the direct object of the clause and as such it would occupy the postverbal position even if it were not marked as focus.⁶

In other contexts, however, the very same focus constituent can be moved to the beginning of the sentence, as in (2) (these contexts will be examined in detail in Sections 3–4):⁷

(6) **A** **MARCOS** invitaron.

ACC Mark invite.PST.3PL

‘(It was) Mark (that) they invited.’

⁵ Indeed, the most natural answers to wh-questions are those that only include the focal constituent without repeating the whole clause. From a methodological viewpoint, however, full sentences, and not constituents in isolation, are needed in order to be able to determine the syntactic distribution of the focal constituent with respect to the other elements of the clause. Note that, at any rate, even if less natural than the focus constituent alone, a full clause is still pragmatically felicitous in this context.

⁶ I am referring here to the lack of syntactic marking at the superficial level of linear order. It has indeed been proposed that postverbal focus undergoes string-vacuous movement to a dedicated functional projection above the vP (Belletti 2001, 2004).

⁷ A further focalization strategy involving movement of the focus constituent is clefting, which I will not discuss in this paper. For an overview of clefts in Romance, see De Cesare (2017).

Within the cartographic approach to syntactic structures, the FF operation is understood as movement to a dedicated functional projection within the left periphery of the sentence (Rizzi 1997). In the generative framework, it is also generally claimed that movement should not occur freely, but should always be related to some sort of special effect, for instance on the interpretation (see, e.g., Chomsky 1995, 2008). Our expectation is thus that FF should be associated with a special interpretation.

2.2. Empirical and theoretical questions

This paper is primarily concerned with the contexts that license FF and the special interpretations that are associated with this syntactic operation. The empirical basis for this study is provided by experimental data on acceptability ratings from European Spanish. Several recent studies on focus in Spanish have highlighted dialectal variation, adopting different methodologies –from production experiments to acceptability judgement tests– and have concentrated on the opposition between different types of focus (information vs. contrastive focus) or between different syntactic categories (e.g. subjects vs. objects) (see Gabriel 2007, 2010, Adli 2011a,b, Hoot 2012a,b, 2016, 2017, Muntendam 2013, Vanrell & Fernández-Soriano 2013, Heidinger 2014a,b, 2015, Feldhausen & Vanrell 2014, Uth 2014, Jiménez-Fernández 2015a,b, Sánchez Alvarado 2018). The principal concern of the present article is neither dialectal variation nor syntactic issues such as the position in which the focus is realized. I will instead concentrate on FF and on the interpretive effects that can be associated with it, taking into consideration three different contexts and three corresponding types of focus. On the basis of the empirical evidence collected, I will then address the following empirical and theoretical questions:

- (a) Which special interpretations are associated with syntactic FF? How widespread and accepted are these possible interpretations among native speakers of European Spanish?
- (b) How can we analyse the interpretive effects (i.e. surprise) in order to capture that relationship between syntactic movement and focus?

To answer these questions, I will offer an analysis of a specific interpretation of FF, namely, its mirative use to express surprise. I will in particular examine the relation between focus and this meaning in an attempt to explain why we need narrow focus and FF in order to obtain the mirative import. My proposal, which builds on the analysis by Bianchi et al. (2015, 2016) for FF in Italian, rests on two assumptions. First, syntactic movement is not always linked to the at-issue meaning (i.e. the informative meaning of a sentence, the message we intend to convey), but can be associated with non-at-issue meanings (or secondary meanings) such as implicatures. In fact, I will show that the mirative interpretation that can be associated with FF in Spanish is a conventional implicature. Secondly, in order to be interpreted correctly, the mirative implicature needs a set of alternatives within its scope, but need not be linked to information-structural conditions or requirements that are based on the new-old information dichotomy.

3. FF and surprise: mirative focus

Let us now turn to the question of the function of the focus constituent in FF contexts. The traditional view is that this syntactic operation has a contrastive or emphatic function (Zubizarreta 1998, 1999, Gutiérrez-Bravo 2008, López 2009). The typical examples provided in the literature are corrections, as in (7), where the corrected alternative is explicitly mentioned or salient in the context:

(7) A **MARcos** invitaron, no a Pablo.

ACC Mark invite.PST.3PL not to Paul

‘(It was) Mark (that) they invited, not Paul.’

In Cruschina (2012), I show that another function can be associated with FF in Romance, that is, the expression of surprise (see also Jiménez-Fernández 2015a). Examples of this use are given in (8):

(8) a. ¡Imagínate! ¡**Con el director** quería hablar!

imagine.IMP.2SG-you with the director want.IMP.3SG talk.INF

‘Guess what! The director he wanted to talk to!’

b. ¡No me lo puedo creer! ¡**Tres trozos de Tarta** se

not me it can.PRS.1SG believe.INF three pieces of cake REFL

ha comido Ángela!

have.PRS.3SG eaten Angela

‘I can’t believe it! Three pieces of cake Angela ate!’

