

RESEARCH ARTICLE

To move or not to move: Is focus on the edge?

Ángel L. Jiménez-Fernández 

Departamento de Filología Inglesa (Lengua Inglesa), Universidad de Sevilla, Spain
Email: ajimfer@us.es

Received: 26 January 2023; **Revised:** 03 September 2024; **Accepted:** 29 June 2024

Keywords: Edge Feature; English; feature inheritance; fronting; focus types; in situ; Spanish

Abstract

A discourse-syntax interface-based approach to three types of focus – Information Focus, Corrective or Contrastive Focus, and Mirative Focus – is discussed in this paper. In my approach, I address the role of discourse/agreement features in the syntactic process of Agree in the Minimalist Program as well as their possible combination with an Edge Feature to trigger attraction of each discourse category, comparing Spanish and English. The data I examine are taken from experimental work, based on two original experiments that test the grammaticality/acceptability of sentences with fronted and in situ focus by native speakers of English and Spanish. The parametric variation detected in the two languages is accounted for by an analysis based on the availability of inheritance of discourse features in the relevant language alongside the activation of an Edge Feature, triggering movement of the relevant discourse category.

1. Introduction¹

In this paper, I discuss focus types – Information Focus (IF), Corrective Focus (CF), and Mirative Focus (MF) (cf. Jiménez-Fernández 2015a,b, 2020; Frascarelli & Jiménez-Fernández 2021; Cruschina 2022; Cruschina, Giurgea & Remberger et al. 2022) – the role of discourse/agreement features in the syntactic process of Agree in the Minimalist Program, and their combination with an Edge Feature (EF) to trigger attraction of each discourse category. In doing so, I compare Spanish (a language with free word order) and English (a language with rigid word order).² The data I examine are taken from experimental work,

¹ The research here has been partially funded by research project PID2022-137233NB-I00 of Spain's Ministry of Science, Innovation, and Universities (MICINN). I am thankful to the *Journal of Linguistics* reviewers for making the paper stronger with their comments. Thanks to Aimée Lewis for revising the English.

² When classifying a language as syntactically rigid or flexible, I refer to the fact that a particular language such as English tends to follow the pattern SVO (Hawkins 2014), whereas another language such as Spanish is less strict and the tendency to stick to the canonical pattern is blurred by the frequency it uses other possible patterns (Fernández-Soriano 1993; Leonetti 2014). Actually, although English is a rigid word-order language, it exhibits rearrangements as in *All is dangerous, I like*. In this tendency, there are languages which are sometimes classified as rigid but flexible on other occasions, as is the case of French (Guerrero & Belloro 2010).

based on two studies testing the grammaticality/acceptability of sentences with fronted and in situ focus by native speakers of English and Spanish. Different strategies will be observed, including preposing and in situ focus. Following are examples of preposed IF, CF, and MF in Spanish, from the experiments:

- (1) A: ¿Qué bebe Jimena cuando va a Brasil?
 what drink-PRS.3SG Jimena when go-PRS.3SG to Brazil
 ‘What is Jimena drinking when she goes to Brazil?’
 B: CAIPIRIÑA bebe normalmente.
 CAIPIRINHAS drink-PRS.3SG normally
 ‘She usually drinks CAIPIRINHAS.’
- (2) A: Ángela bebe coca-cola en las comidas.
 Angela drink-PRS.3SG coke in the meals
 ‘Angela drinks coke for meals.’
 B: No, no. SÓLO AGUA bebe ella en las comidas,
 no no ONLY WATER drink-PRS.3SG she in the meals
 nada de coca-cola.
 nothing of coke
 ‘No, no. She drinks ONLY WATER in her meals, not coke.’
- (3) ¿Sabes qué? ¡DOS PAQUETES DE CIGARRILLOS se
 know-PRS.2SG what TWO PACKETS OF CIGARETTES SE
 fumó Luis mientras esperaba para el médico!
 smoke-PST.3SG Luis while wait-PAST.3SG for the doctor
 ‘You know what? Luis smoked TWO PACKETS OF CIGARETTES while he was
 waiting at the doctor’s!’

Most frequently, when native speakers are informally asked, English sentences in which a focused constituent is preposed are considered ungrammatical:

- (4) [Context: the speaker thought that Loui, a friend of his, only smoked a cigarette occasionally]
 Guess what. *TWO PACKS OF CIGARETTES Loui smoked in the waiting room!

In (4), the determiner phrase (DP) *two packs of cigarettes* has been marked as MF and has moved to the left periphery (LP). However, the resulting structure is not well formed, which leads us to wonder whether focus preposing is available at all in a language such as English.

It is taken for granted in the literature that focus fronting is available in English and authors simply assume the acceptability of these focalized constructions based on their introspective judgment (Haegeman 2012; Haegeman, Meinunger & Vercauteren 2014; Lahousse, Laenzlinger & Soare 2014; etc.). To my knowledge, there is no empirical study using experimental work that explores the acceptability of English focus fronting, with the notable exceptions of Samek-Lodovici (2018) and Samek-Lodovici & Dwyer (2024). This has led me to wonder whether it was relevant to explore the availability of this phenomenon with native speakers of English and compare it with a language, such as Spanish, where fronting is more freely used (Leonetti & Escandell 2009, 2017).

Given all these discrepancies and inconsistencies surrounding the syntax and interpretation of focus, I do believe that experimental work will shed some light on the syntactic and information-structure interpretation of focus (both IF and CF). In this respect, one goal of this research is to confirm or deny different approaches to CF and IF in English and Spanish. This goal will be implemented by including MF, for which no study has ever explored a contrastive view of the different strategies a language may employ.

In view of this scenario, where judgments are inconsistent and interpretations of the discourse-based syntactic devices are used, my goal in this paper is to address the different strategies used to mark focus in English and Spanish, based on experimental work.

The research question I aim to answer in this paper is the following: given Miyagawa's (2017) Strong Uniformity Principle, according to which all languages share the same grammatical properties, do English and Spanish instantiate similar mechanisms in terms of focus marking? If so, the two languages should exhibit grammatical mechanisms to express focus, although these devices may differ in the activation of some grammatical feature in one language but not in the other, thereby accounting for parametric variation.³

My working hypothesis is that, in a language with such a rigid word order as English, preposing is not the most natural option to mark focus, but other grammatical mechanisms may be employed to express this discourse category. On the other hand, in a free word order language, such as Spanish, the range of grammatical manifestations of focus will be higher, including the natural use of preposing.⁴ The main contribution of the paper is not about the free or flexible word order of the two languages under examination but rather the acceptability and interpretation of focus types in languages exhibiting such a different word order.

To show the validity of this hypothesis and acquire an accurate experimental basis to explore my research question, I have carried out an experiment in which native speakers of English and Spanish had to express their grammaticality judgments by using a four-point Likert scale. I use this experimental work to produce a theoretical analysis based on the possible or impossible combination of discourse features with an EF, which will trigger movement of the focused constituent to the LP.

The paper is organized as follows. In Section 2, I present a background on the typology of focus that I assume here. Section 3 presents the experimental work, including information about the experiment and the tokens that I have tested alongside the statistical discussion of the results, based on means and the Student's *t*-test. This will help decide whether my working hypothesis is validated. In Section 4, I put forth a theoretical analysis based on the active participation of an EF to trigger movement in Spanish and the deactivation of such a feature in English so as to account for its ban on focus-induced movement. In Section 5, I draw conclusions from the previously detailed research.

³ In Miyagawa's featural system, discourse features are present in the syntactic computation, and hence I assume discourse features such as [focus] (or its decomposition in a bundle of features) to play a role in the derivation of sentences containing a focus-marked constituent. I am aware of the debate on whether information structure is present in the syntactic derivation or not. See discussion in Jiménez-Fernández (to appear). On the other hand, Miyagawa's claim that all languages share the same grammatical properties implies that the inventory of grammatical properties is finite and languages use a given grammatical property more prolifically than others but still have some access to the latter. See Miyagawa (2017) for general discussion.

⁴ As we will see, focus fronting is more productive in Spanish than in English. From this perspective, it is a natural choice in Spanish to mark focus. However, it should be noted that a subtype of focus fronting such as negative preposing is productive in the two languages. In this paper, I do not discuss this type of fronting and refer readers to Jiménez-Fernández (2018, 2023) and references there.

2. On focus types

2.1. Interpretative properties of focus types

Recent works on the interface and structural properties of discourse categories have led to a distinction for different types of Topics (Büring 1999; Frascarelli 2007; Frascarelli & Hinterhölzl 2007; Krifka 2007, 2008; Bianchi & Frascarelli 2010; Frascarelli & Jiménez-Fernández 2017, 2021; Jiménez-Fernández 2020), Foci (cf. Kiss 1998; Âmbar 1999; Krifka 2007; Leonetti & Escandell 2009; Cruschina 2011, 2022; Bianchi & Bocci 2012; Jiménez-Fernández 2015a,b, 2018, 2020, 2023; Cruschina 2022; among others) and Contrast, often associated with either Focus or Topic but also as an independent feature (Vallduví & Vilks 1998; Molnár 2006; Bianchi & Bocci 2012; Molnár & Winkler 2010).

As far as the semantics of focus is concerned, two approaches can be identified, namely the Alternative Semantics approach and the Structured Meaning approach. In the Alternative Semantics approach (Rooth 1992; Beaver & Clark 2008), focus generates a set of alternatives. Given a *wh*-question, the answer involves a set of propositions which must be congruent to the question. To illustrate, the question in (5) generates the set of propositions in (6), varying in the focused direct object. All the alternatives are congruent answers with respect to the question.

(5) What does Peter want?

(6) {Peter wants SPARKLING WATER, Peter wants COKE, Peter wants BEER, ...}

On the other hand, the Structured Meaning approach (Krifka 2007) splits the proposition into a Focus (e.g. *coke* in the example above) and a background (the denotation of the rest of the clause, i.e. the property of being something that Joe wants).

When it comes to the different types of focus that can be identified, we are faced with different semantic properties, which are allegedly reflected in the syntactic derivation (this impact on syntax may be more prevalent in some languages than in others) and contribute to the definition of each focus type.

(A) Information Focus: IF denotes purely new information (Zubizarreta 1998). It is standard in the analysis of information structure to identify the IF by means of a correlation between a question and an answer. In this line, Gupton (2014) claims that IF implies the resolution of a *wh*-variable in a preceding context. According to the Structured Meaning approach in Krifka (2007), question-answer congruence requires the Focus in the answer to satisfy the interrogative phrase of the question, so the backgrounds should be identical in the question and in the answer. The satisfaction of the request may be seen as the main semantic contribution of this discourse category. The identification of the question's variable in the answer constitutes IF, conveying new information, as illustrated in (7):

- (7) A: ¿Quién ha comprado la tarta para el cumpleaños?
 who have-PRS.3SG bought the cake for the birthday
 'Who has bought the cake for the birthday party?'
 B: La ha comprado Susana.
 CL.ACC.FM.SG have-PRS.3SG bought Susana
 'Susana has bought it.'

In English, the syntactic position occupied by any constituent playing the role of IF is in situ (Gussenhoven 2007).⁵ However, Zubizarreta (1998) states that the most natural syntactic position for IF in Spanish is the final position. This is why the subject *Susana* occurs in postverbal position in the answer in (7).⁶

(B) Corrective Focus: Following Zubizarreta (1998),⁷ I understand CF as a constituent, which is asserted in clear opposition to another entity which has been previously mentioned in the context (Ortega-Santos 2016). Contrast in this case involves a Focus-Background partition, and the set of alternatives is restricted either to members of the same set explicitly presented before by means of an assertion or simply tacitly presupposed. The following example illustrates the use of a preposed CF:

(9) [Jimena and Susana are talking about Vanessa, Igor and their recent wedding.]

