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ATTI 5

Studies in Spanish Syntax

Edited by Laura Brugè



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Preface

Scientific research within the area of Spanish linguistics has been giving for many years an important input to the development of current linguistic theory. It is to this contribution that the present volume is dedicated.

Each of the five papers in this compilation approaches a different aspect of Spanish syntax from the theoretical perspective of generative grammar, and the analyses proposed build on recent formal developments of this theory.

The papers focus on a series of topics that have been the object of linguistic research for many years: the dependencies and relationships which are realized between linguistic elements inside the DP and its functional structure; the role of tense and aspect in sentence structure and interpretation; and the structure and role of the left periphery of the sentence.

Of the five papers, three were presented at the second *Workshop on Spanish Syntax* which took place in Venice on May 9th 2003 at the Dipartimento di Scienze del Linguaggio of the Università Ca' Foscari Venezia.

Following is a brief description of each essay.

The contribution by Bartra and Villalba proposes an interesting analysis of one of those Spanish constructions headed by the so-called 'neuter determiner' lo, namely constructions such as Me asusta lo peligroso de la empresa, which accounts for their peculiar syntactic and interpretive behavior. The authors claim that the derivation of such constructions—i.e., lo-de constructions—cannot share the same analysis of constructions such as Me gusta lo peligrosa que es la empresa—i.e., lo-que constructions, criticizing, in this way, Gutiérrez-Rexach's (1999) idea of extending his analysis for lo-que constructions to lo-de constructions as well. As Bartra and Villalba argue, despite the common property concerning the interpretation of the adjective as a maximal degree adjective, lo-de constructions

can clearly be distinguished from *lo-que* constructions. In fact, among other different properties, *lo-de* constructions need to be selected by a predicate, which, furthermore, conveys an exclamative meaning; they have a clear nominal character and express a factive interpretation. In addition, the features of the adjective, which is the only category that may and must follow *lo*, does not agree with those of the noun of the DP introduced by *de*.

Moreover, Bartra and Villalba offer compelling evidence for the conclusion that *lo-de* constructions show remarkable similarities to DP-internal predicate-inversion constructions (DP-PIC)—i.e., *El idiota del alcalde*: besides sharing a quantificational interpretation, both constructions allow only referential nominal expressions inside the DP headed by *de*, and, among other common properties, they do not allow either the extraction of some constituent internal to the DP or the extraction of the *de*-DP, demonstrating, in this way, that *de* is not a true preposition and does not form a constituent with the DP itself. According to these properties, for *lo-de* constructions the authors suggest an analysis along the lines proposed by den Dikken and Singhapreecha (2004) for the DP-PIC in English, with the crucial difference that, as they argue, in *lo-de* constructions the element that carries the focus interpretation is the inverted predicate, while the DP is interpreted as a topic: in fact, a DP requiring focus interpretation is not allowed in such constructions: *Me sorprendió lo caro de sólo aquella casa.

In the analysis Bartra and Villalba develop, the quantificational value of the construction is provided both by a maximal degree operator, OP_{MAX} , modifying the adjective, predicate of a small clause XP, and by the merging of a functional category F, which immediately dominates the small clause itself: de is realized in the head position of FP as the result of the incorporation of X to F and as the overt manifestation of the quantificational nature of the construction.

The predicate of the small clause, AP, is in turn dominated by a DegP, and OP_{MAX} raises from inside the AP to Spec.DegP in order to bind the degree variable of the gradable adjective. Such movement will later prevent the agreement between the adjective and the noun in the DP, which merges in the specifier position of the small clause XP (cf. Kayne, 1994).

As a further step, DegP moves to the specifier position of the FP projection giving rise to predicative inversion: such syntactic movement, as the authors argue, should be pragmatically motivated, namely focus-driven. With this proposal, Bartra and Villalba intend to extend the informational partition of the sentence to the DP projection as well.

As a final step, the merging of D above FP provides the construction with its nominal nature, and the obligatory raising of OP_{MAX} to Spec.DP, in order to check the MAX features, triggers the realization of the features in D as the 'neuter determiner' *lo*, through the Spec-Head agreement mechanism.

Bosque's contribution is of great relevance for the discussion underlying the issue of plurality inside coordination, since it illustrates how some coordinated constructions whose member are neither nouns nor pronouns can obtain plural features.

The author observes that in Spanish, coordinated expressions composed of singular relational adjectives give rise to a plural expression enabled to agree with the plural noun they modify, as in Los embajadores mexicano v argentino. At first sight, such constructions represent a strong counterexample to the general hypothesis that number features are interpretable only in nouns and pronouns. At the same time, such constructions constitute counterexamples to the hypothesis formalized by Bosque, and inspired by the idea that number features in a coordination are obtained through a computational process, according to which plural features of a coordinated expression can be made of two or more singular expressions only if their respective number features are interpretable. In addition to the above mentioned property which characterizes coordinated singular relational adjectives, Bosque presents compelling evidence that these particular constructions provide the cardinality value of the plural DP they belong to and allow the identification of individuals: Los embajadores mexicano y argentino refers to two ambassadors. The author then claims that all these morphosyntactic and interpretive properties can be derived syntactically.

The syntactic configuration that Bosque suggests to account for these coordinated expressions allows the general hypotheses expressed above to be maintained. Following Kayne's (1994) proposal for genitive PPs, the author argues that a null nominal pro qualifies as the subject of a C/P projection hosting abstract grammatical content (cf. Halle and Marantz, 1993) that can be matched by relational adjectives, among other categories. Pro. being an argument, is provided with interpretable f-features, and consequently, interpretable number features. When pro is provided with singular number features in this configuration, then a singular relational adjective can be inserted in C/P, since this adjective can match prosing. The projection C/P in turn establishes a complement relation with a null head D which agrees with the subject pro and builds its maximal projection: DP. Therefore, according to this syntactic configuration, each member of the coordinated phrase &P is a DP and not an Adjective, as apparently it might seem. The &P projection is in turn analyzed as the subject of a small clause, PredP, which is the complement of the higher D; while the noun of the nominal expression—i.e., embajadores—qualifies as the predicate of the same construction. Being a predicate, the noun will be characterized by non-interpretable f-features, and must move to Spec.PredP where it can inherit the interpretable f-features from the subject of the PredP itself—i.e., &P. Therefore, in the higher D the definite article with plural features—i.e., los—is realized, since it agrees with the nominal moved to Spec.PredP, even though the cardinality value of the whole DP—i.e., *Los embajadores mexicano y argentino*—comes from the DPs which are contained in the &P projection.

According to this syntactic analysis which Bosque extends to coordinated genitive PPs and other coordinated modifiers of the noun (i.e., postnominal possessives and ordinals), the plural interpretable features of the &P comes from the "sum" of the singular interpretable features of each coordinated null nominal *pro*, and not from the relational adjectives, predicates of these null nominals: in Bosque's proposal, the relational adjectives are conceived as "part of the subject of the small clause PredP".

García Fernández's essay constitutes an important contribution to the discussion of some problematic issues concerning the temporal-aspectual field in Spanish.

According to Moreno Cabrera's (2003) theory on subevent structure, which claims that all events are made up of states, García Fernández comes to a lexical-aspectual classification, different from Vendler's (1957), which distinguishes between: *states*, made up of state events (i.e., *estar enfermo*); *activities*, made up of relationships between states—either temporally or non-temporally related to each other—(i.e., *caminar*); *accomplishments*, made up of relationships between states in which the final state is a goal-state (i.e., *construir una casa*); *achievements*, made up of an origin-state and a goal-state (i.e., *morir*); and *punctual atelics*, made up of transitions between states lacking in a goal-state (i.e., *estornudar*). In this classification, furthermore, *stativity*, *durativity* and *telicity* are not considered primitive features but, as the author shows, properties that can be derived both by the number of states underlying each lexical-aspectual class and by the characteristics of the states themselves: *telicity*, for example, depends on the presence of a goal-state.

As a subsequent step, García Fernández applies this lexical-aspectual model to the Spanish temporal-aspectual field since, as he argues, it offers solutions to some theoretical problems concerning, among others, the properties of the progressive periphrasis, the granularity of the event, the difference between Resultative and Experiential Perfects in relation to lexical-aspectual classes, and the possibility of quantifying the goal-state in some aspectual varieties different from the Resultative.

As for the progressive periphrasis, García Fernández shows that the lexical-aspectual model he adopts can explain why in certain cases such as *Juan está siendo inteligente* the construction behaves syntactically like a stative predicate but it is interpreted as dynamic, giving an answer to the so-called progressive paradox (see Dik (1987) and Bertinetto (1994) among others). In fact, in cases like these, the syntactic behavior is determined by

the fact that the progressive focuses on a single state of those that make up the event. The dynamic interpretation, on the other hand, comes from the temporal relationships between the states that make up the event: those predicates that permit the sequentialisation of the event are compatible with the progressive periphrasis; on the contrary, those that do not permit this sequentialisation give rise to ungrammatical sentences, as in *Juan está siendo en Cuenca.

García Fernández also argues that the lexical-aspectual model he adopts provides the possibility of explaining the problems that *activities* pose with respect to the concept of granularity, exemplified by cases such as: *Aquí mis padres están bailando un tango*. In his theory, the question of identifying which interval of an event can be sufficient to be considered a portion of an activity no longer subsists: since *activities* are relationships or transitions between states, dividing an activity up into instants the result are states. Therefore, through this analysis, granularity seems to depend, as the author suggests, on our knowledge of the world and not on grammar.

As for the Perfect Aspect, García Fernández shows that the difference in interpretation between Resultative and Experiential Perfects that affects the different lexical-aspectual classes can be ascribed, in his theory, to the presence or absence of the goal-state in the subevent structure of the event itself, given that Resultative Perfects focus on the goal-state. In this way, constructions such as *Ya he estado en París / Ya he bailado tangos* are interpreted only as Experiential because of the absence of a goal-state in *states* and *activities*; the presence of the goal-state with *accomplishments* and *achievements*, on the other hand, accounts for the immediate interpretation as resultative of constructions such as *Ya han construido el nuevo hotel / Ya han muerto*.

Finally, as García Fernández argues, the analysis he defends enables him to account for the quantification of the goal-state of the subevent structure of the events also in constructions such as *Me dormí (durante) una hora*, an example of Aorist Perfect. In cases like these, in fact, the possibility of quantifying the resulting state—i.e., *estar dormido*—can be determined by the subevent structure of this type of *achievements* (cf. Bertinetto, 1986) which, unlike the other type—i.e., *llegar*, includes an origin-state that follows the goal-state.

Hernanz's contribution is of particular interest for the discussion concerning the main interpretive and syntactic conditions for the activation of the left periphery of the sentence. The analysis the author advances clearly shows that some emphatic affirmative elements involve the left periphery of the sentence and, moreover, that the crucial properties which characterize negative sentences may extend, in a natural way, to affirmative sentences as well.

Hernanz observes that the particle bien that appears in constructions such as Bien ha comido Pepito is used to emphasize the positive value of the sentence, indicating that the event denoted really took place; bien, in fact, cannot appear in negative sentences: *Bien no ha comido Pepito. These peculiarities, together with the impossibility for bien to co-occur with the affirmative marker sí—i.e., *Bien sí ha comido Pepito, leads Hernanz to suggest that bien, like si, merges in Spec.Pol(arity)P when the head of this position, which is immediately above IP, takes the positive value, following Laka's (1990) proposal that a single abstract category subsumes the positive and the negative polarity of the sentence. Moreover, the author presents evidence supporting the idea that the distinct interpretations that bien and si provide to the sentence is due to their different illocutionary force, and she suggests that in Spanish, affirmative polarity can be expressed in three ways: through a null affirmation marker—i.e., Ha llovido en Barcelona, through an affirmative emphatic marker—i.e., Si ha llovido en Barcelona—and through a presuppositional affirmative emphatic marker—i.e., Bien ha llovido en Barcelona.

Exploring the behavior of *bien* in depth, Hernanz observes that in Spanish this element can appear in different positions: in front of a constituent, as in La habitación estaba bien sucia; in preverbal position, as in Bien come pasta Pepito; and followed by the complementizer que, as in Bien que come pasta Pepito. Comparing these constructions from a syntactic and interpretive point of view, the author comes to the conclusion that in all these cases bien should be analyzed as the same element, i.e., the emphatic positive marker, which may be realized in a low position, namely in a Spec.DegP position, as a degree modifier; in a high position, the pre-verbal position; and in a higher position, preceding que. In this way, the different semantic interpretations these sentences receive depend on the different scope properties of bien according to its position in the sentence: in the low position it takes scope over a single constituent; in the high position, focusing on the event denoted in the proposition, it takes scope over the sentence; in the highest position, bien followed by que expresses an echoic value (see Cormack and Smith (1998)) and, for this reason, the sequence takes scope over the main assertion of the sentence.

As a further step, Hernanz concentrates on the syntactic behavior of *bien* in pre-verbal position and of the sequence *bien+que*. As for *bien* in pre-verbal position, she presents compelling evidence for the hypothesis that this affirmative marker moves from its Spec.PolP position to Spec.FocusP position, in order to check off the interpretable feature [EMPH(atic)], in this way activating the left periphery of the sentence. As Hernanz shows, this syntactic movement of *bien*, required by the FOCUS-criterion (see Rizzi (1997)), is motivated both by the fact that it behaves differently from

negative markers—it is restricted to main clauses and cannot appear in Root Infinitive constructions—and by the fact that *bien* behaves similarly to a *wh*-word—it triggers V-to-COMP movement and subject inversion, may freely occur preceded by left dislocated constituents and cannot appear in *wh*-movement constructions.

Finally, moving on to *bien+que*, Hernanz defends the analysis that this sequence, being compatible with negative markers, is obtained by merging *bien* in ForceP, the projection that expresses assertion, and, therefore, the appropriate locus for the echoic interpretation. Comparing the interpretive and syntactic similarities between *bien+que*, *of course-*type adverbs and evidential adverbs followed by the complementizer *que*, Hernanz proposes that *que*, which is associated with the echoic meaning that the sentence expresses, merges in the head of ForceP, while *bien* merges in SpecForceP. In this way, the scope properties and the peculiar interpretation of the sequence *bien+que* are described in a principled way.

The contribution by Martínez-Atienza deals with another issue concerning the syntax and semantics of tense and aspect. The author examines the different aspectual properties of the Present Perfect in English and Spanish from a comparative perspective and provides an interesting account for the intrinsic value of temporal adjuncts, introduced respectively by *since* in English and by *desde* in Spanish, which allows their different syntactic behavior to be determined.

To account for contrasts such as Juan ha salido a las cuatro and *John has left at four (see Giorgi and Pianesi (1997)), which show that in English the Present Perfect does not allow punctual temporal adjuncts, Martínez-Atienza adopts a hypothesis proposed by García Fernández (2000). According to this hypothesis, in Spanish two different underlying temporal structures correspond to the Present Perfect: a Present temporal structure. aspectually interpreted as Perfect, and an "Antepresent" temporal structure. aspectually interpreted as Aorist. The Present Perfect in English, on the other hand, has only the underlying temporal structure of Present. This basic difference between the two languages, besides predicting the above mentioned contrasts, can also account, as Martínez-Atienza observes, for the different interpretation and syntactic behavior of the Present Perfect combined with temporal adjuncts introduced by since and desde in English and Spanish, respectively. Following the proposal suggested by Iatridou et al. (2001) for the Present Perfect in English, Martínez-Atienza points out that in the durational interpretation the Present Perfect plus [SP since/desde DP] can have, the English construction always expresses the aspectual variety of Continuative Perfect—i.e., the event is still occurring at the utterance time, while the Spanish corresponding construction expresses the

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aspectual property of Aorist—i.e., the final point of the event coincides with the utterance time, as the following contrasts show: *She has always lived here but she doesn't anymore vs. Ha vivido siempre aquí, pero ya no vive.

Then, as a final step, Martínez-Atienza focuses on the intrinsic properties of the temporal adjunct [sp since/desde DP] and argues, adopting Iatridou et al.'s (2001) terminology, that in Spanish, the temporal adjunct introduced by desde cannot be considered to be an adjunct of "Perfect-level", contrary to the corresponding temporal adjunct introduced by since in English. The evidence that she adduces for her analysis comes from the fact that in Spanish the temporal adjunct headed by desde does not require verbal morphology expressing Perfect Aspect—cf. Estoy enfermo desde ayer vs. *I am sick since yesterday, can appear with a predicate in Simple Past—cf. Estuve enfermo desde 1990 vs. *I was sick since 1990, and can form a temporal correlation with another adjunct expressing the right temporal limit—cf. Juan ha estado enfermo desde 1990 hasta 1995 vs. *John has been sick since 1990 to 1995.

The editor wishes to express her gratitude to the contributors not only for the relevance of the data and analyses discussed in their papers but also for the fact that all the papers show an intrinsic comparative spirit which makes this compilation of interest not only to researchers and scholars in Spanish syntax but also to those interested in the syntax of Romance and Germanic languages.

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Spanish non Agreeing Quantificational Nominals

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1. Introduction*

Like other Romance Languages, Spanish has no Neuter declension on Nouns. Nonetheless, grammarians often give the label "Neuter Pronoun" to a form of a 3rd, person definite clitic, which stands in the place of an embedded complement clause, as in (1a) or of the predicate of a raising verb, as in (1b):

- sabía, que llegarías tarde. a. Lo (1) it(clit.) knew-I-Past that would arrive-II-Cond late 'I knew it, that you would arrive late'
 - b. ¿Inteligente? No lo intelligent? not it(clit.) is '(As for intelligent), she/he is not'

Parallel to this, a homophonous form heading some kinds of DPs is called "Neuter Determiner", as exemplified in (2): 1

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See Bello (1847), Alcina and Blecua (1975, §3.4.5.), Fernández Ramírez (1986, vol. 3.1., § 72.3.). It has to be noted that Fernández Ramírez underlines the quantificational value of the lo-de construction by calling the Det intensivo o ponderativo, with examples like 'Sólo a los dos días de mi permanencia comprendí lo inútil de mi esfuerzo' ('Only two days after being there I realized how useless my effort was').

- (2) a. Lo más bonito del pueblo es la plaza. the-NEUT most beautiful of the village is the square 'The most beautiful part of the village is the square'
 - b. Me contó *lo* buena que era su hermana. to-me told the-NEUT good that was her sister '(She) told me how virtuous her sister was'
 - c. Cantor mismo notó *lo* inadecuado de esta primera definición.
 Cantor himself noted the-NEUT inadequate of this first definition [1994, B. Rodríguez Salinas, *Cantor y la teoría de conjuntos*, RAEl²

'Cantor himself noted that this first definition was very inadequate'

d. La degradación hasta lo increíble de la vida ciudadana...

[1996, press, Venezuela, RAE]

the decline until the-NEUT incredible of the life city 'The decline of the life in the city to an unbelievable degree'

The general properties of the DPs headed by *lo* are listed in (3):

- (3) a. *lo* can be associated with an "abstract" meaning like PLACE, PART, QUANTITY or VALUE.
 - b. A qualifying predicative adjective precedes a PP or a CP. 3,4

- (i) Lo impertinente de estas afirmaciones LO impertinent of these claims
- (ii) Lo impertinente de varios directivos del club LO impertinent of several managers of the club

Non predicative adjectives can be found inside the DP:

- (iii) Lo caro de las casas unifamiliares grandes LO expensive of the single-family big houses
- (iv) Lo útil de los utensilios españoles artesanales LO useful of the Spanish craft tools

² All examples marked RAE are from the Real Academia Española online databases CREA and CORDE. If not otherwise indicated, the examples are from Peninsular Spanish.

³ As for the predicative value of the adjective, besides relying on speakers' intuition, empirical evidence can be put forward. The nominal inside the *lo-de* construction can be complete, containing Dem, Poss, Num projections:

⁴ As we have already mentioned, the basic properties of the different types of *lo* constructions and also their meanings will became clear through the glosses; hereafter we gloss the 'Neuter' *lo* as *LO*.

- c. The adjective is the predicate of the DP inside the PP or CP complement.
- d. The "lo + A" substring can bear a quantificational value.

Nevertheless there exist, among the constructions exemplified in (2), substantive differences, both in their meaning and structure, which have been pointed out by traditional grammarians. Following this tradition, Bosque and Moreno (1988) distinguish three types of *lo*. They call them *individuating* (4a), *qualitative* (4b), and *quantitative* (4c):⁵

(iii) Vas a ver lo horrible de lo moderno de la construcción de la iglesia.

(you) are going to see LO horrible of LO modern of the construction of the church

Interestingly, if two *lo* are combined, to obtain a grammatical interpretation, one of the two *lo* has to be interpreted with a partitive value. See (iv) and (v):

- (iv) Lo interesante de lo inesperado de sus palabras fue...
 LO interesting of LO unattended of his words was...
 'The interesting thing related to the fact that its words were unattended was...'
- (v) Lo inesperado de lo interesante de sus palabras nos dejó a todos boquiabiertos.
 LO unattended of LO interesting of their words left us with an open mouth
 'The fact that the interesting part of their words was so unattended left us astonished'

Individuative and quantificational *los* can be combined inside a single DP. It is be noted, however, that the partitive one has to be the most embedded one, and the quantificational the outmost:

- (vi) Me sorprendió lo interesante de lo nuevo del libro.to.me surprised LO interesting of LO new of the book'it struck me how interesting the new part of the book was'
- (vii) *Me sorprendió lo nuevo de lo interesante del libro.
 to.me surprised LO new of LO interesting of the book

As will become clear later on in the text, these facts fit very well with our hypothesis, since there can be only one quantificational (focal) element in the DP projection.

⁵ Several syntactic and semantics tests differentiate the three *LO*. Worth being mentioned are their combinatory properties. In spite of a certain degree of pragmatic or stylistic oddity, individuating (or partitive) and quantificational *LO* can combine inside a single DP:

⁽i) Me sorprendió lo oscurantista de lo más reciente de sus poemas. to.me surprised LO obscure of LO more recent of his poems

⁽ii) Me sorprendió lo refinado de lo artesanal de los muebles.to.me surprised LO refined of LO artisan of the furniture

- (4) a. Lo interesante del libro es el primer capítulo.

 LO interesting of the book is the first chapter

 'The interesting part of the book is the first chapter'
 - b. Me asusta *lo* peligroso de la empresa. to.me frightens LO risky of the enterprise 'It frightens me how risky the enterprise is'
 - c. Pepe trabaja lo necesario.
 Pepe works LO necessary
 'Pepe works sufficiently/as much as needed'

Whereas in (4a) the adjective has a partitive meaning, in (4b,c) the adjective construction has a quantificational value, which can be overtly expressed by a quantifier internal to the DP in (4b) and by an external quantifier in (4c):

- (5) a. Me asusta *lo muy* difficil de la empresa. to.me frightens *LO very* difficult of the enterprise 'It frightens me how very difficult the enterprise is'
 - b. Pepe trabaja *tanto como lo* necesario. Pepe works *as much as LO* necessary 'Pepe works as much as needed'

In this paper we will concentrate on one of the constructions in (4) that has been given less attention in the literature: the one in (4b), in which *lo* bears a quantificational value. We will argue that the adjective projection is fronted as a consequence of its focus interpretation. We will also attempt to give an explanation of the fact that the adjective does not agree with the nominal it is predicated from, and we will build our explanation on the intervention effect of the Degree Operator.