I used the term mirative for this type of focus, borrowing the term from the typological literature where this label is applied to those grammatical devices that mark new and unexpected information, very often associated with surprise. In language typology, mirativity “refers to the linguistic marking of an utterance as conveying information which is new or unexpected to the speaker” (DeLancey 2001: 369), and is therefore “a grammatical category whose primary meaning is speaker’s unprepared mind, unexpected new information, and concomitant surprise” (Aikhenvald 2004: 209). As pointed out by Watters

(2002: 290) the surprise and unexpectedness effect results from the fact that “the information is newly discovered –not yet integrated into the speaker’s store of knowledge”. There are no grammatical mirative markers in Spanish, like those discussed in the typological studies, but, on the basis of similar meaning, we can argue that the value that can be associated with FF can be described as mirative, and that hence mirative focus is a type of focus that is related to the expression of surprising or unexpected new information.

Mirative FF is possible in several Romance languages, not only in Spanish, but also in Italian (9), Romanian (10), and Portuguese (especially Brazilian Portuguese) (11). It is particularly common in some Italo-Romance varieties such as Sicilian and Sardinian (12) (see Cruschina 2012, 2016, Cruschina & Remberger 2017):

- (9) I miei? Pensa un po’: **una collana di PERLE** mi
 the my think.IMP.2SG a little a necklace of pearls me.CL
 hanno regalato!
 have.PRS.3SG given
 ‘My parents? Guess what?! A pearl necklace they gave me (as a present).’
 (*Italian*, Bianchi et al. 2015: 12)

- (10) **Două luni** mi-a luat să scriu acest articol!
 two months me.CL-have.PRS.3SG taken SBJV write.PRS.1SG this article
 ‘Two months it took me to write this article!’
 (*Romanian*, Cruschina et al. 2015: 258)

- (11) É inacreditável! Por um corte de cabelo, **60 reais** ele me pediu!
 is incredible for a cut of hair 60 reais he me.CL ask.PST.3SG

‘It’s incredible! For a haircut, 60 réais he charged me!’

(*Brazilian Portuguese*, Cruschina & Remberger 2017: 519):

- (12) a. **A MACHINA** m’ arrubbaru!
the car me.CL steal.PST.3PL
‘My car they stole!’

(*Sicilian*, Cruschina 2012: 71)

- b. **Unu figumORISCU** at mandigadu Giuanne!
a prickly-pear has eaten John
‘A prickly-pear John has eaten!’

(*Sardinian*, Jones 2013: 81)

Preliminary crosslinguistic surveys seem to reveal that mirative FF is in fact not limited to Romance, but a similar (if not identical) phenomenon is found in other non-Romance languages, for example in Hausa (13), where the mirative meaning is evident in Hartmann & Zimmermann’s (2007: 385) description of the phenomenon: “In our view, a focus constituent, or part of it, appears *ex situ* in order to mark its content or discourse function as unexpected or surprising in a given discourse situation.” Similar examples have also been discussed for German (14), although it must be stressed that German V2 syntax renders the situation more complex due to the fact that this preverbal position is much more easily accessible than in other languages and can be associated with several other functions and meanings.

- (13) A: Mèeneenee yà fàaru?
what 3SG.REL.PERF happen

‘What happened?’

B: **Dabboobi-n jeejii** nee mutàanee su-kà kaamàa.

animals-of bush PRT men 3PL.REL.PERF catch

‘The men caught *wild animals*.’

(*Hausa*, Chadic, Nigeria; Hartmann & Zimmermann 2007: 385)

(14) a. **GRÜN** will Maria bald die Tür streichen.

green wants Mary soon the door paint

‘Soon, Mary wants to paint the door green.’

(*German*, Frey 2010: 1417)

b. Unglaublich, weißt du, wo sie ihre Hochzeitsreise

unbelievable know.PRS.2SG you where they their honeymoon

verbracht haben? **Auf die Malediven** sind sie gefahren!

spent have.PRS.3PL to the Maldives are.PRS.3PL they gone

‘Unbelievable, do you know where they spent their honeymoon? They went to the Maldives!’

(*German*, Cruschina et al. 2015: 259)

As will be discussed in more detail in the following sections, the acceptability of FF with mirative focus is very important in understanding the mechanisms that trigger the syntactic operation of FF, and for the association between FF and surprise. The examples above clearly show that a presupposition or a given background is not a necessary condition for mirative FF to apply, presenting a challenge for those analyses and theories that claim a direct relation between FF and the givenness of the background, that is, of the postfocal material (see Samek-Lodovici 2015).

4. The rating experiment

In this section, I describe the web-based rating experiment that I conducted on the distribution of FF in Spanish.⁸ The participants were recruited online: 102 native speakers of European Spanish volunteered to take part in the experiment. The experiment was implemented on *IbexFarm* (Drummond 2017), and the task consisted in acceptability judgements: the experimental sentences were presented in a context and the participants were asked to rate the degree of acceptability of each target sentence (highlighted in a blue font) taking the relevant context (in black) into account and using a 7-point Likert scale. Two factors were tested: (i) focus position and (ii) context type. The first factor included two levels, that is, the focus position was either *in situ* or *ex situ*, corresponding to the lack or the application of FF, respectively. For the second factor, three distinct contexts were designed in order to elicit different interpretations of the focus: corrective, mirative, and merely contrastive (see below). The design was fully factorial with 6 experimental conditions (3*2):

- (15) (i) corrective context, *in situ*; (ii) corrective context, *ex situ*;
(iii) mirative context, *in situ*; (iv) mirative context, *ex situ*;
(v) merely contrastive context, *in situ*; (vi) merely contrastive context, *ex situ*.

