

# Spanish Root Exclamatives at the Syntax/Semantics Interface

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## Abstract

In this paper several aspects of the syntax and semantics of Spanish root exclamatives are analyzed. Assuming a multi-layered approach to the CP projection, it is argued that a degree feature is checked in the Focus layer and that the exclamative feature is checked in the Force layer. The former type of checking provides evidence for the hypothesis that focus-related features are checked in different phases of the syntactic computation. The apparent diversity of exclamative structures in Spanish corresponds to a tight set of derivational mechanisms and corresponding interpretive steps.

**Key words:** exclamative sentences, focus, degree, syntax/semantics interface.

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## 0. Introduction

The analysis of sentence types poses a challenge for any theory of the syntax/semantics interface. On the one hand, there seem to be strong pragmatic and semantic reasons supporting a typology separating declaratives, imperatives, interrogatives and exclamatives. On the other hand, the structural configurations corresponding to a sentence type seem too diverse at times to justify a uniform characterization from a syntactic point of view. For example, true imperatives and surrogate imperatives are clearly different morpho-syntactically, but they express a unique semantic/pragmatic type (Rivero and Terzi 1995). Even the force-based typology is not without problems. It certainly has a pragmatic justification, since sentential types are determined by the speech act they express —whether the speaker uttering the relevant expression is making a statement, issuing a command (tries

to influence the addressee), etc. Semantically speaking, positing such a clear-cut and compartmentalized typology might not be the optimal strategy, since there are clear connections across sentence types. Interrogatives and exclamatives share important properties, and several recent accounts of the semantics of exclamatives (Gutiérrez-Rexach 1996, 2001, Zanuttini and Portner 2003) derive the semantics of *wh*-exclamatives from the semantics of *wh*-questions. For example, exclamatives and interrogatives seem to use similar lexical resources (*wh*-words) and syntactic strategies (displacement to the left periphery), so at least a partially unified approach looks reasonable. On the other hand, this conclusion is not necessary by any means, and other approaches do not stress a unifying connection, from Lewis's (1970) account to Castroviejo (2006, 2007). There are indeed semantic factors that are conducive to a non-connecting view: The speech acts associated with the utterance of exclamatory and interrogative sentences are quite different; exclamatives are narrowly associated with certain denotational properties (reference to degrees), which are absent in most interrogatives; etc. Nevertheless, as it will be argued below, it is possible to defend an account where exclamatives denote discrete semantic objects that share certain features with questions.

If one assumes a model of grammar in which syntactic and semantic computation proceed in parallel, the above challenges become theoretically relevant. In Chomsky's (2001) "derivation by phase" model and Uriagereka's (2000) system based on "multiple spell-out", it is assumed that syntactic derivations can be sent to the Spell-Out component and assigned an interpretation at any point.<sup>1</sup> This model allows us to establish a tighter fit between syntax and semantics since semantic steps are mirrored by syntactic steps. Another interesting consequence is that semantic considerations play an essential role in the structural analysis of the constructions of a language.<sup>2</sup>

In this paper, it will be proposed that Spanish root exclamatives provide evidence for a model of grammar of this sort, one in which semantic properties and their syntactic instantiation are addressed in a unitary fashion. Additionally, it will be argued that—despite the apparent diversity of exclamatory constructions at the surface level—there are uniform syntactic procedures that derive the relevant structures and the intended exclamative interpretation.

1. In this paper, we will remain neutral with respect to debates within the phase-based minimalist framework—developed from Chomsky (2001) to Chomsky (2006)—, namely with respect to the issue of how movement is represented (attraction, internal merge), feature checking vs. valuation, the status of agreement and agreement projections, the probe/goal theory, etc. Cf. Boeckx (2008) for a critical analysis.
2. This idea is also defended in Gutiérrez-Rexach (1999a), where a generalized minimalist system is proposed in which syntactic and semantic derivations go in parallel. This latest minimalist approach to the correspondence between syntactic and semantic derivations is by no means new. It can be traced back to the technical implementation of the "Curry-Howard isomorphism" in categorial grammar. The connections with some of the leading ideas in generative semantics and Keenan's (1979) semantically based grammar are also obvious.