Besides the little attention devoted to the structure in (4b), some analyses have been proposed for the quasi-synonymy with (2b) or (6):

(6) Me asusta *lo* peligrosa que es la empresa. to.me frightens *LO very* risky that is the enterprise 'It frightens me how very risky the enterprise is'

As in the non-agreeing construction, in (6) the adjective receives a maximum degree value interpretation:

(7) Me sorprendió *lo caro de la casa*. to.me surprised LO expensive of the flat 'It struck me how expensive the flat was' (8) Me sorprendió / extrañó lo cara que era la casa. to.me surprised/struck LO expensive that was the house 'It struck me how expensive the flat was'

Despite their similarity, we will argue that there is enough empirical evidence for a different analysis of the constructions in (7) and (8). We will propose an analysis along the lines suggested for the predicate-inversion construction (PIC) that idiot of a mayor by den Dikken (1995, 1998) for English. The paper is organised as follows. In section 2 we revise the properties of the construction, basically its similarities with PIC. In section 3 we present the differences between (7) and (8), and in section 4 we argue against the claims and the analysis made in Gutiérrez-Rexach (1999).

In section 5 we develop the analysis of the construction in (7).

2. Syntactic properties of the *lo-de* construction

2.1. The **lo-de** construction as a DP-internal predicate inversion construction

As said before, we argue that *lo-de* and *lo-que* constructions cannot be unified and propose that the former ones share major properties with DP-internal predicate-inversion constructions (DP-PIC) like *that idiot of a mayor*.

In the following paragraphs we consider the properties of *lo-de* constructions in detail.

2.1.1. High degree quantification

Both constructions under analysis involve a quantificational interpretation, so that in both instances we have the interpretation represented in (9)—on a parallel with exclamative sentences, which are known to have a high degree implicature (see Gutiérrez-Rexach (1996), Portner and Zanuttini (2001), Villalba (2003)):⁶

There are slight differences due to the interaction of a series of properties related to the lexical, syntactic and semantic nature of the quantification. In PIC the predicate involved in the quantification is always a pejorative epithet (see Ruwet (1982)), and therefore the quantification is lexically motivated. Nevertheless, the quantificational nature of the A in PIC can be shown by the possibility of quantificational prefixes. The fact that the quantification requires a high degree interpretation receives further support from the impossibility of comparative quantificational modification:

⁽i) *Me extrañó lo tan caro como un palacio del piso.

(9) a. El idiota del alcalde
b. ...lo caro del piso
c. ¡Qué caro que es el piso!
⇒ "the mayor is very foolish"
⇒ "the flat is very expensive"

Interestingly, this high degree interpretation is known to be incompatible with some quantificational structures (see Villalba (2004)). Let us consider, for instance, the impossibility of taking an absolute superlative or elative modifier, whereas intensifying superlatives are admitted:

- (10) a. Me extrañó lo *más caro / ?superior / supercaro del piso.
 to.me struck the most expensive/most high/expensive.MAX of the
 flat
 - b. No hablaste con el *más idiota / ??pésimo / requeteidiota del alcalde.
 - not talked.2 with the most idiot/worst/idiot. MAX of the mayor
 - c. ¡Qué *más caro / ?carísimo es el piso! what more expensive/expensive. MAX is the flat

In both the *lo-de* construction and DP-PIC, on a parallel with exclamative sentences, the only quantification permitted is the intensifying superlative. In (11), further examples in which the intensifying modifier is overtly expressed are presented:⁷

(11) a. ¿Se da cuenta el procesado de lo absurdísimo de su error?

[1965, Alfonso Sastre, M.S.V. o La sangre y la ceniza, RAE]

b. Antes que ningún otro rasgo de ese monumento increíble, me suspendió *lo antiquísimo de su fábrica*.

[1949-1952, Borges, *El Aleph*, RAE]

c. Sólo distinguían lo numerosos de los bultos, *lo hermosísimo de muchas señoras, lo bizarro de los señores y caballeros*.

[1646, Baptista Remiro de Navarra, Los peligros de Madrid, RAE]

⁽ii) *Me extrañó lo más caro que un palacio de la casa.

⁽iii) *Me sorprendió lo *mucho menos* caro *de lo previsto* de la casa.

⁷ Ojeda (1991:401) points out that, regarding the semantic interpretation, "the neuter *lo* denotes the function which selects the greatest element of any subset [E] which has a greatest element".

2.1.2. The DP must be definite and 'strongly referential'

The quantification constraint just displayed affects the DP-side of the constructions under analysis, again on a parallel with exclamatives (see Villalba (2004)).

Consider several cases:

• nonspecific DPs:

- (12) a. *No me sorprenderá lo caro de *un piso* (*cualquiera*). not to.me surprise-FUT LO expensive of a flat (any)
 - b. *No hablaré con el idiota de *un alcalde* (*cualquiera*). not (I) talk-FUT with the idiot of a mayor (any)
 - c. ¡Qué caro que es *un piso cualquiera*! how expensive that is a flat any

• bare plural DPs:

- (13) a. *No me extrañó lo caro de *pisos*. not to.me struck LO expensive of flats
 - b. *No hablé con los idiotas de *alcaldes*. not talked with the-*plu* idiots of mayors
 - c. *¡Qué altos que tiene *niños*! how tall-*plu* that have children

• NPI/downward entailing quantifiers:

- (14) a. *No me extrañó lo caro de *ningún piso/pocos pisos*. not to.me struck LO expensive of no flat/few flats
 - b. *No hablé con el idiota de *ningún alcalde*/los idiotas de *pocos alcaldes*.
 - not (I) talked with the idiot of no mayor/the-plu idiots of few mayors
 - c. *¡Qué caros que son *pocos pisos*!⁸ how expensive-*plu* that are few flats

• generic DPs:

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(15) a. *Me extrañó lo caro de *un piso en general*. to.me struck LO expensive of a flat in general

⁸ There is no negative version of the exclamative sentence, for negation is generally forbidden in exclamatives (see Villalba (2004)).

- b. *Es necesario hablar con el idiota de *un alcalde en general*. (it) is necessary to talk with the idiot of a mayor in general
- c. *¡Qué caro que es *un piso en general*! how expensive that is a flat in general

2.1.3. Islandhood

Another property that makes *lo-de* constructions and DP-PIC similar is islandhood. Neither allows extraction, as can be easily observed in the following examples, which correspond to *wh*-movement, and focus fronting, respectively:

- (16) a. *¿[En qué asunto]; te extrañó lo mezquino de su interés t;? [in what matter] to.you struck LO mean of his/her interest
 - b. *¿[De qué pueblo]_i conoció Juan al idiota del alcalde t_i? [of which village] met Juan to.the fool of.the mayor
- (17) a. *[EN COBRAR]_i te extrañó lo mezquino de su interés t_i. [in get.paid] to.you struck LO mean of his interest
 - b. *¡[DE BARCELONA]¡ conoció Juan al idiota del alcalde t¡! [of Barcelona] met Juan the fool of the mayor

2.1.4. *Impossibility of subextraction*

Another shared property between the *lo-de* construction and DP-PIC concerns the impossibility of subextracting neither the apparently prepositional, nor the adjectival part. Again, this property is exemplified with *wh*-movement and focus fronting respectively:

- (18) a. *¿[De qué]_i te extrañó lo caro t_i? [of what] to.you struck LO expensive
 - b. *¿[De qué alcalde]_i conociste al idiota t_i? [of what mayor] (you) met to.the fool
- (19) a. *[DEL PISO]_i me extrañó lo caro t_i. [of.the flat] to.me struck LO expensive
 - b. *[DEL ALCALDE]_i conoció Juan al idiota t_i. [of the mayor] met Juan to.the fool

As we will argue in more detail in section 5, this behavior results from the fact that de is not a true P in these constructions, nor does it form a maximal projection with the DP (for similar conclusions regarding a subtype of exclamative sentence in Catalan involving de, see Villalba (2003)). This conclusion is compatible with the impossibility of getting the de+DP sequence pronominalized by a possessive pronoun:

- (20) a. Me extrañó lo inocente *de Juan*. 5 to.me struck LO naïve of Juan 'Juan's being naïve struck me'
 - b. *Me extrañó lo inocente *suyo*. to me struck LO innocent his
- (21) a. Hablé con el idiota de Juan.
 - (I) talked with the idiot of Juan
 - b. *Hablé con el idiota suvo.
 - (I) talked with the idiot his

It therefore seems that *de* must be analyzed as a functional category close to the one present in several quantificational constructions in Spanish (see Gutiérrez-Rexach (1999) and Villalba (2003)):

- (22) a. ¡Son *de* fuertes! (they) are of strong-*plu* 'They are so strong!'
 - b. Este vino es caro *de* cojones. this wine is expensive of balls 'This wine is extremely expensive'

(iv) {lo avaricioso / *la avaricia} de su interés

23

It has been claimed that the meaning of lo-de adjectives are similar to that of abstract deadjectival feminine nouns (lo inocente de Juan $\sim la$ inocencia de Juan). Nevertheless, Fernández Ramírez (1986) pointed out that one construction cannot be replaced by the other. For reasons we cannot go into now, psychological and other properties frequently used to describe human beings are not very common in lo-de constructions that are directly predicated of people, but they fit well when predicated from human manifestations such as words, attitudes, etc:

⁽i) {*lo generoso / la generosidad} de Juan

⁽ii) {lo generoso / ???la generosidad} de su oferta

⁽iii) {*lo avaricioso / la avaricia} de Juan

- c. ¿Cómo es *de* caro este vino? how is of expensive this wine 'How expensive is this wine?'
- d. ¡Cómo es *de* caro este vino! how is of expensive this wine 'How expensive this wine is!'
- e. Es así *de* largo. is this of long 'It is this long'

2.1.5. A ban against strong pronouns

Neither the *lo-de* construction nor the DP-PIC allows a strong personal pronoun as the subject of the small clause (in contrast with the *lo-que* construction):

- (23) a. *Me sorprendió lo inocente de él. to.me surprised LO naïve of him
 - b. *Hablé con el idiota de él.(I) talked with the idiot of him

Interestingly, this restriction is found in secondary predication structures as well (in all the cases the sentences are fine without the strong pronoun):

- (24) a. Lo considero *{idiota a él} / ??{a él idiota}. him(clit.) consider fool to him/to him fool
 - b. La tenía *{enferma a ella} / ??{a ella enferma}. her(clit.) had sick to her/to her sick
 - c. Todos la tenían *{por idiota a ella} / ??{a ella por idiota}. Everybody her(clit.) had for fool to her/to her for fool

2.1.6. The de+DP sequence does not form a constituent

According to what has been said, constituency tests for the apparent PP do not obtain:

• The apparent PP cannot be focalised nor topicalised:

- (25) a. *¡DE LA CASA, me sorprendió lo caro!¹0
 [of the house]_{FOC}, to me surprised LO expensive
 - b. *De la casa, me sorprendió lo caro.
 [of the house]_{TOP}, to me surprised LO expensive
 - c. *¡DEL ALCALDE, conocí el idiota! [of the mayor], (I) met the idiot
- Nor can the *lo+A* group:

LO tired

- (26) a. *¡LO CARO, me sorprendió de la casa! [LO expensive]_{FOC}, to.me surprised of the house
 - b. *Lo caro, me (lo) sorprendió de la casa [LO expensive]_{TOP}, to.me (it.clit.) surprised of the house
 - c. *¡EL IDIOTA, conocí del alcalde! [the idiot], (I) met of.the mayor

The phrase has to be moved as a whole, as the contrast between (27) and (25)-(26) shows:

(27) ¡LO CARO DEL PISO, me extrañó! [LO expensive of.the flat]_{FOC}, to.me struck

The tight relation between lo+A and the de+DP sequence also explains the fact that the A cannot be gapped in an anaphoric construction:

- (28) a. Me extrañó lo irritado de su tono, *pero no lo de sus modales. to.me struck LO exasperated of his voice, but not LO of his manners
 - b. Me extrañó lo irritado de su tono, *pero no me sorprendió lo cansado.
 to.me struck LO exasperated of his voice, but to.me didn't surprise

Two de+DP sequences can be coordinated to a single A:

¹⁰ Grammaticality judgements are neither completely clear nor uniform for speakers in cases like (25) or (26), maybe because of rather complex facts related to echo interpretation. The values given for these sentences go from completely odd to fairly marginal. All speakers agree that the examples in (26) are even more worse than those in (25), in which the

selectional properties of the main verb appear to be preserved.

- (29) a. Me extrañó lo irritado de su tono y de su expresión. to.me struck LO exasperated of his voice and of his expression
 - b. Me extrañó lo irritado y lo cansado de su tono. to.me struck LO exasperated and LO tired of his voice

Sluicing cannot delete the apparent PP:

- (30) a. Las casas me sorprendieron por lo caras. the houses to me surprised by LO expensive-fem.plu
 - b. *Las casas me sorprendieron por lo caro.
 the houses to me surprised by LO expensive-Ø¹¹

2.1.7. The inverted predicate is interpreted as a focus

Den Dikken and Singhapreecha (2004) claim that, in DP-PIC, the DP receives a focus interpretation, whereas the inverted predicate is interpreted as topic. Contrary to this analysis, we argue that in Spanish the inverted predicate is interpreted as focus with respect to the topic DP.¹² The clearest prediction following on from this proposal is that DPs requiring focus should be disfavored in Spanish *lo-de* and DP-PIC. Consider, for instance, *wh-in situ* elements (31), and DPs associated with *sólo*, 'only', (32), which are known to be typically focus:

(31) a. *No te extrañó lo caro de qué piso. 'How expensive what flat was didn't strike you'

- (i) ??Sus palabras me sorprendieron por lo atinado. Their words to me surprised by LO clever
- (ii) ??Sus reacciones sorprenden por lo agresivo. Their reactions surprise by LO aggressive

The relevant fact is, nevertheless, that LO agreeing constructions are always much better:

- (iii) Sus palabras me sorprendieron por lo atinadas.
 Their words to me surprised by LO clever-fem.plu
- (iv) Sus reacciones sorprenden por lo agresivas.
 Their reactions surprise by LO aggressive-fem.plu

¹¹ The fact that some examples are more acceptable for some speakers is probably due to discourse and pragmatic factors:

¹² See Bosque (2001) for a similar intuition, and García and Méndez (2002) for a different proposal based on modality.

- b. *No hablaste con el idiota de qué alcalde.'You didn't talk with that fool of what mayor'
- (32) a. *Me sorprendió lo caro de sólo aquella casa. 'How expensive only that flat was surprised me'
 - b. *No hablaste con el idiota de sólo aquel alcalde. 'You didn't talk with that fool of only a mayor'

The examples make it apparent that the prediction is correct and so we will henceforth assume that in Spanish *lo-de* and DP-PIC the inverted predicate is interpreted as focus.¹³

3. Lo-de versus Lo-que

In this section, we focalise on the differences between the non-agreeing *lo-de* and the agreeing *lo-que* constructions. These differences support our claim against a unifying analysis.

3.1 Selection

Contrary to *lo-que* constructions, *lo-de* clauses cannot be independent:

- (33) a. *¡Lo caro del piso! LO expensive of the flat
 - b. ¡Lo caro que era el piso! LO expensive that was the flat 'How expensive that flat was!'

Since strong pronouns in Spanish are typically associated with a contrastive use (see Rigau (1982) and Picallo (1994)), we expect their presence to be disfavoured in the topic position within *lo-de* and DP-PIC.

¹³ The informational structure suggested may help us explain the otherwise surprising ban against strong pronouns found in *lo-de* (i.a), and DP-PIC (i.b) (in contrast with the *lo-que* (i.c)):

⁽i) a. *Me sorprendió lo inocente de él.

^{&#}x27;I was surprised by his naïveté'

b. *Hablé con el idiota de él.

^{&#}x27;I talked with that fool of him'

c. Me sorprendió lo inocente que era él.

^{&#}x27;I was surprised by how naïve he was'

Lo-de constructions need to be selected by a predicate and take an object or (internal) subject syntactic function. The most clear constructions are those in which lo-de is selected by a verb that conveys an exclamatory meaning, as sorprender ('strike', 'surprise'), asombrar ('amaze'), extrañar ('strike', 'wonder at'), maravillar ('astonish') (in a negative sense), indignar ('anger'), molestar ('bother'), etc. A lexicosyntactic property of theses verbs is the fact that they can select either a DP or a CP:

- (34) a. Me extrañaron sus palabras. to.me struck his/her words 'His words struck me'
 - b. Me extrañó que hablara.to.me struck that (she/he) spoke'It struck me that she spoke'

Some Spanish philologists present a type of *lo-de* construction not selected by an exclamative predicate, as in the examples in (35):

- (35) a. Sólo a los dos días de permanencia comprendí lo inútil de mi esfuerzo. [A. H. Catá, Cuatro libras de felicidad,75]
 'Only two days after my arrival did I understand how useless my effort was'
 - b. [Mis contertulios del pasado, muy serios,] aguantando muy bien lo muy desairado de su estrechez. [Gómez de la Serna, *Pombo* II,L] '[...] resisting well the unattractive aspect of his narrowness'
 - c. los vídeos, pese a lo falso de la situación en que normalmente están hechos.
 [J. Marías, Corazón tan blanco]¹⁴
 'the videos, in spite of the falsity of the situation in which they have been made'

The *lo* of examples such as the ones in (35) have been called *lo intensivo* o *ponderativo*. We consider them to be a subtype of the class we are describing, since they share the basic properties, the factivity, and the quantificational high degree value.

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¹⁴ Examples (35a) and (35b) are taken from Fernández Ramírez (3.1:43) and example (35c) was offered to us by J.M. Brucart.

3.2. Factivity

As has been widely recognized (see Portner and Zanuttini (2001), Villalba (2003)), exclamative sentences have a factive interpretation. Interestingly enough, the constructions under analysis have a factive interpretation as well. This is the reason why assertive (*verba dicendi*) or volitional predicates, do not admit the construction under discussion:

- (36) a. *Sospechó lo caro del piso. (he/she) suspected LO expensive of the flat
 - b. ??/*Esperaba lo favorable de la respuesta. (he/she) expected LO favourable of the answer
 - c. ??/*Temía lo desfavorable de la respuesta del público.
 (he/she) was afraid about LO not favourable of the answer of the audience.

Interestingly enough, among an apparently uniform class of verbs, such as the one presented in Grimshaw (1979), some of them admit the *lo-de* complement or subject, whereas others do not. Compare, for instance, (37a) with (37b):

- (37) a. Te sorprenderá lo enorme de los coches americanos. to.you will surprise LO huge of the cars american 'It will surprise you how huge the American cars are'
 - b. *Quizá te puedas creer lo enorme de los coches americanos. maybe to.you (you) can believe LO huge of the cars american

Whereas *sorprender* has the inherent lexical property of admitting a quantified or exclamative complement, *creer* or *importar* acquire this possibility by the polarity item, i.e., by its negative use: they are not inherently factive.

A property probably related to factivity is that the verbs selecting *lo-de* constructs can be quantified over. Verbs that do not admit quantification give ungrammatical results:

(38) a. Me extrañó (*mucho*) lo caro del piso. to.me struck (very much) LO expensive of.the flat 'It struck me very much how expensive the flat was' b. *Descubrí (*mucho*) lo caro del piso.¹⁵
(I) discovered (very much) LO expensive of the flat

Semifactive, factivo-psychological, and psychological predicates also allows the construction in general, as we see in (39); also with bi-sentential verbs such as *demostrar* ('prove'), *confirmar* ('confirm'), (40); factive-emotional nominal predicates, (41):

- (39) a. Adiviné lo perverso de sus maquinaciones. I guess LO perverse of her plot
 - b. Me molestó lo impertinente de su respuesta.
 to.me bothered LO impertinent of her answer
 'It bothered me how impertinent her answer was'
- (40) Lo inmoral de la invasión demuestra que no queda rastro de ética. LO immoral of the invasion shows that does not remain trace of ethics
- (41) Es lamentable lo neurótico de su comportamiento. (it) is regrettable LO neurotic of her behaviour 'It is regrettable that she behaves so neurotically'

Lo-que sentences, though they also normally appear in exclamative, and therefore factive contexts, need not do so, as shown by some facts: they

The verb *explicar* admits a quantifier *mucho*, but it is not interpreted as a quantifier over the event, but rather as the direct object:

(iii) Me han explicado mucho. to.me (they) have explained a lot

explicar is a factive verb. as (iv) and (v) show:

- (iv) ??/*Le expliqué que Eva ayer podía haber tenido un accidente. to.him (I) explained that Eve yesterday could have had an accident
- (v) ??/*Le expliqué que mañana podría llover. to.him (I) explained that tomorrow could rain

¹⁵ A verb such as explicar cannot be quantified, but nevertheless in some contexts allows the lo-de construction:

⁽i) Le expliqué a Juan lo increíble de la propuesta del director. to.him (I) explained to John LO incredible of the proposal of the boss

⁽ii) Ya me han explicado lo bochornoso del discurso del candidato.already to.me (they) have explained LO shameful of the discourse of the candidate

allow modal epistemic auxiliaries modifying the main verb and they can be selected by an intensional verb:

- (42) a. Imaginate lo relajantes que podrían ser unas vacaciones en las Azores. imagine LO relaxing that could be Det-*indef.fem.plu* holiday in the Azores (islands)
 - 'Imagine how relaxing a holiday in the Azores islands could be'
 - b. Se puso a soñar lo enorme que iba a ser su nueva casa. (she) began to dream LO huge that was going to be her new house 'She dreamed about the enormity of her new house'

3.3. Nominal character

A rather obvious property is that the *lo-de* construction has a clear nominal character. We have shown that it shares distribution with (internal) subjects and objects. In accordance with this, *lo-de* constituents can be clefted, contrary to what we find with sentential arguments:

- (43) a. Es / fue lo caro de la casa lo que me extrañó.
 - (It) is/was LO expensive of the house that bothered me
 - b. *Es / fue que se iba de viaje lo que me dijo Pedro.
 - (It) is/was that he went to a trip LO that to.me said Pedro

Therefore, *lo-de* constructions can appear as subjects, whereas *lo-que* cannot:

- (44) a. Lo insolente de su respuesta merece un castigo. LO rude of his/her answer merits a punishment
 - b. *Lo insolente que es su respuesta merece un castigo. LO rude that is his/her answer merits a punishment
 - c. Sus palabras merecen un castigo. His/her words merit a punishment

3.4. Only As admitted

As opposed to *lo-que* constructions, *lo-de* nominals do no allow other categories other than adjectives. So, Adverbs are not admitted:

- (45) a. Es increíble lo bien que está Juan.
 - (it) is incredible LO well that is John
 - 'It is incredible how well John is'

b. *Me sorprendió lo bien de Juan. to.me surprised LO well of John

NPs are possible predicates in *lo-que* sentences. An NP can be the predicate in a *lo-que* construction, but not in a *lo-de* construction:

- (46) a. Es increíble lo hombre que ya es Juan.
 - (it) is incredible LO man that is John
 - 'It is incredible that John is already a real man'
 - b. *Me sorprendió lo hombre de Juan. to.me surprised LO man of John

The same contrast obtains with PPs:

- (47) a. A Mafalda le maravilló lo en su punto que estaba la sopa. to Mafalda to.her wondered LO in its point that was the soup 'Mafalda wondered at the perfection of the soup'
 - b. *A Mafalda le sorprendió lo en su punto de la sopa. to Mafalda to.her surprised LO in its point of the soup

3.5. Specificity

The NP/DP inside the PP in *lo-de* constructions has to be specific, whereas this is not the case in *lo-que* constructions:

- (48) a. Es increíble lo feroz {*de un león / de los osos polares}.(It) is incredible LO savage of a lion/of the polar bears'It is incredible how savage a lion/the polar bears can be/is/are'
 - b. Es increíble lo feroz {que es un león / que son los osos polares}.(It) is incredible LO savage that is a lion/are the polar bears 'It is incredible how savage a lion/the polar bears can be/is/are'

3.6. The properties of the adjective

Among the properties of the adjectives in both constructions, both share some, whereas some others are specific to one or the other construction.

a) Gradability

The As that can appear in *lo-de* and *lo-que* constructions need to be gradable. Therefore, argumental adjectives, colour adjectives or elative adjectives cannot enter these constructions:

- (49) a. *Me sorprendió lo minera de la explotación. to.me surprised LO miner of the working
 - b. *Me sorprendió lo minera que era la explotación. to.me surprised LO miner that was the working

Adjectives that can be ambiguous, are permitted only in their qualificative version:

- (50) a. Me sorpendió lo musical de su tono de voz. to.me surprised LO musical of her tone of voice 'It surprised me how musical her voice was'
 - b. *Me sorprendió lo musical del programa radiofónico. to.me surprised LO musical of the radio programm

b) High degree interpretation

The construction expresses a very high (extreme for a standard measure) degree of the property denoted by the Adjective. Therefore, the quantifier *muy* can be added:

- (51) a. Sorprendió lo muy elaborado de su propuesta. surprised LO very elaborated of her proposal 'It struck everybody how her proposal was elaborated'
 - b. Sorprendió lo muy elaborada que era su propuesta. surprised LO very elaborated that was her proposal 'It struck everybody how her proposal was elaborated'

For the same reason, it is not possible to have other degree quantifiers that do not establish an extreme degree interpretation, as *bastante* ('rather'):

- (52) a. *Me sorprendió lo bastante caro de la casa. to.me surprised LO rather expensive of the house
 - b. *Me sorprendió lo bastante cara que era la casa. to.me surprised LO rather expensive that was the house

c) Stage level / individual level

Vinet (1991) mentions the fact that non-verbal exclamatives in French cannot be constructed with stage level predicates, but only with individual level predicates, a phenomenon that is reproduced in Spanish, as Hernanz and Suñer Gratacós (1999) point out:

- (53) a. ¡Excelentes, los calamares! Excellent, the squids 'The squids are excellent!'
 - b. ¡Enorme, tu nuevo apartamento! huge, your new flat 'Your flat is huge!'
 - c. *¡Cansado / Enfermo, tu jefe! tired/ill, your boss'Your boss is tired/ill!'
 - d. *¡Caducado, el yogur! out of date, the yogurt 'The yogurt is out of date!'