I created 36 items and each was presented under the 6 conditions above, for a total of 216 experimental stimuli (each stimulus consisting of a context and a target sentence). The two

⁸ This experiment replicates the experiment on Italian described in Bianchi et al. (2015): the experimental design and the stimuli were almost identical, but for technical and practical reasons a different online software (*IbexFarm*) and a different scale for the acceptability ratings were used for the Spanish experiment. Despite these slight differences (cf. also fn. 14), perhaps unsurprisingly, the results of the Spanish experiment closely match those of the Italian experiment. See Bianchi et al. (2015, 2016) for more details. See also Trotzke (2017a) for mirative fronting in German with similar results.

factors were manipulated between items and within subjects. The stimuli were divided into 6 lists, so that each included 36 experimental stimuli (6 stimuli per experimental condition) and 36 fillers.⁹ The participants were randomly assigned one list. Each participant was thus only presented with one stimulus per item (i.e. each item under one condition only), so that the same lexical material of the target sentence was only judged once. The order of the trials was pseudo-randomized, each trial was presented individually, and the participants were not able to modify their answers. Each session started with a brief sociolinguistic questionnaire and a short familiarization session.¹⁰

In the next section I illustrate the three types of context individually, with the aid of the relevant examples.

4.1. The three types of context

Let us start with the first type of context: the corrective context. An example from the experiment, together with the introductory context, is provided in (16). In this and in the following examples, both the in-situ (16a) and the ex-situ (16b) version of the target sentence are reported for completeness, but recall that only one of the two versions was presented to the subjects:

⁹ Direct wh-questions were used as target sentences in the fillers. These wh-questions varied according to the extraction site of the wh-element (extraction either from an embedded or from the matrix clause) and to the position of the subject in the embedded clause (either preverbal or postverbal). The appearance and the design of the fillers were perfectly comparable with that of the experimental stimuli.

¹⁰ At the beginning of the experiment, the participants were asked to provide some personal information, including details about their origins and their variety of Spanish. Even though this was not among the purposes of the present study, this allowed me to control for dialectal variation: no significant differences emerged, however, with respect to the provenance of the speaker.

(16) CONTEXT: *María y Gabriel se han casado recientemente; Ana y Lucía hablan de su luna de miel.* ‘Mary and Gabriel just got married; Anna and Lucy are talking about their honeymoon.’

A: Me han dicho que fueron a las Seychelles.
me.CL have.PRS.3PL said that go.PST.3PL to the Seychelles
‘I heard that they went to the Seychelles.’

a) L: Fueron a las **Maldivas**, no a las Seychelles. Me lo
go.PST.3PL to the Maldives not to the Seychelles me.CL it.CL
acaba de decir el hermano de María.
finish.PRS.3SG of say.INF the brother of Mary
‘They went to the Maldives, not to the Seychelles. Mary’s brother just told me.’

b) L: **A las Maldivas** fueron, no a las Seychelles. Me lo
to the Maldives go.PST.3PL not to the Seychelles me.CL it.CL
acaba de decir el hermano de María.
finish.PRS.3SG of say.INF the brother of Mary
‘To the Maldives they went, not to the Seychelles. Mary’s brother just told me.’

This is essentially the contrastive and corrective function that has been traditionally associated with FF in Romance and that was mentioned in Section 3. What is important to observe about this context is that an alternative to the focus must be salient in the context. In (16), for example, the alternative to the focus *a las Maldivas* is *a las Seychelles*, that is, they went to the Maldives and not to the Seychelles. Since the postfocal material in L’s

reply with corrective FF (16b) is already present in A's first statement, the background in L's correction (i.e. the presupposition that they went somewhere on a honeymoon) counts as given. In this sense, corrective FF complies with the traditional definition of the information-structural function associated with focus, namely, the partition of the sentence into a new-information focus part and a given background.

The second type of context is the mirative context. In this case, unlike with the corrective focus, no salient alternative need be present in the relevant context. The speaker utters (17a/b) not to make a correction with respect to other possibilities, but to express surprise:

(17) CONTEXT: *María y Gabriel se han casado recientemente, y su amiga Ana comenta.*

‘Maria and Gabriel just got married, and their friend Anna comments.’

a) A: ¡Y yo que pensaba que no tenían ni un euro!
 and I that think.IMPF.3SG that not have.IMPF.3PL not-even a euro
 ¿Sabes qué?! ¡Fueron a las Maldivas de luna de miel!
 know.PRS.2SG what go.PST.3PL to the Maldives of moon of honey
 ‘I thought they were penniless! Guess what?! To the Maldives they went on
 honeymoon.’

b) A: ¡Y yo que pensaba que no tenían ni un euro!
 and I that think.IMPF.3SG that not have.IMPF.3PL not-even a euro
 ¿Sabes qué?! ¡A las Maldivas fueron de luna de miel!
 know.PRS.2SG what to the Maldives go.PST.3PL of moon of honey

‘I thought they were penniless! Guess what?! To the Maldives they went on honeymoon.’