## 1. The semantics and pragmatics of exclamatives

The consideration of exclamatives as a separate and semantically-distinct sentence type has to be motivated with a proposal in which they denote a semantic object that is different from those denoted by other sentence types. If we assume that declarative sentences denote truth values, interrogative sentences denote questions (Groenendijk and Stokhof 1984), and imperatives denote commands (Hamblin 1987), the assumption that exclamatives denote semantic objects that we can call “exclamations” seems sufficiently parsimonious. The relevant issue becomes to determine the nature of such objects and their composition. Consider the exclamative sentence in (1):

- (1) What an intelligent man he is!

By uttering the above sentence, a speaker expresses an emotive attitude (amazement, surprise or any other contextually coherent attitude) toward the degree of intelligence of the individual under consideration. In Gutiérrez-Rexach (1996, 2001) it is claimed that a formal theory of exclamatives has to characterize what we have just described informally: Exclamatives express attitudes towards the high degree of a property —cf. Castroviejo (2006, 2007) for a more direct defense of the claim that exclamatives are actually degree constructions. The question is now how to model this semantic object using the tools of contemporary formal semantics. The semantics of exclamatives proposed in Gutiérrez-Rexach (1996) is based on the semantics of questions developed by Karttunen (1977) with the addition of Groenendijk and Stokhof’s (1984) notion of strong exhaustivity. Degree-question sentences, such as (2), express questions about maximal degrees (3). This interpretation is formalized in (4).

- (2) How tall is John?

- (3) What is the maximal degree  $d$  such that John is  $d$ tall?

- (4)  $\uparrow p \exists d [p(w) \ \& \ p = \lambda w' [d = \text{MAX}(\lambda d' [\text{tall}(w')(j,d')]]]$

Formula (4) denotes in  $w$  the unique true proposition  $p$  of the form ‘John is  $d$  tall’, where  $d$  is a maximal degree. If we want to extend this semantics to exclamatives, what is needed is to add an operator of exclamative force. In sum, interrogatives and exclamatives have basically the same denotation, but would be associated with different speech-act or illocutionary operators —cf. Krifka (1995) for an account of questions that also relies on illocutionary force operators. The exclamative force of the class of expressions we are dealing with comes from the presence of an illocutionary operator EXC of type  $\langle i, \langle s, \langle \langle s, t \rangle, t \rangle \rangle \rangle$ , where  $i$  is the type of the speaker’s variable and  $s$  is the type of the world variable. Therefore, EXC it is not a mere extensional truth-functional operator, such as negation, but an intensional operator on propositions. The definition of EXC is as proposed in Gutiérrez-Rexach (1996):

- (5) Let  $a$  be an agent (the speaker),  $w$  a world (typically the actual world),  $p$  a proposition, and  $P \in \text{EMOT}$  (the set of emotive properties). Then,  
 $\text{EXC} =_{\text{df}} \lambda a_1 \lambda w_s \lambda p_{\langle s,t \rangle} \exists P_{\langle s, \langle \langle s,t \rangle, \langle e,t \rangle \rangle} [P(w)(p)(a)]$

Consider (6):

- (6) ¡Qué/lo                    alto que es Juan!  
 what/the-NEUT tall that is Juan  
 ‘How tall Juan is!’

When uttering (6), the speaker expresses an attitude (surprise, admiration, amazement) toward the fact that Juan is  $d$ -tall, where  $d$  is Juan’s “degree of tallness” (his height). Formally:

- (7)  $\text{EXC}(a)(w)(t_p \exists d [p(w) \ \& \ p = \lambda w' [d = \text{MAX}(\lambda d' [\text{tall}(w')(j,d')]])])$  iff  
 $\exists P \in \text{EMOT} [P(w)(t_p \exists d [p(w) \ \& \ p = \lambda w' [d = \text{MAX}(\lambda d' [\text{tall}(w')(j,d')]])])](a)]$

Nevertheless, (7) does not exhaust the content of the exclamatory expression. For example, (6) would be true and felicitous in a situation in which Juan is ‘5’6” —which is not being objectively tall according to US/European standards— but the speaker expected him to be shorter or, alternatively, if Juan’s relatives were all shorter, and the speaker meets Juan for the first time and realizes that he is taller than his relatives, i.e. taller than he expected him to be. Thus, there is an additional ingredient missing in (7), namely that the relevant degree property exceeds the speaker’s expectations. In other words, Juan does not need to be “objectively” tall or tall according to a standard in the common ground. His degree of height needs to exceed the speaker’s expectations, whatever those are. They could be expectations that follow common-ground norms, socially-accepted standards, or they could be expectations reflecting his personal assessment. Capturing this additional ingredient is more elusive than it seems at first. Several authors (Gutiérrez-Rexach 1996, Zanuttini and Portner 2003, Villalba 2003, Castroviejo 2007) have treated it as a high degree or extreme degree implicature or interpretation. This property predicts why the adjective *alto* ‘tall’ in (6) can combine with high or extreme degree modifiers such as *muy* ‘very’ or *extremadamente* ‘extremely’, but not with others associated with middle or low intervals of the relevant degree scale: *razonablemente* ‘reasonably’, etc.