The same restriction holds with *lo-de* constructions, and explains some subtle differences as the one in (54):

- (54) a. Me sorprendió lo angosto del desfiladero. to.me surprised LO small of the pass 'It struck me how small the pass was'
 - b. Me sorprendió lo enfermo de tu jefe. to.me surprised LO ill of your boss 'It struck me how ill your boss was'
- (55) a. Me sorprendió lo caro del piso. (*Individual level*) to.me surprised LO expensive of the flat
 - b. *Me sorprendió lo caro de la vida en Italia. (Stage level) to.me surprised LO expensive of the life in Italy

Interestingly enough, *lo-que* sentences allow both stage level and individual level predicates:

- (56) a. Me sorprendió lo caro que era el piso. (*Individual level*) to.me surprised LO expensive that was the flat
 - b. Me sorprendió lo cara que era la vida en Italia. (*Stage level*) to.me surprised LO expensive that was the life in Italy

3.7. Adjective's agreement

As said, in the *lo-de* construction the adjective does not agree with the noun inside the PP, whereas in *lo-que* construction agreement is obligatory. We repeat the examples here for ease of exposition:

- (57) Me sorprendió lo {caro / *cara} de la casa / lo {caro / *caros} de los pisos.
 - to.me surprised LO {expensive- \emptyset /*expensive-fem.sing} of the house-fem.sing / {expensive- \emptyset /*expensive-masc.plu} of the flats-masc.plu 'It struck me how expensive the flat was'
- (58) Es increíble lo {*caro / cara} que está la vida.
 - (it) is incredible LO {*expensive-\(\mathcal{O}\)/expensive-fem.sing} that is the life-fem.sing
 - 'It's incredible how expensive life is'

4. Against a unifying analysis of lo-de and lo-que

Gutiérrez-Rexach (1999) develops an interesting analysis of the Spanish *loque* construction by applying Kayne's (1994) proposal for relative clauses. Essentially, he takes *lo* as the head of a DP which takes a CP or a PP as a complement/adjunct (SC stands for 'small clause'):

(59) a.
$$[_{DP}$$
 lo $[_{CP}$ $[_{C'}$ que $[_{IP}$ es $[_{SC}$ la casa car- $]]]]]] b. $[_{DP}$ lo $[_{PP}$ de $[_{SC}$ la casa car- $]]]$$

Then the adjective raises from its position, yielding:

(60) a.
$$[_{DP}$$
 lo $[_{CP}$ cara $_i$ $[_{C'}$ que $[_{IP}$ es $[_{SC}$ la casa t_i]]]]] b. $[_{DP}$ lo $[_{PP}$ car- $_i$ de $[_{SC}$ la casa t_i]]]

In both cases the adjective is expected not to agree with the neuter determiner, for it is not in a specifier-head configuration (Gutiérrez-Rexach, 1999:49). Yet, whereas the adjective in the *lo-que* construction has already checked and valued its phi-features against the noun, yielding the agreeing form *cara*, this doesn't hold for the *lo-de* construction, for unclear reasons. Therefore, he is obliged to assume quite a baroque derivation: the adjective must raise to the specifier of an abstract agreement projection, where it happens to agree with the trace of the operator on degrees, yielding a default neuter form. Schematically:

(61)
$$[_{DP} Op_j [_{D'} lo [_{AgrP} [_{AP} estúpido]_i [_{Agr'} t_j [_{Agr'} [_{Agr} e] [_{PP} [_{P'} de [_{DP} tu pregunta t_j [t_i]]]]]]]$$

Leaving aside technical problems—for instance, the crucial agreement relation between the adjective and (the trace of) the operator on degrees is not a spec-head relation—this unifying analysis does not give a satisfactory

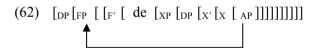
answer to the many questions raised in the previous sections. First, it remains mysterious why noun-adjective agreement in the lower small clause is possible in *lo-que* but not in *lo-de* (see section 3.7). Second, no explanation is offered for the lexical differences between the two constructions concerning selection restrictions (see sections 3.1-3.4 and 3.6). Third, it gives no proper explanation for the quantificational (and not prepositional) nature of *de*, and the quantificational and referential restrictions imposed on *lo-de* (see sections 2.1-2.2). Fourth, the analysis makes the wrong predictions concerning the presumed PP with respect to constituency tests (see sections 2.3, 2.5). Finally, this analysis cannot account for the clear similarities between *lo-de* and DP-PIC (see section 2).

As a consequence, in the following section we will develop an alternative analysis.

5. A new proposal: the *lo-de* construction as a DP-internal predicate inversion construction

In agreement with the vast bulk of empirical evidence presented, we assume an analysis of the *lo-de* construction different from that of the *lo-que* construction (against Gutiérrez-Rexach (1999)), and capable of capturing the systematic set of properties it shares with DP-PIC. The analysis is based on previous works by Kayne (2000), den Dikken (1995), den Dikken and Singhapreecha (2004), Villalba (2003), and references therein.

The general schema is presented in (62).



In (62), F and X stand for functional categories. X is the element articulating the predication, the equivalent of INFL inside a nominal projection. F, on the other hand, is the functional projection relating the predication to the determiner (the corresponding to C inside the nominal projection).

The crucial points of the analysis are the following. First, the quantificational value of the construction relies on two elements: the Maximal Degree Operator inside the AP¹⁶ and the Functional element F that selects the small clause. Second, there is Predicate Raising to a left peripheral position within the DP. Third, the absence of agreement on the adjective is the unmarked case when an exclamative operator is selected.

¹⁶ These two elements are related to independent properties, which both give rise to a discourse prominence.

Finally, in *lo-que*, the functional projections inherent to its sentential character permit the non-agreeing adjective to end in a configuration in which it can check its features against the DP.

Let us elaborate the proposal.

Before going into the derivation, we point out the outlines of the analysis.

5.1. Common features of **lo-de**, **lo-que**, and DP-PIC constructions

The three constructions involve a small clause XP headed by a functional projection that articulates the subject-predicate relation, as is a standard assumption since Kayne (1994):

(63)
$$\left[DP \left[FP \left[F' F \left[XP DP \left[X' X AP \right] \right] \right] \right] \right]$$

Here X and F stand for functional categories. X is the element articulating the predication, the equivalent of INFL inside a nominal projection. F, on the other hand, is the functional projection relating the predication to the determiner (what corresponds to C inside the nominal projection).¹⁷

From this departing structure, Predicate Raising applies:

(64)
$$\left[DP \left[FP \left[F' F \left[XP \left[DP \left[X' X AP \right] \right] \right] \right] \right] \right]$$

At this point a major question arises: what is the motivation underlying predicate inversion? Two answers have been raised in the literature. Moro (2000) argues that the trigger would be the need to break the symmetric structure of the small clause containing the DP and the AP, to fulfill Kayne's *Linear Correspondence Axiom*. Yet we discard this line of research, for we are making the standard assumption that a null functional head heads the small clause. A second approach is that taken by den Dikken (2006), where it is claimed that the predicate must raise to some Spec A-position to become licensed through formal feature checking. Nevertheless, this proposal must address major theoretical problems: (i) it must assume that whenever we have PI, the feature specification of the predicate is different from that of non-PI structures, the effect of which would be to wildly increase the size of the lexicon, with major consequences for language processing and

¹⁷ Den Dikken (2006) has coined the term *relator* to account for several elements of different categories, which relate the subject and the predicate. Despite the fact that our analysis relies very much on previous work by den Dikken, we do not factually follow his latest claims, as will become clear in the text.

acquisition; (ii) it gives no clue concerning the informational status of the inverted predicate, namely why is this movement rendering the AP a topic?; (iii) since the features to be checked are those of the A head, why should the whole AP raise, instead of just moving the A head?; (iv) the raising of the AP is considered A-movement, even though no argument is involved, and it leaves unexplained why extraction from this A-position should be banned (see section 2.4).

We will follow a different line, and assume that the AP must raise to obtain the correct interpretation as focus. Even though this line of analysis entails the existence of pragmatically motivated movements in syntax, we feel that it does a better job of accounting for the main properties of the constructions under scrutiny, particularly those making reference to islandhood (see section 2.4) and constraints on quantification (see sections 2.2. and 3.5). In a very speculative way, we would like to suggest that the same mechanisms devised to express the informational-partition of sentence in terms of focus and topic—standardly, FocP and TopP—should be assumed for the DP as well, ¹⁸ so that the neutral label of the functional projection F should rather be renamed as FocP.

5.2. Differences between the three constructions

5.2.1. Lexical versus syntactic high degree quantification

The first difference concerns the kind of quantification involved in each construction. We propose that whereas in *lo-de* and *lo-que* constructions the element responsible for the quantificational status of the structure is a null exclamative operator over degrees (OP_{Excl}), DP-PIC is an inherently quantified structure (i.e., no null exclamative operator is involved), with unpredictable idiosyncratic restrictions, such as the following (for the inherently evaluative value of this construction in Spanish, see García and Méndez (2002)):

- (65) a. El idiota / corrupto / loco del alcalde 'that fool/crook/madman of a mayor'
 - b. ??/*El malo / pomposo / peligroso / fiero del alcalde 'that bad/pompous/dangerous/vicious man of a mayor'

_

¹⁸ See also Aboh (20004) for a similar proposal.

Cf. with *lo-de*:

(66) Lo idiota / corrupto / loco / malo / pomposo / peligroso / fiero del alcalde

LO foolish/ corrupt/ crazy/ bad/ pompous/ dangerous/ vicious of.the mayor

The hypothesis that there is an OP_{MAX} in *lo-de* and *lo-que* has major consequences. On the one hand, it acts as an intervener for DP-AP agreement, along the lines suggested by Chomsky (2000, 2001). Hence, the following pattern arises: in the case of DP-PIC, DP-AP agreement takes place within the small clause, whereas in *lo-de* / *lo-que* the presence of the operator blocks DP-AP agreement within the small clause (but see section 5.2.2 for the *lo-que*, where it will be argued that the sentential functional structure offers a "second chance" for the DP and the AP to get into a configuration that allows agreement).

Next, OP must move to [Spec,DP] to check its quantificational feature. As a consequence, it enters into a spec-head agreement with the D, which, given the lack of phi-features of the operator, is realized as the neuter determiner *lo*. In the DP-PIC, by contrast, the determiner enters into agreement with the fully inflected adjective, yielding the corresponding agreeing form.

5.2.2. DP vs. CP structure

We have assumed that the presence of OP_{Excl} blocks the DP-AP agreement in *lo-de* and *lo-que* within the small clause. Yet there is a fundamental structural difference: the sentential character of *lo-que*. We propose that the functional projections inherent to its sentential character permit the nonagreeing adjective to end up in a configuration in which it can check its features against the DP, yielding an agreeing form of the adjective, along the lines suggested in Gutiérrez-Rexach (1999). In contrast, *lo-de* lacks such a structure, and hence lacks the chance to get the DP and the AP into an agreement configuration.

Let us now go into the fine derivation of *lo-de* phrases.

Stage 1: Modifying the $AP \rightarrow The A$ is modified by a Maximum Degree Operator:

(67) [AP A OPMAX]

We consider that the adjective is modified by this Maximal Degree Operator in both the *lo-de* and *lo-que* constructions (but not in DP-PIC as *el idiota del alcalde*, where the high degree value of the adjective is conveyed by the lexical meaning proper), which is responsible for the high degree interpretation associated with the construction under study.

Stage 2: Selecting the AP → The AP containing a gradable A is selected by the head of a DegP: 19

(68)
$$\left[\text{DegP Deg } \left[\text{AP A OP}_{\text{MAX}} \right] \right]$$

The head of the DegP is usually empty, but can be occupied by a superlative morpheme, like -isimo.

Stage3: Raising of the OP_{MAX} :

(69)
$$\left[\text{DegP OP}_{\text{MAXi}} \left[\text{Deg' Deg } \left[\text{AP A t}_{i} \right] \right] \right]$$

The OP_{MAX} moves to Spec.DegP in order to bind the degree variable of the gradable adjective. This movement will later have a blocking effect for the agreement relationship between the DP and the AP.

Stage4: building the small clause (I) \rightarrow merger of X and DegP:

$$(70) \quad \left[{_{X^{'}}X} \left[{_{DegP}} \right. OP_{MAXi} \left[{_{Deg'}} \right. Deg \left[{_{AP}A} \right. t_i] \right] \right]$$

As argued below, the articulation of the small clause by means of the functional head X renders Moro's (2000) motivation for predicate inversion untenable.

Stage 5: building the small clause (II) \rightarrow merger of X' and DP:

$$(71) \quad [_{XP} \ DP \ [_{X'} \ X \ [_{DegP} \ OP_{MAXi} \ [_{Deg'} Deg \ [_{AP} \ A \ t_i]]]]]$$

This is a standard predicative antisymmetric small clause \grave{a} la Kayne, so that at this stage the A imposes morphological and semantic restrictions on the DP.

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¹⁹ See Doetjes (1997) for a thorough investigation on Degree Phrases and Quantifiers.

Stage 6: predicate inversion (I) \rightarrow merger of F and incorporation of X (X+F surfaces as de):

(72)
$$[F' X+F(=de) [XP DP [X' t_X [DegP OP_{MAXi} [Deg' Deg [AP A t_i]]]]]]$$

As mentioned in 1.1.5, de is the overt manifestation of the quantificational nature of the structure. Moreover, de and the DP do not form a maximal projection, which forbids its extraction and substitution by a possessive pronoun.

Stage 7: predicate inversion (II) \rightarrow rising of DegP:

(73)
$$\left[F_P \left[D_{egP} OP_{MAXi} \left[D_{eg'} Deg \left[A_P A t_i \right] \right] \right] \right] \left[F_Y X + F(=de) \left[A_P DP \left[A_Y t_X t_{DegP} \right] \right] \right]$$

At this point a major question arises: what is the motivation underlying predicate inversion? Three answers have been raised in the literature:

- 1. Breaking symmetry (Moro 2000): the trigger would be the necessity to break the symmetric structure of the small clause containing the DP and the DegP/AP, to fulfil Kayne's *Linear Correspondence Axiom*. Yet, we won't pursue this line of research for we are making the standard assumption that a null functional head heads the small clause.
- 2. Formal licensing of the predicate head (den Dikken, 2003): it is claimed that the predicate must raise to some Spec AP-position licensed through formal feature checking. Yet, this proposal must face major theoretical problems: (i) it must assume that whenever we have PI, the feature specification of the predicate is different from that of non-PI structures, which amounts to wildly increase the size of the lexicon, which has major consequences for language processing and acquisition; (ii) it gives no clue concerning the informational status of the inverted predicate, namely why is this movement rendering the DegP a topic? (iii) since the features to be checked are those of the A head, why should the whole DegP raise, instead of just moving the A head?; (iv) the raising of the DegP is considered A-movement, even though no argument is involved, and it leaves unexplained why extraction from this A-position should be banned.
- 3. Information-driven movement: it is argued that the DegP must rise to get the correct interpretation as a topic. Even though this line of analysis entails the existence of pragmatically motivated movements in syntax, we consider it to be better suited to capture the main properties of the constructions under scrutiny, particularly those making reference to islandhood and constraints on quantification. In a very speculative way,

we would like to suggest that the same mechanisms devised to express the informational-partition of sentence in terms of focus and topic—standardly, FocP and TopP—should be assumed for the DP as well, so that the neutral label of the functional projection F should rather be renamed as TopP.

Since more structure is created, the structure becomes an island for extraction.

Stage 8: building the DP (I) \rightarrow merger of D:

(74)
$$\begin{bmatrix} D' & D & FP & DegP & OP_{MAXi} & Deg' & Deg & A & t_i \end{bmatrix} \end{bmatrix} \begin{bmatrix} F' & X+F(=de) & DP & X' & t_i & t_i \end{bmatrix} \end{bmatrix}$$

The D gives the construction its nominal behavior.

Stage 9: building the DP (II) \rightarrow rising of the MAX operator:

(75)
$$\left[\underset{DP}{\text{OP}} \text{OP}_{\text{MAX}i} \left[\underset{D'}{\text{D}} \right] \right] \left[\underset{FP}{\text{FP}} \left[\underset{\text{DegP}}{\text{Deg}} \left[\underset{T^{\prime}}{\text{Deg}} \right] \right] \right] \left[\underset{F'}{\text{A}} \right] \left[\underset{F'}{\text{A}} \right] \left[\underset{F}{\text{A}} \right] \left[\underset{F'}{\text{A}} \right] \left[\underset{F}{\text{A}} \right] \left[\underset{F}{\text{A}} \right] \left[\underset{F'}{\text{A}} \right] \left[\underset{F}{\text{A}} \right] \left[\underset{F'}{\text{A}} \right] \left[\underset{F}{\text{A}} \right] \left[\underset{F'}{\text{A}} \right$$

The MAX operator (OP_{MAX}) must raise to SpecDP to check the MAX features. This will have three major consequences. First of all, it enters into spec-head agreement with D, which is realised as the neuter determiner *lo* and receives an interpretation of maximal set. Second, this spec-head agreement renders the DP quantificational, allowing s-selection to hold. Finally, the operator-variable configuration formed will interact with other quantifiers, yielding the tight restrictions on quantification presented.

Stage 10: merger of the predicate:

(76)
$$[V' V [DP OP_{MAXi} D' D FP DegP Deg, t_i, Deg A t_i]]] [F' X+F(=de) [NP DP N t_i, t_i, t_i]]]$$

Also, the placement of OP_{MAX} in Spec,DP creates a minimality effect rendering the construction an island.

6. Conclusion

In this article, we have shown that the Spanish nominal quantificational intensive maximum degree construction *lo-de* should be analyzed along the

lines of DP predicate internal constructions involving predicate inversion, which has been argued to be focus-driven. Moreover, we have demonstrated that the *de* element is not a preposition, but rather a formal mark of the quantificational nature of the construction. Finally, we have argued for the crucial presence of a null operator, which is responsible for not only the maximal degree value of the construction and the lack of agreement between the DP and the AP, but also the quantificational and referential restrictions that affect it. All these empirical findings have been integrated in an analysis which is able to explain the common properties of *lo-de*, *lo-que* and DP-PIC constructions, while simultaneously accounting for their differences in a principled fashion.

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Coordinated Adjectives and the Interpretation of Number Features

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1. Introduction*

There seems to be a general agreement on the fact that (1) is true:

(1) Number features are interpretable in nouns and pronouns, not elsewhere.

In this paper I will analyze some strong counterexamples to (1). I will argue that number features in coordinated adjectival structures determine the cardinal interpretation of DPs in some cases, but not in others. The difference depends both on the lexical classes to which adjectives belong (specifically, so-called *relational* or *classifying* vs. *qualifying* adjectives) and the syntactic configurations obtained. I will present an analysis of the relevant coordinate structures which will be able to maintain (1). The data that I will analyze in this paper are from Spanish, but I believe that the phenomenon and the analysis can be naturally extended to other Romance languages.

2. The problem

I will take coordinated structures to be projections of the conjunction, as argued by Munn (1993), Zoerner (1995), Camacho (2003) and others. The

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conjunction and is thus the head of John and Mary, a "and phrase" (&P). There is not such an agreement of how exactly the number features of this &P projection are obtained. One possibility is that a Number projection is above &P, as claimed by Sauerland (2003), which means that Number selects for and. Another option is that abstract number features are assigned to the &-head as a part of the computational process. These two analyses are probably rather close. However, it is worth pointing out that most (if not all) maximal projections can be coordinated, but number features are interpretable only in some of them. I will thus take the second option as a preferable alternative. Let us put forward what one might call "the null option":

(2) A coordinated plural phrase can be made out of two or more singular expressions if and only if their respective number features are interpretable.

Notice that (2) describes a computational process. It says that non-interpretable singulars cannot be "summed up" to obtain a plural, since only interpretable singulars can. This analysis makes a number of empirical predictions, but also entails some unexpected problems that one must deal with. Consider the predictions first.