The mirative meaning will be discussed in more detail in the next section. For the moment, I will simply remark that, in the example above, the surprise effect derives from the fact that the speaker presumably has in mind other alternative places which are more likely destinations for Maria’s and Gabriel’s honeymoon, on the basis of economic reasons, for instance. As stated previously, none of these alternative places is in fact salient in the context –the background is not given– but they must nevertheless be relevant alternatives in this context, that is, possible destinations for a honeymoon according to the shared knowledge of the interlocutors. Mirative FF (17b) is thus problematic for the traditional analyses of FF, and of focus more generally, because it is not contrastive or corrective, given that no explicit alternatives are necessary; nor is the traditional information-structural articulation of the sentence into a new and a given part guaranteed, inasmuch as the background need not be given. In other words, the meaning associated with mirative FF does not depend either on the information structure of the sentence or on the givenness of the non-focal part of the clause, that is, of the background.

The third and final context is referred to as merely contrastive. This context was intended as a context where there is some sort of contrast but where FF is nonetheless impossible or, at least, pragmatically infelicitous. Negative judgments on FF in this context were provided, see (18b), but the actual aim was to gather empirical evidence with respect to the role that contrast alone, without correction, plays in the determination of FF:

(18) CONTEXT: *Ana y Lucía hablan de dos amigas suyas.*

‘Anna and Lucy talk about two mutual friends.’

A: ¿Partieron ya de vacaciones?

leave.PST.3PL already of holidays

‘Have they already left for the holidays?’

a) L: Sí, fueron **al MAR**, no a la montaña.

yes go.PST.3PL to-the sea not to the mountain

‘Yes, to the seaside they went, not to the mountains.’

b) L: ?? Sí, **al MAR** fueron, no a la montaña.

yes to-the sea go.PST.3PL not to the mountain

?? ‘Yes, to the seaside they went, not to the mountains.’

In this case a salient alternative is mentioned, but only after the focus has been uttered, so that this alternative cannot qualify as a given antecedent for a correction. This shows that contrast alone is thus not a sufficient condition to trigger FF. This third context was mainly included in the experiment as baseline for comparison with the other two contexts and the pre-experimental prediction, confirmed by the results, was that FF is not acceptable with merely contrastive focus.

Summing up the major properties of the three contexts, the corrective context involves both contrast and a given focal alternative, the mirative context needs neither contrast nor a given alternative, and finally, the merely contrastive must be contrastive but includes no given alternatives. The reader might have already noticed that a well-known and extensively discussed type of focus is missing from this typology, namely, information focus. Information focus is typically found in answers to wh-questions and FF with this type of

focus is generally considered unacceptable and pragmatically infelicitous (cf. (1)–(5) above and the references in the discussion of these examples). I decided to leave this type of focus out for two reasons. First, information focus conveys new information and always involves a given background, which corresponds to the presupposition raised in the relevant question. In this sense, information focus is a ‘well-behaved’ type of focus, in that it conforms to the traditional partition of the sentence into a new focus and a given background that a narrow focus generates. Secondly, the acceptability of FF with information focus is rather controversial. As mentioned above, FF of information focus is generally considered infelicitous, but some scholars have more recently reported different views and data (see Gabriel 2010, Hoot 2016, Jiménez-Fernández 2015a,b). A further complication in this respect is that, while contrastive or corrective focus is not possible in answers to questions, mirative focus, and hence mirative FF, is indeed possible, insofar as it conveys unexpected information which is also new. It is thus difficult to accurately detect or control for the presence or absence of mirative nuances in an answer to a wh-question that involves FF.

4.2. The experimental results

The acceptability judgements were converted into z-scores and fitted into a multi-level mixed effects regression. The model included the z-scores as a dependent variable, focus position (in situ vs. ex situ) and context type (contrastive vs. corrective vs. mirative) as fixed effects, and crossed by-subject and by-item random intercepts and slopes. Consider Figure 1, where for simplicity merely contrastive focus is abbreviated as ‘contrastive’:

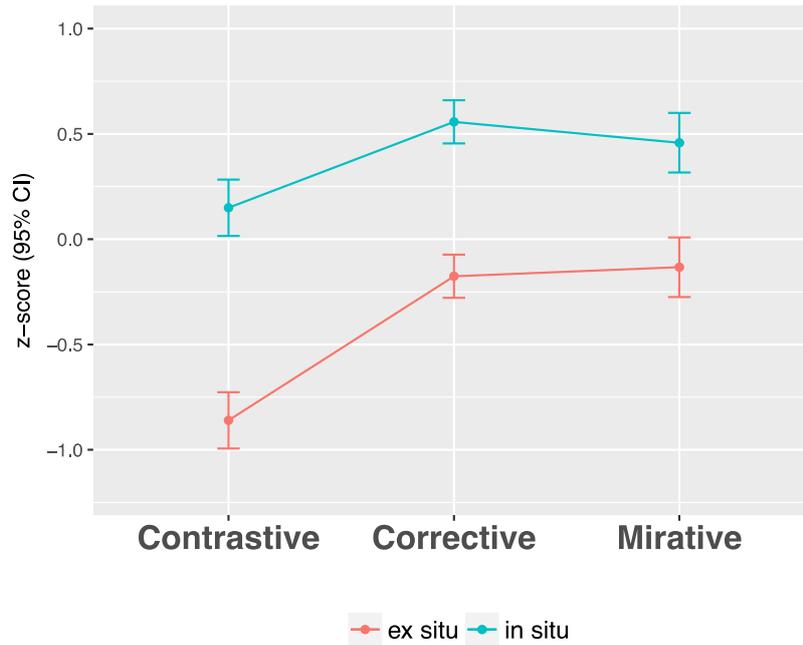


Figure 1: Results of the syntactic experiment: rating judgements (in z-scores, 95% CI) for sentences with focus ex situ and in situ in three types of contexts: contrastive, corrective, and mirative.

Overall, independently of the position of the focus element, the sentences in the contrastive contexts were rated significantly lower than the sentences in the corrective contexts (Estimate: .546, SE: .083, $t = 6.54$, $p < .001$). This effect is partially due to the very low score assigned to the stimuli with contrastive contexts and focus ex situ. In contrast, the sentences in the corrective contexts did not score differently from those in the mirative contexts (Estimate: -.028, SE: .086, $t = -.326$, $p > .05$). In all contexts, overall, the sentences with focus in situ scored significantly higher than those with focus ex situ (Estimate: 0.779, SE: .026, $t = 29.86$, $p < .001$). The interactions between the experimental factors were revealing. Crucially, we observed that the difference between focus ex situ and focus in situ in contrastive contexts is significantly higher than the difference in corrective contexts (Estimate: -.276, SE: .063, $t = -4.32$, $p < .001$). Moreover, a second significant interaction

emerged: the difference between focus ex situ and focus in situ in the corrective context is slightly greater than what was observed for the mirative context (although reduced in size, the effect is statistically significant: Estimate: -.142, SE: .063, t: -2.22, $p = .026$).

Let us consider these results in terms of acceptability and with respect to their consequences on the syntactic distribution of focus in Spanish. As is evident in Figure 1, focus in situ always scored higher than focus ex situ in all three contexts. This finding is not surprising, but could be problematic at a theoretical level. On the one hand, focus in situ coincides with the unmarked word order of Spanish, which means that this word order would always be judged as grammatical and natural independently of the context. In most cases, moreover, the focus in situ was also the final, rightmost constituent of the sentence (cf. 16a, 18a):¹¹ it could then well be that the in-situ version of the experimental sentence was preferred for prosodic reasons, insofar as sentence-final focus corresponds to the default prosodic pattern of Spanish (see Zubizarreta 1998). On the other hand, the contexts were set up so as to elicit a specific interpretation of the focus (corrective, mirative, contrastive), and the fact that corrective and mirative focus need not be fronted leads us to the idea of a degree of optionality with respect to the syntactic realization of narrow focus in Spanish.

This challenging issue has been addressed within the framework of Stochastic OT in Gabriel (2010) with data from two varieties of Argentinean Spanish: in this analysis the in-situ and the ex-situ options are treated as the result of two alternative competing strategies to mark narrow focus: a prosodic strategy, which yields focus in situ, and a syntactic strategy, which gives focus ex situ as a result. A different solution in terms of alternative spell-out of the two copies of the focus constituent has been proposed in Bianchi & Bocci (2012) on the basis of similar data from Italian. This proposal implies that narrow focus

¹¹ The fact that the mirative example (17a) does not have a sentence-final focus is only accidental. Indeed, the in-situ focus is also often the final constituent in most target sentences in the mirative condition.

always enters a syntactic dependency with the left periphery of the clause, and that optionality has to be reduced to a phenomenon of the syntax-prosody interface. In other words, focus movement consistently takes place in the syntax, generating two copies in the foot and in the head of the movement chain, respectively.¹² It is then at the syntax-prosody interface that either the higher or the lower copy is deleted. The preference for focus in situ by native speakers is considered a consequence of the fact that this option corresponds to the unmarked prosodic structure, while spelling out the higher copy in the ex-situ position yields a prosodically marked configuration. Following this approach, and in a kind of OT spirit, I assume that the optionality between in-situ and ex-situ focus is regulated by interface constraints such as prosodic unmarkedness, favouring focus in situ, and interpretive transparency (in the sense of Bobaljik & Wurmbrand 2012), which instead favours FF.¹³ Since this paper is concerned with FF, however, I will not discuss focus in situ further, and will concentrate on focus ex situ.

Let us then examine the ex-situ condition in the three contexts of the experiment. We can interpret the very low score of focus ex situ in the case of merely contrastive focus as a clear indication that FF is not accepted in this context.¹⁴ Crucially, focus ex situ in the corrective and the mirative contexts obtained much higher scores. If we compare the difference between the in-situ and the ex-situ condition for each context, we notice that in the corrective and mirative contexts there is a small distance between the in-situ and the ex-

¹² According to the copy theory of movement, a trace is a copy of the moved element that is deleted in the phonological component, but is still available for interpretation at the semantic interface (see Chomsky 1995 and Nunes 2001, 2004).