Alternative implementations of the high-degree property have been developed in the literature. For example, Zanuttini and Portner (2003) relate it to the property of widening (Kadmon and Ladman 1993). Widening expands the quantificational domain associated with the *wh*-clause (the standard set of true propositions) to a wider domain (one that includes propositions that are not considered in the standard alternatives). The high degree meaning of exclamatives is derived as a conventional scalar implicature (Grice 1989), since it cannot be canceled nor is detachable. This characterization is controversial. On the one hand, as Villalba (2003: fn. 1) points out, there are some doubts about non-detachability. Sentences

that are not exclamative in form may trigger the implicature. If this observation is correct, it would seem more adequate to treat this property not as an implicature but rather as a presupposition: A precondition that has to be met by the preceding discourse (or common ground), in order to be successfully updated with the content expressed by the exclamative.<sup>3</sup> Castroviejo (2006: 118-9) discusses the case of adjectives denoting closed scales, like *dry*, *empty* or *full*, which do not seem amenable to a widening analysis, since the associated scale cannot be widened beyond a certain point. Hence, *How empty the cinema was!* obviously does not entail that the cinema was empty.

On the other hand, as our discussion of example (6) highlights, it is probably not accurate to talk about a high or extreme degree property *per se*. What counts is that the relevant degree property triggers the emotive attitude of the speaker and that such property exceeds his expectations —cf. Katz (2005) for the notion of attitudes toward degrees in general. Gutiérrez-Rexach (1996) presents a characterization of this sort, refraining from the “high/extreme degree” label. An exclamatory sentence triggers a partition of degree properties according to the speaker’s expectations. What is presupposed with respect to (6) is that if Juan had been shorter (tall to a lesser degree) in an alternative world, the speaker would not be surprised or amazed. Formally, let  $<_a^P$  be an ordering relation on degrees associated with property P according to the individual a’s expectations. Then, the following holds:  $\forall d, d' [d' <_a^P d \ \& \ \text{EXC}((a)(w)(P(d))) \rightarrow \neg \text{EXC}((a)(w)(P(d')))]$ .

Another important property of exclamatives is that they are factive (Elliott 1974, Grimshaw 1979). This property is shared by emotive predicates in general (*be surprised*, *be amazed*, *be incredible*, etc.) Thus, it seems reasonable to link factivity to the characterization of the exclamatory operator in (5) above, in which a hidden contextually-dependent property is predicated of the relevant proposition. Exclamatives are factive because they “encode” a null emotive predicate.

This characterization allows us to distinguish exclamatives from other constructions that are emotive in nature or express attitudes toward degrees but are not factive, such as *John is filthy rich*, which can be uttered as a statement contributing new information —for example, as an answer to the question *How rich is John?*— and do not necessarily have the prosodic contour of an exclamative either.

The hypothesis that there is a constellation or cluster of semantic properties responsible for identifying a sentence as an exclamative has important consequences for a potential syntactic analysis. Associating the exclamatory interpretation of a sentence with an exclamatory operator entails that there has to be a syntactic projection hosting this constituent expressing force. Thus, the syntactic exclamative feature is related to the exclamative operator, which could be assumed to be syntactically merged in the specifier of ForceP (Rizzi 1997, Gutiérrez-Rexach 2001). Additionally, there is no need to postulate an abstract embedding verb, as was done by the followers of the “performative hypothesis” (Ross 1971). Root exclamatives are structurally con-

3. This dynamic characterization of presuppositional meaning is based on Kamp’s (2001) ideas. In Gutiérrez-Rexach (2006), a similar treatment is extended to superlatives, another area where degree-implicature theories run into problems.

stituents of category CP.<sup>4</sup> Finally, the scalar degree presupposition triggered by the exclamative and discussed above requires consideration of alternatives, since the relevant degree property is picked from a contextually determined set of alternatives (Zanuttini and Portner 2003). This is implemented by introducing an additional restriction on the domain of degrees considered in the degree presupposition: The relevant domain will be the set of degrees determined by the alternative worlds under consideration, namely, those worlds in which the relevant degree property is as expected or less than expected. The consideration of alternatives is also essential in the analysis of focus constructions (Rooth 1992). In what follows, it will be shown that there is more evidence of the interface connection of exclamatives and focus, and that checking of the degree/exclamative feature is focus-related.