A: Si he entendido bien, se han ido
if have-PRS.1SG understood well SE have-PRS.3PL gone
a México.
to Mexico

B: No, ¡te equivocas! ¡A CUBA se han
no, SE be-wrong-PRS.2SG to Cuba SE have-PRS.3PL
ido de viaje de novios! ¡No a México!
gone of honeymoon not to Mexico

‘A: If I’ve understood correctly, they went to Mexico.

B: No, you are wrong! They went TO CUBA for their honeymoon! Not to Mexico!’
(Jiménez-Fernández 2015a: 52 ex. [14])

⁵ As pointed out by a reviewer, Kayne (1998) argued that focus fronting is part of the grammar of English, but remnant movement masks this fronting. In other words, there is focus fronting in English depending on the analysis of seemingly in situ focus we assume. Ortega-Santos (2008) checked whether the hypothesized focus movement + remnant movement licenses parasitic gaps and it is not the case. The latter suggests that focus movement is at best just marginal in English.

⁶ Jiménez-Fernández (2015b) has shown that focus fronting is also available when the focus is informational in some Spanish dialects (Andalusian Spanish). Hence, in this variety a possible reply in (7) may simply be *Susana lo ha comprado*, where there is no clear evidence that the IF *Susana* has moved to the LP or stays in situ (as in English). However, the IF is the direct object, Andalusian Spanish also instantiates preposing to the LP, as shown in (i):

(i) A: ¿Qué está comiendo Ángela?
what be-PRS.3SG eating Ángela
‘What is Angela eating?’
B: Pasta está comiendo Ángela.
pasta be-PRS.3SG eating Ángela
‘Ángela is eating pasta.’

Here *pasta* in (iB) is the object of the verb *comiendo* ‘eating’ and satisfies the wh-variable in the question (A). Note that it has undergone movement to the left, thereby supporting the idea that IF can also be fronted in some language. See also Vanrell & Fernández-Soriano (2013) for a similar instantiation of IF in the LP of other Spanish varieties and in Catalan varieties. A similar case of IF fronting has been detected in Armenian (Giorgi & Haroutunyan 2020) and Italian (especially in Southern dialects; cf. Bocci 2008 and Catasso, Coniglio & De Bastiani 2022).

⁷ Zubizarreta (1998) uses the term Contrastive Focus. I do not differentiate between Corrective and Contrastive Focus and stick to the term CF, but see Krifka (2007, 2008) for the difference between these two focus types.

In semantic terms, this CF implies some sort of contrast of correction with respect to the previous assertion (Zubizarreta 1998; Ortega-Santos 2016).

(C) Mirative Focus: Following Cruschina (2012, 2022), Camacho-Taboada et al. (2016), Frascarelli & Jiménez-Fernández (2021) or Jiménez-Fernández (2020), among others, MF can be described as one type conveying new information. However, based on the speaker's knowledge of the hearer's expectations, it is implied that such information will be unexpected. This unexpectedness is the semantic property which leads authors such as Jiménez-Fernández (2015a) and Camacho-Taboada et al. (2016) to include the feature [+ surprise] as part of the featural array of MF, alongside with [+ new].⁸ I illustrate MF in Spanish in (10), where caps are used to signal the proposed MF:

- (10) ¡No me lo puedo creer! ¡TRES
not CL.ACC1SG CL.ACC3SG.MSC can-PRS.1SG believe three
TROZOS DE TARTA se ha comido Ángela!
pieces of cake SE have-PRS.3SG eaten Angela
'I can't believe it! Angela ate THREE PIECES OF CAKE!'⁹
(Jiménez-Fernández 2015a: 52 ex. 8)

Mirativity does not depend on a question-answer context. Contrast is set up with an element that is part of the shared knowledge of the participants in the communicative act, though its presence in the relevant context is new. The set of alternatives is very large, as Jiménez-Fernández (2015a) notes. In example (10), the alternatives are by far too many as long as they are numbers of pieces of cake.

To conclude this section, it should be clear that, semantically and pragmatically, focus has a range of flavors that lead us to the distinction between three types. We have seen that, in Spanish, it is quite common to express CF and MF by moving the focus-marked element to the LP.¹⁰ From the English translations we may infer that most naturally CF and MF remain in situ. The different strategies attested in the literature will be tested in the experiment, where the availability for fronting and in situ for the three types of focus will be checked in the two languages under examination.

2.2. The syntax of focus types and their optional movement

In this section, I address the syntactic manifestations of the three types of focus in English and Spanish. In the absence of discourse-based morphology to mark focus in the

⁸ MF involves a range of features, comprising [+surprise] [+ new]. In the formal realization of MF, to be discussed below, I take [MF] to stand as a combination of these features. In other words, as we will see, each focus type will correspond to a specific bundle of features.

⁹ The sentence in (10) is exclamative. Although there is a very close connection between exclamatives and mirativity, we can find examples of MF in sentences other than exclamatives. For example, MF fronting is possible in declaratives and interrogatives. This is illustrated in (i):

(i) ¡Qué sorpresa! ¿A CANARIAS te fuiste al final?
what surprise to Canaries SE go-PST.2SG to.the end
'What a surprise! Did you go TO THE CANARIES in the end?'

For the association of mirativity and exclamatives in Spanish and Catalan, see Villalba (2024).

¹⁰ See Tsai & Yang (2022), Villalba (2024) or Sánchez López (2017) for the motivation of positing that mirativity is reflected in syntax.

two languages (contrary to languages such as Gungbe, where focus is marked by a specific suffix; see Aboh 2010), English and Spanish may resort to leaving the focused element in its original position, regardless of the type. In (11) I show in situ IF, in (12) in situ CF, and in (13) MF, for English (all types are capitalized):

- (11) Q: What did you drink at the party?
A: I drank SOME BEER
- (12) A: John has bought a new car.
B: No, no. John has bought A NEW BIKE, not a new car.
- (13) Oh, my God! John has bought A MASERATI!

In Spanish, there is also the option of leaving all focus types in their original position (sentence-internal position), which (parallel to English examples (11)–(13)) is illustrated for IF in (14), for CF in (15), and for MF in (16):

- (14) Q: ¿Qué bebiste en la fiesta?
what drink-PST.2SG in the party
'What did you drink at the party?'
A: Bebí CERVEZA.
drink-PST.1SG beer
'I drank BEER.'
- (15) A: Juan se ha comprado un nuevo coche.
Juan SE have-PRS.3SG bought a new car
'Juan has bought a new car.'
B: No, no. Se ha comprado UNA BICI, no un coche.
no no SE have-PRS.3SG bought A BIKE not a car
'No, no. He has bought A BIKE, not a car.'
- (16) ¡Madre mía! Juan se ha comprado UN MASERATI.
mother mine Juan SE have-PRS.3SG bought a Maserati
'My goodness! Juan has bought A MASERATI.'

Given the examples in (11)–(13) and (14)–(16), the conclusion that might be drawn is that, in both English and Spanish, focus types can be expressed in situ. This raises the question as to the syntactic movement that discourse may induce, in particular, whether in the two languages movement triggered by a [Foc] feature (or bundle of focus-related features) is available in the grammar-discourse interface.¹¹ The following examples illustrate focus fronting in English (17)–(19) and Spanish (20)–(22):

- (17) Q: What did you drink at the party?
A: SOME BEER I drank.

¹¹ The impact of focus in the syntactic derivation in languages with no morphological indication is clearly supported by the distribution of focus-inducing adverbs and also by mirative particles, such as *wow* in English or *ANDA* in Spanish. On mirative markers and the connection of mirativity and the Speech Act Phrase, see Cruschina & Bianchi (2021) Espinal et al. (*in press*), Villalba (2024), or Badan (2020).

- (18) A: John has bought a new car.
 B: No, no. A NEW BIKE John has bought, not a new car.
- (19) Oh, my God! A MASERATI John has bought!
- (20) Q: ¿Qué bebiste en la fiesta?
 what drink-PST.2SG in the party
 ‘What did you drink at the party?’
 A: CERVEZA bebí.
 beer drink-PST.1SG
 ‘I drank BEER.’
- (21) A: Juan se ha comprado un nuevo coche.
 Juan SE have-PRS.3SG bought a new car
 ‘Juan has bought a new car.’
 B: No, no. UNA BICI se ha comprado Juan,
 no no A BIKE SE have-PRS.3SG bought Juan
 no un coche.
 not a car
 ‘No, no. Juan has bought A BIKE, not a car.’
- (22) ¡Madre mía! UN MASERATI se ha comprado Juan.
 mother mine a Maserati SE have-PRS.3SG bought Juan
 ‘My goodness! Juan has bought A MASERATI.’

It is clear that optionality is one of the grammatical properties of focus in that, in principle, both in English and Spanish, movement to the LP of a focused constituent is available. For Minimalism, optionality in syntax has been a problem since it implies a relaxation in the obligatoriness of the syntactic rules (Chomsky 2008; Miyagawa 2012; Amaechi & Georgi 2020; Titov 2020; among many others). In what follows, I add to the discussion surrounding optionality in syntax by testing the two possibilities of each focus type in both languages under examination. In doing this, we may obtain a more fine-grained picture to propose a theoretical explanation of optionality in discourse-based movement and the attested variation in English and Spanish.

3. The experiments

3.1. Methodology

The experiments consisted of two parts. The first was intended to obtain demographic information (level of instruction, geographic area, age, gender, etc.). The second part included a grammaticality judgment task, used here to validate the working hypothesis and to motivate the theoretical analysis (Bley-Vroman & Yoshinaga 1992; Gupton 2014; Frascarelli & Jiménez-Fernández 2019; Ortega-Santos 2020, 2024; Hoot & Ebert 2021; among many others). There were three condition types depending on the kind of focus (IF, CF, and MF) to be tested. All focus types were tested on subjects and objects by including

eight tokens for each (four with focus in preverbal position and four with focus postverbal position), which amounts to 48 tokens.¹²

All sentences contained transitive verbs to avoid any bias from the unergative/unaccusative distinction in intransitive verbs. This bias is because postverbal subjects are naturally generated after the selecting unaccusative verb, and this is also the natural position for focused subjects in Spanish (see Irwin 2018 for a discussion on the factors having an impact on speaker's preference for a given syntactic position in Spanish).

Each experiment contained a total of 48 items, plus 34 distractors so informants could not establish a specific pattern in their responses. The different tokens were conveniently randomized before creating the study in the questionnaire. The informants were presented with the questionnaire online in written form using <https://www.limesurvey.org>. Each token was preceded by either a text, a question or a statement that served as the context where the informants had to judge the acceptability of the corresponding item.

When it comes to judgments, a four-point Likert scale was used, in which one stood for fully unacceptable and four for fully acceptable.¹³ The figures provided in the Tables are the mean scores of acceptability alongside percentages. These percentages resulted from the combination of one + two for unacceptability and three + four for acceptability (see Frascarelli & Jiménez-Fernández 2019: 174, where a two-alternative judgement task is proposed to informants; Frascarelli & Jiménez-Fernández 2021: 27, where a four-point Likert scale is used, but the results are taken as involving two options). This was designed as so on purpose, following a common practice known as two-alternative forced choice task, suggested in Stadthagen-González et al. (2017), where the data are interpreted according to the Thurstone measure). Thus, the informants were given enough gradation to decide on their judgments (hence granularity), but also the results were simplified. However, the original four-point scale has been kept as such when used for obtaining the means (see discussion in Ortega-Santos 2024 on the different choices that experimental work may offer).¹⁴

The questionnaire was conducted as an online experiment, with open access, collecting 228 full questionnaires for Spanish and 203 for English. For each token in the experiment, the color blue was used to identify the sentence that informants had to judge. As for results, they were statistically analyzed to detect any significant distinction, so a Student's *t*-test was carried out when needed. By running this *t*-test, we can obtain the *p* value, that is, the probability of obtaining a result at least as extreme as the one that was actually observed,

¹² I have kept the number of tokens per condition to the bare minimum in order to avoid fatigue in the informants (Sprouse, Schütze & Almeida 2013) or satiation (Arunachalam 2013; Snyder 2000, 2022).