¹³ I thank Valentina Bianchi for this suggestion. See Bianchi (2018) for more details.

¹⁴ An anonymous reviewer observes that in the contrastive context, focus in situ scored lower than in the other two contexts. In fact, it may well be that sentences in this condition (i.e. merely contrastive context, in situ) do not always sound perfectly natural to native speakers: the minimal context in (18) above, for instance, does not directly justify the contrast in (18a), which then proves somewhat odd. It is undoubtedly true that in the contrastive context, focus in situ is slightly worse than in the other two contexts, and that some sort of contextual accommodation might be needed to license the contrast. This, however, does not undermine the interpretation of the experimental results, which show that in contrastive contexts the distance between the in-situ and the ex-situ versions is significantly greater than in mirative and corrective contexts (cf. Figure 1).

situ conditions, but that distance is significantly greater in the case of the merely contrastive context. As expected, then, merely contrastive focus does not license FF: as mentioned, statistically, the contrast between corrective and mirative focus *ex situ* vs. merely contrastive *ex situ* is highly significant.

More importantly, the experimental results show that FF (i.e. focus *ex situ*) was accepted both in mirative and corrective contexts. As a matter of fact, *ex-situ* mirative focus scored higher than *ex-situ* corrective focus. The difference between the two conditions is relatively small, but still statistically significant ($p = .026$).¹⁵ On the one hand, we thus have empirical evidence that the mirative function is not just a rare function of FF, but is actually common and widely accepted by native speakers of Spanish, to at least the same or even to a higher degree as corrective FF. On the other hand, the acceptability of mirative FF confirms that the new-given distinction is not a necessary condition for FF, since mirative focus need not involve a given background or a given alternative in the context.

5. The semantic analysis

We can now turn to the semantics of mirative focus. How can we best capture and analyse the intuition that mirative focus creates a sense of surprise? In a sentence with mirative FF like that in (17), repeated here below as (19), two meanings must be acknowledged: a primary, at-issue meaning and a secondary, non-at-issue meaning. The at-issue meaning corresponds to the informative content of the sentence, that is, the main information and message that the speaker wants to convey. For simplicity, I call this meaning *p*. For (19), *p* is equivalent to the proposition ‘They went to the Maldives on honeymoon’. We are also

¹⁵ This difference was somewhat unexpected and did not emerge in the Italian experiment reported in Bianchi et al. (2015). For the time being, I am not able to provide an explanation for this difference; I leave a more thorough investigation of this result and a closer comparison between Italian and Spanish to future research.

able to recognize that the same sentence conveys a secondary non-at-issue meaning, namely, that p (the assertion) is unexpected and hence surprising. The latter is the mirative meaning for which I use the Greek letter μ :

- (19) ¡Y yo que pensaba que no tenían ni un euro!
 and I that think.IMPF.3SG that not have.IMPF.3PL not-even a euro
 ¿Sabes qué?! ¡**Alas Maldivas** fueron de luna de miel!
 know.PRS.2SG what tothe Maldives go.PST.3PL of moon of honey
 ‘I thought they were penniless! Guess what?! To the Maldives they went on honeymoon!’

p = the propositional content of the sentence

[*They went to the Maldives on honeymoon*]

μ = p is unexpected (*the mirative meaning*)

The next question to be addressed is then the following: What exactly is μ ? We have assumed that the mirative value is an additional meaning, and not the main meaning of the sentence. In this sense, we can characterize it as an implicature, i.e. a meaning that is not really asserted, but is implied and suggested by the speaker. We also said that, intuitively, μ expresses that p is unexpected. Unexpectedness is then the source of the surprise that we have descriptively associated with mirative FF. But what does it mean to say that a proposition, describing a state of affairs, is unexpected? In order to understand the notion of unexpectedness, we need to compare the asserted proposition with other possible propositions: something is unexpected, i.e. less likely, with respect to alternatives which are more likely (see the function of ‘emphatic focus’ discussed in Krifka 1995). Finally, if the speaker has a set of alternatives in mind, it is important that these alternatives are ordered

according to what the speaker considers more *normal* in that specific situation and hence more likely to happen. What we need is a stereotypical ordering source defining the normal course of events.

Before discussing this last point, let us examine the first two components of our analysis: the mirative value as conventional implicature and unexpectedness as the result of a comparison of alternatives. In the characterization of these two elements lies the explanation of why focus is needed for the interpretation of the mirative value: it is the focus that provides the set of alternatives necessary to understand unexpectedness.