## 2. Unity behind diversity

From a cross-linguistic perspective, Spanish is unique among Romance languages in the variety of constructions that can express exclamatory force. All the sentences below belong to this sentence type

- (8) ¡Lo alta que es María!  
 the-NEUT tall that is Mary  
 'How tall Mary is!'
- (9) ¡Sí que tienes mala suerte tú!  
 yes that have bad luck you  
 'You really have bad luck!'
- (10) ¡Claro que te va a salir bien el examen!  
 clear that to-you goes to come-out well the exam  
 'Of course, you'll do fine in the exam!'
- (11) ¡Qué alta que es María!  
 what tall that is Mary  
 'How tall Mary is!'
- (12) ¡Vaya alta que es María!  
 go-SUBJ tall that is Mary  
 'How tall Mary is!'
- (13) ¡Que si es alta María!  
 that if is tall Mary  
 'Mary is really tall!'

4. Rivero (1994), following a suggestion by I. Bosque, also proposes that root imperatives are constituents of category CP. Concretely, in structures such as (i) the preposition occupies the specifier of CP.

(i) ¡A correr! 'Run!'

- (14) ¡Por supuesto que María es alta!  
 by supposed that María is tall  
 'Of course, Mary is tall!'

In Gutiérrez-Rexach (2001), a typology of exclamative constructions based on the category of the initial element in the construct is established. The following exclamative types are postulated: Det (8), Adv (9), Adj (10), *Wh* (11), V (12), C (13) and P (14). What I will argue in this section is that the derivation of these structures follows two uniform procedures and that the output linearizations are the result of the checking of features related to focus (associated with the (high) degree presupposition; cf. Postma 1996) and force (the checking of the exclamative feature). Following Rizzi's (1997) proposal on the structure of the left periphery, I will assume that CPs have a fine-grained structure encoding topic, focus and force constituents.<sup>5</sup> In minimalist terms, in the CP phase of the syntactic derivation (Chomsky 2001) at least features related to [focus], [topic] and [force] are attracted. The task is to determine whether there are other features involved in the derivation of the convergent structures in (8)–(14).<sup>6</sup>

In Gutiérrez and Silva (1999), it is shown that Spanish DPs also have a multi-layered structure, in which focus and focus-related features are checked. The idea of feature-relatedness applies to features that are checked at the same stage of a syntactic derivation.<sup>7</sup> Gutiérrez and Silva argue that focus and depreciativity are semantically related and checked at the same stage of the derivation. In the case of exclamatives, we have suggested above that the degree presupposition and focus are semantically related. Thus, based on the parallel conception of semantic and syntactic derivation, it has to be concluded that a [+degree] element is attracted to the [focus] specifier of the CP.<sup>8</sup>

5. Ambar et al. (1998) and Poletto (1999) also present analyses of similar structures in Portuguese and Italian dialects as evidence for a structure of the CP layer based on Rizzi's proposal.
6. Some of the assumptions behind Rizzi's (1997) proposal may be problematic from a minimalist perspective, more concretely, the proposal that [topic] and [focus] features are independent or syntactically computed like any other features. Leaving aside some cases where focus might be lexically encoded, it remains a mystery how these features are introduced into the computational system. For example, it seems unintuitive to postulate [topic] as a lexically-encoded feature, but alternative proposals would violate inclusiveness. On the other hand, there is sufficient evidence to distinguish topic and focus fields and/or layers in several languages, so a plain elimination of the [topic] feature does not seem a satisfactory alternative either. See Lopez (2003) for a minimalist account of these issues.
7. In Gutiérrez and Silva (1999), a multiple-specifiers structure is adopted for DPs, based on derivational considerations. Rizzi's (1997) proposal for the left periphery of the sentence has a representational core and each feature heads its own projection. The structure that will be proposed in this paper is compatible with both approaches.
8. Notice that when an adjective is attracted to the left periphery, it has to be gradable. Thus, attraction of *muerta* 'dead' or *extinguido* 'extinct' in (i) is not allowed.
  - (i) a. \*¡Lo muerta que está Juana!  
 the-NEUT dead that is Juana
  - b. \*¡Lo extinguidos que están los dinosaurios!  
 the-NEUT extinct that are the dinosaurs