¹³ Stadthagen-Gonzalez et al. (2017) argue for the avoidance of too fine-grained scales such as 5-point or more scales. They claim that when informants are faced with open options, they tend to give a disperse response and select the intermediate points. To avoid this flaw, I decided to use this 4-point Likert scale and 'force' informants to make a clear decision.

¹⁴ There has been a hot debate in experimental research with respect to the reliability, consistency, and accuracy of scales versus two-alternative forced choices. One of the main flaws of the latter is the loss of gradience (Sorace & Keller 2005), whereas one of the advantages is their consistency and lack of bias (Stadthagen-Gonzalez et al. 2017). One way to see to gradience and granularity is to use a Likert scale. This is its main advantage. However, scales are not less problematic. One dilemma is whether to choose a four-point, five-point, or *n*-point scale. In particular, there seems to be a tendency among respondents to select the middle option (three in a five-point scale). Different opinions and stands exist (Chang 1994; Adelson & McCoach 2010; Mellor & Moore 2014; among many others). I decided to include a four-point scale in my experiments to avoid the gray area of the middle option; at the same time, for consistency, the four choices were interpreted as two options.

given that the null hypothesis is true. If $p < 0.05$, the effect of the relevant factor/interaction is taken to be significant. My theoretical proposal is based on the statistical results obtained from the experiment.

According to Ortega-Santos (2020: 569–570), the widespread use of informationally gathered acceptability judgements in generative grammar has been widely criticized for three reasons: (1) absence of information about the informants, their origin, their linguistic profile, and their command of the grammatical properties of their native language; (2) absence of distractors to avoid a biased answer; and (3) absence of a statistical analysis. The problem in reason (2) has been solved in my work by inserting 34 fillers, as previously mentioned. On the other hand, the shortcoming in reason (3) will be overcome by presenting a precise statistical analysis based on percentages of acceptability and showing whether there is any significant distinction between constructions in the two languages.

The problem in reason (1) points directly to demographic information as well as the informants' familiarity with linguistics. I tackle this issue in the following section.

3.2. Description of informants

In the English study, 203 speakers participated voluntarily. Information relating to gender can be seen in the following chart (data in Figures refer to number of individuals):

Of the total number of participants, 61% were female and 39% were male. In the case of the Spanish questionnaire, 228 speakers participated also voluntarily. Figure 2 shows gender for the Spanish group, with 74.5% as female and 25.5% as male.

When comparing Figure 1 and Figure 2, we may observe that gender is not a factor, which in turn may have an impact on possible differences between English and Spanish, because the number of women was much higher than men in both cases.

Concerning the origin of participants, the English questionnaire was completed by the spectrum of informants shown in Figure 3.

Most American informants were from the East of the country (77%), as were the Canadian speakers (100% from the Toronto area). British participants were mostly from England (76%), although some of them were from Wales (14%) and Scotland (10%). Finally, Irish speakers were all from the Dublin area (100%).

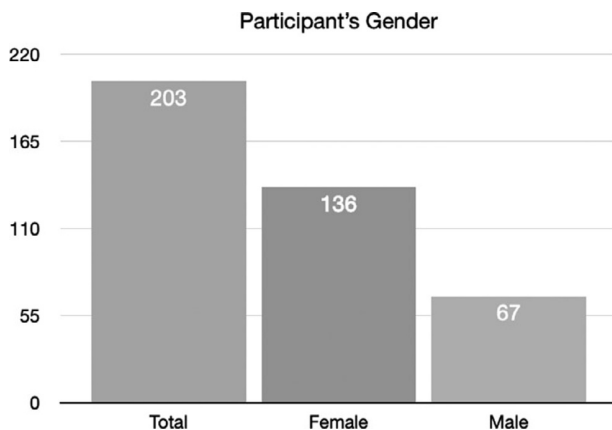


Figure 1. Gender distribution in English.

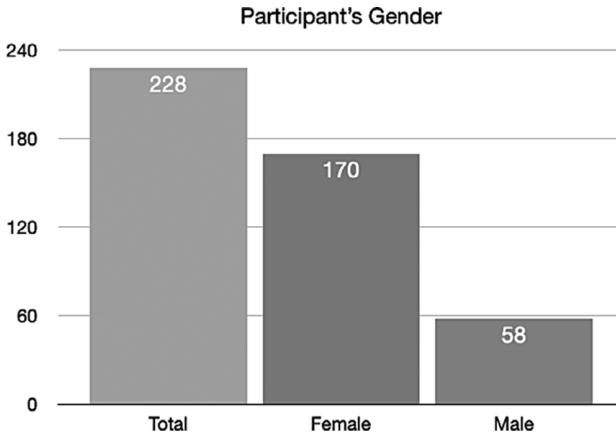


Figure 2. Gender distribution in Spanish.

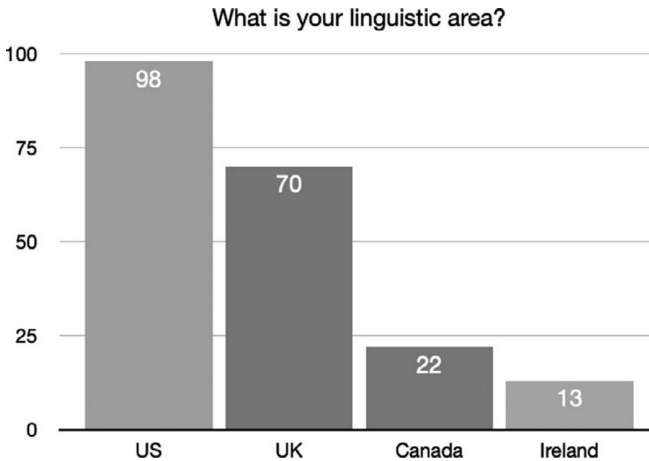


Figure 3. English-speaking geographical area.

In [Figure 4](#), I display the origin of Spanish-speaking participants.

As we may see, 147 speakers were Spanish, mostly from Andalusia (around 40%) and Asturias (around 25%), although some were from Catalonia (20%) and Madrid (9%). The other 6% of informants came from other areas in Spain. On the other hand, 81 informants came from America, mainly from Mexico (41%), Argentina (19%), Chile (15%), and Venezuela (10%) but also from El Salvador (7%), Puerto Rico (6%), and Peru (2%). As we will see, the origin of informants plays a role in the acceptability of fronting in Spanish.

The last demographic questions concern the informants' education, field of study, and command of linguistics. As for education, most participants had a university degree (97%) in the two languages, mostly in the humanities. Finally, as far as their command of linguistics is concerned, most speakers were familiar with linguistics in general (around 95%), thereby replying positively to the question of whether they had experience with linguistics. This familiarity reduces the possible bias that some speakers may show due to a clear preference

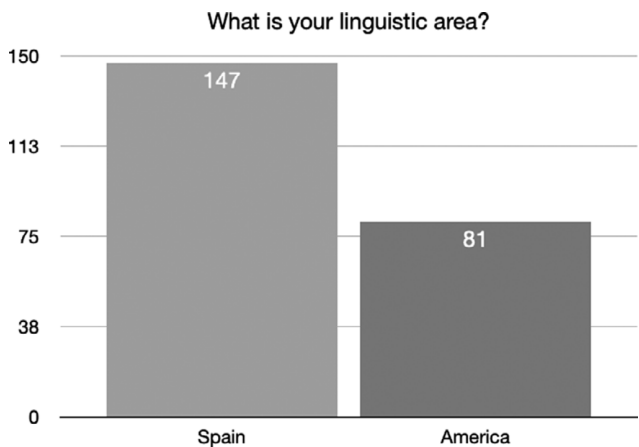


Figure 4. Spanish-speaking geographical areas.

in both colloquial English and colloquial Spanish (the latter, especially among younger participants).

3.3. Conditions, results, and discussion

In this section, I present the types of tokens that I have tested and the results of the experiments. Recall that my working hypothesis is that in English, fronting is not a natural option to mark focus, but it may show other grammatical mechanisms to express this discourse category. On the other hand, in Spanish, the number of grammatical manifestations of focus will be higher, including the natural use of preposing. In order to see if this hypothesis is valid and proceed with a theoretical explanation, I discuss the data obtained from the two studies, making a systematic contrast between the English and the Spanish results.

Starting with the conditions¹⁵ that I tested and examples from the two languages, condition A is dedicated to the acceptability of IF as developed by subjects and objects. In (23), I illustrate the case of focused objects, in which the focus status is induced by the preceding question, under the question-answer congruence constraint (Velleman & Beaver 2016):

- (23) a. A: ¿Qué bebe Jimena cuando va a Brasil?
 what drink-PRS.3SG Jimena when go-PRS.3SG to Brazil
 ‘What does Jimena drink when she goes to Brazil?’
 B: Normalmente bebe CAIPIRINÁS.
 usually drink-PRS.3SG caipirinhas
 ‘She usually drinks CAIPIRINHAS.’

¹⁵ The term ‘condition’ is taken here as used by linguists, such as Gupton (2014), to refer to one particular linguistic phenomenon that is being tested in an experiment. For example, Condition A deals with the instantiation of subject and objects they express IF.

- b. A: ¿Qué bebe Jimena cuando va a Brasil?
 what drink-PRS.3SG Jimena when go-PRS.3SG to Brazil
 'What does Jimena drink when she goes to Brazil?'
 B: CAIPIRINHAS bebe normalmente.
 Caipirinhas drink-PRS.3SG usually
 'She usually drinks CAIPIRINHAS.'

In (24), I illustrate IF in English, taking the object as the focused constituent:

- (24) a. A: What does Jane drink when she travels to Brazil?
 B: She normally drinks CAIPIRINHAS.
 b. A: What does Jane drink when she travels to Brazil?
 B: CAIPIRINHAS she normally drinks.

Condition B attempted to find out about the acceptability of CF. This type of focus is induced by a previous statement which is intended to be corrected in the target sentence. This was tested for both subjects and objects. In (25) and (26), the contrastively focused object construction is illustrated in Spanish and English, respectively:¹⁶

- (25) a. A: Ángela bebe coca-cola en las comidas.
 Angela drink-PRS.3SG coke in the meals
 'Angela drinks coke for meals.'
 B: No, no. Ella bebe SÓLO AGUA¹⁷ en
 no no she drink-PRS.3SG ONLY WATER in
 las comidas, nada de coca-cola.
 the meals nothing of coke
 'No, no. She drinks only water, not coke.'
 b. A: Ángela bebe coca-cola en las comidas.
 Angela drink-PRS.3SG coke in the meals
 'Angela drinks coke for meals.'
 B: No, no. SÓLO AGUA bebe ella en las comidas,
 no no ONLY WATER drink-PRS.3SG she in the meals
 nada de coca-cola.
 nothing of coke
 'No, no. She drinks only water in her meals, not coke.'

¹⁶ The examples of IF and CF included both focused subjects and objects. The reason is that in Spanish it is possible to have a postverbal focused position dedicated to either IF or CF. See Ortega-Santos (2019) for postverbal CF.