The verbal form *are* in *John and Mary are happy* has (non-interpretable) plural features because the &P *John and Mary* has (interpretable) plural features. Let us suppose that it gets them by summing up two singular features, as postulated in (2). Notice that we predict the fact that number features cannot be summed up in coordinated VPs (in fact, coordinated IPs, since verbs are inflected), because these number features are not interpretable. Thus, there is not a possible counterpart of (3a) in which an IP with plural features is made up out of two singulars:

- (3) a. Estos dos niños estudian y juegan. 'These two children study_{plu} and play_{plu}'
 - b. *Estos dos niños estudia y juega respectivamente. 'These children study_{sing} and play_{sing} respectively'
 - c. Este niño estudia y juega.'This child studies and plays'

The irregularity of (3b) is then straightforwardly derived from (2). As for (3a), we still need to say that *estudian y juegan* is a projection with plural features, although non-interpretable. Since the conjunction *y* is its head, and *estudian* is (arguably) its specifier, we may say that the plural features of

estudian y juegan are obtained through spec-head agreement in the coordinated phrase:

(4) The &° head of a &P receives plural features by spec-head agreement.

The same result is obtained in (3c), in which estudia y juega is a projection with singular features which agrees in number with the subject este niño. Certainly, something would have to be added to (4) to assure identity of number features (and not tense features, for example) in coordinated I's, but my main concern is this paper will not be (4), but (2), which has more interesting consequences. Notice that (2) is not affected by (3a) or (3c). I will simply take (4) to be a blind process, whereas the computation to which (2) refers is—I will argue—sensitive to other grammatical properties of the categories involved.

It also follows from (2) the fact that two singular determiners cannot be coordinated to agree with a plural noun, since f-features in determiners are not interpretable. The noun *turista* ('turist') is chosen in (5) because it can be masculine or feminine, and so gender agreement is not affected by the coordination process:

- (5) a. El turista y la turista 'The turist_{masc} and the turist_{fem}'
 - b. *El y la turistas
 'The turist_{masc} and the turist_{fem}'
 - c. *Este y aquel turistas 'This and that turists'

Another natural consequence of (2) is the fact that two coordinate singular nouns can agree with a plural adjective, whether the latter is a modifier (6a), it appears in a copulative sentence (6b), or in a secondary predication structure, as in (6c):

- (6) a. Una camisa y una falda <u>amarillas</u> 'A yellow shirt and a yellow skirt'
 - b. El vino y la cerveza están <u>fríos</u>. 'The wine and the beer are cold'
 - c. Quiero bien <u>fríos</u> el vino y la cerveza.'I want (both) wine and beer to be very cold'

The adjectives *amarillas* and *frios* have plural features in (6), which are triggered by their nominal subjects. Notice that the opposite situation is not

possible, as predicted by (2). That is, two singular qualifying adjectives cannot be coordinated to obtain a plural adjectival phrase, since number features in adjectives are not interpretable:

- (7) a. *Los dos discos caro y barato que compraste ayer.

 'The two expensive_{sing} and cheap_{sing} records that you bought yesterday'
 - b. *Las novelas aburrida y divertida que he leído estas vacaciones. 'The boring_{sing} and amusing_{sing} novels that I read in the last vacation'
 - c. *No me deje usted larga y corta las mangas de esta camisa. 'Don't you leave the sleeves of this shirt long_{sing} and short_{sing} on me'

All these are straightforward predictions of (2). Let us take a look at the problems now. An important problem for (2) comes also from adjectives, specifically from so-called descriptive, non-predicational, relational, classifying or ethnical adjectives. These adjectives have been analyzed by Levi (1974, 1978), Cinque (1994), Bosque (1993), Bosque & Picallo (1996), Demonte (1999) and others. An interesting property of these adjectives, not pointed out in any of these analyses, is the fact that they do not behave as the adjectives in (7) as regards coordination; that is, two or more singular relational adjectives can be coordinated and give rise to a plural expression enabled to agree with a noun. This is shown in (8):

- (8) a. Las literaturas española, francesa e inglesa 'Spanish, French and English literatures'
 - b. Los embajadores mexicano y argentino 'The Mexican_{sing} and the Argentinian_{sing} ambassadors'
 - c. Las políticas agraria y pesquera 'The agricultural and fishing policies'
 - d. Las ceremonias civil y religiosa 'The civil and religious ceremonies'
 - e. Mis abuelas paterna y materna 'My grandmothers on my father's and my mother's sides'

In this paper I will present an analysis of (8) that is compatible with (2), and ultimately with (1). I will also extend the relevant syntactic configurations that permit (8) to genitive PPs and other modifiers.

3. A solution

I will use the label *relational adjectives* (somehow reminiscent of the French term *adjectifs de relation*) to refer to the adjectives in (8). Notice that the relevant issue is not only the fact that it is possible to coordinate these adjectives to obtain a projection with plural features. It is even more important to realize that these adjectives provide the cardinality value of these plural expressions: (8a) is about three types of literatures; (8b) refers to two ambassadors, (8d) implies that exactly two ceremonies are involved, etc. This is a surprising fact, since adjectives are not determiners or pronouns. It certainly looks strange to say that adjectives provide the referential information necessary to identify the number of entities of a set, but this is exactly what we find in (8). Before we deal with the syntactic structure of the DPs in (8), we may, then, reach a first conclusion on semantic grounds. The conclusion will not exactly be "Number features of relational adjectives are interpretable", but rather (9):

(9) Relational adjectives in coordinate structures may determine the cardinal interpretation of plural DPs.

In this section and in the following, I will explain why these two apparently similar generalizations are not equivalent. Let me first ask this natural question: Why does this phenomenon arise with relational adjectives and not with other predicates? The truth is that it does arise with other predicates, as I will explain in a minute, but it is interesting to recall now that relational adjectives are denominal, even if they involve suppletive forms, as in the English adjectives fraternal, French or agrarian. All relational adjectives are, then, lexically derived from nouns. It has been repeatedly pointed out that affixes of relational adjectives come close to genitive case markers, as the Spanish preposition de, or to simple adjacency, as in English N-N compounds. These relations were pointed out in Levi (1974, 1978), Williams (1981), Ronat (1975) and many other studies. There seems to be a wide general agreement on the idea that suffixes of qualifying adjectives provide the semantic content necessary to introduce a predicative relation: "which has", "containing", "similar to", etc. On the contrary, suffixes of relational adjectives are close to syntactic markers and provide the abstract content that Williams 1981 calls "R". In fact, the problem for (2) that (8) raises extends to de complements naturally. The crucial contrasts are these:

(10) a. Los amigos de Juan y María 'The friends of J and M'

- b. Los amigos de Juan y los de María 'The friends of J. and those of M.'
- c. Los amigos de Juan y de María Lit.: The friends of J. and of M.

The DP (10a) refers to a set of people who are friends of both Juan and Maria, who may or may not be a couple. (10b) refers to two separate sets, since the conjunction y is coordinating to independent DPs. The most interesting example of the three is (10c), which is ambiguous. (10c) only contains one determiner, but it has the meaning of either (10a) or (10b), an unexpected fact that we have to account for. A very similar contrast is found in (11):

- (11) a. Los embajadores de México y de Argentina
 - b. Los embajadores mexicanos y argentinos

The DP in (11a) is ambiguous in the sense that (10c) is. (11b) is also ambiguous in the same sense, but—as in (11a)—the interpretation in which one country has several ambassadors in another one is strange for pragmatics reasons (cf. *negotiator*, *messenger*, etc.). In the other reading, (11b) refers to the set of people who are or have been ambassadors of one of these countries or both. Remember that (8b) is not ambiguous: it refers to two different ambassadors, one from each country.

We have seen that the cardinality of the sets referred to in (8) is obtained from the coordinated adjectives. An interesting property of these structures is the fact that this reference cannot be provided by a numeral. Consider (12):

- (12) a. *Los dos embajadores mexicano y argentino 'The two Mexican and Argentinian ambassadors'
 - b. Los dos amigos de Juan y María
 'The two friends of John and Mary'

The DP in (12a) is ungrammatical, and (12b) is not ambiguous: it has the interpretation of (10a), not that of (10b). We may intuitively say that the information provided by a numeral quantifier is redundant if the cardinality of a set is obtained through the syntax, somehow as in *The two John and Mary versus The two youngsters.

I will argue that all these properties may be derived from the syntactic structure. We need two syntactic configurations for these coordinate phrases. I will suggest that the projections which contain relational adjectives and *de* complements provide interpretable number features and help to identify

individuals. This is possible in a syntactic structure in which those adjectives and *de* complements are part of the subject of a predicational structure. These adjectives and modifiers can also be predicates of nominals in another, more familiar, structure, just as qualifying adjectives are. In this other structure, in which adjectives are simple predicates, they are not able to identify individuals and the issue of number feature interpretation does not arise. These two structures will explain the cases of ambiguity reported above.

Let us first assume, following Brucart & Gràcia (1986), Contreras (1989), Torrego (1988), Kester & Sleeman (2002) and others, that DPs such as (13) contain a nominal category *pro* whose grammatical features are provided by the determiner:

(13) El embajador de México y el *pro* de Argentina 'The ambassador of Mexico and that of Argentina'

Kayne (1994) argues that *de* in *La voiture de Jean* is a prepositional complementizer which heads a functional projection whose complement is a predicational structure. Let us suppose that a similar abstract C/P projection is able to host the grammatical content of both Sp. *de* and relational affixes, also heads, so that *de México* and *mexicano* are able to match the features of this projection:

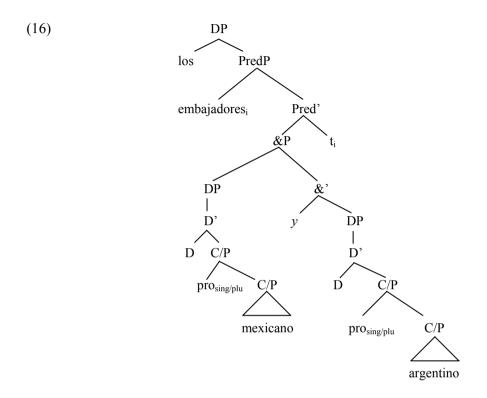
(14) [DP [D el [C/P proi [C/P {de México / mexicano}]]]]

This is a very natural move in Distributed Morphology (Halle & Marantz 1993 and subsequent work), since in this theory word formation processes take place at different levels of the grammar. Crucially, terminal elements in the syntax lack phonological features in Distributed Morphology representations. They relate bundles of morphological and syntactic features to bundles of phonological features, which are spelled out as a late process. This means that if *mexicano* is inserted in the C/P projection, it will match its features, just as the syntactic construction *de México* would. Let us try to represent the syntactic structure of (8b), repeated here as (15):

(15) Los embajadores mexicano y argentino

We want to account for the fact that these adjectives denote individuals, rather than properties, and also for the fact that they provide the cardinal interpretation of the DP, as argued above. The relevant structure will have

mexicano and *argentino* as part of the subject of a small clause. We may obtain this result in a structure such as (16):



Let me make some comments on this syntactic structure. As in Kayne (1994) a head-modifier structure is reduced to a subject-predicate small clause (PredP in (16)). The noun *embajadores* is its predicate and raises to Spec/PredP. Being a predicate, *embajadores* does not have interpretable ffeatures. In fact, it inherits them from the subject of PredP: &P. This coordinated structure contains two DPs will null heads. The D° head agrees with *pro* in each member of the coordination. The number features of *pro* are interpretable, since *pro* is an argument. &P has, then, plural features, since two "interpretable singulars" (those of the two *pro*) are being summed up according to (2). The article *los* ultimately agrees with *embajadores*, but the cardinality value of the whole DP is provided by the DPs conjoined in &P.

Recall that phonological insertion of features in terminal nodes is a late process. The C/P projection in (16) contains abstract (arguably Case) grammatical features. This projection is a predicate of *pro*. As we have seen, *pro* is a subject nominal with interpretable number features. If *pro* is

singular, the adjective *mexicano* can be inserted in C/P, since it is able to match pro_{sing} . The number feature of pro is transmitted to D as in any DP structure. The &P is then plural, according to (2). The analysis is identical if instead of *mexicano*, we insert *de México* in the C/P phrase.

Let us now suppose that pro is plural in (16). In this case, &P automatically receives plural features, according to (4). If we have pro_{plu} , we will not be able to insert mexicano in the first member of &P, since this adjective is marked with a singular feature. We will be able to insert mexicanos, as we may insert argentinos in the other member of the coordinate structure. If we do this, we get (11b) in one of their interpretations, namely the one in which two groups are coordinated. There is some controversy on whether or not the coordination of groups should be interpreted in a distributive manner (see Link (1998) for a review of analyses) but this does not concern us here. The point is simply that the &P would provide the interpretable number features of a plural subject.

Suppose now that we have pro_{plu} and we insert de México and de Argentina in the respective C/P projections of (16). These PPs have no number features, but pro has them. Consequently, &P, the predicate embajadores and los (in that order) will ultimately acquire these features. We obtain one of the interpretations of (11a) in this way, and we also get—from an identical syntactic structure—the reading of (10c) in which it is equivalent to (10a).

Regardless of whether *pro* is singular or plural in (16), we may think that the Ds of &P can be null in this structure because *los* has strong f-features. This suggests that the examples in (8) may be found in other Romance Languages with strong Ds. We also know that *embajadores* is licensed by the &P in (16), not by *los*, since *embajadores* cannot be null in DPs with nominal ellipsis. This is shown in (17):

- (17) a. Los *pro* mexicanos (*pro* = embajadores) 'The Mexican ones'
 - b. *Los *pro* mexicano y argentino (*pro* = embajadores) 'The Mexican and the Argentinian ambassadors'

Let us now turn to the second syntactic structure. If the adjectival coordinate projection is the predicate of PredP, things work as expected in an easier way. Various syntactic analyses will give the desired result for these coordinate structures, as long as they coincide in the fact that &P is not a subject in them. We may choose a structure such as (18a), in which *embajadores* raises to Spec/PredP from the subject of the small clause:

- (18) a. Los $[P_{REDP}]$ [embajadores $_i$] $[P_{RED}]$, $[P_{RED}]$,
 - b. Los $[P_{REDP} \ [embajadores_i] \ [P_{C/P} \ t_i \ de \ México] [P_{V} \ t_i \ de \ Argentina]]]$

or a structure in which the raising of the subject *embajadores* is obtained in an across-the-board configuration, as in (18b).

Whatever our choice is, the crucial point is that the DPs in (8) do not fit in these structures. Let's see why. The coordinate projections in (8) could not get plural features in (18) because (2) disallows this possibility. Since the coordinate adjectives are predicates, two or more singulars cannot be summed up to obtain a plural, as in (7). If the head &° receives singular features through Spec/head agreement, as in (4), a conflict would arise with the plural in *embajadores*. The resulting structure will then crash because the subject (*embajadores* in this case) and the predicate cannot agree. We certainly could have a singular predicate, as in (19):

(19) El embajador mexicano y argentino 'The Mexican and Argentinian ambassador'

This DP fits the requirements of (18), but not—crucially—those of (16), a desired result. Notice that no "hidden D-pro structure" is available for the &P of (19), since this expression refers to a single individual.

Suppose now that we have *mexicanos y argentinos* in the configurations of (18). In this case, we get a grammatical structure. We obtain the interpretation in which we denote a set of individuals with some properties, that is, we refer to the set of persons who are or have been ambassadors of these countries. The coordinate conjunction receives abstract plural features according to (4), which are not interpretable, according to (2). Another desired result is the fact that the relational vs. qualifying distinction somehow disappears if all these adjectives appear in a predicational structure.

4. Some extensions

Let us take a brief look at some possible extensions of this analysis. The first extension concerns possessives. We have seen that the C/P projection can be thought of as a Case projection. Postnominal possessive adjectives contain genitive features, as has traditionally been argued. It is not surprising, then, that they are able to fit the structure in (16):

(20) Los libros tuyo y mío 'The books of you and mine'

As expected, (20) refers to exactly two books. The fact that prenominal possessives reject coordination (*Mi y tu libros 'My and your books') was attributed to their morphological status as clitics in Bosque (1987). Notice that (2) is not involved in these structures when these possessives have plural features, but the result is equally ungrammatical (*Mis y tus libros 'My and your books').

The second natural extension of the phenomena in (8) affects ordinals, as shown in (21):

(21) Las filas segunda y tercera 'The second and third rows'

Morphology of ordinal numerals is relatively similar to that of relational adjectives, in that suppletion processes affect both. Again, the number features of *segunda* and *tercera* have to interpreted in (21). It is interesting to point out that these are the classical cases in which appositive structures come close to those formed with nouns and adjectives. In fact, ordinal numerals freely alternate with cardinal numbers in them (*Las filas dos y tres* 'rows two and three'). Nominal appositions of the sort discussed by Jackendoff (1984), as in *Las letras A*, *B y C* ('The letters A, B and C') are also candidates for the same structure.

Let me remark that relational adjectives fit in the structure (16) because they are classifying adjectives and, in that sense, they help us to identify individuals. It has been pointed out by several authors that many evaluative adjectives are somehow strange in DPs with null heads in Spanish (as in ?El libro malo y el maravilloso 'The bad book and the beautiful one'). This is correct, but we certainly cannot say that qualifying adjectives reject the construction with null nominal heads. From this perspective, there is problem in the fact that adjectives that allow for the nominal ellipsis in DPs do not exactly coincide with those allowing for the structure in (16):

- (22) a. La muchacha mentirosa y la sincera 'The lying girl and the sincere one'
 - b. *Las muchachas mentirosa y sincera 'The lying and the sincere girls'

This is a lexical problem, rather than a syntactic one. I take it to be a manifestation of the fact that the class or relational adjectives—that is, those

which license the C/P projection in (16)—is a grammatical class, not a pragmatic one, even if some of their members behave sometimes as qualifying adjectives, as has traditionally been pointed out. Consider colour adjectives, for example (in Demonte (1999); sections 3.4.2.2 and 3.5.1.2b, the reader will find a review of their grammatical characteristics in Spanish). It is obvious that colour adjectives provide properties, but it is also true that they are appropriate to classify individuals, and—consequently—they help us to identify them. The latter characteristic allows these adjectives to share the syntactic structure that we have suggested for the adjectives in (8), as (23a) witnesses. The former explains that this very structure is not available when colour adjectives are grouped with other qualifying modifiers, as in (23b):

- (23) a. Las ballenas azul y blanca 'The blue and the white whales'
 - b. *Mis camisas azul y blanca 'My blue and my white shirts'

Other adjectives are well-known for their capacity to behave as relational in some contexts and as qualifying in others. A classical example is *popular* ('popular'), which approximately means 'known, widespread' as a qualifying adjective, but comes close to 'learned' when it names a form of culture, as a relational adjective. Thus, if I have read two books, one very popular and the other one ignored or unknown, I cannot say (24a); but I can perfectly say (24b) if I want to refer to two different types of literature:

- (24) a. *Los libros popular y desconocido que he leído 'The popular and the unknown books that I have read'
 - b. Las literaturas popular y culta del siglo XIX 'The popular and the learned literatures of the XIX century'

Other similar contrasts could easily be constructed. We may give a formal translation to these differences, in the sense that relational (but not qualifying) adjectives are able to match the C/P head suggested above. As we pointed out, the relational-qualifying distinction is partially lost if the coordinated phrases are predicates, that is, in structures such as (18).

5. Conclusion

Some adjectives help us to identify individuals and provide the cardinality value of plural DPs. Apparently, they have interpretable number features, but a close look shows that they lack them. The structure (16) is somehow paradoxical because it seems to present adjectives as subjects. It is not really

so, since the two members of &P are DPs, not APs. This structure allows us to maintain (2), and—crucially—also (1), in spite of the counterexamples introduced in (8). As we have seen, the interpretable number features in (16) are not those of the relational adjectives, but—ultimately—those of *pro*. Since *pro* is the subject of the C/P complement of D°, &P denotes as many individuals as DPs are coordinated, which gives us (9). Neither D nor *pro* are visible, but they are right there to give us the form and the interpretation of these syntactic structures.

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A Stativistic Theory of Lexical Aspect and its Impact on Grammatical Aspect

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1. Introduction*

In this paper our aim is to apply Moreno Cabrera's theory on subevent structure (2003) to the aspectual system in Spanish and show that it neatly resolves some of the problems which have traditionally arisen. The article is arranged as follows:

Part 2 introduces the concept of lexical aspect together with the systems of classification most commonly used in the bibliography.

Part 3 is divided into two sections: in the first Moreno Cabrera's model of lexical aspect is introduced, and in the second this model is applied to grammatical aspect.

In Part 4 four problems are studied to demonstrate the explanatory power of the theory: the first concerns the Imperfective, Progressive and Continuous aspects; the second the granularity of activities and accomplishments; the third how the Resultative and the Experiential Perfect relate to the different lexical aspectual classes; and the last addresses the quantification of states that are apparently not represented syntactically.

2. The Concept of Lexical Aspect

It's Vendler (1957) who provides us with the best known classification of

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lexical aspect. He identifies four lexical aspectual classes:

(1) a. *States*: Ama a Salomé.²

'He loves Salomé'

b. Activities: Camina por el parque.

'He walks in the park'/'He is walking in the park'

c. Accomplishments: Construyó la casa.

'He built the house'

d. Achievements: Llegó a la estación.

'He arrived at the station'

As Bertinetto shows (1986:113), these are the basic types of predicate used in other works, such as Bennett and Partee (1972), Mourelatos (1978) and Gabbay and Moravcsik (1980). More recent works, such as Rothstein (2004), also distinguish between these four types.

The first distinction to be made between Vendler's four types of predicate concerns the presupposition of a natural endpoint in the event. Telic events have one and atelic events do not. States and activities are atelic, whereas accomplishments and achievements are telic. Atelic predicates are carried out throughout the event, but telic predicates are not. This is easily demonstrated: if Juan stops loving Salomé, or if Carlos stops walking in the park, it will be true to say that Juan has loved Salomé and that Carlos has been walking in the park. On the other hand, if Pepe is building the house and is interrupted, he will not have built the house. Similarly, if María is arriving at the station and is stopped, it is not true to say she has arrived at the station. Atelic events can be said to cease or stop, but not to culminate, whereas telic events can stop—if the telos or end is not reached—or culminate—if the telos is reached. There is also syntactical evidence for this difference, i.e. when time adverbials with *durante* 'for' or en 'in' followed by quantified noun phrases can be used: atelic predicates combine with *durante* and telic ones with en:

(2) a. Estuvo triste {*en / durante} varios meses. (STATE) 'He was upset {in/for} several months'

b. Caminó {*en / durante} media hora. (ACTIVITY)

'He walked {in/for} half an hour'

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¹ See also Bach (1981), Dowty (1979, 1986), Hatav (1989), Heinämäki (1974:8-23), Klein (1994: chap. 5), Mittwoch (1991), Parsons (1990: chap. 3), Smith (1999), Verkuyl (1972) and Vet (1980:68-69).

² The translation of the examples into English is merely for illustrative purposes.

³ For the concept of telicity, see Dahl (1978), Declerck (1979b), Delfitto and Bertinetto (1995) and Depraetere (1995). I will return to this subject in section 3.2.