Although (8-14) mostly instantiate overt raising of an X element (typically an adjective), there are cases in which the adjective is not attracted to the C layer:

- (15) ¡Vaya que María es alta!  
 go-SUBJ that Mary is tall  
 ‘Mary is not tall at all.’
- (16) a. ¡Lo que son los niños altos! (XVII Century)  
 the-NEUT that are the boys tall
- b. ¡Lo que son los niños de altos!  
 the-NEUT that are the boys of tall  
 ‘How tall the boys are!’

Sentence (15) has the interpretation shown in the paraphrase, given the relevant distinctive intonational contour associated to its canonical or most standard utterance. It states surprise, amazement or disagreement at a previous assertion that Mary is tall —an assessment obviously not shared by the speaker— and not necessarily at the degree of her tallness. Similarly, when uttering (17), a speaker may express incredulity at a prior assertion stating that Juan is poor, probably because he/she believes that this is not the case.

- (17) ¡Vaya/venga que va a ser pobre Juan!  
 go-SUBJ/come-SUBJ that goes to be poor Juan  
 ‘No way Juan is poor!’

In the contrast in (16), only the variant in which the adjective is preceded by the preposition *de* is grammatical in contemporary Spanish.<sup>9</sup> The degree reading requires the presence of the preposition *de* ‘of’ heading a DP/PP (Kayne 1994). The DP/PP constituent hosts a null operator on degrees in its specifier position. Insertion of *de* is a last resort mechanism to allow covert attraction of an adjective to the C layer (Gutiérrez-Rexach 1999b). Additionally, all these sentences in which the article occurs in the lower position also share the property of lacking the scalar presupposition characteristic of exclamative expressions that we mentioned above. Sentence (17) does not entail that Juan’s degree of poverty exceeds the speaker’s expectations. The opposite is precisely the case. The speaker is denying that Juan’s degree of poverty exceeds any normal measure, if he is poor at all. This shows that the scalar degree presupposition of exclamatives is systematically associated with a syntactic property (the raised left-peripheral position of the adjective), so there is a correlation between a semantic and a syntactic requirement at the interface

9. Sentence (16a) is found in texts until the XVII Century (Keniston 1937), suggesting that raising/attraction of the adjective was optional before Spell-Out at a certain point in the development of Spanish. Later, overt attraction or insertion of *de* (16c) became obligatory. These two options are standard in contemporary Spanish.



(the input to semantic/pragmatic interpretation).<sup>10</sup> Additionally, only when the adjective has been attracted to the left periphery it can be modified by extreme degree modifiers (*muy* ‘very’, *extremadamente* ‘extremely’).<sup>11</sup>

- (18) a. ¡Vaya        extremadamente alta que es María!  
           go-SUBJ extremely            tall that is Mary  
           ‘Mary is really tall!’
- b. ??¡Vaya        que es extremadamente alta María!  
           go-SUBJ that is    extremely            tall Mary

Thus, when a sequence reaches the C phase of the derivation, the adjective is attracted to the Focus projection and checks the interpretable feature [+deg], as illustrated in (19).

- (19) [<sub>Topic</sub> *que es María alta*<sub>[+deg]]] → [<sub>Focus</sub> *alta* [<sub>Topic</sub> *que es María alta*<sub>copy</sub>]]</sub>

An immediate consequence of overt attraction of the adjective and its (degree) variable is that when the existential quantifier on degrees binds the variable of the adjective —by an application of Existential Closure (Heim 1982)—, this quantifier has scope over any other quantificational element in the clause. For example, the existential quantifier over degrees has wide scope over the verb *parecer* ‘seem’ in (20) and over the universal quantifier in (21):

- (20) ¡Vaya        alta que parece María!  
           go-SUBJ tall that seems Mary  
           ‘Mary seems really tall!’
- (21) ¡Vaya        altos que son todos tus    hermanos!  
           go-SUBJ tall that are all    your brothers  
           ‘Your brothers are really tall!’