¹⁷ As an anonymous reviewer observes, focus-sensitive particles have an impact on the semantics of the focus structure (see, e.g. Krifka 2007, 2008) and favors fronting. I fully agree with this assertion when CF is concerned but not IF (let alone MF). However, the fact that Spanish speakers found CF in situ (including those with a focus-oriented adverb) a perfectly natural option, even with a higher rating of acceptability, does not support the idea that these focus-inducing adverbs does also give rise to fronting effects. I must clarify that the rest of the tested items did not contain any of these adverbs, though.

- (26) a. A: Angela drinks coke with meals
 B: No, no. She drinks **ONLY WATER** with meals, not coke.
 b. A: Angela drinks coke with meals.
 B: No, no. **ONLY WATER** she drinks with meals, not coke.

Finally, Condition C sought to identify the acceptability of MF, both in situ and fronted, while paying attention to a possible asymmetry between subjects and objects. Examples in (27) and (28) illustrate MF in Spanish, and examples in (29) and (30) show MF in English. In both cases, the object has been focused:

- (27) [Contexto: el hablante creía que Luis, un amigo suyo, sólo fumaba un cigarro en determinadas ocasiones, muy de vez en cuando]
 ¿Sabes qué? Luis se fumó **DOS PAQUETES**
 know-PRS.2SG what Luis **SE** smoke-PST.3SG **TWO PACKETS**
DE CIGARRILLOS mientras esperaba para el médico.
OF CIGARETTES while wait-PST.3SG for the doctor
 ‘You know what? Luis smoked two packets of cigarettes while he was waiting at the doctor’s!’
- (28) [Contexto: el hablante creía que Luis, un amigo suyo, sólo fumaba un cigarro en determinadas ocasiones, muy de vez en cuando]
 ¿Sabes qué? **DOS PAQUETES DE CIGARRILLOS** se
 know-PRS.2SG what **TWO PACKETS OF CIGARETTES** **SE**
 fumó Luis mientras esperaba para el médico.
 smoke-PST.3SG Luis while wait-PST.3SG for the doctor
 ‘You know what? Luis smoked two packets of cigarettes while he was waiting at the doctor’s!’
- (29) [Context: the speaker thought that Loui, a friend of his, only smoked a cigarette occasionally]
 Guess what, Louis smoked **TWO PACKS OF CIGARETTES** while he was in the waiting room.
- (30) [Context: the speaker thought that Loui, a friend of his, only smoked a cigarette occasionally]
 Guess what, **TWO PACKS OF CIGARETTES** Loui smoked in the waiting room.

As far as fillers are concerned, on the one hand, both the English and Spanish experiments contained sentences with a very close connection in interpretation to the tokens tested, namely cleft sentences such as (31) for English:¹⁸

- (31) b. A: What does Jane drink when she travels to Brazil?
 B: It is **CAIPIRINHAS** that she normally drinks.

¹⁸ It is important to note that both in English and Spanish, clefting is used to express focus. This has been discussed by large in the relevant literature for CF and to a lesser extent for IF (Fernández-Soriano 2009; Zubizarreta 2013; Haegeman et al. 2014; Lahousse et al. 2014; Cruschina 2015, 2022; Feldhausen & Vanrell 2015; Gutiérrez-Bravo 2021; Lahousse 2022).

On the other hand, 10 other distractors with no association with focus were added. An example of this unrelated construction is provided in (32) for English:

- (32) [Context: Marcello has to go out but he can't find his keys. He asks]
M: Did somebody see my keys somewhere?

Some of the distractors were completely ungrammatical so as to catch the informant's attention. An example is (33) for the English study:

- (33) [Context: Marta is telling her friend Ilaria about her super-busy week. Ilaria, astonished, asks her]
I: My God! How can you make it? I would be exhausted at this point...
M: Well, indeed I am. I will have early nights in the weekend!

Now, I turn to the discussion of results, presenting them in a systematically comparative manner. For each condition, I tested focused subjects and objects in two different syntactic contexts, namely fronted (preverbal) and in situ (postverbal), including the three types of foci (IF, CF, and MF). This adds up to a total of 48 target sentences plus the 34 fillers, which amounts to 82 tokens, as previously explained.

The first condition is the expression of IF in the two languages, either with the subject or the object in focus position. In Table 1, the results for the focused subject are presented, whereas Table 2 displays the results for the focused object.

In the tables, we can observe the means and also the number of speakers who consider the relevant construction acceptable, shown in brackets. Postverbal subjects are not common in English, so they were not tested (N/A). As Table 1 indicates, preverbal focused subjects are fully available and acceptable in the two languages. The mean values score quite highly (3.48 for Spanish; 3.7 for English). Also, postverbal focused subjects rate quite highly in Spanish (mean values of 3.5 and 91.6% of acceptability). Upon comparing this percentage with the one for preverbal subjects (93.5%), we may observe that, although preverbal subjects are slightly preferred, the difference is not significant; $p = 0.8056$, and the distinction is not statistically significant in the t -test.

Table 1. Spanish/English IF of subjects

Description	Spanish subject IF	English subject IF
Preverbal	3.48 (93.5%)	3.7 (89%)
Postverbal	3.50 (91.6%)	N/A

Table 2. Spanish/English IF of objects

Description	Spanish object IF	English object IF
Preverbal	2.44 (44.87%)	2.16 (38.7%)
Postverbal	3.8 (98%)	3.96 (100%)

Table 2 showcases IF for objects either in postverbal position (98% in Spanish and 100% in English).

Regarding preverbal objects, these are a marginal option in English (with a mean value of 2.16 and a percentage of acceptability of 38.7%). Still, some speakers have this strategy in their English grammar, which indicates that this resource is possible in the language (see Samek-Lodovici & Dwyer 2024). Indeed, the result is fully expected given the rigid nature of English word order, maintaining the canonical pattern subject–verb–object (SVO). When preverbal and postverbal objects in English are compared, we observe that Fisher’s exact test statistic value is < 0.00001 . The result is thus significant at $p < 0.05$, which leads me to conclude that English speakers do have a clear preference for postverbal focused objects when functioning as IF.

Finally, turning to Spanish preposed IF objects, the outcome is 44.87% of acceptability, with a mean score of 2.44, which I interpret as grammatically acceptable, although somewhat dispreferred in acceptability terms – $p < 0.00001$; hence, the result is a significant one, at $p < 0.05$. The reason for this significance may be related to microvariation. Recall from the origin of Spanish speakers that most come from Andalusia, where preposed objects as IF have been reported in Jiménez-Fernández (2015b), similar to other languages, such as Sicilian (Cruschina 2015, 2022) or Italian and Armenian (Giorgi & Haroutunyan 2020). However, in other varieties of Spanish, this fronting is not allowed.

Traditionally, IF can be found in a postverbal position in languages such as Spanish (Zubizarreta 1998; cf. review of relevant literature in Ortega-Santos 2016). However, as observed, this is not fully attested in my data given that most informants were Andalusian and fronting IF is an acceptable option in this variety of Spanish. In any case, I believe it is important to note that Andalusian informants amounted to 40% of European Spanish speakers; 80% of these Andalusian speakers rated fronted IF as acceptable. Conversely, for the rest of European Spanish speakers, this option was not valid. On the other hand, only a few speakers among Mexican and Puerto Rican informants considered preposed IF as acceptable, as the rest of American informants decided otherwise. This may be indicative of the historical connection between Andalusian and Caribbean varieties (Lapesa 1997). In my theoretical analysis, I provide an explanation for this, which hinges on the demographic data given above.

Now, I turn to the second condition, namely CF, either in preverbal or postverbal position in English and Spanish. As in the previous condition, subjects in postverbal position are not available in English, which explains why I decided not to include them in the experiment.

Table 3 displays the results of tokens where the subject is CF in the two syntactic environments, namely, preverbal and postverbal positions.

We may observe that, with the exception of postverbal CF subjects, the other options are available in both languages. All percentages are above 90% (with mean values of 3.5 and above). Postverbal subjects are identified with the discourse category of IF in Romance

Table 3. Spanish/English contrastively focused subject

Description	Spanish subject CF	English subject CF
Preverbal	3.60 (96.8%)	3.90 (96.7%)
Postverbal	3.53 (90.38%)	N/A

Table 4. Spanish/English contrastively focused object

Description	Spanish object CF	English object CF
Preverbal	2.69 (57.69%)	2.03 (32.25%)
Postverbal	3.57 (92.3%)	3.87 (96.77%)

Table 5. Subjects as MF in Spanish and English

Description	Spanish subject MF	English subject MF
Preverbal	3.88 (98.32%)	3.75 (95.4%)
Postverbal	1.13 (11.25%)	N/A

(Zubizarreta 1998; Belletti 2001, 2004). However, the acceptability percentage of postverbal subjects as CF raises up to 90.38%, with a mean value of 3.42. In Spanish, there may be a postverbal position for contrastively focused subjects, as independently shown by Ortega-Santos (2016).

The data in Table 4 are very revealing. The results for contrastively focused objects in postverbal position, since they clearly show the full acceptability of objects as CF in this particular syntactic context.

However, preposing of CF in English is extremely marginal (with a mean score of 2.03 and a percentage of 32.25%), whereas it is much more natural in Spanish but only with a very low rate (mean score of 2.69 and 57.69% of acceptability). Interestingly, when we compare the preverbal and the postverbal options in Spanish, we observe that speakers show a clear preference for postverbal CF in object position (probably *in situ*) (mean value of 3.57 and percentage of 92.3%) as opposed to fronted CF, which is statistically extremely significant, as the two-tailed $p < 0.0001$. This supports previous claims about CF made in Frascarelli & Jiménez-Fernández (2021), in which speakers have opted for *in situ* rather than preposed CF in imperative clauses.

This choice may be related with the preference of Merge over Move that has been claimed within Minimalism (Castillo, Drury & Grohmann 2009), since movement will always be more costly. The Principle of Economy is involved in this preference, as the most economic strategy will always be Merge or External Move. In other words, we cannot claim that CF is optionally expressed either preverbally or in a postverbal position (see Samek-Lodovici 2015 for the distinction between *in situ* and left-peripheral focalization).¹⁹

Finally, MF has been tested for subjects and objects in English and Spanish. Table 5 displays that subjects expressing MF are fully acceptable *in situ* in the two languages, hence

¹⁹ An important issue for the distinction between (and preference for) *in situ* CF and fronted CF is the impact of informants' age, given that I have noticed that the younger a speaker is the higher preference for *in situ* focus they show. This demographic factor is currently being pursued in my own research. For the moment, I have run an informal experiment with young students (ages 21–25), including speakers of the European Spanish variety alongside speakers from Colombia, Chile, Argentina, and Mexico. I asked them about object fronted CF in contrast with the *in situ* version. The general feeling was that fronting involved some sort of literary flavor, preferring the canonical SVO in their daily communication. I am preparing the relevant experiment to test this on a broader basis.

it is a discourse category which is present in the inventory of the two grammars, supporting Miyagawa's idea that all languages share the same grammatical properties.

Originally, the study included tokens involving the use of subjects with an MF interpretation. This is illustrated by the following examples, preceded with a context inducing the mirative interpretation:

- (34) [context: John and Mary are friends, and they study in the same school. John has brought chocolate biscuits as his snack and finds out that they are gone. Suddenly, Mary enters the room having some chocolate stains on her mouth. John realizes and says:
- a. Wow, MARY ate all my biscuits!
 - b. ¡Madre mía, MARÍA se comió todas mis galletas!
 mother mine Maria SE eat-PST.3SG all my biscuits
 - c. #¡Madre mía, todas mis galletas se comió MARÍA!
 'My goodness, MARY ate all my biscuits.'

From Table 5, it is clear that postverbal subjects with a mirative interpretation are not an option in Spanish. The positive answers from informants must be due to some other reading that they have identified. For example, if in the same context the subject is interpreted as IF or CF, then the sentence is fully acceptable. Statistically, the difference between MF subjects in preverbal and postverbal positions is very significant, given that $p < 0.0001$.