- c. Fabricó este violín {en / *durante} un año. (ACCOMPLISHMENT) 'He made this violin {in/for} a year'
- d. Se murió {en / *durante} muy poco tiempo. (ACHIEVEMENT) 'He died {in/for} a very short time'

We can also divide Vendler's four types of events into stative or non-dynamic and non-stative or dynamic events. States are stative and activities, accomplishments and achievements are dynamic. States are homogeneous throughout the event—they don't vary or change, progress or move towards a limit.

The stative or non-stative nature of a predicate can be demonstrated in many ways. For example, stative predicates are, in principle, incompatible with the imperative (3), unless there is a controlling subject, as in (4):

- (3) a. #Ten anginas.
 - 'Have tonsillitis'
 - b. #Sé rubio.
 - 'Be blond'
- (4) a. Estáte ahí quieto.
 - 'Sit still'/'Stand still'
 - b. Permaneced agachados.
 - 'Stay down'

Stative predicates are also incompatible with progressive periphrasis, ⁴ (5), something which will be dealt with in more detail in section 4.1:

- (5) a. *Estoy teniendo cinco hermanos.
 - 'I'm having five brothers and sisters'
 - b. *Estoy siendo rubio.
 - 'I'm being blond'

Lastly, we can distinguish between durative and punctual events. States, activities and accomplishments are durative and achievements are punctual. This means that in achievements the beginning and the end of the event coincide. In principle, therefore, achievements don't admit either progressive periphrasis, which isolates a central phase of the event, or adverbials of duration, as shown below in (6a) and (6b) respectively:

⁴ The initial letter will be in the lower case for morphological expressions such as 'progressive periphrasis' or 'imperfective simple past' and the upper case for semantic content such as 'Progressive' or 'Imperfective'.

- (6) a. *El niño está naciendo.
 - 'The boy is being born'
 - b. *Juan encontró un décimo de lotería en media hora.
 - 'John found a lottery ticket in half an hour'

However, achievements are often accompanied by a phase that precedes the culmination of the *telos*. In such cases, both progressive periphrasis and adverbials of duration may appear, as shown in (7a) and (7b) respectively:⁵

- (7) a. Se está muriendo.
 - 'He is dying'
 - b. Llegué a la plaza en cinco minutos.
 - 'I got to the square in five minutes'

As we have said, Vendler's classification has been fundamentally respected in more recent works. Nevertheless, some later authors have defined it more closely. Bertinetto (1986) makes some distinctions that Vendler does not.

Bertinetto distinguishes between durative and non-durative predicates. The non-durative category includes both telic predicates—Vendler's achievements—and non-telic predicates—which we will simply call punctual atelics. This category of non-durative and atelic predicate, also propounded by Smith (1991), was absent in Vendler's classification.

Bertinetto also divides up achievements into reversible and non-reversible types. Reversible achievements, i.e. those telic predicates which lead to a non-permanent state, possess the curious quality of permitting the quantification of the state bounded by two successive and contrasting changes. In the sentence *Se durmió durante media hora*, 'He went to sleep for half an hour', it is obvious that the adverbial *durante* + quantified noun phrase does not quantify the time it took him to go to sleep, but the time he was asleep, i.e. the time between going to sleep and waking up ((1986:282-283)). This will be discussed further in section 4.4.

Smith's classification (1991:30) also essentially respects Vendler's. As in Bertinetto (1986), it introduces a fifth basic category of punctual atelic predicates which it calls semelfactive, a name we will not use. This classification of predicates is based on the combination of three features [± Static], [± Durative] and [± Telic], resulting in the following:

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⁵ For achievements in the Progressive see Rothstein (2004: chap. 2).

Table I

	Static	Durative	Telic
States	+	+	0 6
Activities	-	+	-
Accomplishments	-	+	+
Punctual atelic (Semelfactive)	-	-	-
Achievements	-	-	+

Table I can be illustrated with the following predicates:

(8) **States**: tener hambre, estar enfadado, estar aquí, ser

madrileño.

'to be hungry, to be angry, to be here, to be from

Madrid'

Activities: *correr*, *caminar*, *bailar*, *dormir*.

'to run, to walk, to dance, to sleep'

Accomplishments: escribir la carta, hacer las maletas,

'to write the letter, to pack your bags'

elaborar la estrategia, ir de Madrid a Barcelona.'to draw up the strategy, to go from Madrid to

Barcelona'

Semelfactives: estornudar, toser, parpadear, sobresaltarse.

'to sneeze, to cough, to blink, to jump (be startled)'

Achievements: *morir*, *nacer*, *dormirse*, *llegar*.

'to die, to be born, to go to sleep, to arrive'

The concept of lexical aspect has been very fertile in modern linguistics and the establishment of these five basic classes of predicate is fundamental for the study of the grammar of aspect and time adverbials. We hope that any new theory will avail of the explanatory power of this classification. In Part 3 we will go on to see how Moreno Cabrera's theory explains these distinctions.

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⁶ As is usual, the [+] sign indicates that the group possesses the characteristic in question and the [-] sign indicates the opposite; the zero indicates that applying the characteristic to the group is impossible or irrelevant. Maintaining that the telic/atelic characteristic is irrelevant to states gives rise to the problem of how to explain that the atelicity of states is manifested syntactically when combined with *durante* 'for' and not *en* 'in', as seen in (2a).

3. Moreno Cabrera (2003)

Moreno Cabrera (2003) studies the relationship between syntax and semantics, specifically the internal structure of events and thematic roles. Here we are only interested in those of Moreno Cabrera's ideas that concern the internal structure of events, and how this affects grammatical aspect. Consequently, we will not be looking at some other fundamental questions⁷ in Moreno Cabrera's book. We will concentrate on his ideas on subevent structure along the lines of previous works by McCawley (1968), Dowty (1979), Jackendoff (1972) and (1990), Pustejovsky (1991) or Levin and Rappaport (1995).

3.1. A Stativistic Theory of Lexical Aspect

Moreno Cabrera classifies events into three types: states, processes and actions. The states are the primitive elements of the theory, since the processes are defined as transitions between states and the actions as processes in relation to a causing entity. As far as our work is concerned, the difference between processes and actions is irrelevant. What is essential, however, is the difference between telic and atelic events, regardless of whether they are processes or actions. In this section we will look at Moreno Cabrera's classification of events, and thereafter at the concept of telicity.

Moreno Cabrera (2003:61) affirms that the characteristic feature of a state is that an entity is in a given place or has a given property. The former is a locative state, the latter attributive. He picks up Langacker's idea (1987:214 ff; 2000:10-12) that states are atemporal, i.e. that temporal evolution is not an intrinsic or central aspect of a state. According to Moreno Cabrera, this doesn't mean that states occur outside of time, but rather that time plays no defining role in them, hence their lack of dynamicity.

Moreno Cabrera conceives processes as relationships⁸ between states: "A process exists when an entity goes from being in one state to another". So for this relationship between two states to exist, they must share the same entity. Just as there are both locative and attributive states, there are two types of processes: displacements and mutations, respectively. In displacements the entity changes its place and in mutations it totally or partially changes its property.

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⁷ For example thematic roles, especially the experiencer or the integration and disintegration of events.

⁸ Relationships and not transitions; this will be further clarified later.

Moreno Cabrera's processes may correspond to activities, accomplishments and achievements, since neither the telicity nor the durativity/punctuality of an event characterises a process.

Actions are defined (p.165) as relationships between processes and entities. "These relationships are usually interpreted as being agentive or causative: an entity originates, controls or is responsible for a given process." Just as there are two types of process, there are locomotive actions or locomotions, based on displacement processes, and modificative actions or modifications, based on mutation processes.

Moreno Cabrera's actions can be atelic or telic, and may correspond, therefore, to Vendler's activities or accomplishments, respectively.

Table II illustrates the relationship between the different types of states, processes and actions.

STATES

Attributions Locations

PROCESSES

Mutations Displacements

ACTIONS

Modifications Locomotions

Table II

For Moreno Cabrera, states are the only primitive events, since processes are changes of state, and actions relationships between processes and entities. This means there cannot be actions without processes, but there can be processes without actions. In the same way, there are no processes without states, but there are states without processes. In short, there is no event without a state. As a result, there is a hierarchy in subevent structure:

- 1- States are primitive events.
- 2- Processes are relationships between states.
- 3- Actions are relationships between processes and entities.

In Table III there is a detailed definition of each type of event:

Table III

STATE (Y, Φ)

Where Y is a variable over individuals and Φ is a variable over properties or places.

PROCESS [STATE (Y, Φ) , STATE (Y, Θ)]

Where Y is a variable over individuals and Φ and Θ are variables over properties or places.

ACTION $(Y_2 [PROCESS [STATE (Y_1, \Phi), STATE (Y_1, \Theta)]])$

Where Y is a variable over individuals and Φ and Θ are variables over properties or places.

It is important to note that processes can involve intermediate states. Let us take as an example the event denoted by the predicate *ir desde casa a la estación*, 'to go from one's home to the station', in the sentence *Juan fue desde casa a la estación*, 'John went from his home to the station'. This is a process, which, as explained, is a relationship between states. In this case the states are [Juan, EN casa] ['Juan, AT home'] and [Juan, EN la estación] ['Juan, AT the station']. This relationship between states is not instantaneous, however; it presupposes the existence of intermediate states. Note that in the example Juan *está yendo desde casa a la estación*, 'Juan is going from his home to the station', the focus is on precisely one of these intermediate states. We can demonstrate the existence of these intermediate states by introducing a variable of place numbered from 1 to N. All states over 1 and under N are intermediate states:

PROCESS [STATE
$$(Y, \Delta_1)$$
, STATE (Y, Δ_{N-1}) , STATE (Y, Δ_N)]

The relationship between states may or may not be temporal. Moreno Cabrera (2003:123ff) affirms that a process is a relationship and not a transition between states. Indeed, verbs of motion often appear in sentences where there is no motion at all:

- (9) a. La carretera va de Madrid a Zaragoza. 'The road goes from Madrid to Zaragoza'
 - b. La nube va desde Valladolid a Burgos.'The cloud goes from Valladolid to Burgos'

The examples in (9) are from Moreno Cabrera (2003:123).

Moreno Cabrera explains that this is due to the fact that verbs of motion do not express motion directly, but that motion in sentences such as *Juan va de Madrid a Zaragoza*, 'Juan goes from Madrid to Zaragoza', is deduced thanks to our knowledge of the world, i.e. of the characteristics of the entity usually denoted by a name such as Juan.

On page 125, however, Moreno Cabrera maintains that the examples in (9) may be considered states. To explain why verbs of motion are used to denote fictitious motion, he structures (9a) as follows:

(10) PROCESS (STATE (the road, Madrid), STATE (the road, Zaragoza))

Taking into account that the structure of *Juan va de Madrid a Zaragoza* is the following, Moreno Cabrera explains that verbs of motion are used in both, because they are formally identical:

(11) PROCESS (STATE (Juan, Madrid), STATE (Juan, Zaragoza))

As already stated, the different interpretation is clearly due to what we know about roads and individuals called Juan. Moreno Cabrera believes that the sentences in (9) could be considered states. The essential difference between (10) and (11) is that in (10) each of the states is predicated of part of the individual denoted by *la carretera*, whereas the states in (11) are predicated of the whole of the individual denoted by *Juan*. Since an individual who is in one place at a given time cannot be in another at the same time, if two locative states of John are to be predicated, each must be at a different time. Motion comes about precisely because the two states are predicated at different times, and since these times are in an order, John must have been in one place before the other and moved from the first to the second. Therefore, the states in (11), but not those in (10), are related temporally. This fact is crucial: as will be seen, it conditions the syntax of the two types of structure significantly. For example, as Moreno Cabrera points out, the sequences in (10) do not permit the Progressive, whereas those in (11) do:

- (12) a. #La carretera está yendo de Madrid a Zaragoza. 'The road is going from Madrid to Zaragoza'
 - b. Juan está yendo de Madrid a Zaragoza.'John is going from Madrid to Zaragoza'

We will come back to the difference between examples such as (12a) and (12b), but what we wish to emphasise is that verbs of motion are used in structures which are devoid of motion. In our opinion, this is something that needs to be explained, and the model set out above provides us with a natural explanation for it.

Moreno Cabrera's theory is remarkably simple: the only primitive event is the state. Now we are going on to see how it fits in with the theory of aspect.

3.2. States and Telicity

In this section we are going to look at the concept of telicity in Moreno Cabrera's theory of lexical aspect. We have already established that all events are made up of states. Now we are going to take a closer look at these states and at the concept of telicity, which was essential to Vendler's classification and is a basic concept in the field of aspect.

We should ask ourselves if all states in the different types of events share the same properties and function in the same way. We are going to see that this is not so.

Let us start from the premise that stative events are determined lexically, i.e. their characteristics are functions of the lexical properties of the words that denote them.

We will also assume that the final state in an accomplishment and, to the extent that we will later explain, the resulting state in an achievement are determined in this way. These two types of states will be called goal-states. A goal-state is related temporally to a previous state and defines a process as telic.

As is frequently reiterated in the bibliography, the goal-state in accomplishments is determined compositionally. Whether the direct object of transitive predicates is definite or indefinite, and quantified or unquantified, is a crucial factor for the lexical aspect of a good number of these predicates. Let us consider the following examples:

- (13) a. Juan comió manzanas.
 - 'John ate apples'
 - b. Juan comió tres manzanas.
 - 'John ate three apples'

⁹ Some transitive predicates are activities, e.g. *empujar el carro*, 'to push the cart', as is demonstrated by the fact that it combines with an adverbial beginning with *durante* 'for' and not *en* 'in'.

In (13a), where there is a "bare" plural direct object, the predicate is atelic, in fact an activity, whereas in (13b) the quantified direct object 'three apples' makes the predicate telic, specifically an accomplishment. This is because 'three apples' bounds the action by providing it with a goal-state, the state where the three apples have been eaten, beyond which point the event cannot go.

In achievements, the goal-state is part of the lexical content. For example, the resulting state *estar muerto*, 'to be dead', is contained within the verb *morir*, 'to die'. Consequently, as Delfitto and Bertinetto maintain (1995:137), while telicity is a function of the lexical content of achievements, this is not the case in accomplishments, where telicity depends on the syntactical nature of the complements.

The initial state may also be determined lexically, as with verbs of motion:

(14) Juan fue de Madrid a Barcelona.

'John went from Madrid to Barcelona'

In this example there is an origin-state (*Juan está en Madrid*, 'John is in Madrid') and a goal-state (*Juan está en Barcelona*, 'John is in Barcelona').

There are two types of states determined lexically: those denoted by stative predicates (15a), and the goal-states in achievements (15b). In addition, there are two types of state also determined lexically but compositionally: the origin-state (15c), and the goal-state in accomplishments (15c) and (15d). All examples are in bold:

(15) a. Juan está en su casa.

'John is at home'

- b. Juan se murió. (Juan está muerto.)
 - 'John died' ('John is dead')
- c. Juan caminó desde el parque hasta la estación. (Juan está en el parque/Juan está en la estación.)
 - 'John walked from the park to the station' ('John is at the park/ John is at the station')
- d. Juan ha escrito la carta. (La carta está escrita.) 'John has written the letter' ('The letter is written')

No other states are determined lexically. Let us see why. We have said that in accomplishments the final state is a goal-state and is determined compositionally by the verb and its direct object if the verb is transitive. If

the accomplishment reaches the *telos*, as in (16), we can predicate that the house has been built precisely because *estar construida la casa* (Lit. 'to (have) be(en) built the house') is the goal-state of the event denotated by *construir la casa*, 'to build the house'.

(16) Juan construyó la casa. 'John built the house'

Let us now look at the same accomplishment in the Progressive Imperfective Aspect:

(17) Juan está construyendo la casa. 'John is building the house'

The intermediate states are not determined lexically. Consequently, in (17) we cannot know exactly what Juan is doing: he may be bricklaying, or wiring, or even working on the plans. We only know that one of the undefined transition states of the *construir la casa*, 'to build the house', event is being predicated. Indeed, this detailed information about the specific job he is doing is not part of the lexical information in the predicate *construir la casa*. If we imagine that John is doing these types of jobs it is due to our knowledge of the world: a house made of adobe requires very different types of work from a wooden one, for example.

The states that are not origin-states or goal-states, which we will call path-states, are characteristically precarious. This is due to the fact that a path-state can always be followed by another path-state, whereas a goal-state cannot. A path-state is or can be linked to another path-state after it. Precariousness is therefore defined as the characteristic of a state that is related temporally with a subsequent state.

Taking into account everything we have said above, Vendler's classification may be translated into the following Table IV. Each of Vendler's lexical aspectual classes is matched to its equivalent in Moreno Cabrera's model. S stands for state:

Table IV

It is necessary to clarify the terms first-state and origin-state. An origin-state is clearly a first-state, but not all first-states are origin-states. Any event which is taking place or has taken place has had a beginning. Therefore all plural events have a first-state; however, not all events have an origin-state. In order to understand this difference, let us take the following examples:

- (18) a. Juan corrió por el parque.
 - 'John ran around the park'
 - b. Juan corrió desde la fuente hasta el banco.
 - 'John ran from the fountain to the bench'
 - c. Juan corrió hasta el banco.
 - 'John ran to the bench'

In (18a) there is a first-state, when John begins to move, but this is not an origin-state. In (18b), on the other hand, the first-state is at the same time an origin-state, which is specified lexically by the prepositional phrase *desde la fuente* 'from the fountain'. Notice that the goal-state can be specified although the origin-state is not (18c).

It should be noted at this point that the classification in Table IV is consistent with Smith's five classes of lexical aspect (1991:30), since the following distinctions are made:

Singular / non-singular events:

states / activities, accomplishments, achievements, punctual atelics;

Instantaneous / non-instantaneous events:

achievements, punctual atelics / activities, accomplishments;

Events with goal-states / without goal-states:

accomplishments, achievements / states, activities, punctual atelics.

In Table V the predicates are classified according to the three features plurality, instantaneity, and telicity:

Table V

	Plurality	Instantaneity	Telicity
States	-	0	-
Activities	+	-	-
Accomplishments	+	-	+
Punctual atelics	+	+	-
Achievements	+	+	+

Table V shows us that states are the only singular, i.e. non-plural events. This feature, as with Smith's stativity, distinguishes them from the other types of event. This is because states are the only single-event predicate, and needless to say that event is a state. We have said that Moreno Cabrera's processes (2003) correspond to Vendler's activities, accomplishments and achievements. Naturally, this is only true if the relationship between the states in the process concerned is dynamic. If this is not the case, as in (9a), La carretera va de Madrid a Barcelona, 'The road goes from Madrid to Barcelona', the process can be classified as a non-dynamic process or as a state made up lexically of two states.

Among plural or non-singular events the fact that there may be two or more states in the relationship separates instantaneous events (achievements and punctual atelics) from non-instantaneous ones (activities and accomplishments). Instantaneous events contain only one change of state, since they are made up of two states. Note that states are not classified according to this feature, since time does not play a defining role in them. This is because they are made up of a single event.

Lastly, telicity depends on whether there is a goal-state or not.

Neither stativity nor dynamicity is a basic feature, since they are derived properties. Stativity, in the sense of the absence of dynamicity, is a consequence of the singular nature of states, just as dynamicity is due to the

possibility of establishing a temporal relationship between the states that constitute an event.

In the classification we have adopted, stativity, durativity and telicity are indeed not primitive features, but are deduced from the number of states in the event and their characteristics. Our classification distinguishes between A) single-state events, B) events with two or more states, and C) those in which the final state is a goal-state.

Let us go back to Table IV. States are made up of state events, which, as we have explained, are the only primitive ones in the theory. All other events are relationships between states. States may be measured from their beginning to their end (19a) or may be taken in a subinterval (19b):

- (19) a. Estuvo enfermo durante varios años.
 - 'He was ill for a few years'
 - b. Cuando entré, estaba muerto.
 - 'When I went in, he was dead'

Activities are relationships between states, the last of which is never a goal-state. It should be remembered that goal-states are determined lexically or compositionally. Dynamicity derives from the fact that there may be a temporal relationship between the states.

A section of an activity that contains at least two states is an activity, whereas a section containing only one state is a state. This is precisely the difference between the continuous periphrasis in (20a) and the progressive periphrasis in (20b). In the continuous the auxiliary is a verb of motion, whereas in the progressive it is a copula. This difference will be looked into in more detail later

- (20) a. Juan va diciendo tonterías.
 - 'John keeps talking nonsense'
 - b. Juan está diciendo tonterías.
 - 'John is talking nonsense'

Accomplishments are relationships between states where the final state is a goal-state. If we compare the examples in (21) with (22), we will see that the telicity in (21) stems from the fact that the direct object defines a final state, the goal-state, which finishes off the event, making it impossible for it to continue any longer. In (22) on the other hand, the direct object does not define a goal-state, and the events could have lasted indefinitely:

- (21) a. Juan escribió la novela en tres meses.
 - 'John wrote the novel in three months'
 - b. Se comieron todos los pasteles.
 - 'They ate all the cakes'
- (22) a. Juan escribió novelas durante años.
 - 'John wrote novels for years'
 - b. Comieron pasteles.
 - 'They ate cakes'

When an event reaches the goal-state, we say it culminates; if it is interrupted before the goal-state we say it stops or ceases. In (23a) the novel was finished, so the event is said to have culminated. In (23b), the novel was not finished, so the event ceased, but did not culminate:

- (23) a. Terminó de escribir la novela.
 - 'He finished writing the novel'
 - b. Dejó de escribir la novela.
 - 'He stopped writing the novel'

Accomplishments are typically exemplified with transitive predicates which have a definite or quantified object, but intransitive verbs of motion which denote a path are also accomplishments if the destination (24a) or both the origin and destination (24b) are specified:

- (24) a. Se desplazaron todos al jardín.
 - 'Everyone went to the garden'
 - b. Fue desde Madrid a Barcelona.
 - 'He went from Madrid to Barcelona'

If an accomplishment is in the Progressive, the goal-state has not been reached:

(25) Juan está escribiendo una novela.

'John is writing a novel'

This is the imperfective paradox: accomplishments are defined by the goal-state and in the Progressive the goal-state has not been reached. There is, however, a difference between the Progressive in an accomplishment and one in an activity:

- (26) a. Juan estaba comiendo tres manzanas.
 - 'John was eating three apples'
 - b. Juan estaba comiendo manzanas.
 - 'John was eating apples'

The fact that the event does not culminate does not make (26a) synonymous with (26b). The predicate *comer tres manzanas*, 'to eat three apples', contains a goal-state, which despite not being reached, defines the event itself.

According to Rothstein (2004:91ff), a property of accomplishments is their incrementality. This means they progress towards a goal, which is a goal-state in our terms, while activities may lack an order and not progress. John can eat apples nibbling at one and then another without ever finishing, but if three apples are being eaten the event has to progress towards its goal, i.e. the state where the three apples have been eaten. Accomplishments are transitions between ordered states that progress towards the goal-state. Activities are simply transitions between states which are not ordered.