The paraphrases of the logical forms corresponding to these readings are respectively ‘There is a degree of height such that Mary seems to exceed it’ and ‘There is a degree of height such that all your brothers exceed that degree.’<sup>12</sup> This fact is consistent with Szabolci’s (1985) and Heim’s (1995) analyses of superlatives, which involve existential quantification over degrees (cf. also Gutiérrez-Rexach 2006).

10. In Bosque and Gutiérrez-Rexach (2007: chapter 11), there is a more exhaustive description of the syntax of left peripheral and discourse-related elements.

11. (18b) is only felicitous in the non-degree reading discussed with respect to (17) above.

12. The unavailable narrow scope readings of (20) and (21) would respectively be: ‘It seems that there is a degree of height such that Mary is that tall’ and ‘For every brother of yours x there is a (possibly different degree) such that x exceeds that degree’. Thus, (21) in the narrow scope reading would be compatible with an interpretation in which it is actually the case that not all brothers are tall.

For these authors, the existential degree quantifier has wide scope over other operators in the clause.

After the application of Move/Attract, the final step in the derivation inserts a minimal element and merges it with the Force head. The derivation in (19) could be terminated with the insertion of an element of category D or V, as in (22) and (23) respectively.

(22) [<sub>Focus</sub> *alta* [<sub>Topic</sub> *que es María alta*<sub>copy</sub>]] → [<sub>Force</sub> *lo* [<sub>Focus</sub> *alta* [<sub>Topic</sub> *que es María alta*<sub>copy</sub>]]]

(23) [<sub>Focus</sub> *alta* [<sub>Topic</sub> *que es María alta*<sub>copy</sub>]] → [<sub>Force</sub> *Vaya* [<sub>Focus</sub> *alta* [<sub>Topic</sub> *que es María alta*<sub>copy</sub>]]]

This type of derivation is in the spirit of the analysis proposed by Gutiérrez-Rexach (1999) for neuter degree relatives, which follows Kayne's (1994) raising analysis of relative clauses. The difference would be that standard neuter degree relatives do not necessarily check the exclamative feature:

(24) No sé            lo            alta que es María.  
not know-I the-NEUT tall that is Mary  
'I don't know how tall Mary is.'

The [+exclamative] feature is an optional interpretable feature of the determiner which allows its merger with the Force head. This optional feature is only encoded in certain fixed grammatical forms, such as the neuter article or the feminine article in partitive constructions such as (25). In the case of verbs, only verbs in the subjunctive (*vaya*, *venga*) or the imperative, as *fíjate* in (26), may encode the [force] feature.<sup>13</sup>

(25) ¡La            de libros que he            leído!  
the-FEM of books that have-I read  
'I have read so many books!'

(26) ¡Fíjate el vestido que lleva!  
look the dress that wears-she  
'Look at her dress!'

We can conclude that a Kayne-style treatment of Spanish exclamatives derives the correct Spell-Out linearizations and the appropriate input for the semantic interpretation of degree structures. In general we have a Spell-Out arrangement of the following sort:

13. The encoding of this optional feature is a lexical property and is subject to cross-linguistic variation. This explains why the resources for the expression of exclamative constructions are more reduced in a language such as English, where neither articles nor most verbs can encode the exclamative feature.

(27) [<sub>Force</sub> X [<sub>Focus</sub> A/N [<sub>Top</sub> que ...]]]

As correctly observed by a reviewer, the association between the scalar degree presupposition and adjective movement to the left periphery has an exception in the exclamative [*cómo ... de A*] construction: *¡Cómo es de alto Juan!* ('How tall Juan is!'), *¡Cómo está todo de caro!* ('How expensive everything is!'). The split solution without *de* is the common one in French and Italian (*Come sei bella!* 'How beautiful you are!')—see Villalba (2003). As claimed in Gutiérrez-Rexach (1999b), the association of *in situ* adjectives with the obligatory presence of *de* in Spanish indicates the presence of a PP constituent headed by *de*, hosting a null operator, which would license the exclamative interpretation.

Recently, Bartra and Villalba (2006) have proposed that Spanish non-agreeing *lo-de* constructions—as in *lo caro del piso* 'lit. the-neut. expensive of the apartment'—are derived in a different fashion, along the lines of DP predicate internal constructions involving predicate inversion (den Dikken 2006). The derivation of these constructions requires the satisfaction of several quantificational and focus-related properties, which would not require raising *per se*. These constructions are non-sentential, non-exclamatory and the triggering of the high-degree property comes from an external source.<sup>14</sup> What this entails is that the focussation of a constituent is not associated with a uniform syntactic derivational procedure. How to check the focus feature also depends on the other features that have to be checked in order to get a convergent syntactic object. More concretely, "focus relatedness" in the nominal domain may be satisfied by predicate inversion, whereas its association with force-dependent features requires a computational mechanism of the sort we are arguing for here.