The last construction I have tested is MF expressed by the object. In Table 6, I show the data concerning MF as object when it occurs in a preverbal position and in a postverbal position:

The first result is that when MF object is postverbal (presumably in situ), the construction is fully acceptable both in English (99.5%) and in Spanish (81.41%). The second and most interesting result has to do with fronting. Spanish shows a very high level of acceptability (96.15%, and 3.24 as mean value), whereas only 22.5% of speakers allow for this option in English, which dubs preposed MF as unacceptable in this language. Two-tailed $p < 0.0001$, and the distinction between the two outcomes is extremely statistically significant.

As we may observe, MF is where the two languages differ most clearly. When comparing the three focus types in the two languages, fronting is always allowed in Spanish (with differences in the figures) but (at best) marginal in English for CF and unacceptable for MF. The figures obtained for MF are lower in English, but as I show in the statistical analysis, fronting always is statistically significant as far as the contrast between the two languages is concerned.

It seems remarkable that, when comparing the results in Table 6 with those in Table 5, optionality arises again as the main property of MF in Spanish, since the percentage of speakers allowing for in situ MF and that of informants permitting fronted MF are very similar.

Table 6. Objects as MF in Spanish and English

Description	Spanish object MF	English object MF
Preverbal	3.24 (96.15%)	1.83 (22.5%)
Postverbal	3.78 (81.41%)	3.96 (99.5%)

3.4. Some remarks on optionality and MF

This optionality has led me to carry out an informal experiment with 21 speakers from Seville, Spain, who were confronted with four sentences (two included in situ MF as object and two contained preposed MF as object). These sentences were the same in the original study, but the question was now regarding preference (two-alternative force choice tasks, in the sense of Fechner 1889), as illustrated in (35), in which glosses have not been included due to lack of space, since they were given in previous examples:

- (35) En la situación descrita entre corchetes, ¿cuál de las dos opciones dadas elegirías?
 ‘In the situation provided in brackets, which of the two options given would you choose?’
 [Contexto: el hablante creía que Luis, un amigo suyo, sólo fumaba un cigarro en determinadas ocasiones, muy de vez en cuando]
 ‘[Context: the speaker thought that Loui, a friend of his, only smoked a cigarette occasionally]’
 a. ¿Sabes qué? ¡DOS PAQUETES DE CIGARRILLOS se fumó Luis mientras esperaba para el médico!
 b. ¿Sabes qué? ¡Luis se fumó DOS PAQUETES DE CIGARRILLOS mientras esperaba para el médico!
 ‘You know what? Luis smoked two packets of cigarettes while he was waiting at the doctor’s!’

The outcome of this test was very clear: 85% of the speakers preferred fronted MF. Thus, the optionality that the results in Table 5 had thrown is rather illusionary. Speakers tend to associate preposing with a more expressive intonation, and this is precisely what defines MF, typically denoting surprise.

At this point we arrive at the empirically informed confirmation that Spanish allows for all types of fronted foci, whereas English does not. Generally, the two languages do clearly exhibit the use of the three types of foci, albeit the syntactic strategy seems to be different. This renders my working hypothesis valid, since it is proven that the two languages share the same inventory of types of foci but have different syntactic strategies to use them. In Section 4, I propose a revision of the Strong Uniformity Principle so as to include the feature responsible for the parametric variation detected in the two languages under discussion.

3.5. The Student’s *t*-test and the statistical analysis of the data

In this section, I briefly present the results after applying the Student’s *t*-test to our data. This will give us a general, integrated, and fine-grained picture of the differences between English and Spanish as far as the distinct discourse categories in different syntactic contexts are concerned.

In the following three tables, three columns are included.²⁰ The first column represents the mean when comparing the English group and the Spanish group with respect to a given

²⁰ Postverbal subjects have not been tested since they are not available in English. Given that the Student’s *t*-test is based on the contrast of two situations and the unavailability of postverbal subjects in one of these situations, they have been left aside here.

Table 7. Statistical summary for Information Focus

Information Focus	Mean value	<i>t</i> value	<i>p</i> value
IF preverbal subject	−0.07	−0.760122	0.44985
IF preverbal object	−0.26	−2.203465	0.03111
IF postverbal object	0	0	1.

Table 8. Statistical summary for Corrective Focus

Corrective Focus	Mean value	<i>t</i> value	<i>p</i> value
CF preverbal subject	0.09	1.936492	0.05716
CF preverbal object	−0.63	−5.599707	< 0.00001
CF postverbal object	0.12	1.923816	0.05876

Table 9. Statistical summary for Mirative Focus

Mirative Focus	Mean value	<i>t</i> value	<i>p</i> value
MF preverbal object	0.88	5.843311	< 0.00001
MF postverbal object	−0.08	−1.690692	0.09584
MF preverbal subject	−0.07	−0.960261	0.58232

factor. The second column is for the *t* value and the third column showcases the *p* value. For the two values, I have used bold type when the difference is statistically significant.

There is one general confirmation that can be observed in [Tables 7–9](#). The first observation is that preverbal focus (as a consequence of fronting) is not fully acceptable in English, whereas in Spanish it is completely grammatical. As we may notice, the difference between the two languages is statistically significant in the three categories. This makes my starting hypothesis valid. Recall that initially it was posited that, in English, focus fronting is not the most natural mechanism, but it could use other strategies to express focus. Indeed, this is confirmed by the statistical analysis in this section.

In the next section, I proceed with a theoretical analysis of the distinction detected between fronting (preverbal) and in situ (postverbal) focus.

4. Theoretical proposal and explanation

4.1. Fronting and in situ: An Edge Feature-based analysis

Following Chomsky’s (2008) Uniformity Principle, Miyagawa (2010, 2017) proposes the Strong Uniformity Principle, according to which all languages contain discourse features (δ -features) and agreement features (ϕ -features) – see Jiménez-Fernández (2020, to appear).

In Miyagawa's (2010: 12) words, 'Every language shares the same set of grammatical features, and every language overtly manifests these features in some fashion'.

Given this uniformity across languages, we expect the main generalization I have drawn from the experimental work to hold, namely that English and Spanish have the same inventory of discourse categories (IF, CF, and MF). The difference is that Spanish may move any type of focus to the left periphery, whereas English is restricted to IF and CF as far as a movement to the LP is concerned.

Recall that my research question is whether all languages should have the same inventory of features (both ϕ -features and δ -features). I claim that English and Spanish share the same type of focus features and assume that they have [I-Foc], [C-Foc], and [M-Foc] as part of their set of δ -features.²¹ Variation will be reduced to two universally available mechanisms, namely, the projection of an EF and feature inheritance. These are the key concepts for the view of discourse that I pursue and have called the radically minimalist view of discourse, as instantiated in Miyagawa (2010, 2017, 2022), Jiménez-Fernández & Miyagawa (2014), Joshi (2022), Ojea (2017, 2019, 2020), Jiménez-Fernández (2018, 2020, 2021, 2023, to appear), Kato & Ordóñez (2019), Mursell (2021), Yang (2023), Zhao (2024), among others.

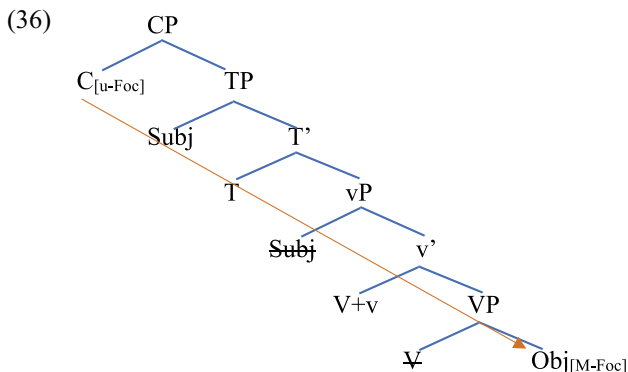
By feature inheritance, grammatical features may percolate down from a phasal head to the immediately lower head, thus accounting for the feature selection of languages, their flexible/rigid word order, and the different position targeted by discourse-driven moved constituents across languages. In a free word-order language, such as Spanish, some δ -features may be lowered to T from C (though other features may be retained in C; see Jiménez-Fernández 2020, Jiménez-Fernández & Miyagawa 2014 and Frascarelli & Jiménez-Fernández 2021 for this double strategy in the same language). By contrast, in a rigid word-order language such as English, δ -features always remain in C.

The EF here is conceived of as a formal feature which is optionally encoded in a given functional head; hence, it works in tandem (Miyagawa 2010, 2022) with other features which the head may also be endowed with. This is Chomsky's (2008) original concept of EF. Following Kandybowic (2009), the EF is not an inherently active property of phasal heads. Based on data from Nupe (a Benue-Congo language related to Yoruba that is spoken in Nigeria), this author suggests that the EF may be active and then trigger movement or lie dormant in narrow syntax. In my system, differences of word order can be elegantly accounted for by positing the optional existence of EF in phasal heads. Actually, Chomsky (2000: 109) posits the idea that EFs are optionally assigned to phasal heads.

My main claim with respect to language-internal variation across discourse categories is that some types of foci may require movement, whereas others do not. This happens in Spanish with respect to CF, MF, and IF, which has raised the question as to whether these categories are not available in the syntax of English. I have already given empirical evidence (based on experimental work) that the full array of foci is part of the English grammar, except that they either occur in situ or use a different syntactic device. For the first possibility, I argue that an EF is optionally given to C (Chomsky 2008). If C enters the derivation without an EF, it will get its feature (focus feature is uninterpretable in C) valued via Long-Distance agree

²¹ Recall that the features [I-Foc], [C-Foc], and [M-Foc] represent a bundle of features in that they have been decomposed into different features.

with the relevant discourse category. I show the possible analysis for in situ MF (also valid for CF and IF) in English in (36), where the object is focused:

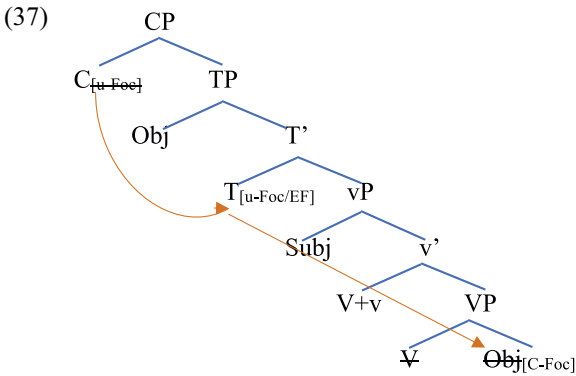


Since C does not contain an EF in English, the agree relation between C and Obj is established at a long distance. The feature [M-Foc] values the uninterpretable feature in C, with no need for movement. The prediction that this analysis makes is that mirativity in English does not involve any type of fronting. In Table 5, we saw that MF fronting in English is at best marginal (around 22% of acceptability), which confirms the validity of the previous prediction based on the absence of an EF. This marginality highlights the relative availability of the option in English, in compliance with the Strong Uniformity Principle; yet the construction is dispreferred when compared with the in situ version.