5.1. The mirative value as conventional implicature

Following Frey's (2010) and Bianchi et al.'s (2015, 2016) analysis of FF in German and in Italian, respectively, I assume that the mirative value is a conventional implicature, in the sense of Potts (2005, 2007). An implicature can be obligatory, that is, always present –these are the conventional implicatures– or optional, in the sense that it depends on the context –these are the conversational implicatures.¹⁶ The mirative value is a conventional implicature because it cannot be cancelled by the same speaker without resulting in a contradiction. Let us take our honeymoon example (20). The mirative meaning μ indicates that p is unexpected; if the same speaker who utters (20a) tries to deny or to cancel this meaning, with continuations such as 'but there's nothing strange about it' (20b) or 'but it doesn't surprise me' (20c), which would in fact deny that p is unexpected, we clearly arrive at a contradiction:

¹⁶ Conventional implicatures are typically triggered by specific lexical items or constructions. A classic example from Grice (1975) is the conventional implicature associated with the word 'therefore', as in the following sentence:

(i) He is an Englishman; he is, therefore, brave.

Speakers using this sentence imply, but do not say explicitly, that his being follows from being an Englishman. It is the meaning of 'therefore' that conventionally generates this implicature.

- (20) a. ¿Sabes qué?! ¡**Alas Maldivas** fueron de luna de miel!
 know.PRS.2SG what to the Maldives go.PST.3PL of moon of honey
 ‘Guess what?! To the Maldives they went on honeymoon!’
- b. #pero no es nada extraño...
 but not be.PRS.3SG nothing strange
 ‘but that’s not strange...’
- c. #pero eso no me sorprende...
 but that not REFL surprise.PRS.3SG
 ‘but that doesn’t surprise me...’

p = the propositional content of the sentence

μ = conventional implicature: p is unexpected

Similarly, the hearer can react to the two meanings independently, which shows that they belong to two different dimensions (Potts 2005, 2007). The hearer can indeed state that either p (21B) or μ (21C) is false:

- (21) A: ¿Sabes qué?! ¡**Alas Maldivas** fueron de luna de miel!
 know.PRS.2SG what to the Maldives go.PST.3PL of moon of honey
 ‘Guess what?! To the Maldives they went on honeymoon!’
- B: ¡Te equivocas! ¡No es verdad!
 REFL be-wrong.PRS.2SG not be.PRS.3SG truth
 ‘You’re wrong! That’s not true!’
- C: ¡No es nada extraño!

not be.PRS.3SG nothing strange

‘There’s nothing strange about it!’

Note that, while denying the truth of the mirative implicature (21C), the speaker may well accept the truth of the at-issue content of the sentence. Non-cancellability –the test in (20)– is a typical property of conventional implicatures, as opposed to conversational implicature. So, μ is an implicature, but a conventional implicature that is always present and that does not depend on the context. Moreover, the reaction test in (21) shows that the mirative conventional implicature pertains to a level distinct from the at-issue dimension of meaning.

It is also important to emphasize that although sentences with mirative FF may resemble exclamative sentences because they express surprise, in fact they are not exclamatives proper. Exclamatives are presuppositional or factive (see Michaelis 2001, Zanuttini & Portner 2003, among others), and typically have a degree interpretation (see Rett 2011). Unlike exclamatives, the propositional content of sentences with mirative FF is not presupposed but asserted, and the surprise and unexpected interpretation does not necessarily derive from a degree interpretation associated with the focus phrase (see also Cruschina et al. 2015).

5.2. Unexpectedness as the result of a comparison of alternatives

Let us now consider the role of the set of alternatives in order to understand unexpectedness and to shed light on the relationship between the mirative import and FF. The question here is why the mirative implicature needs to be associated with a narrow focus and may trigger the syntactic operation FF.¹⁷ First of all, as mentioned previously, in order to understand

¹⁷ As discussed in Section 4.2, focus in situ with a mirative interpretation is also possible. It is however important to observe that we also have a narrow focus structure generating a set of alternatives in the in-situ

unexpectedness we need to compare alternatives with respect to their quality of being probable. In other words, unexpectedness results from the likelihood comparison of alternative propositions (Grosz 2012). The alternative propositions are directly provided by the focus structure: recall that, semantically, “focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions” (Krifka 2007: 18). Narrow focus on a constituent, as in FF structures, therefore introduces a set of alternatives (Rooth 1992).

This analysis can be illustrated with the aid of our honeymoon example.¹⁸ As soon as the speaker utters (22) with a narrow fronted focus on the first constituent *a las Maldivas*, a set of alternatives at the propositional level is automatically evoked. We may think of these alternatives as propositions which have the same background as the asserted proposition (p_4 in (23)) and only change with respect to the focus part, as shown in (23):

- (22) ¡**A las Maldivas** fueron de luna de miel!
 |-----*focus*-----| |-----*background*-----|

version, and that, following Bianchi & Bocci (2012), the realization of the focus in situ or ex situ may simply depend on interface properties.

¹⁸ For a formal version of this analysis, see Bianchi et al. (2016).