### 3. Successive movement

The extension of the derivation proposed in the previous section to all types of exclamatives is problematic. There are cases—concretely the ones that I have called above *Wh-*, *P-* and *Adv-* exclamatives—in which an alternative analysis seems to avoid undesired results. The strategy presented above entails that the elements attracted to Focus and the ones merged at Force do not belong to the same constituent at any stage of the derivation. Nevertheless, the examples in (28) are equivalent in meaning, suggesting a correspondence in which the adverb *bien* 'well' and the adjective *ricas* 'rich/tasty' would belong to the same constituent—i.e. undergo the same operations—until *bien ricas* ('really tasty') is proposed.<sup>15</sup>

14. In the sentence *Me sorprende lo caro del piso* 'It surprises me how expensive the apartment is', a high-degree presupposition is triggered, which is similar to the ones we have been analyzing in root exclamatives. Nevertheless, this is not always the case. In *Quédate con lo bueno de Juan* 'Just consider Juan's good features', the *lo-de* construction is interpreted as a partitive and lacks any high degree property, since the embedding verb is not an emotive predicate.

15. For a discussion of several related constructions see Hernanz (1999) and Hernanz and Rigau (2006).

- (28) a. ¡Bien ricas que saben estas manzanas!  
 well rich that taste these apples  
 ‘These apples are really good/tasty!’
- b. ¡Estas manzanas saben bien ricas!  
 these apples taste well rich  
 ‘These apples are really good/tasty!’

Additionally, if *bien* and *ricas* would not form a constituent, it would be possible to derive a convergent construction in which the adjective remained *in situ* (embedded in a DP/PP headed by *de*) and the adverb were merged directly at Force. Nevertheless, this predicts the wrong result, since (29) is ungrammatical:<sup>16</sup>

- (29) \*¡Bien que saben estas manzanas de ricas!  
 well that taste these apples of rich

Similarly, if the derivation of (30) involved a step in which *libros* were raised from the VP-internal complement position of *leer* ‘read’ and *los* ‘the-pl.’ were merged directly at Force, we would leave the determiner-noun agreement facts unexplained.

- (30) ¡Los libros que has leído!  
 the-MASC.PL books that have-you read  
 ‘You have read so many books!’

In the case of *wh*-exclamatives a parallel reasoning can be invoked. Thus, I want to propose that there is an alternative derivational procedure that renders equivalent meanings —the features checked are identical to those considered in the previous section with respect to non-agreeing V and D exclamatives. Nevertheless, this alternative derivation is clearly different from a syntactic point of view. A full XP is moved to ForceP first in order to satisfy the checking requirements of the degree feature and, afterwards, its specifier is displaced to Force in order to check the exclamatory feature. Consider (31):

- (31) ¡Qué libros que has leído!  
 what books that have-you read  
 ‘The books that you have read!’

In the initial numeration corresponding to (31), the *wh*-word *qué* encodes the features [+deg] and [+excl]. The feature [+excl] is encoded as an interface requirement of the EXCL operator. Its presence will trigger the last derivational step considered, which will effectively terminate the derivation. When the *wh*-expression encodes the

16. Sentence (29) should not be confused with the grammatical *Bien que sabes tú qué hacer* ‘You really know what to do’, where the adverb *bien* is not associated with any constituent inside the CP.

feature [+question] the derivation is the standard one for *wh*-interrogatives. The following transition in (32) represents the checking of the degree feature, whereas the step in (33) corresponds to the checking of the exclamative feature.