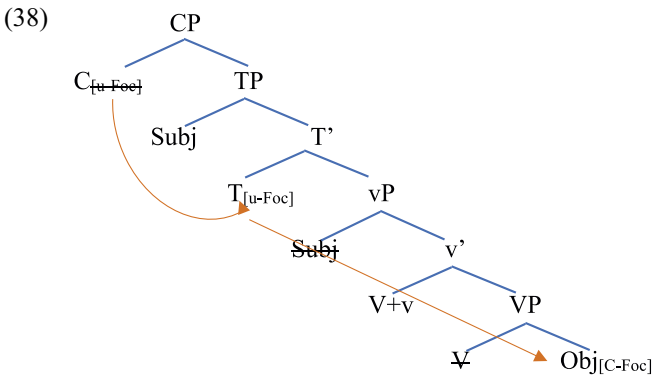
We may draw the conclusion that English is very unlikely to project an EF and hence trigger movement induced by some discourse feature. Much to the contrary, the mechanism involved is Long-Distance Agreement, by which C probes and agrees the MF Obj, as in (36), valuing the [u-Foc] as [M-Foc]. However, given the Strong Uniformity Principle, some residual activation of the EF should be detected in English. This predicts that some examples with fronting will still be visible in English, which is precisely what was shown with the rare use of fronting CF in English (See Table 4 above). In other words, speakers may rarely activate an EF and combine it with a [Foc] feature, triggering movement to spec-CP, which explains the marginality of the fronting constructions. Now, let us turn to Spanish.

As for Spanish CF, elaborating on my earlier proposals (Camacho-Taboada, Victoria & Jiménez-Fernández 2014; Jiménez-Fernández 2018, 2020), I claim that it undergoes movement to spec-TP after feature inheritance. This is illustrated in (37), where the activation of an EF in T is crucial to trigger movement of the CF to spec-TP (the curved arrow indicates feature inheritance):²²

²² It should be noted that Spanish also exhibits other types of focus fronting with a different interpretation. For example, Escandell-Vidal & Leonetti (2009) have claimed that Verum Focus or Polarity Focus may be expressed in Spanish by fronting the focused constituent. This focus type is not considered in this work.



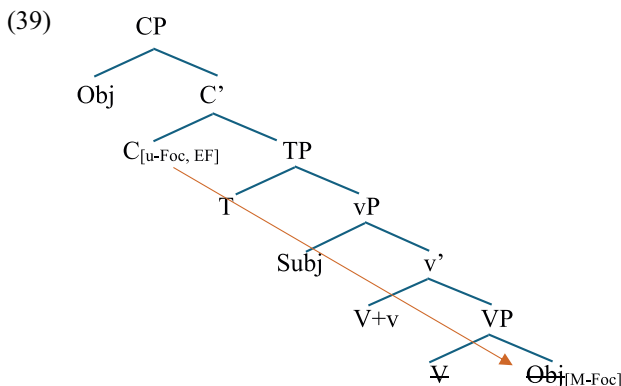
However, Spanish also allows the possibility of projecting T without an EF, in which case the process of feature valuing is carried out via Long-Distance Agree and movement is not induced. This is presented in (38):



In (38), the focus feature is valued as [C-Foc] and deleted before LF due to its uninterpretability. The ϕ -features which T has inherited work in conjunction with an EF feature, triggering movement of the subject to spec-TP. We may observe that sometimes both ϕ -features and δ -features work together, but other times ϕ -features agree with a goal and δ -features agree with another goal, as in (38).

The prediction made by an analysis where CF targets a position in TP in Spanish is that CF will not interfere with other possible movements to the CP domain. As we will see in Section 4.3, this prediction is borne out by the non-root status of fronting in Spanish.

Regarding mirativity, the δ -feature that enters in an Agree relation with the MF is retained in C. As a consequence, MF involves movement of the focused constituent to the CP-area. Spanish may simply establish a long-distance Agree relation between the MF constituent and C or move the focused element to the CP-area. Both options are statistically supported by data (see Table 5 above). This is illustrated in (37), where the EF is activated in C:



As I have shown, focus in English does not imply any kind of movement, but this does not mean that Focalization in English is not possible in that it exhibits strategies such as clefting, that can be employed to express either CF or IF. However, from the results of the experiment, English focus cannot be pinpointed in the narrow syntax. Rather, it is marked only prosodically (Gussenhoven 2007; Goodhue 2022). In my view, this is not fully accurate.

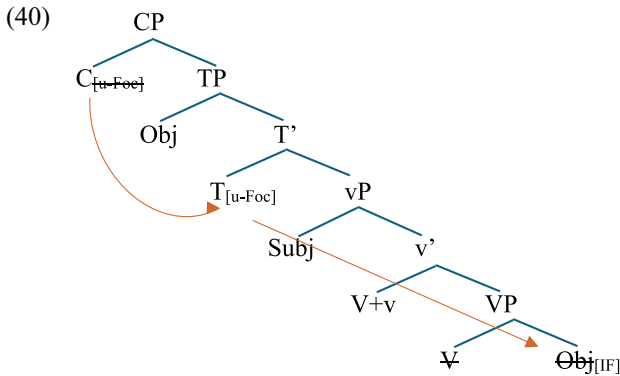
I claim that focus in English is also present in the narrow syntax, much in the spirit of Minimalism. In a radical interpretation of the Strong Uniformity Principle (Miyagawa 2010), I propose that the three types of focus value an uninterpretable [Foc] feature in C (given that this feature is not inherited by T) – see Zhao’s (2024) discussion on the connection between the Strong Uniformity Principle, δ -features, and feature inheritance in Chinese. The difference with Spanish lies in that the [Foc] feature does not work in conjunction with an EF. Parametric variation is thus reduced to the presence of an EF in a given phasal head. Note importantly that English may marginally activate this EF (as I have observed earlier), in which case fronting CF would also be available. In other words, sometimes parametric variation may be associated with the relative preference that speakers of a given language show when they activate a specific feature. For CF, Spanish speakers do prefer the construction where they activate the relevant EF in clear contrast with the low preference that English speakers show.

In my analysis of MF, δ -features remain in C. This predicts that, if MF is fronted, it will be moved to the CP domain. If root phenomena, such as focus fronting, are identified as operations that are associated with CP, we may predict that fronted MF is unavailable in embedded contexts. I show that this prediction is borne out in Section 4.3 for Spanish.

One final note is in order concerning IF. I have assumed with Ortega-Santos (2016) that IF is associated with C, as is the rest of focus types. Belletti (2001, 2004, 2005) claims that there is a low focus position in the vP -periphery for IF alongside a high focus position in CP for CF. Although this may be correct, it says nothing against a possible high focus position in the Left Periphery. When I discussed preverbal IF in English, I argued that this focus type is related with C, which is not endowed with an EF thereby accounting for the absence of movement.

However, to end up with an elegant proposal, alongside those cases where the parametric difference between English and Spanish lies in the presence or absence of an EF, I endorse

the idea that Spanish C has a focus feature which is lowered onto T and works in conjunction with an EF, attracting the constituent with the discourse role of IF to spec-TP. This is illustrated in (40), where the object is focused:



In conclusion, the analyses I have put forth in this section accounts for the parametric variation detected in English and Spanish by claiming that feature inheritance operates in Spanish under certain circumstances, but it never does in English. This has consequences for the syntactic position targeted by different focus types in different languages. Also, some variation has been posed regarding the availability of movement in Spanish and the absence thereof (though not absolutely) in English, which is simply explained by the activation/deactivation of an EF.

At this point, I propose a revision of Miyagawa's (2010) Strong Uniformity Principle so as to include the effect of the EF cross-linguistically:

(41) *Revised Strong Uniformity Principle*

Every language shares the same set of ϕ - and δ -features, and every language overtly manifests these features in some fashion in the syntax, optionally in combination with an EF.

This revision accounts for the parametric variation detected in English and Spanish by allowing fronting and in situ focus in Spanish, whereas dispreferring focus preposing in favor of in situ focus.

4.2. Evidence for different focus positions

In this section, I present some evidence that in Spanish IF and CF may undergo movement to TP, whereas MF may move to CP. This evidence comes from the realm of Main Clause Phenomena. It is widely acknowledged that discourse-induced movement is blocked in some embedded contexts (Bianchi & Frascarelli 2010; Haegeman 2012; Jiménez-Fernández & Miyagawa 2014; Jiménez-Fernández 2020; Frascarelli & Jiménez-Fernández 2021; among many others). One of the reasons that has been posited is the discourse category's incompatibility with an eventive operator due to the discourse category competing with this

eventive operator for the same syntactic position, namely, spec-CP. This is supported by the incompatibility of MF in subordinate contexts selected by factive verbs:

- (42) a. ¡Dios mío! María negó que se hubieran
 God mine Maria deny-PST.3SG that SE have-PST.3PL
 bebido TODA LA BOTELLA.
 drunk all the bottle
 b. ¡Dios mío! *María negó que TODA LA BOTELLA se hubieran bebido.
 ‘Oh my God! *Mary denied that they had drunk THE WHOLE BOTTLE.’
 (Adapted from Jiménez-Fernández 2020: 115 ex. [67])

MF is possible in an embedded context when in situ, as in (42a), which indicates that pragmatically or semantically there is no incompatibility. The ungrammatical example (42b) is precisely evidence that MF is blocked if moved to spec-CP. This is expected from the analysis I put forth, in which MF may be attracted to spec-CP.²³

On the other hand, CF and IF have been claimed to optionally move to spec-TP, not interfering with the eventive operator in embedded clauses selected by factive verbs. Hence, both CF and IF should be available in those contexts in Spanish. This prediction is borne out in light of examples (43) for CF and (44) for IF:

- (43) Negaron que A JIMENA vieran en la fiesta (no a Ángela).
 deny-PST.3SG that to Jimena see-PST.3SG in the party not to Angela
 ‘They denied that they saw JIMENA at the party, not Angela.’
 (Camacho-Taboada & Jiménez-Fernández 2014, 50 ex. [7b])
- (44) Q: Who solved the problem with the computer?
 A: No estoy seguro, pero es probable que
 not be-PRS.1SG sure but be-PRS.3SG probable that
 lo haya solucionado SUSANA.
 CL-3SG.MSC.ACC have-PRS.SUBJ.3SG solved Susana
 ‘I’m not sure but it’s probable that it was solved by Susana.’
 (Jiménez-Fernández 2020: 108 ex. [48])

If my proposal that CF and IF may move to spec-TP after feature inheritance in Spanish is correct, the prediction is that they will not compete with any eventive operator in spec-CP and should thus be allowed in embedded contexts. The prediction is again borne out when we observe the examples (43) and (44). Note that the in situ focus alternatives in (43) and (44) are also available here, thereby confirming the optional use of the EF in Spanish, as shown in (45) and (46).

- (45) Negaron que vieran A JIMENA en la fiesta (no a Ángela).
 deny-PST.3SG that see-PST.3SG to Jimena in the party not to Angela
 ‘They denied that they saw JIMENA at the party, not Angela.’

²³ MF has been claimed to be dependent on the presence of illocutionary force; specifically, it depends on a root evaluative force (Frascarelli & Jiménez-Fernández 2021: 5). This may explain why moving MF to spec-CP in a subordinate clause is not an option.

(46) Q: Who solved the problem with the computer?

A: No estoy seguro, pero es probable que
 not be-PRS.1SG sure but be-PRS.3SG probable that
 SUSANA lo haya solucionado.
 Susana CL-3SG.MSC.ACC have-PRS.SUBJ.3SG solved
 'I'm not sure but it's probable that it was solved by Susana.'

The in situ examples (45) and (46) show that, in factive contexts, Spanish allows focused constituents in their original syntactic position, which tells us that there is no incompatibility between focus and factivity. If we take into account that in the very same factive contexts Spanish also allows movement of the focused constituent, and if we assume that movement of CP is blocked in factive clauses (Jiménez-Fernández & Miyagawa 2014), focus-induced movement in Spanish targets a position lower than CP, that is, spec-TP.

5. Conclusions

In this article, I have discussed the availability of three types of focus (IF, CF, and MF) in three different syntactic contexts (a preverbal or postverbal position), establishing a systematic contrast between two languages – Spanish and English. Based on experimental data, the original hypothesis that in Spanish fronted foci are fully available whereas in English they are not as natural as in situ foci has been proved valid. Additionally, the two languages share the property of expressing the three focus types if there is no movement; hence, the focused constituent is left in situ. When comparing fronting in the two languages, statistical significance indicates, though available in the grammar of English, the frequency of focus movement is not as high as is in Spanish.