The presence of the goal-state in accomplishments is therefore essential to distinguish them from activities, since it explains the property of incrementality. Its absence explains the property of cumulativity. Rothstein points out that, although not always possible, two activity events can be joined together to form one single event of the activity denoted by the predicate in question. If John ran from three to four o'clock and from four to five we can in certain circumstances say that he ran from three to five. This, however, is never possible with accomplishments: if John ate three apples and then ate three more, we could never claim there was one single event with the eating of three apples. Telic events are not cumulative. We could say that John has eaten six apples, but this would be a different event. The cumulative nature of activities is due to the absence of a goal-state, and the presence of a goal-state in accomplishments precludes cumulativity.

Achievements contain both an origin-state and a goal-state, one of which is in a negative form with respect to the other. Indeed, it has often been maintained that achievements denote changes of state. In (27a) the event denoted by *murió*, 'he died', may be understood as a transition from the state of being alive to the state of not being alive. Similarly, (27b) could be a transition from the state of not being in the shop to being in it:

- (27) a. Murió.
 - 'He died'
 - b. Entró en la tienda.
 - 'He went into the shop'

It may be noted that in (27b) there is a verb of motion, but one which does not denote a path.

Lastly we have the punctual atelic predicates, those which were not included in Vendler's classification. It is obvious from the name we have given these events that they are atelic, like activities, and punctual, like achievements. They may be described as transitions between two states neither of which is a goal-state. The fact that the final state of a punctual atelic is not a goal-state makes it possible for these predicates to join together and form activities. This is the case in (28):

- (28) a. Juan parpadeó.
 - 'Juan blinked'
 - b. Juan estornudó.
 - 'Juan sneezed'

The examples in (28) may quite easily be interpreted as being semelfactive, i.e. John blinked or sneezed just once, or as iterative, i.e. when the action is repeated. When the interpretation is iterative, there is no difference between a punctual atelic predicate and an activity. Punctual atelics are activity events that may be punctual but don't have to be. This is in fact another example of the property of cumulativity that Rothstein attributes to activities, and which is a consequence of the absence of a goal-state.

4. Consequences for Aspectual Theory

In Part 3 we have described Moreno Cabrera's theory (2003) of lexical aspect, in which states are the only primitive events, and we have explained the role of telicity in it. Now we are going to look at some typical problems of the temporal-aspectual field to find out how they can be resolved using this model. The problems are the following: first, the nature of progressive and continuous periphrases—and at the same time that of the Progressive and Continuous aspects—and how they relate to the Imperfective aspect. We will then go on to the question of granularity, i.e. if activities are homogeneous but not dense. Thirdly, we will study the difference between the Resultative Perfect and the Experiential in relation to lexical aspectual classes. Lastly, we will look into the possibility of quantifying some goal-states with adverbials even if the event is not in the Resultative Perfect aspect.

4.1. The Imperfective, Progressive and Continuous Aspects

In the bibliography different values of the Imperfective aspect are admitted. Bertinetto (1986:162-181) defines its basic property as that of not stating the conclusion of the predicate, and distinguishes between three possible types: the Progressive, the Habitual and the Continuous. The following are examples:

- (29) a. Cuando entré, María fregaba el suelo. (PROGRESSIVE) 'When I went in, Mary was mopping the floor'
 - b. En aquella época, Juan iba andando al trabajo. (HABITUAL) 'In those days, John walked to work'
 - c. Durante la reunión Marta decía tonterías a todo el mundo.

(CONTINUOUS)

'During the meeting Martha was making stupid remarks to everyone'

These three values can be made explicit by means of periphrasis:

- (30) a. Cuando entré, María estaba fregando el suelo. (PROGRESSIVE) 'When I went in, Mary was mopping the floor'
 - b. En aquella época, Juan solía ir andando al trabajo. (HABITUAL) 'In those days, John used to walk to work'
 - c. Durante la reunión, iba diciendo tonterías a todo el mundo.

(CONTINUOUS)

'During the meeting, she kept making stupid remarks to everyone'

In the Progressive the focus is on a single moment. The Habitual Imperfective is used with predicates where the repetition of the situation can be said to characterise the subject. In the Continuous the focus is on a period. According to Bertinetto (1986:171), the Continuous differs from the Progressive in that the former does not focus on a single moment, whereas the latter does. The Habitual differs from the Continuous (and the Progressive) because it involves a multiple situation, i.e. the repetition of the event on different occasions. A habit may be conceived as a property of the subject involving the regular repetition of a type of event. Bertinetto (1994:32) calls the set of events a macroevent and each individual event a microevent. In the Continuous the event may be repeated, but the situation in which the events take place is always the same one.

In this section we are going to concentrate on the Progressive and Continuous, but not the Habitual, which involves two events—the

macroevent and the microevent—and presents specific problems that cannot be dealt with.

In the bibliography about progressive periphrasis in English, it has been stated both that the periphrasis is stative and that it is dynamic. There are also contradictions to be found regarding equivalent periphrases in Romance languages. Some authors, such as Dik (1987:62), have maintained that the periphrasis is stative, whereas the corresponding "imperfectos", imperfective simple tenses, are dynamic. To Dik's way of thinking, the main clause of (31a) contains a stative event, while in (31b) the event is dynamic:

- (31) a. Cuando entré, estaban cantando.
 - 'When I went in, they were singing'
 - b. Cuando entré, cantaban.
 - 'When I went in, they were singing'

In fact Dik (1987:62), ¹⁰ considers the Progressive, as with all aspectual relationships which he calls phasal, to be the relationship between a state and

A- The opposition Perfective / Imperfective.

Dependent on if the State of Affairs (Event) is presented from an external point of view as a whole (Perfective) or from an internal point of view as incomplete (Imperfective).

B- The phasal relationship.

The relationship between a defined point on the time axis and a State of Affairs. Dik (1987:60) makes seven possible distinctions:

- 1. Prospective:
- 2. Immediate Prospective;
- 3. Ingressive;
- 4. Progressive;
- 5. Egressive:
- 6. Immediate Perfect.
- 7. Perfect.
- C- The quantificational relationship.

The quantification of groups of occurrences of a certain State of Affairs. Dik (1987:63) identifies five varieties:

- 1. Habitual;
- 2. Continuous;
- 3. Semelfactive:
- 4. Iterative:
- 5. Frequentative.

¹⁰ Dik (1987:60-63) distinguishes three classes of aspectual relationships:

an event, as is usually the case with the Prospective and the Perfect. He defines these two aspectual varieties as follows:¹¹

Prospective: It is stated at the moment of speaking that

- John is such at the moment of speaking that
- the State of Affairs 'John is a rich man' will obtain after the moment of speaking.

Perfect: It is stated at the moment of speaking that

- John is such at the moment of speaking that
- the State of Affairs 'John is a rich man' obtained before the moment of speaking.

These definitions explain the much-commented impression that in the Perfect and the Prospective there is a dislocation between the aspectual focus and the event. In the example in the Perfect (32a), the absence of the secretary at three o'clock is a State of Affairs subsequent to her departure. Similarly, with the Prospective in (32b), it is not stated that the person was phoning you, but rather that he was ready to do so. Therefore Dik's definitions explain this relationship between a state and an event in the Perfect and the Prospective:

- (32) a. A las tres, la secretaria ya se había ido.
 - 'At three, the secretary had already left'
 - b. A las nueve, iba a llamarte.
 - 'At nine, I was going to phone you'

Dik does not define the Progressive, but, based on the definitions of the Prospective and Perfect and what he says on page 64 of his paper, we can draw up the following definition:

Progressive: It is stated at the moment of speaking that

- John is such at the moment of speaking that
- the State of Affairs 'John is singing' obtains at the moment of speaking.

Notice that the feeling we had about the Perfect and Prospective is lost in the definition of the Progressive. There is no natural way of understanding that

¹¹ Aspect is not a deictic grammatical category; Dik's definitions are meant to be combined with a time value in the Present; this is why the moment of speaking is mentioned in them.

there is a relationship between the event and a state which coincides with the same event. We will come back to this point later.

The idea that the Progressive is stative would for some authors explain why progressive periphrasis is normally incompatible with states. Vlach (1993) also qualifies the Progressive as stative. However, Bertinetto (1994) believes the opposite to be true, that the periphrasis is dynamic. Smith (1991: 113) agrees that the Progressive is dynamic, but not so the imperfective simple past.

Bertinetto argues forcefully that the periphrasis is dynamic, especially when it comes to stative predicates. It is true that when stative predicates combine with progressive periphrasis they become clearly dynamic, as happens in (33b) compared to (33a):

- (33) a. Juan es tonto.
 - 'John is stupid'
 - b. Juan está siendo tonto.
 - 'John is being stupid'

If we claim that the predicate in (33b) has become dynamic, it would be contradictory to maintain that the construction is stative.

The fact that authors have described progressive periphrasis in completely contradictory terms makes the concept of 'stative predicate' seem confused. In specialized bibliography scholars have suggested that the negation is stative, and that the Perfect, the Habitual Imperfective and the Prospective are too, without defining the exact meaning of 'stative' in these cases and assuming confusingly that these constructions function like lexical states. It is true, however, that the periphrasis shares syntactical properties with states. One of these is well known: the periphrasis has no imperative:

Naturally, attempts have been made to explain this affirming that the Progressive is a state; it is common knowledge that in normal conditions states have no imperative, due to the non-agentive nature of the subject:

(35) a. *¡Sabe la verdad (tú)!

'Know the truth!'

b. *¡Estad cansados!

'Be tired!'

In infinitive clauses beginning with *al*, non-stative predicates can be interpreted temporally, but states cannot, as we can see in (36) and (37) respectively:

- (36) a. Al entrar, me sonrió.
 - 'When he came in, he smiled at me'
 - b. Al acabar la carta, comenzó a llorar.
 - 'When he finished the letter, he began to cry'
- (37) a. Al estar enfermo, no asistí a la reunión.
 - 'As I was ill, I didn't attend the meeting'
 - b. Al tener hambre, salí a comer algo.
 - 'As I was hungry, I went out for something to eat'

As is true of the states in (37), the progressive periphrasis in these cases can never be interpreted temporally, but rather causally:

- (38) a. Al estar escribiendo, no le oí.
 - 'As I was writing, I didn't hear him'
 - b. Al estar acabando la carta, no respondió al teléfono.
 - 'As he was finishing off the letter, he didn't answer the telephone'

In nominal clauses after verbs of speech, stative infinitives are interpreted as current (39), whereas infinitives in non-stative predicates are considered Habitual or Attitudinal (40). ^{12,13} The periphrasis (41) again functions like stative predicates. First the examples without periphrasis:

- (39) a. Dice tener hambre.
 - 'He says he's hungry'
 - b. Dice estar enfermo.
 - 'He says he's ill'
- (40) a. Dice leer el periódico.

'He says he reads the newspaper'

¹² I owe this observation to Ignacio Bosque (p. c.).

¹³ By Attitudinal we understand the constant predisposition of the individual denoted by the subject towards the event. See also the commentary to the examples in (68).

b. Dice hacer ejercicio.'He says he exercises'

In (39) a current event and the act of speaking denoted by *dice*, 'says', are simultaneous, whereas in (40) the event is habitual, not current. In (40a), for example, it is not stated that he is reading the newspaper at this moment. If the infinitives in (40) are replaced by progressive ones (41), there is again simultaneity with a current event, as in (39):

- (41) a. Dice estar leyendo el periódico. 'He says he's reading the newspaper'
 - b. Dice estar haciendo ejercicio.

 'He says he's exercising'

The model we have adopted for our theory neatly explains the paradox that in certain contexts progressive periphrasis functions syntactically like states, but is interpreted as dynamic. Let us explain why this is so.

The Progressive focuses on a single moment of an event. Since activities and accomplishments are relationships between states, focusing on a single moment means focusing on a state. Let us suppose that in the activity in (42) it is the state S^{N-1}, which is in square brackets in (43). The dynamic interpretation of the Progressive derives from the fact that this state has a temporal relationship with the preceding states and that an individual cannot be in two different places simultaneously.

(42) Juan estaba caminando. 'John was walking'

(43) Activity
$$-S^1 \dots S^2 \dots S^3 \dots [S^{N-1}] \dots S^N$$
 (To walk)

In this sense it is understandable that the Progressive has been considered a state and has been said to function syntactically like a state in the above examples. In (43) it can be seen that the Progressive focuses on one of the states which make up the activity denoted by *caminando*, 'walking'.

Returning to Dik's definitions of the Prospective and the Perfect, and that of the Progressive which is based on his, we can see that although it is possible to conceive the first two as a relationship between a state and an event, such a relationship seems forced and unnatural with the Progressive. In fact, in the Prospective and the Perfect the relationship may be conceived as being between an event and a state that respectively precedes or follows the event in question. However, with the Progressive it is not clear how an

event can be related to a state that would inevitably be different from the event itself but nevertheless simultaneous with it. Our solution to this problem is that the state being focused on is one of the states that make up the event

In addition, this may also explain the fact that in Spanish, as in many other languages, the progressive periphrasis is formed with a copula, a verb that is clearly associated with stative predicates. This is one of the arguments for the Progressive to be considered stative, but we have seen that Bertinetto's hypothesis on the dynamicity of examples such as *Juan está siendo inteligente*, 'John is being intelligent', is indisputable. Our theory explains why the periphrasis is interpreted as being dynamic, a characteristic derived from the temporal relationship between the states that make up the event, and at the same time it explains the presence of the stative auxiliary.

Let us take a look at how progressive periphrasis combines with stative predicates. It is known that a state in the Progressive may be ungrammatical (44a) or dynamic (44b):

- (44) a. *Juan está siendo de Cuenca. 'John is being from Cuenca'
 - b. Juan está siendo inteligente.'John is being intelligent'

By focusing on a single moment of an event, the Progressive sequentialises the event, since the state focused on is linked temporally to the previous state, which in turn is related to a previous state, and so on back to the first-state. Predicates that don't permit this sequentialisation, such as *ser de Cuenca*, 'to be from Cuenca', lead to ungrammatical sentences. Those that do permit it produce grammatical sentences, but become dynamic because they are no longer a single state but a sequence of states. It should be noted that there are two types of interpretation of the ungrammaticalness of states in the Progressive. The first simply maintains that the periphrasis is stative and therefore incompatible with states. Needless to say, this in no way constitutes an explanation.

The second interpretation supposes that the Progressive focuses on an instant, and since states cannot be modified by punctual time adverbials; this made them ungrammatical. However, this needs to be qualified. Look at the following pairs of sentences where the adverbials *a las tres*, 'at three o'clock', and *en aquel momento*, 'at that time' or 'at that moment', alternate and where there is a different predicate in each pair. In (45) and (46) the sequences with *a las tres* are incorrect and those with *en aquel momento* are correct, no doubt because of the strictly punctual nature of the former. But

what we wish to emphasise is that in (47) and (48) the sequences are correctly formed with both adverbials:

- (45) a. ??A las tres vivíamos en Madrid.
 - 'At three o'clock we {lived/were living} in Madrid'
 - b. En aquel momento vivíamos en Madrid.
 - 'At that time we {lived/were living} in Madrid'
- (46) a. ??A las tres tenía anginas.
 - 'At three o'clock I had tonsillitis'
 - b. En aquel momento tenía anginas.
 - 'At that time I had tonsillitis'
- (47) a. A las tres estaba triste.
 - 'At three o'clock I was upset'
 - b. En aquel momento estaba triste.
 - 'At that moment I was upset'
- (48) a. A las tres estábamos en el bar.
 - 'At three o'clock we were in the bar'
 - b. En aquel momento estábamos en el bar.
 - 'At that moment we were in the bar'

This shows that the supposed incompatibility between states and punctual adverbials is relative, and that it occurs with predicates that denote more stable events, i.e. events that are unlikely to cease suddenly or immediately. We might therefore expect progressive periphrasis to be compatible with less stable states, like those in (47) and (48). This is not the case, however, as can be seen in the following examples:

- (49) *A las tres estaba estando triste.
 - 'At three o'clock I was being upset'
- (50) *A las tres estábamos estando en el bar.
 - 'At three o'clock we were being in the bar'

If progressive periphrasis just focused on one moment of an event, (49) and (50) could be expected to be as acceptable as (47) and (48). There has to be another reason for the ungrammaticality of (49) and (50). In our opinion, the Progressive does not focus on one moment of an event, but rather on a state that belongs to a sequence of states. The incompatibility of states with the

Progressive is due to the fact that states are not made up of states, but are singular events, which do not contain momentary intermediate states to be focused on by the Progressive.

An explanation is also required regarding the dynamisation of states that combine with the Progressive. Focusing on one point in the development of an event such as *A las tres estaba alli*, 'At three o'clock I was there', does not automatically make it dynamic. The explanation lies once more in sequentialisation: in our opinion the Progressive focuses on a momentary state, which in any well-formed sentence interpreted as Progressive makes a sequence of states inevitable.

With respect to verbs of motion that denote fictitious motion, such as those in (9) and repeated in (51), the impossibility of their combining with the Progressive (52a) or of them doing so without denoting real movement, marked # in (52b), is also due to sequentialisation. The Progressive does not isolate a state spatially; it cannot focus on a specific piece of the road as it passes Sigüenza, for example, since the verbal inflection expresses time, not space. Consequently, the Progressive isolates a state temporally, not spatially. Hence the dynamic interpretation.

- (51) a. La carretera va de Madrid a Zaragoza. 'The road goes from Madrid to Zaragoza'
 - b. La nube va desde Valladolid a Burgos.
 The cloud goes from Valladolid to Burgos'
- (52) a. *La carretera está yendo de Madrid a Zaragoza. 'The road is going from Madrid to Zaragoza'
 - b. #La nube está yendo desde Valladolid a Burgos. 'The cloud is going from Valladolid to Burgos'

The examples in (51) are from Moreno Cabrera (2003:123).

Moving on to the Continuous, which is represented in the following examples by the periphrases < and x + gerund> (53a) and x + gerund> (53b), we can see that the part of the event focused on is longer than an instant, it is rather a transition between states. In (54) this is indicated by the square brackets:

- (53) a. Juan andaba diciendo tonterías.
 - 'John kept making stupid remarks'
 - b. Iba nevando cada vez más.'It was snowing more and more heavily'

(54) Activity
$$-S^1 \dots [S^2 \dots S^3 \dots S^N] \dots S^{GOAL-1}$$
 (To walk)

This explains why continuous periphrases are typically formed with verbs of motion, whereas progressive one is formed with the stative auxiliary *estar*. We have said that a period of a process is a process but an instant of a process is a state. Therefore in our view auxiliaries in continuous periphrases are archetypically verbs of motion, i.e. verbs that lexically denote processes, while auxiliaries in progressive periphrases are copulas or other stative predicates, i.e. verbs linked to the expression of stativity.

Continuative periphrases are a similar case. By Continuative we understand the aspectual variety where the event is focused on from its beginning up to an internal point in its development. In Spanish the Continuative is expressed by the periphrases *<levar* + gerund> (55a) and *<venir* + gerund> (55b). In (55a), for example, the person started to cry at three and has continued to do so up to the moment of speaking without interruption. This is what (56) is meant to represent:

- (55) a. Lleva llorando desde las tres.
 - 'He has been crying since three o'clock'
 - b. Viene protestando desde esta mañana.'He has been complaining since this morning'

(56)
$$[S^1 ... S^2 ... S^3 ... S^N] ... S^{GOAL-1}$$

The focus here is on a period rather than a state, i.e. on a series of states. This explains why auxiliaries in the Continuative are verbs of motion.

Progressive periphrasis can clearly be interpreted as Continuative given the right adverbials (57a), or simply as Continuous (57b), but our theory explains the basic use of auxiliaries in progressive, continuous and continuative periphrases, and especially why <*estar* + gerund> is originally a progressive periphrasis. Extending a form to contexts from which it was in principle excluded is typical of the process of grammaticalization.

- (57) a. He estado trabajando desde las ocho de la mañana.
 - 'I have been working since eight this morning'
 - b. Estuve durmiendo toda la tarde.
 - 'I was sleeping all afternoon'

¹⁴ The same is true in Italian: continuous periphrases are formed with *andare* and *venire* and progressive periphrasis with *stare*.

Our model provides an answer to the question of whether the imperfective simple past of states should be interpreted as Continuous or Progressive. This question was put by Bertinetto (1986:182ff). Let us consider the following examples:

- (58) a. Cuando llegué, tenía un hambre feroz.
 - 'When I arrived, I was starving'
 - b. Me asomé un segundo a la puerta y vi que Renato estaba tumbado en la cama.
 - 'I glanced into the room and saw that Renato was lying on the bed'

These are translations of examples (23) and (24) in Bertinetto (1986:187).¹⁵

Both "imperfectos" in (58) would seem for Bertinetto to be examples of the Progressive Imperfective Aspect, since the focus is on a single instant of the event. Bertinetto (1986:183) provides us with the following examples of stative predicates which can be interpreted as being Continuous Imperfectives:

- (59) a. En aquel período tenía mucho que hacer, ahora las cosas van un poco mejor.
 - 'During that time I was very busy. Now things are going a bit better'
 - b. Ayer por la mañana, sentía un fastidioso dolor en una muela.
 - 'Yesterday morning I felt an irritating pain in a tooth'

These are translations of examples (1) and (2) from Bertinetto (1986:183).¹⁶

This question has further implications. In many studies it is taken for granted either implicitly or explicitly both that progressive and continuous periphrasis correspond exactly to one of the values of the Imperfective aspect and that the 'imperfective simple past' verb form, which is associated precisely with the expression of the imperfective aspect, has those same

(i) a. Quando arrivai, avevo una fame da lupi.

b. Mi affacciai per un attimo alla porta, e vidi Renato che era sdraiato sul letto.

(i) a. In quel periodo avevo parecchio da fare; ora va un po' meglio.

b. Ieri mattina sentivo un fastidioso dolore a un dente.

¹⁵ In Italian:

¹⁶ In Italian:

values. This is why Bertinetto asks which of the Imperfective values (Progressive, Continuous or Habitual) can characterise the imperfecive simple past of a stative predicate. Up to now we have seen that the imperfective simple past and the imperfective progressive past are not really equivalent. They are roughly equivalent in activities (60) and accomplishments and (61), but are not so in states (62):

- (60) a. Cuando entré, bailaban.
 - 'When I went in, they were dancing'
 - b. Cuando entré, estaban bailando.'When I went in, they were dancing'
- (61) a. En aquel momento redactaba el informe.
 - 'At that moment, I was making out the report'
 - b. En aquel momento estaba redactando el informe. 'At that moment, I was making out the report'
- (62) a. Era muy listo.
 - 'He was very clever'
 - b. Estaba siendo muy listo.
 - 'He was being very clever'

This different effect according to the type of predicate to which the imperfective simple past and the progressive periphrasis are applied is due to the type of quantification in each form. The "imperfecto" selects a proper part of the event but does not sequentialise in the way the Progressive does. We have seen that a state becomes dynamic in the Progressive due to this sequentialisation. We can therefore conclude that progressive periphrasis has a dynamizing effect, but that the "imperfecto" does not.