(23) $[\lambda x. \text{went}(\text{gabriel}, \text{maría}, x)]$

{ p_1 Fueron *a Madrid* de luna de miel
 p_2 Fueron *a Roma* de luna de miel
 p_3 Fueron *a París* de luna de miel
 p_4 Fueron *a las Maldivas* de luna de miel
...
 p_n Fueron *al Polo Norte* de luna de miel }

|-----focus-----|

These alternatives are all possibilities that the speaker has in mind: the actual number and the actual possibilities that may be relevant in the specific situation will depend on the context and on the knowledge shared by the conversational participants. Moreover, these possibilities need to be ordered and ranked according to a basic principle, that is, what is more normal (and hence expected) on the basis of the speakers' common ground and knowledge. In the literature, this principle or criterion is known as the 'stereotypical ordering source', which defines normality according to the normal course of events (Kratzer 1991, 2012). The alternatives are thus ranked according to expectations. We can therefore consider the alternative propositions at the top of the list in (23) as the more likely, while the alternative propositions at the bottom of the list are the most unlikely. Of course, the ranking can differ between speakers according to their beliefs and knowledge about the situation. If they share some common knowledge, conversational participants could also share the same ordering of the expectations, so that the asserted proposition p_4 may be unlikely for the whole conversational community.

In view of this example, what we have assumed throughout the previous sections becomes clearer: with mirative focus, the alternatives need not be given or salient in the context, but must simply be relevant to the specific context on the basis of the common ground. We can then define the mirative meaning as follows:¹⁹

(24) *Mirative implicature*

μ is the conventional implicature that p is *less likely* than other focus alternative propositions.

If the alternatives are ordered as indicated in (23), for example, we assume that in view of the normal course of events, the subject of our sentence (Gabriel and María) were expected to go somewhere else and not to the Maldives (e.g. because they did not have enough money). So the asserted proposition p_4 (*they went to the Maldives on honeymoon*) is less likely than p_1 , p_2 or p_3 . The asserted proposition need not be the least likely; there could be other alternatives which are even less likely such as p_n (*they went to the North Pole on honeymoon*). What is important is that there is at least one alternative proposition which is more likely than the one being asserted.²⁰

¹⁹ Note that the mirative implicature is not the only implicature or meaning that can be associated with FF in Spanish. As we saw in Section 4, FF can have other functions: it can be used to make a correction, for instance (see Bianchi & Bocci 2012 and Bianchi et al. 2015 for the idea that the corrective meaning is also an implicature that is built on a focus structure). Is the question of which meaning or function is triggered when a speaker produces an FF structure dependent on the context? It is tempting to conclude that the FF-associated meanings or implicatures are in fact grammaticalized, in the sense that they are grammatically distinguished by specific properties such as the intonation and the prosodic contour. On the basis of evidence from a production experiment, Bianchi et al. (2015, 2016) show that this is indeed the case in Italian, where the intonation of corrective FF and that of mirative FF are clearly distinct. It would be very interesting to verify whether Spanish behaves similarly in this respect, but for the time being, I have to leave this task to future research.

²⁰ Unexpectedness could also yield discontent or anger if the focus alternatives are ranked according to a bouletic ordering source (i.e. according to wishes or desires) (Kratzer 1991, 2012), rather than a stereotypical ordering source (see Bianchi et al. 2016).

6. Conclusions

In this paper, I have investigated the distribution of FF in Spanish and the special meanings that can be associated with this syntactic operation, in particular the mirative import. We are now able to provide an answer to the empirical and theoretical questions that were addressed in the introduction (cf. § 1.2.), and that I repeat here below for convenience:

- (a) Which special interpretations are associated with syntactic FF? How widespread and accepted are these possible interpretations among native speakers of European Spanish?
- (b) How can we analyse the interpretive effects (i.e. surprise) in order to capture that relationship between syntactic movement and focus?

In response to the empirical question (a), we have seen that the corrective and mirative interpretations are very commonly associated with FF. In particular, as confirmed by the results of the syntactic experiment, the distribution of FF in Spanish shows that the mirative meaning is as acceptable as the corrective interpretation.²¹ In response to the theoretical question (b), following previous work (Bianchi et al. 2015, 2016), I proposed that the mirative meaning is a conventional implicature that requires a focus structure in order to be interpreted correctly. More specifically, it needs a set of alternatives ordered according to expectations. This analysis straightforwardly explains the association between the mirative value and focus.

The evidence of mirative FF in Spanish ultimately shows firstly that this meaning is entirely independent from the traditional partition of the sentence into a new focal part and a given background, and secondly that syntactic movement can be associated with

²¹ We should not exclude the possibility that other special (evaluative) interpretations can be associated with FF in Spanish (see Frey 2010 and Trotzke 2017b for German, where the notion of ‘emphatic fronting’ is used to cover various interpretations).

secondary non-at-issue meanings such as implicatures. The first point proves that the givenness of the postfocal background material as well as the presence of a salient alternative in the context are not necessary conditions for FF. More importantly, the acceptability of mirative FF shows that Spanish FF is not exclusively linked to information-structural conditions or requirements, via the new-old information distinction. The set of focal alternatives generated by mirative FF is instead exploited to support an evaluative conventional implicature, namely, that there exists at least one focus alternative proposition that is more likely than the asserted proposition. As for the second issue, this study supports the cartographic view that information-structure notions and discourse-related features like focus should thus not be relegated to extra-syntactic domains such as the level of pragmatics, but may play an essential role in the triggering of syntactic operations and in the mapping between syntax and semantics.

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