To account for the preference of fronted or in situ focus, I have proposed that an EF is activated either in C or T in Spanish, depending on the type of focus and on the notion of feature inheritance. The parametric variation detected in English and Spanish can elegantly be reduced to the presence or absence of an EF and the syntactic position targeted (CP/TP). This is ultimately derived from the Revised Strong Minimalist Principle that I proposed in my theoretical analysis.

References

- Aboh, Enoch O. 2010. Information structure starts in the numeration. *Iberia: An International Journal of Theoretical Linguistics* 2.1, 12–42.
- Adelson, Jill L. & D. Betsy McCoach. 2010. Measuring the mathematical attitudes of elementary students: The effects of a 4-point or 5-point Likert-type scale. *Educational and Psychological Measurement*, 70.5, 796–807. <https://doi.org/10.1177/0013164410366694>.
- Amaechi, Mary & Doreen Georgi. 2020. On optional wh-/focus fronting in Igbo: A SYN-SEM-PHON interaction. *Zeitschrift für Sprachwissenschaft* 39.3, 299–327. <https://doi.org/10.1515/zfs-2020-2017>.
- Âmbar, Manuela. 1999. Aspects of the syntax of focus in Portuguese. In Georges Rebuschi & Laurice Tuller (eds.), *The Grammar of focus*, 23–53. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.24.02amb>.
- Arunachalam, Sudha. 2013. Experimental methods for linguists. *Language and Linguistics Compass* 7.4, 221–232.
- Badan, Linda. 2020. Italian discourse markers: The case of *guarda te*. *Studia Linguistica* 74, 303–336. <https://doi.org/10.1111/STUL.12127>.
- Beaver, David & Brady Clark. 2008. *Sense and sensitivity: How focus determines meaning*. Oxford, UK: Blackwell. <https://doi.org/10.1002/9781444304176>.

- Belletti, Adriana. 2001. Inversion as focalization. In Afke Hulk and J.-Yves Pollock (eds.), *Subject inversion in Romance and the theory of universal grammar*, 60–90. New York: Oxford University Press.
- Belletti, Adriana. 2004. Aspects of the low IP area. In Luigi Rizzi (ed.), *The structure of CP and IP – The cartography of syntactic structures*, vol. 2, 16–51. New York: Oxford University Press.
- Belletti, Adriana. 2005. Extended doubling and the VP periphery. *Probus* 17, 1–35. <https://doi.org/10.1515/prbs.2005.17.1.1>.
- Bianchi, Valentina & Giuliano Bocci. 2012. Should I stay or should I go? Optional focus movement in Italian. In Christopher Pinon (ed.), *Empirical issues in syntax and semantics*, vol. 9, 1–16. Paris: EISS.
- Bianchi, Valentina & Mara Frascarelli. 2010. Is topic a root phenomenon? *Iberia* 2, 43–88.
- Bley-Vroman, Robert & Naoko Yoshinaga. 1992. Broad and narrow constraints on the English dative alternation: Some fundamental differences between native speakers and foreign language learners. *University of Hawai'i Working Papers in ESL* 11, 157–199.
- Bocci, Giuliano. 2008. On the syntax-prosody interface: an analysis of the prosodic properties of postfocal material in Italian and its implications. *Nanzan Linguistics* 5, 13–42.
- Büring, Daniel. 1999. Topic. In Peter Bosch & Rob van der Sandt (eds.), *Focus, linguistic cognitive and computational perspectives*, 142–165. Cambridge, UK: Cambridge University Press.
- Camacho-Taboada, M. Victoria & Ángel L. Jiménez-Fernández. 2014. Focus fronting and root phenomena in Spanish and English. In Joseph Emonds & Marketa Janebova (eds.), *Language use and linguistic structure*, vol. 3, 41–60. Olomouc, Czech Republic: Palacký University Press.
- Camacho-Taboada, M. Victoria, Ángel L. Jiménez-Fernández & Susana López-Rueda. 2016. The acquisition of null/explicit subject pronouns in Spanish as L2 by English speakers. In Bożena Cetnarowska, Marcin Kuczek & Marcin Zabawa (eds.), *Various dimensions of contrastive studies*, 310–332. Katowice: Wydawnictwo Uniwersytetu Śląskiego.
- Castillo, Juan Carlos, John E. Drury & Kleanthes Grohmann. 2009. Merge over move and the Extended Projection Principle. *Iberia: An International Journal of Theoretical Linguistics* 1.1, 53–114.
- Catasso, Nicholas, Marco Coniglio & Chiara De Bastiani. 2022. Interface phenomena and language change. Where we are and where we are going. In Nicholas Catasso, Marco Coniglio & Chiara De Bastiani (eds.), *Language change at the interfaces. Intrasentential and intersentential phenomena*, 1–34. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.275.int>.
- Chang, Lei. 1994. A psychometric evaluation of 4-point and 6-point Likert-type scales in relation to reliability and validity. *Applied Psychological Measurement* 18.3, 205–215. <https://doi.org/10.1177/014662169401800302>.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Essays on minimalist syntax in honor of Howard Lasnik*, 89–156. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos Otero & Maria Luisa Zubizarreta (eds.), *Foundational issues in linguistic theory*, 133–166. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mit-press/9780262062787.003.0007>.
- Cruschina, Silvio. 2011. Fronting, dislocation and the syntactic role of discourse-related features. *Linguistic variation* 11, 1–34. <https://doi.org/10.1075/lv.11.1.01cru>.
- Cruschina, Silvio. 2012. *Discourse-Related Features and functional Projections*. Oxford: Oxford University Press.
- Cruschina, Silvio. 2015. Some notes on clefting and fronting. In Elisa Di Domenico, Cornelia Hamann & Simona Matteini (eds.), *Structures, strategies and beyond. Studies in honour of Adriana Belletti*, 181–208. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.223.09cru>.
- Cruschina, Silvio. 2022. Focus and focus structures in the Romance languages. In Mark Aronoff (ed.), *Oxford research encyclopedias: Linguistics*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acrefore/9780199384655.013.649>.
- Cruschina, Silvio & Valentina Bianchi. 2021. Mirative implicatures at the syntax-semantics interface. In Andreas Trotzke & Xavier Villalba (eds.), *Expressive meaning across linguistic levels and frameworks*, 86–107. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/oso/9780198871217.003.0005>.
- Cruschina, Silvio, Ion Giurgea & Eva-Maria Remberger. 2022. Information Structure. In Adam Ledgeway & Martin Maiden (eds.), *The Cambridge handbook of Romance linguistics*, 784–814. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108580410.031>.
- Escandell-Vidal, Victoria & Manuel Leonetti. 2009. Fronting and irony in Spanish. In Andreas Dufter & A. S. Octavio de Toledo (eds.), *Left sentence peripheries in Spanish: Diachronic, variationist and comparative perspectives*, 309–342. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.214.16esc>.

- Feldhausen, Ingo & M. del Mar Vanrell. 2015. Oraciones hendidas y marcación del foco estrecho en español: Una aproximación desde la Teoría de la Optimidad Estocástica. *Revista Internacional de Lingüística Iberoamericana* 13.2, 39–59.
- Fechner, Gustav Theodor. 1889. *Elemente der psychophysik* [Elements of psychophysics] (2 volumes). Leipzig: Breitkopf and Härtel.
- Fernández-Soriano, Olga. 1993. Sobre el orden de palabras en español [On word order in Spanish]. *Dicenda* 11, 113–152.
- Fernández-Soriano, Olga. 2009. On the nature of covert operations: the case of focus in Spanish pseudo-clefts. In Enoch O. Aboh, Elisabeth van der Linden, Josep Quer & Petra Sleeman (eds.), *Romance languages and linguistic theory: Selected papers from Going Romance*, 87–108. Amsterdam: John Benjamins.
- Frascarelli, Mara. 2007. Subjects, topics and the interpretation of referential *pro*: An interface approach to the linking of (null) pronouns. *Natural Language and Linguistic Theory* 25, 691–734. <https://doi.org/10.1007/s11049-007-9025-x>.
- Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian.” In Kirstin Schwabe & Susanne Winkler (eds.), *On information structure, meaning and form*, 87–116. Amsterdam/Philadelphia: John Benjamins. <https://doi.org/10.1075/la.100.07fra>.
- Frascarelli, Mara & Ángel L. Jiménez-Fernández. 2017. Subextraction at the discourse-grammar interface: a featural approach to island effects. In Elena Castroviejo, Olga Fernández-Soriano & Isabel Pérez (eds.), *Boundaries, phases, and interfaces. Case studies in honor of Violeta Demonte*, 224–254. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.239.11fra>.
- Frascarelli, Mara & Ángel L. Jiménez-Fernández. 2019. Understanding partiality in pro-drop languages: An information-structure approach. *Syntax* 29.1/2, 162–198. <http://doi.org/10.1111/synt.12184>.
- Frascarelli, Mara & Ángel L. Jiménez-Fernández. 2021. How much room for discourse in imperative? The lens of interface on English, Italian and Spanish. *Studia Linguistica* 75/3: 375–434. <https://doi.org/10.1111/stul.12153>.
- Goodhue, Daniel. 2022. All focus is contrastive. *Journal of Semantics* 29 & , 117–158. <https://doi.org/10.1093/jos/ffab018>.
- Giorgi, Alessandra & Sona Haroutunyan. 2020. Verb second and verb third in modern eastern Armenian. In Rebeca Woods & Sam Wolfe (eds.), *Rethinking verb second*, 642–664. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/oso/9780198844303.003.0027>.
- Guerrero, Liliana & Valeria A. Belloro. 2010. On word order and information structure in Yaqui. In José Camacho, Rodrigo Gutiérrez-Bravo & Liliana Sánchez (eds.), *Information structure in indigenous languages of the Americas*, 115–137. Berlin: de Gruyter.
- Gupton, Timothy. 2014. *The syntax-information structure interface*. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9781614512059>.
- Gussenhoven, Carlos. 2007. Types of focus in English. In Chungmin Lee & Matthew Gordon, *Topic and focus: Cross-linguistic perspectives on meaning and intonation*, 83–100. New York: Springer. https://doi.org/10.1007/978-1-4020-4796-1_5.
- Gutiérrez-Bravo, Rodrigo. 2021. Las oraciones pseudo-hendidas en español. Sintaxis y propiedades informativas [Pseudo-cleft sentences in Spanish. Syntax and information structure properties]. In Manuel Leonetti and Victoria Escandell, *La estructura informativa* [Information structure], 359–392. Madrid: Visor.
- Haegeman, Liliane. 2012. *Adverbial clauses, main clause phenomena, and the composition of the left periphery*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199858774.001.0001>.
- Haegeman, Liliane, André Meinunger & Aleksandra Vercauteren. 2014. The architecture of it-clefts. *Journal of Linguistics* 50, 269–296. <https://doi.org/10.1017/S0022267130000042>.
- Hawkins, John A. 2014. *Crosslinguistic variation and efficiency*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199664993.001.0001>.
- Hoot, Bradley & Shane Ebert. 2021. On the position of subjects in Spanish: Evidence from code-switching. *Glossa: a Journal of General Linguistics* 6.1, 73, 1–31. <https://doi.org/10.5334/gjgl.1449>.
- Irwin, Patricia. 2018. Existential unaccusativity and new discourse referents. *Glossa: a Journal of General Linguistics* 3.1, 1–42. <https://doi.org/10.5334/gjgl.283>.
- Jiménez-Fernández, Ángel L. 2015a. Towards a typology of focus: Subject position and microvariation at the discourse-syntax interface. *Amper sand: An International Journal of General and Applied Linguistics* 2, 49–60. <https://doi.org/10.1016/j.amper.2015.03.001>.
- Jiménez-Fernández, Ángel L. 2015b. When focus goes wild: An empirical study of two syntactic positions for information focus. *Linguistics Beyond and Within* 1, 119–133. <https://doi.org/10.31743/lingbaw.5627>.