This explains why the imperfective simple past can be used both in dynamic and static situations, but that the Progressive can only be used in the former:

- (63) a. Juan decía hola a sus padres.
 - 'Juan was saying hello to his parents'
 - b. Juan estaba diciendo hola a sus padres.
 - 'Juan was saying hello to his parents'
- (64) a. Su carta decía hola.
 - 'His letter said hello'

b. #Su carta estaba diciendo hola. 'His letter was saving hello'

The example in (64a) is from Doiz Bienzobas (2001:131).

If a dynamic verb like *decir* is used statively (64a) it cannot be combined with progressive periphrasis, which shows that the imperfective simple past and progressive periphrasis are different grammatical mechanisms with different syntax and semantics. The examples in (60) and (61) are equivalent because the imperfective simple past is applied to a dynamic predicate, and although it does not have a dynamizing effect, it is not incompatible with dynamicity.

It should be noted, however, that in standard peninsular Spanish the imperfective simple past tends to have a stative interpretation and progressive periphrasis a dynamic one:

- (65) a. Cuando llegué a la casa, la televisión funcionaba.
 - 'When I got home, the television was working'
 - b. Cuando llegué a la casa, la televisión estaba funcionando.
 - 'When I got home, the television was working'

In (65a) the imperfective simple past conveys that the television was in a working state. This is what Bertinetto (1994) calls Attitudinal, i.e. a constant predisposition of the individual denoted by the subject towards the event. Here this means that the television can be turned on at any moment even if it is not actually turned on, so the interpretation is stative, i.e. it is a property of the television that is being talked about. In (65b), on the other hand, the television is understood to be turned on at a specific moment, so the interpretation is dynamic.

This reasoning with respect to the imperfective simple past and progressive periphrasis can be applied to continuous periphrases. In (66) and (67) the continuous periphrases lead to ungrammaticality when combined with stative predicates (examples a) unless these are dynamic (examples b):

- (66) a. *Luis todavía iba queriendo comprar el coche.
 - 'Luis still kept wanting to buy the car'
 - b. Iba entendiendo el problema cada vez mejor.'He was understanding the problem better and better'
- (67) a. *Andaba estando moreno.
 - 'He was being tanned'

b. Andaba teniendo cada vez más problemas con su marido. 'He was having more and more problems with his husband'

Examples (66a) and (66b) are adapted from Squartini (1998:263) and Martínez-Atienza (2006:174) respectively. That of (67b) is from Martínez-Atienza (2006:88).

As with the Progressive, the dynamization of continuous periphrases is attributed to their sequentialisation of the event, i.e. it being formed by a series of states.

In our opinion the interpretation of the imperfective simple past should be considered in the following terms. With states, it focuses on a proper part of the event denoted by the predicate. Given that any part of a state is a state, the imperfective simple past always focuses on a part of a state.

Continuous and progressive periphrases sequentialise the event and therefore make it dynamic for the reason stated above: given that an individual who is somewhere at a specific moment cannot be elsewhere at the same time, if two locative states are predicated of said individual each of them must be at a different time. Motion is produced precisely because the two states are predicated at different times; and as time has an order, Juan must have been in one place before the other and have moved from the first to the second.¹⁷

4.2. Granularity

Moreno Cabrera's theory also permits us to reconsider the problem of granularity.

We saw in (25) *Juan está escribiendo una novela*, 'Juan is writing a novel', an example of what the bibliography calls the imperfective paradox. Rothstein (2004: 38) points out that the imperfective paradox exists because in accomplishments a proper part of the event is not the event itself. So, if the instant focused on by the Progressive in an example such as (25) is a proper part of an accomplishment, but is not an accomplishment itself, and the accomplishment can be interrupted, how can we maintain that it is an accomplishment? In other words, how can a proper part of an event be semantically linked to an end that may not be reached?

Activities and states do not give rise to the imperfective paradox since every proper part of a state is a state and every proper part of an activity is an activity. Even so, it has often been said that states are dense and

 $^{^{17}}$ We have exemplified the processes involving displacement predicates (Table II), but the same is true for mutation predicates.

homogeneous but that activities are homogeneous but not dense. ¹⁸ This means that states always divide up into portions of state and that between two moments of a state there can be nothing other than a portion of the state. Activities, on the other hand, are supposed to be homogeneous, which explains why they do not lead to the imperfective paradox, but not dense, i.e. that if a sufficiently short period of time were isolated it would not be an activity. This suggests that our ideas above may be revised in the following way: that each proper part of a state is a state, but only a sufficiently large part of an activity is an activity.

Bonomi and Zucchi (2001:151) illustrate this idea with the predicate bailar un tango, 'to dance a tango'. If Terry is dancing a tango, which is made up of a certain number of steps, an event in which he only does part of the sequence cannot be considered a performance of the dance. For it to be true that Terry is dancing a tango a minimum interval must be established, which in turn varies according to the type of event concerned, since according to Bonomi and Zucchi the minimum interval for the tango is longer than that of the merengue.

This reasoning is not grammatical, but based on observation of reality. According to our theory, an instant of an activity is a state and therefore can never fulfil the condition of the minimum interval. In fact the definition of the granularity of activities comes up against that of the Progressive. The Progressive has been said to focus on a single moment (Bertinetto, 1986:120); if granularity were well defined, the Progressive should be incompatible with activities, since the instant focused on is by definition not long enough to permit the conditions that lexically define the predicate. Even if the Progressive were to focus on an interval and not an instant, we would not have resolved the problem. The question of granularity requires us to distinguish between the minimum intervals in different types of event. This means that if the definition of the Progressive is to be compatible with that of granularity it is necessary to accept that the former focuses on an interval that varies according to the type of event concerned. Moreover, the question would arise of the Progressive interval coinciding with that of the Continuous, which would be another undesirable consequence.

The question of granularity is confronted by another empirical problem. Progressive periphrasis, like the imperfective simple forms, can be used to describe events depicted in pictures or photographs. These portray a single instant, but we can nevertheless say as we look at a photograph: Aquí mis padres están bailando un tango or Aquí mis padres bailan un tango, 'Here my parents are dancing a tango'. Of course, the theory of granularity

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¹⁸ See for example Dowty (1979) and (1986:42) and Taylor (1977).

considers such a sentence to be impossible. Obviously the interval in a photograph is not long enough for my parents to perform the steps which make up a tango. Despite this, it is not only possible but indeed extremely common to use the Progressive or the imperfective in these cases.

Let us see how this question may be incorporated into our theory of lexical aspect. The hypothesis of granularity is essentially that if an activity is divided up into sufficiently long intervals this results in portions of that activity, but if it is divided up into very short intervals, we have portions of its component parts instead. What our theory says is that when dividing an activity up into instants this results in states, since activities are relationships between states—transitions if the relationship between states is temporal. It is possible to use the Progressive precisely because it focuses on one of the states that make up the activity. This is why the Progressive may be used to describe photographed events, which are no more than states.

4.3. The Resultative and the Experiential Perfect

By Perfect we understand the aspectual variety that focuses on the period of time that follows the period when the event takes place. It is expressed by compound forms with *haber* 'to have', and three values are usually identified: the Resultative, the Experiential and the Continuative, examples of which are respectively as follows:

- (68) a. Ya ha llegado.
 - 'He has (already) arrived'
 - b. Yo ya he comido ostras.
 - 'I have eaten oysters'
 - c. He sido feliz desde que lo conozco.
 - 'I have been happy ever since I met him'

The Resultative Perfect (68a) talks of the results of a prior action. In our example, this action is denoted by *llegar* 'to arrive', and an equivalent sentence would be *está aquí*, 'he is here'. The Experiential Perfect talks of the state of affairs involving a kind of experience, in a very wide sense, which in (68b) is having eaten oysters at least once. The Continuative Perfect talks of an event which started at a point in the past and which has continued without interruption until the present. It is easy to observe that the Resultative and the Experiential in the examples (68a) and (68b) both affirm the state of affairs, i.e. the result or the experience, produced by a prior, finished event, while in (68c) the event has begun but not finished. In García Fernández (2004, forthcoming) we have argued against considering cases such as (68c)

examples of the Perfect but rather that they are Aoristic, ¹⁹ which, with the right time adverbials, permits the event to go on until the reference point in Reichenbachian terms. Consequently, we will not be looking at cases like (68c) here.

First a clear distinction should be made between the Resultative and the Experiential. The former is always semelfactive, whereas the latter does not have to be. In the Resultative the focus is on the period after an occurrence of the verbal event. This occurrence can be complex even if it is not multiple, as in (69):

(69) a. Ya hemos dado cinco vueltas con el coche sin encontrar dónde aparcar.

'We have driven round five times without finding anywhere to park'

In the example above events are quantified over, not occasions: on one occasion they drive around five times. In example (70a), on the other hand, occasions are quantified over, and in (70b) both occasions and events are:

- (70) a. Tres veces llamé a la puerta.
 - 'I knocked three times'
 - b. Tres veces llamé a la puerta dos veces.
 - 'I knocked twice three times'

In the Experiential the occurrence can be multiple, i.e. the event can occur on more than one occasion. Accordingly, occasions and not events are quantified over in (71):

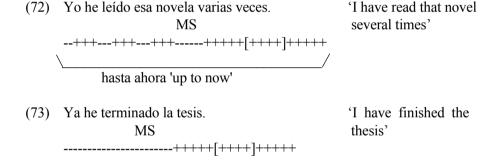
(71) Yo he estado en París un par de veces. 'I have been to Paris a couple of times'

Another fundamental difference between the two Perfects is that the Experiential always has an underlying adverbial which includes both the event and the subsequent state and which may be made explicit as *hasta ahora*, 'up to now', or *hasta entonces*, 'up to then', depending on the form of the auxiliary.²⁰ This is the reason why even when there is only one occurrence of

Hasta ahora with the "pretérito perfecto compuesto", present perfect, and hasta entonces with the "pretérito pluscuamperfecto", past perfect.

¹⁹ Aoristic corresponds to what Comrie (1976:16ff) calls Perfective, and we are using this term to avoid confusion with the term 'Perfect'. We define Aoristic as the aspectual variety that focuses on the event from its beginning to its end. The "pretérito perfecto simple", perfective simple past, is the most representative form of the Aoristic.

the event the Experiential is never the same as the Resultative. A sentence like Ya he leido esa novela, 'I have read that novel', can be interpreted in two ways: the resultative, which means va he terminado de leer esa novela, 'I have finished reading that novel', and the experiential, which means en mi vida vo he leido esa novela al menos una vez, 'I have read that novel at least once at some time in my life'. The existence of the underlying adverbial²¹ in the Experiential also explains why the occurrence can be multiple. If this were not the case, the usual definition of the Perfect, which states that the Perfect focuses on the period that follows the event, would not cater for the Experiential, since there is nothing after the event that indicates that the event itself is multiple. There would be no way of conveying that the period focused on follows a series of occurrences and not only the last one. Let us suppose that the temporal-aspectual interpretation of sentences (72) and (73) is as below. The experiential (72) requires an adverbial that encompasses all the occurrences of the verbal event. Using Klein's system (1992), the event is represented by the - sign, the time that follows or precedes the event by +, the period focused on by square brackets [] and the moment of speaking by MS:



What is interesting about the difference between the Resultative Perfect and the Experiential is that they require different lexical aspectual characteristics in the predicate. The Resultative produces barely acceptable or ungrammatical sequences with states (74) and activities (75)—marked # below. As a result, the following sequences are interpreted as experiential and not resultative:

(74) a. #Ya he tenido anginas. 'I have already had tonsillitis'

Vlach (1993) supposes that there is always an underlying adverbial, which we agree with. The difference between the Experiential and the Resultative may be explained according to the different characteristics of the adverbials.

- b. #Ya he estado en París.
 - 'I have already been to Paris'
- c. #Ya he estado enfadado con él.
 - 'I have already been angry with him'
- (75) a. #Ya he visto los Campos Elíseos.
 - 'I have already seen the Champs-Elysées'
 - b. #Ya he bailado tangos.
 - 'I have already danced tangos'
 - c. #Ya he comido paella.
 - 'I have already eaten paella'

Telic predicates in the same context are immediately interpreted as Resultative:

- (76) a. Ya he escrito el telegrama.
 - 'I have already written the telegram'
 - b. Ya han construido el nuevo hotel.
 - 'The new hotel has already been built'
 - c. Ya han redactado la reforma del Código Civil.
 - 'The Civil Code Reform has already been drafted'

This difference can be put down to the absence of a goal-state in states and activities and the presence of one in accomplishments and achievements. Telic events are bounded by a goal-state, which is focused on by the Perfect provided it is still valid at the moment of speaking or at the corresponding moment in the past. If it is no longer valid, the event cannot combine with the Resultative Perfect. Example (77) is acceptable as long as the goal-state *estar dormido*, 'to be asleep', is still valid:

(77) El niño ya se ha dormido.

'The boy has (already) fallen asleep'

If this is not the case, the appropriate solution is clearly an Aorist with the form *El niño se ha dormido*²² or *El niño se durmió*, 'The boy fell asleep', according to the distribution of the two forms. The Resultative Perfect focuses on a state that is part of the subevent structure of the event: the goal-state. The Experiential Perfect does not focus on the goal-state, however. Consequently,

²² In Spanish compound verb forms are aspectually ambiguous with respect to the Perfect or Aoristic interpretation; see García Fernández (1995).

the Resultative is only combined with telic predicates, whereas the Experiential does not have this limitation. Our theory explains this distribution depending on whether the event possesses a goal-state or not.

4.4. Quantified Goal-states

Our theory incorporates the view that goal-states can be quantified adverbially to the extent that they are like lexical states and can, in principle, be expressed lexically.

This is possible in different types of structures. One is a resultative construction such as the one formed with the verb *tener*, 'to have', and the participle of a transitive verb:

- (78) a. Tengo la carta escrita desde esta mañana.
 - 'The letter has been written since this morning'
 - b. Tenía las camisas planchadas desde hacía un buen rato.
 - 'The shirts had been ironed for a good while'

It is logical that the goal-state can be quantified in a resultative construction. Since it is precisely the result of the event that is focused on. What we want to concentrate on in this section, however, is the quantification of the goal-state with other aspectual varieties. One case is that of the Aorist:

- (79) a. Me dormí (durante) una hora.
 - 'I fell asleep for an hour'
 - b. Salí (durante) un rato a la calle.
 - 'I went outside for a while'

In (79) the adverbials cannot modify the events denoted by *me dormi*, 'I fell asleep', and *sali*, 'I went out(side)', which are achievements, i.e. punctual events. Moreover, the adverbials can begin with the atelic preposition *durante*, 'for', which as such combines with states and activities. Notice that the telic preposition for accomplishments and achievements is *en*, 'in':

- (80) a. Me dormí en unos segundos.
 - 'I fell asleep in a few seconds'
 - b. Salí en un instante a la calle.
 - 'I went outside in a flash'

Comparing examples (80) and (79) we can see that in (79) the resulting state is quantified, i.e. *estar dormido*, 'to be asleep', and *estar fuera*, 'to be outside'.

In (80), on the other hand, the quantification is of the time it takes to change state, i.e. reach the telos.

It is also possible to quantify the goal-state with the Habitual Imperfective:

- (81) a. Todas las tardes me dormía (durante) una hora.
 - 'Every afternoon I fell asleep for an hour'
 - b. A diario salía (durante) un rato a la calle.
 - 'Every day I went outside for a while'

In the Habitual there is, in Bertinetto's terms, a macroevent, or habit, and the microevents that make it up, each of which can have the characteristics of the Aoristic aspect. In the light of the examples in (79), those in (81) are to be expected.

In examples (79) we have that special type of achievement predicate that Bertinetto (1986) calls 'reversible transformative'. These predicates are characterized precisely by this property, because two consecutive and contrasting changes of state bound a state. As a result, achievements could be divided into two groups: the non-reversibles in (82) and the reversibles in (83):

- (82) a. *Llegó (durante) media hora.
 - 'He arrived for half an hour'
 - b. *Nació (durante) dos días.
 - 'He was born for two days'
- (83) a. Me dormí (durante) media hora.
 - 'I fell asleep for half an hour'
 - b. Entró unos segundos en la sala de reuniones.
 - 'He went into the meeting room for a few seconds'

It should be noted that the resulting state of some achievements, such as *llegar*, 'to arrive', or *nacer*, 'to be born', cannot be quantified, unlike those of (79) and (83).

In order to explain this let us suppose that the subevent structure of the events denotated by predicates such as those in (82) is different from that of events denotated by predicates in (83), as is shown in (84a) and (84b), respectively:

(84) a. Achievements 1=
$$S^{ORIGIN} - S^{GOAL}$$
 (llegar)
b. Achievements 2= $S^{ORIGIN} - S^{GOAL} - S^{ORIGIN}$ (dormirse)

Examples such as (83) are in our opinion one of the best indications of the existence of subevents in structures as propounded by Moreno Cabrera (2003) or Pustejovsky (1991). It is absolutely necessary to postulate a subevent structure to explain examples such as (83). Predicates denoting punctual telic events like *dormirse*, 'to fall asleep', or *entrar*, 'to go in', should combine with durative adverbials beginning with *en*, 'in', as in $(80)^{23}$ or with time location adverbials as in (85), but not with adverbials starting with *durante*, 'for', which are characteristic of durative atelic predicates:

- (85) a. Me dormí a las dos.
 - 'I fell asleep at two o'clock'
 - b. Entré en la sala en ese momento.
 - 'I went into the room at that moment'

Note that in (85) there are two Aorists and not two Perfects. It may well be possible to quantify the resulting state with a Perfect, but is less likely than with an Aorist, which is the aspectual variety that focuses on the event from beginning to end. It is possible according to our theory on subevent structure, since the resulting state is part of the event's structure whether it is focused on aspectually or not. If we did not accept that verbs like *dormirse* or *entrar* have a complex subevent structure like in example (84) we would find ourselves with a state modified adverbially but without syntactical representation, since, we insist, *dormirse* or *entrar* do not denote states.

5. Conclusion

Moreno Cabrera's theory (2003) on lexical aspect is extraordinarily simple and uses a limited number of primitives: all events are made up of states. It has enabled us to explain the apparent paradox of the Progressive: that it is described as both stative and dynamic. We have also explained why in Spanish periphrases the progressive is formed with a copula, but the continuous and continuative are formed with verbs of motion. We have also discovered that granularity can be accounted for in terms of our knowledge of the world, not of grammar. In addition, the Resultative Perfect and the Experiential have been contrasted and explained in terms of the presence or not of a goal-state in the subevent structure. Finally, our theory demonstrates the adverbial modification of states which are apparently not present sintactically.

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²³ In section 2 we said that achievements, despite being punctual predicates, can have a previous phase and can in such circumstances be quantified with durative adverbials.

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Emphatic Polarity and C in Spanish

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1. Introduction^{*}

In Spanish emphatic affirmative sentences like (1a), as opposed to their neutral counterparts in (1b), normally consist of the positive word si ("yes") followed by the tensed verb:

- (1) a. Pepito *si* come pasta.

 Pepito yes eats pasta

 'Pepito does eat'
 - b. Pepito come pasta.'Pepito eats pasta'

As has been observed by Laka (1990), among other authors, the example in (1a), rather than counting as the positive equivalent of the negative sentence in (2), is interpreted as a marked affirmative sentence:

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(2) Pepito *no* come pasta.
Pepito not eats pasta
'Pepito does not eat pasta'

The goal of this paper is to address the study of a particular type of emphatic positive marker in Spanish, the particle *bien* (literally, "well"), which may appear either in a preverbal position or followed by the complementizer *que* ("that"), as illustrated in (3a) and (3b), respectively:

- (3) a. *Bien* come pasta Pepito. Well eats pasta Pepito 'But Pepito eats pasta'
 - b. *Bien que* come pasta Pepito.Well that eats pasta Pepito'But Pepito indeed eats pasta'

Despite their interpretive differences, the examples in (1a) and (3) share a relevant property, namely, they qualify as emphatic affirmative sentences in Spanish. Moreover, as we will see below, the emphatic value conveyed by *bien* also extends to the cases where it is used as a degree-modifier, as in (4):

(4) Pepito es *bien* listo. Pepito is well smart 'Pepito is really smart'

In this paper I will argue for a comprehensive analysis of the syntax of bien. focusing specially on the alternation between bien and bien que. The main claim I make is that bien is an assertive operator whose contribution to the semantic interpretation of the sentence is reminiscent of its scopal domain. In order to capture both sides of the nature of bien—i.e., its positive value and its emphatic import-it will be suggested that, besides the low functional phrases (DegreeP, PolP) hosting bien, a higher functional projection in the left periphery of the sentence, FocusP, is involved. On the other hand, the (slight) contrast exhibited by the examples in (3) clearly suggests that the complementizer plays a relevant role in the alternation bien/bien que, as well as in other emphatic constructions where a similar pattern arises. In this connection, it will be shown that the complementizer in (3b) is associated with an echoic value that is lacking in (3a). This behavior parallels that of echoic negation in a significant way, which provides strong support for the view that some crucial properties of negative sentences may hold across the whole paradigm of (negative and positive) polarity.

This paper is organized as follows. In section 2, I present a general overview of the behavior of *bien*, and I examine the emphatic positive value of this adverb, mainly its connection to both negative markers and the positive polarity marker *si* ("yes"). In section 3, I turn to the distribution of *bien*, and I show that it may surface in three structural positions. The status of *bien* in the CP domain is addressed in section 4, where I discuss a number of data suggesting that the syntax of *bien*-sentences shares salient properties with that of *wh*-sentences, and I argue as well that *bien* targets *FocusP* in order to check its emphatic value. In section 5, I revisit the alternation *bien/bien que*, and I propose that the presence of the complementizer *que* ("that") may be taken as evidence for postulating that a further projection, *ForceP*, in the left periphery of the sentence is activated. Finally, section 6 concludes the paper.

2. Characterizing bien: from manner value to assertive value

2.1. Preliminary remarks: the polyvalence of bien

Spanish, as well as other Romance languages, makes use of *bien* in a variety of constructions in which the meaning of this adverb has shifted from its original value as an adverb of manner (equivalent to English "well") to an assertive value. The two kinds of *bien* are illustrated in (5):

- (5) a. Pepito ha comido bien. 'Pepito has eaten well'
 - b. *Bien* ha comido Pepito. Well has eaten Pepito 'But Pepito has eaten'

As the English glosses show, *bien* takes a manner reading in the example (5a). By contrast, *bien* is used in (5b) to emphasize the positive value of the sentence, which is interpreted as a confirmation that "Pepito has *really*/

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¹ Assertive *bien* has no exact equivalent in English. For the sake of clarity, I will translate it as "well" in the word-for-word glosses. In the meaning-translation, I will use "but" for the assertive value, and generally "indeed" (or "really") with other meanings (though colloquially other translations might be equally apt). I thank Michael Kennedy for his help with the English version of the examples discussed in this paper.

indeed eaten". Setting aside the manner interpretation of *bien*,² what is relevant for the purposes of this study is the contrast between (5b) and its neutral counterpart in (6), an issue I address in the following sections:

(6) Pepito ha comido. 'Pepito has eaten'

2.2. The emphatic positive import of bien

Turning now to the contrast illustrated so far, observe that both (6) and (5b) assert the same thing, namely that "Pepito ate". However, they sharply differ on syntactic and semantic grounds. As already noted, while the former qualifies as an unmarked affirmative sentence, the latter is interpreted as an emphatic positive statement. In other words, *bien* is used to indicate that the event denoted in the sentence really took place. Accordingly, (5b), contrary to (6), is oriented to positive polarity. Empirical support for this claim comes from the fact that *bien* is systematically precluded in negative sentences:³

- (7) a. *Bien no ha comido Pepito.
 Well has not eaten Pepito
 - b. *Bien nunca habla francés Pepito. Well never speaks French Pepito
 - c. *Bien nadie fue al cine ayer.
 Well nobody went to the cinema yesterday

The ill-formedness of the examples in (7) clearly suggests that *bien*, having a positive import, is incompatible with negative words such as *no*, *nunca*, *nadie*, etc. ⁴ By the same token, it also cannot co-occur with the affirmative marker *si* ("yes"):

² In this study I disregard the manner interpretation of *bien*, and I mainly concentrate on its assertive value. See Hernanz (2006a) for a more detailed discussion of the differences between the former and the latter reading.