(32) [<sub>Topic</sub> *que has leído qué libros*] →  
 [<sub>Focus/Deg</sub> *qué libros* [<sub>Topic</sub> *que has leído [qué libros]<sub>copy</sub>*]]

(33) [<sub>Focus</sub> *qué libros* [<sub>Topic</sub> *que has leído [qué libros]<sub>copy</sub>*]] →  
 [<sub>Force/Excl</sub> *qué* [<sub>Focus/Deg</sub> [*qué*]<sub>copy</sub> *libros*] [<sub>Topic</sub> *que has leído [qué libros]<sub>copy</sub>*]]

A similar derivation can be proposed for the examples in (28a) and (30). The only difference resides in the category of the element attracted to Force. In all these cases the exclamative feature is optionally encoded in the element which will close the derivation. The optional presence of *que* is related to the activation of the focus layer in C. Demonte and Fernández-Soriano (2005) call it “defective *que*”, since it only carries some of the features present in complementizers and is licensed by other means (focus checking).<sup>17</sup>

#### 4. Evidentiality in exclamatives

As we have been seen up to this point, merger or movement of an element in Force is not without consequences. Lexical items bring in requirements associated with their idiosyncratic feature specification. In this section, it will be shown that the presence of an adjective or an adverb in Force<sup>min</sup> (by an application of Merge) semantically expresses the propositional attitude of the speaker. More specifically, all of the adjectives/adverbs below (*claro* ‘clear’, *seguro* ‘sure/certain’, *evidentemente* ‘evidently’) have a feature related to evidentiality.

(34) ¡Claro que te lo voy a dar!  
 clear that to-you it go-I to give  
 ‘Of course I will give it to you!’

(35) ¡Evidentemente que va a ser declarado culpable!  
 evidently that goes-he to be declared guilty  
 ‘Of course, he will be found guilty’

(36) ¡Seguro que no trajiste eso!  
 sure that not brought-you that  
 ‘Of course, you did not bring that’

17. In this respect, we agree with Demonte and Fernández Soriano’s (2005) observation that defective *que* is not related to factivity, since its presence is optional and factivity is, on the other hand, obligatory. Recall that here we are claiming that factivity is a property of the emotive predicate associated with the exclamative operator. This entails that the relevant factive interpretation is a by-product of the exclamative feature and does not require an independent lexical item to encode it.

- (37) ¡Bien que la jodiste, hermano!  
 well that her screwed-you, brother  
 ‘You screwed up, brother’

The relevant exclamative reading is clearly propositional and generated by merger at Force, in contrast to the degree/quantity reading, which requires movement of the adjective, as shown above. Since merger at ForceP is also related—in the above examples—with the checking of an evidentiality feature, this is further evidence for the claim that there is an Evidentiality head in the left periphery (Cinque 1999, Demonte and Fernández Soriano 2005) and that checking of this feature takes place at the Force stage of the C phase. Non-evidential adjectives/adverbs cannot merge directly to the Force head:<sup>18</sup>

- (38) \*¡Tarde que has llegado!  
 late that have-you arrived  
 ‘You were really late!’

- (39) \*¡Hermosa que es María!  
 pretty that is María  
 ‘María is really pretty!’

On the other hand, the presence of the modifier *bien* ‘well’ in Force indicates that the displacement of a non-evidential adverb to Focus is allowed:

- (40) ¡Bien tarde que has llegado!  
 well late that have-you arrived  
 ‘You arrived really late!’

- (41) ¡Bien contentos que están!  
 well happy that are-they  
 ‘They are really happy!’

Indirect attraction of the adjective via modification by the adverb *bien* ‘well’ in the above sentences follows the procedure discussed in the previous section: Movement to FocusP and subsequent movement of *bien* to ForceP.

18. There are certain non-evidential adjectives that can also occur in this position: *¡Listo que es uno!* ‘lit. Smart that one is; What a smart guy I am’, etc. One could extend the evidentiality analysis to them, since they seem to assert (strong) evidence that the relevant proposition holds, for example that the speaker believes that he is smart. Thus, they would not constitute a counterexample to the association of adjectives with the evidentiality feature.

## 5. Conclusion

Taking the proposals in Gutiérrez-Rexach (1996, 2001) as a departure point, it has been argued that an analysis of the semantics and syntax of Spanish root exclamatives sheds new light on the correspondence between syntactic computation and semantic interpretation and on what is commonly understood as the syntax/semantics interface. Semantically, it has been argued that exclamatory constructions express a uniform content that is susceptible of receiving a systematic formal analysis. On the syntactic front —assuming a multi-layered approach to the CP projection— it is argued that a degree feature is checked in the Focus layer and the exclamative feature is checked in the Force layer. The former type of checking provides evidence for Gutiérrez and Silva's (1999) hypothesis on the existence of focus-related features in different phases of the syntactic computation. The apparent diversity of exclamative structures in Spanish corresponds to a tight set of derivational mechanisms and the corresponding interpretive steps.

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