- Jiménez-Fernández, Ángel L. 2018. Negative preposing. Intervention and parametric variation in complement clauses. *Atlantis* 40.1, 11–37. <https://doi.org/10.28914/Atlantis-2018-40.1.01>.
- Jiménez-Fernández, Ángel L. 2020. *Syntax-information structure interactions in the sentential, verbal and nominal peripheries*. Newcastle, UK: Cambridge Scholars Publishing.
- Jiménez-Fernández, Ángel L. 2021. Relative clauses and negative preposing in English and Spanish. *Verba: Anuario Galego de Filoloxía* 48, 1–25. <https://doi.org/10.15304/verba.48.6943>.
- Jiménez-Fernández, Ángel L. 2023. English/Spanish relatives and their relative information structure: A view from language contact in Puerto Rico. *Catalan Journal of Linguistics* 22.1, 29–70.
- Jiménez-Fernández, Ángel L. To appear. Discourse in minimalism. In Kleanthes Grohmann & Evelina Leivada (eds.), *The Cambridge handbook of minimalism and its applications*, Cambridge, UK: Cambridge University Press.
- Jiménez-Fernández, Ángel L. & Shigeru Miyagawa. 2014. A feature-inheritance approach to root phenomena and parametric variation. *Lingua* 145, 276–302. <https://doi.org/10.1016/j.lingua.2014.04.008>.
- Joshi, Kinjal. 2022. A uniform account for the agreement and information structure relationship: A case study of Surati Gujarati. Ph.D. dissertation, University of Oslo.
- Kandybowicz, Jason. 2009. Embracing edges: Syntactic and phono-syntactic edge sensitivity in Nupe. *Natural Language and Linguistic Theory* 27.2, 305–344. <https://doi.org/10.1007/s11049-009-9064-6>.
- Kato, Mary A. & Francisco Ordóñez. 2019. Topic subjects in Brazilian Portuguese and clitic left dislocation in Dominican Spanish: The role of clitics and null subjects. *Syntax* 22 (2-3), 229–247. <https://doi.org/10.1111/synt.12180>
- Kayne, Richard S. 1998. Overt vs. covert movements. *Syntax* 1, 128–191.
- Kiss, Katalin É. 1998. Identificational focus versus information focus. *Language* 74, 245–273. <https://doi.org/10.1353/lan.1998.0211>.
- Krifka, Manfred. 2007. Basic notions of information structure. In Caroline Féry & Manfred Krifka (eds.), *Interdisciplinary studies on information structure*, 13–55. Potsdam: Interdisziplinäre Studien zur Informationsstruktur (ISIS), Universitätsverlag Potsdam.
- Krifka, Manfred. 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 55, 243–276. <https://doi.org/10.1556/ALing.55.2008.3-4.2>.
- Lahousse, Karen. 2022. Is clefting a root phenomenon? In Davide Garassino & Daniel Jacob (eds.), *When data challenges theory: Unexpected and paradoxical evidence in information structure*, 147–182, Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/la.273>.
- Lahousse, Karen, Christopher Laenzlinger & Gabriela Soare. 2014. Contrast and intervention at the periphery. *Lingua* 143, 56–85. <https://doi.org/10.1016/j.lingua.2014.01.003>.
- Lapesa, Rafael. 1997. Orígenes y expansión del español atlántico [Origins and expansion of Atlantic Spanish]. *Demófilo* 22, 13–27.
- Leonetti, Manuel. 2014. Gramática y pragmática en el orden de palabras [Grammar and pragmatics in word order]. *LingRed: Lingüística en la red* 12. <https://ebuah.uah.es/dspace/handle/10017/23258>.
- Leonetti, Manuel & Victoria Escandell. 2009. Fronting and verum-focus in Spanish. In Andreas Dufter & David Jacob (eds.), *Focus and background in Romance languages*, 155–204. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/slcs.112.07leo>.
- Leonetti, Manuel & Victoria Escandell. 2017. El foco es relativo [Focus is relative]. In Ángel Gallego, Yolanda Rodríguez & Javier Fernández (eds.), *Relaciones sintácticas: Homenaje a José M. Brucart y M. Lluïsa Hernanz* [Syntactic relations in Honor of José M. Brucart and M. Lluïsa Hernanz], 435–446. Barcelona: Universitat Autònoma de Barcelona.
- Mellor, David & Kathleen A. Moore. 2014. The use of Likert scales with children. *Journal of Pediatric Psychology* 39.3, 369–379. <https://doi.org/10.1093/jpepsy/jst079>.
- Miyagawa, Shigeru. 2010. *Why agree? Why move? Unifying agreement-based and discourse configurational languages* (LI Monograph 54). Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/8116.001.0001>.
- Miyagawa, Shigeru. 2012. Optionality. In Cedric Boeckx (ed.), *The Oxford handbook of linguistic minimalism*, 354–376. Oxford, UK: Oxford University Press. <http://doi.org/10.1093/oxfordhb/9780199549368.013.0016>.
- Miyagawa, Shigeru. 2017. *Agreement beyond phi*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/10958.001.0001>.
- Miyagawa, Shigeru. 2022. *Syntax in the treetops*. Cambridge, MA: MIT Press. <https://doi.org/10.7551/mitpress/14421.001.0001>.
- Molnár, Valeria. 2006. On different kinds of contrast. In Valeria Molnár & Susanne Winkler, *The architecture of focus*, 197–234. Berlin & New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110922011.197>.

- Molnár, Valeria & Suzanne Winkler. 2010. Edges and gaps: Contrast at the interfaces. *Lingua* 120, 1392–1415. <https://doi.org/10.1016/j.lingua.2008.08.010>.
- Mursell, Johannes. 2021. *The syntax of information structure*. Amsterdam & Philadelphia: John Benjamins.
- Ojea, Ana. 2017. Core intentional features in the syntactic computation: Deriving the position of the subject in Spanish. *Lingua* 195, 72–91. <https://doi.org/10.1016/j.lingua.2017.06.007>
- Ojea, Ana. 2019. EPP satisfaction on discourse grounds: The case of locative inversion. *Syntax* 22.2/3, 248–273. <https://doi.org/10.1111/synt.12181>.
- Ojea, Ana. 2020. Syntax meets discourse: Locative and deictic (directional) inversion in English. *Poznan Studies in Contemporary Linguistics* 56.2, 251–276. <https://doi.org/10.1515/psicl-2020-0007>.
- Ortega-Santos, Iván. 2008. *Projecting subjects in Spanish and English*. Ph.D. dissertation, University of Maryland.
- Ortega-Santos, Iván. 2016. *Focus-related operations at the right edge in the grammar of Spanish: Subjects and ellipsis*. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/ihi.7>.
- Ortega-Santos, Iván. 2020. La fiabilidad de los juicios de gramaticalidad en los estudios de sintaxis del español [The reliability of acceptability judgments in Spanish syntax]. *Cuadernos de la ALFAL* 12, 567–589.
- Ortega-Santos, Iván. 2024. *Data representativity and granularity in Spanish syntax: Subjecthood across dialects and methodologies in Spanish*. New York: Routledge.
- Real Puigdollers, Cristina, M. Teresa Espinal & Xavier Villalba. In press. *Vaya* in Spanish. From a judgment to a commitment marker. *Journal of Historical Syntax*.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1, 75–116. <https://doi.org/10.1007/BF02342617>.
- Samek-Lodovici, Vieri. 2015. *The Interaction of focus, givenness, and prosody: A study of Italian clause structure*. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780198737926.001.0001>.
- Samek-Lodovici, Vieri. 2018. Contrast, contrastive focus, and focus fronting. *UCL Working Papers in Linguistics* 2018, 57–77.
- Samek-Lodovici, Vieri & Karen Dwyer. 2024. Experimental testing of focus fronting in British English. In Jorina Brysbaert & Karen Lahousse (eds.), *On the role of contrast in information structure: Definition, types, encoding and annotation* (Trends in Linguistics. Studies and Monographs), 21–40. Berlin: De Gruyter.
- Sánchez López, Cristina. 2017. Mirativity in Spanish: The case of the particle *mira*. *Review of Cognitive Linguistics* 15.2, 489–514.
- Sorace, Antonella & Frank Keller. 2005. Gradience in linguistic data. *Lingua*, 115.11, 1497–1524.
- Snyder, Will. 2000. An experimental investigation of syntactic satiation effects. *Linguistic Inquiry* 31, 575–582.
- Snyder, Will. 2022. On the nature of syntactic satiation. *Languages* 7, 38. <https://doi.org/10.3390/languages7010038>.
- Sprouse, Jon, Carson T. Schütze & Diogo Almeida. 2013. Assessing the reliability of journal data in syntax: Linguistic inquiry 2001–2010. *Lingua* 134, 219–248. <https://doi.org/10.1016/j.lingua.2013.07.002>.
- Stadthagen-González, Hans, Luis López, M. Carme Parafita Couto & C. Alejandro Párraga. 2017. Using two-alternative forced choice tasks and Thurstone's law of comparative judgments for code-switching research. *Linguistic Approaches to Bilingualism* 8.1, 67–97. <https://doi.org/10.1075/lab.16030.sta>.
- Titov, Elena. 2020. *Information structure of argument order alternations*. Ph.D. dissertation, University College London.
- Tsai, Wei-Tien Dylan & Ching-Yu Helen Yang. 2022. On the syntax of mirativity: Evidence from Mandarin Chinese. In Andrew Simpson (ed.), *New explorations in Chinese theoretical syntax. Studies in honor of Yen-Hui Audrey Li*, 431v444. Amsterdam: John Benjamins.
- Vallduví, Enric & Maria Vilkuña. 1998. On rheme and contrast. In Peter W. Culicover & Louise McNally (eds.), *The limits of syntax*, 79–108. San Diego, CA: Academic Press.
- Vanrell, María del Mar & Olga Fernández-Soriano. 2013. Variation at the interfaces in Ibero-Romance: Catalan and Spanish prosody and word order. *Catalan Journal of Linguistics* 12, 253–282. <https://doi.org/10.5565/rev/catjl.63>.
- Velleman, Leah & David Beaver. 2016. Question-based models of information structure. In Caroline Féry & Sishiro Ishihara (eds.), *The handbook of information structure*, 86–107. Oxford, UK: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199642670.013.29>.
- Villalba, Xavier. 2024. Romance exclamative markers at the syntax-pragmatics interface: A compositional approach to exlativity. *Journal of Pragmatics*, 226, 64–77
- Yang, Jiahui. 2023. Discourse-feature-driven movement in Spanish and the revised PGU. *Studia Linguistica*, 77(2), 333–367. <https://doi.org/10.1111/stul.12210>
- Zubizarreta, María Luisa. 1998. *Prosody, focus and word order*. Cambridge, MA: MIT Press.

- Zubizarreta, María Luisa. 2013. On the grammaticalization of the assertion structure: A view from Spanish. In Andreas Dufter & Octavio de Toledo, *Left sentence peripheries in Spanish: Diachronic, variationist and comparative perspectives*, 253–282, Amsterdam: John Benjamins.
- Zhao, Chen. 2024. Chinese is a discourse-configurational language: Miyagawa's typology revisited. *Lingua* 304, 103716. <https://doi.org/10.1016/j.lingua.2024.103716>.