³ The same pattern is attested in other Romance languages, in which the equivalent of Spanish *bien* (i.e., Italian *ben*, French *bien*, Catalan *ben/bé*) is also banned from negative sentences. See Belleti (1990), Vinet (2000), and Hernanz (2006a).

⁴ It goes without saying that the ungrammaticality of the examples in (7) (trivially) parallels the pattern illustrated in (i), where the affirmative adverb si fails to co-occur with no, nunca:

⁽i) a. *No sí ha comido Pepito.

b. *Sí nunca habla francés Pepito.

- (8) a. *Bien sí ha comido Pepito. Well yes has eaten Pepito
 - b. *Bien sí habla francés Pepito. Well yes speaks French Pepito

Given my claim that *bien* is an emphatic positive marker, the ungrammaticality of (8) comes as no surprise. It is the result of the competition of two mutually exclusive elements for the same position in the sentential structure. I will return to this issue shortly. However, before we close this section, note that the positive import of *bien* is further confirmed in that it is banned from emphatic sentences denoting an extreme-degree quantification, such as those in (9):

- (9) a. *Bien es extremadamente listo Pepito.
 Well is extremely smart Pepito
 - b. *Bien es list<u>ísimo</u> Pepito. Well is very smart Pepito

Under the assumption that extreme-degree quantification, being emphatic in nature, behaves as a positive polarity marker,⁵ the ungrammaticality of the examples in (9) is expected, as it follows, like in (8), from the *collision* of two elements that are mutually incompatible.

On the basis of the data discussed above, I assume that *bien*, due to its positive import, must be attributed a syntactic representation which shares relevant properties with that of the negative marker *no*. I follow Laka's (1990) proposal that both negation and affirmation may be subsumed under a single abstract category which is underspecified for either negative or positive value. That is, the category encoding the polarity of the sentence, *Pol*, may be viewed as comprising two alternative semantic heads, [NEG] and [POS] (see Cormack and Smith (1998)). Accordingly, I argue that *bien* (like *si*) occurs in a functional projection *Pol(arity)P*. More precisely, when

⁵ See, in this respect, González (2004: 48ff). According to this author, the positive value of extreme-degree quantification is attested by the fact that it is precluded in negative sentences. This is shown in the examples in (i), which are ungrammatical unless they are given an echoic interpretation:

⁽i) a. *Pepito no es extremadamente listo.

b. *Pepito no es listísimo.

⁶ I assume, following much of the existing literature, that this abstract category is higher than IP (see Laka (1990) and Zanuttini (1997), among others).

PolP takes a positive value, the Spec position of *PolP* may be filled by *bien*, as shown in (10):⁷

The representation in (10) is consistent with the assumption that there is contrast between neutral positive sentences—see (1b), (5a) (6)—in which the phonetic effect of [POS] is null, and marked positive sentences—see (1a), (3), (5b), in which an overt marker appears.

2.3. **Bien** vs. si: the illocutionary force of bien

Given my claim that *bien* stresses the positive polarity of a sentence, the question arises as to whether it patterns like another adverb that encodes an emphatic positive meaning in Spanish, namely *si* ("yes").⁸ Consider, in this respect, the examples in (11) and their counterparts with *bien* in (12):

(11) a. Si come pasta Pepito.

Yes eats pasta Pepito

'Pepito does eat pasta'

- b. Sí se compró un coche Pepito.
 Yes CL_{DAT} bought a car Pepito
 'Pepito did buy a car'
- (12) a. *Bien* come pasta Pepito. = (3a)
 Well eats pasta Pepito
 - 'But Pepito indeed eats pasta'
 - b. Bien se compró un coche Pepito.
 Well CL_{DAT} bought a car Pepito
 'But Pepito bought a car'

The sentences in (11) are as emphatic as those in (12). However, their interpretation sharply diverges. In Hernanz (2006a), it is argued that the differences stem from their illocutionary force: *bien* encodes a presuppositional value that is lacking in *si*. Thus, besides its emphatic positive meaning, *bien* adds a subjective implicature which cancels an implicit negative expectation. By contrast, *si* merely denies an explicit

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⁷ Belletti (1990: 40) proposes a similar analysis to account for the positive adverb *ben* in Italian.

⁸ The emphatic nature of si has been discussed in Laka (1990).

negative statement. In order to provide a more precise characterization of the contribution of si and bien to the semantic interpretation of a sentence, let us return to the contrast between (11a) and (12a). The former example, as opposed to the latter, qualifies as an appropriate response to the negative sentence in (13a):

- (13) a. Pepito <u>no</u> come pasta.
 - 'Pepito does not eat pasta'
 - b. Si come pasta Pepito. = (11a)
 - c. #Bien come pasta Pepito. = (12a)

The example in (13b) is a perfectly good response to (13a), since this sentence provides an overt negation to anchor the emphatic value of si. By contrast, (13c) is quite infelicitous when uttered as a response to (13a). As observed above, rather than contradicting an explicit negative statement, bien cancels an implicit and hence not overtly formulated negative expectation. Therefore, what rules out (13c) is that the state of affairs "to not eat pasta" is directly formulated in (13a). On the other hand, unlike (13b), (13c) does qualify as an suitable response to examples such as those in (14), which, rather than asserting that "Pepito does not eat pasta", can be taken as an appropriate pragmatic background from which to make this inference (that is, if Pepito is very thin, or Pepito hates Italian cooking, it is expected that Pepito would not eat pasta). ¹⁰

⁹ A general picture of the distribution of si in Spanish is beyond the scope of this work. A close examination of the data suggests, though, that the occurrence of si rather systematically correlates with a previous negative context, regardless of whether it takes a "denial" interpretation as in (13b), or not (i):

⁽i) a. "Chirac <u>no</u> ha dado detalles de su dolencia. El hospital *sí* ha señalado que Chirac no podrá volver a volar en seis meses" (recorded oral speech).

^{&#}x27;Chirac has not revealed details of his medical problem. However, the hospital *has* indicated that Chirac will be unable to fly again for six months.'

b. "[...] Aunque EEUU <u>no</u> participe en Montreal, en la primera conferencia de los países firmantes del protocolo de Kyoto, *si* interviene en las negociaciones de la undécima conferencia de cambio climático [...]" (*La Vanguardia*, 5/12/05).

^{&#}x27;Though the US is not taking part in Montreal at the first meeting in Montreal of countries that have signed the Kyoto protocol, it *is* participating in negotiations at the Eleventh Conference on Climate Change.'

¹⁰ See Hernanz (2006a), for a more extensive account of the presuppositional value of *bien*.

- (14) a. Pepito está muy delgado.
 - 'Pepito is very thin'
 - b. Pepito detesta la cocina italiana.'Pepito hates the Italian cooking'
 - c. *Bien* come pasta Pepito. 'But Pepito eats pasta(!)'
 - d. #Sí come pasta Pepito.

In light of these data, it can be concluded that *bien* and *si* behave alike in that both adverbs stress the positive polarity of a statement. However, they widely diverge regarding their illocutionary force: contrary to the latter, the former has a semantic import that is clearly presuppositional in nature. More precisely, the sentence headed by *bien* is always associated with a subjective value, that is, it is interpreted as denoting a statement from the perspective of the speaker's responsibility. This asymmetry can be accounted for under the familiar assumption, within the minimalist program, that a lexical item may consist of a bundle of features (see Chomsky (1995)). I thus propose that *si* is endowed with the semantic features [+*Affirmative*] and [+*Emphatic*], whereas *bien* bears an additional feature [+*Presuppositional*]. This is schematized in (15):

(15) Si: [+Affirmative, +Emphatic]

Bien: [+Affirmative, +Emphatic, +Presuppositional]

The feature system proposed in (15) gives rise to three kinds of affirmative sentences in Spanish, as seen in (16):

- (16) a. Ha llovido en Barcelona.
 - 'It has rained in Barcelona'
 - b. Sí ha llovido en Barcelona. Yes has rained in Barcelona' It has rained in Barcelona'
 - c. Bien ha llovido en Barcelona.Well has rained in Barcelona'It has indeed rained in Barcelona'

The example (16a) is an unmarked affirmative statement. By contrast, (16b), with an overt mark carrying a positive meaning, must be regarded as an emphatic affirmative statement. Accordingly, unlike (16a), it does not merely count as the neutral positive counterpart of the negative sentence *No ha llovido en Barcelona* ("It has not rained in Barcelona"). Finally, (16b)

contrasts with (16c), since *bien*, rather than contradicting an assertion, cancels an expectation.

To sum up, the paradigm illustrated in (16) can be taken as evidence that allows us to postulate that the markers of affirmative polarity in Spanish come in three varieties: a null affirmation marker, an affirmation marker si, and the presuppositional marker bien, which, besides its emphatic reading, encodes an added illocutionary value. As a tentative hypothesis to be explored throughout section 4, I would like to suggest that the feature system proposed in (15) is mainly responsible for the movement of both si and bien from their basic position in PolP (see (10)) to a high functional projection, FocusP, in the CP domain. But before moving on to this issue, let us turn our attention to the distribution of bien.

3. Three positions for bien

As already mentioned, *bien* reinforces the positive value of the sentence containing it. In this section I will provide evidence that *bien* may surface in three structural positions. My basic aim is to argue that the core analysis for *bien* sketched so far applies to the whole distribution of this particle.

3.1. **Bien** as a preverbal particle

I begin by considering those cases in which *bien* occurs in a preverbal position, as in (3a), (5b), (12) and (16c). Note that *bien*, like the pre-verbal negative marker *no*, must precede the finite verb, be it a main verb or an auxiliary. Compare, in this respect, the examples in (17) with those in (18):

- (17) a. *Bien* viene a verme cuando me necesita. 12
 Well (he/she) comes to see+CL_{ACC} when (he/she) CL_{ACC} needs
 'But (s)he visits me when (s)he needs me'
 - b. *Bien* me <u>gustaría</u> ayudarte, pero no puedo.

 Well CL_{DAT} would please to help+ CL_{ACC} you, but (I) can't 'I would really like to help you, but I can't'

¹¹ The asymmetry between *bien* and *si* with respect to their illocutionary value is amenable to a rather similar parallelism involving the pattern of negative polarity. In this regard, Zanuttini (1997:99) pointed out that the paradigm of negative markers splits into two classes: *non-presuppositional* negative markers (like Italian *no*) and *presuppositional* negative markers (like Italian *mica*). While the latter negate a proposition that is assumed in the discourse, the former negate a proposition with no particular discourse status. See also Cinque (1976).

The example in (17a) is from Moliner (1975), s.v. bien.

- c. Bien se <u>ha</u> molestado cuando se lo han dicho.
 Well (he/she) CL has got upset when (they) CL_{DAT} CL_{ACC} have said
 - 'But (s)he has got really upset when they told him/her'
- d. *Bien* podrías haberme llamado. Well (you) could have+ CL_{ACC} called 'But you could have called me'
- (18) a. *Viene bien a verme cuando me necesita.
 - b. *Me gustaría bien ayudarte, pero no puedo.
 - c. *Se ha bien molestado cuando se lo han dicho.
 - d. *Podrías bien haberme llamado.

The distributional pattern of *bien* given in (17) diverges from that of its (approximate)¹³ counterparts in Romance languages, which surface in a lower position, namely to the right of the finite verb. The following examples illustrate this situation in the case of Catalan *ben*:¹⁴

(i) a. Je <u>suis</u> *bien* arrivé à l'heure. (Vinet, 2000:137) I am indeed arrived on time 'I did indeed arrive on time'

Je <u>voudrais</u> bien vous inviter.
 I would like indeed CL_{ACC} to invite

'I would indeed like to invite you'

(ii) a. Gianni <u>avrà ben</u> risposto. (Belletti, 1990:39)
 Gianni will have indeed answered
 b. Maria parlava *ben* di lui.

Maria <u>parlava</u> ben di lui.
 Maria spoke indeed of him

Despite the similarities illustrated in the above examples, a closer look at the data reveals that the distribution of *bien / ben* in French, Italian and Catalan is far from homogeneous. I will not go into the intricacies of this phenomenon here.

¹³ Although Spanish *bien* and its Romance equivalents share a relevant property, namely their emphatic positive import (see Vinet (1996), Vinet (2000) and Belletti (1990) among other authors), they differ in their semantic interpretation. More precisely, Spanish *bien* encodes a nearly concessive value that is lacking in its Romance counterparts (see section 3.2).

¹⁴ As shown in (i)-(ii), a similar picture arises in French and Italian:

(19) a. S'<u>ha</u> ben enfadat quan li ho han dit.

(He/she) CL has really got angry when (they) to him/her it have said

'(S)he got really angry when they told him/her'

b. T'ho pots *ben* creure.

(You) CL it can indeed believe

'You can indeed believe it'

Examination of the relative ordering of *bien* and pronominal clitics reveals the existence of a further parallelism between this adverb and pre-verbal negative markers. Note that *bien*, like *no*, has to precede all clitics, as shown in (17b)-(17c) and (20)-(21):

- (20) a. Bien se lo dije.
 - (I) well CL DAT CLACC said
 - 'I indeed told him/her'
 - b. *Se lo bien dije.
- (21) a. No se lo dije.
 - (I) not CL DAT CLACC said
 - 'I did not tell him/her'
 - b. *Se lo no dije

Under the assumption that pronominal clitics attach to the I head (see Kayne (1989)), it can easily be concluded that *bien*, on a par with *no*, has to occur in a functional projection above IP, as proposed in (10).

To sum up: the distributional data just discussed provide relevant evidence that the parallelisms between *bien* and preverbal negative marker *no* are in fact quite tight. Both elements surface in a high position above IP and take sentential scope. This pattern contrasts with the behavior of its Romance equivalents such as Catalan *ben* (as well as French *bien* and Italian *ben*), which occupy a lower position in the hierarchical structure.

3.2. **Bien** as a degree-modifier

Besides its regular use as a pre-verbal emphatic positive marker, *bien* may also appear in a low position and take scope over a single constituent rather than over the whole sentence:

(22) a. La habitación estaba *bien* sucia. The room was well dirty

'The room was really dirty'

- b. El jefe trató *bien* duramente a Pepito.
 The boss treated well harshly Pepito
 'The boss treated Pepito truly harshly'
- c. Han comido *bien* poco.(They) have eaten well little'They have really eaten very little'

In (22) bien expresses a high-degree quantification over the properties denoted by either an adjective (22a) or an adverb (22b)-(22c). In spite of this, bien is by no means semantically and syntactically equivalent to its approximate counterpart, the degree modifier muy ("very"). That is, the examples in (22) clearly differ from those in (23):

- (23) a. La habitación estaba *muy* sucia.
 - 'The room was very dirty'
 - b. El jefe trató *muy* duramente a Pepito. 'The boss treated Pepito very harshly'
 - c. Han comido *muy* poco. They have eaten very little 'They have eaten very little'

Unlike those in (23), the examples in (22) do not merely convey a neutral statement expressing a high degree property. They rather denote a high degree property from the perspective of the speaker's attitude. In fact, they

For an extensive account of adjective modifiers in Spanish, see Bosque (1999), Rodríguez-Ramalle (2003), and González (2004), among other authors.

¹⁵ It should be observed that the meaning of *bien* in (22) cannot be rendered by the class of adverbs that denote an extreme-degree quantification such as *extremadamente* ("extremely") and the like. While the latter place the element they modify at the very top of a scale, *bien* reinforces the assertion made in the sentence with regard to the property denoted by the constituent (AP, AdvP) over which it takes scope. Relevant evidence that *bien* and extreme-degree quantifiers do not pattern alike comes from the fact that the latter, contrary to *bien*, may be compatible with negation in certain contexts:

⁽i) a. *Estoy cansada, – aunque <u>no</u> (estoy) *bien* cansada. I am tired – though (I am) not really tired

b. Estoy cansada – aunque <u>no</u> (estoy) {*extremadamente* / *enormemente*} cansada. I am tired – though (I am) not {extremely/enormously tired

are usually interpreted by Peninsular Spanish speakers, 16 like the examples in (17), as emphatic sentences with a subjective flavor. Crucial evidence supporting the parallelism between preverbal bien in (17) and degree-bien in (22) is provided by the fact that the latter, like the former, is incompatible with both negative and positive markers:

(24) a. *La habitación no estaba *bien* sucia.

The room was not well dirty

b. *El jefe sí trató bien duramente a Pepito. The boss yes treated well harshly Pepito

It is worth noting, in this respect, that if it were the case that bien and muy patterned alike, we would expect the examples in (25) to be ill-formed alongside those in (24), contrary to what is the actual case:

(25) a. La habitación no estaba muy sucia.

'The room was not very dirty'

b. El jefe sí trató muy duramente a Pepito. The boss yes treated very rudely Pepito 'The boss did treat Pepito very harshly'

Moreover, bien and muy also differ in that the former, as opposed to the latter, may trigger movement to CP. This property is mainly responsible for the contrast in (26):

(26) a. ¡Y bien bonito que era el barco!¹⁷ And well nice that was the ship! 'But the ship was really nice!'

> b. *¡Y muy bonito que era el barco! And very nice that was the ship!

The example in (26a) shows that bien shares relevant properties with whwords. This pattern is reminiscent of the well-known behavior of exclamative pronouns like $qu\acute{e}$ ("what") and emphatic neuter article lo^{18} in Spanish, as illustrated in (27):

¹⁶ In some varieties of American Spanish, bien has undergone a process of grammaticalization, as a consequence of which its original lexical meaning is lost. In these varieties, bien behaves as a degree-word nearly equivalent to muy ("very").

¹⁷ This example is from Seco (1999), s.v. *bien*.

¹⁸ For a study of the emphatic uses of the neuter determiner *lo* in Spanish, see Bosque and Moreno (1990), Brucart (1993), and Gutiérrez-Rexach (1999).

- (27) a. ¡Qué bonito que era el barco! How nice that was the ship! 'How nice the ship was!'
 - b. ¡Lo bonito que era el barco! LO nice that was the ship! 'How nice the ship was!'

So far we have presented evidence that *bien*, when used as a degree-word, clearly diverges from its approximate counterpart *muy*. In contrast, a significant parallelism can be drawn between preverbal *bien* and degree-bien, namely that they are both oriented to positive polarity.¹⁹ On the basis of this crucial property, it would be tempting to formulate a unified account which conflates the two instances of *bien* into a single category. I tentatively assume that this is the case and thus propose that in the examples in (22) *bien* behaves as an emphatic positive degree-word generated into the Spec position of a *DegreeP*, as in (28):²⁰

(28) [DegreeP bien [Degree [Degree0 [AP sucia]]]]

- (i) a. Julia está *extraordinariamente* preocupada.

 Julia is extraordinarily worried
 - b. Julia está *muy* preocupada.'Julia is very worried'
 - c. *Si*, Julia está *muy* preocupada. 'Yes, Julia is very worried'

Yes, Julia is very worried

See also what is observed in footnote 24.

²⁰ Note that the analysis sketched in (28) does not explain how the emphatic positive value of *bien* is licensed. In order to obtain this result, some mechanism of Agree must be postulated which assures that the inherent features {affirmative, emphatic} of degree-*bien* (see (15)) are checked in the relevant functional category, namely *PolP*. Alternatively, it could be assumed, along the lines of González's (2004:39ff, 53ff) work, that emphatic affirmative degree-modifiers are licensed in *DegreeP* (see footnote 24). I leave this question open for future research.

¹⁹ It is worth noting, in this respect, that a similar situation seems to obtain when comparing emphatic affirmative marker *si* ("yes") with evaluative degree-words like *extraordinariamente* ("extraordinarily"), *realmente* ("really"), *increiblemente* ("incredibly"), etc., which also have been claimed to be oriented to positive polarity. That is, as observed by Rodríguez-Ramalle (2005:517), a sentence like (i.a) is not semantically equivalent to (i.b); instead, it may be (roughly) paraphrased by means of (i.c):

Setting aside a more in-depth account of degree-words,²¹ what it is interesting for the purposes of this work is the fact that by postulating the analysis in (28), we advocate the existence of two distinct hierarchical positions involved in the derivation of *bien*: a low position for degree-*bien*, and a high position for preverbal *bien* (see (10)). If this claim is on the right track, we would expect that both elements exhibit differences in scope, as suggested above. This expectation is fulfilled, as shown by the minimal pairs in (29) and (30):

- (29) a. La soprano está *bien* enfadada. The soprano is well angry 'The soprano is really angry'
 - b. *Bien* se ha enfadado la soprano. Well CL has got angry the soprano 'But the soprano has indeed got angry'
- (30) a. Chomsky ha escrito libros *bien* importantes. Chomsky has written books well important 'Chomsky has written really important books'
 - b. *Bien* ha escrito libros importantes Chomsky.
 Well has written books important Chomsky
 'But Chomsky has indeed written important books'

The examples in (29)-(30) are all interpreted as speaker-oriented statements which take on an emphatic positive reading. However, (a) and (b) in both (29) and (30) sharply diverge in their semantic interpretation. In order to illustrate this contrast, consider the pair in (29). What is stressed in (29a) is the property denoted by the past participle *enfadada*, implying that the state of "being angry" is noteworthy in some way. By contrast, in (29b) *bien* focuses on the whole sentence; in other words, it serves to indicate that the denoted event of "getting angry" really took place. As a consequence, (29b) adopts a contrastive value—nearly a concessive meaning—²² that is lacking in (29a). And the same holds, *mutatis mutandis*, for (30).

Further evidence confirming that scopal differences are at the root of the interpretive contrast shown in (29)-(30) is provided by the examples in (31):

²¹ The structure in (28) may be refined along the lines of recent studies on degree adverbs. See, in this respect, Corver (2000), among others. Regarding the structure of *DegreeP* in Spanish, see Brucart (2003), Rodríguez-Ramalle (2003), and González (2004). I do not pursue this issue here, as it is not crucial for the purposes of this work.

²² See Hernanz (2006a) for a more detailed account of the concessive value of preverbal *bien*.

- (31) a. *Nôtre-Dame de París es *bien* gótica. Nôtre-Dame of Paris is well Gothic
 - b. *Bien* es gótica Nôtre-Dame de París.'But Nôtre-Dame of Paris is truly/indeed Gothic'

Given that preverbal *bien* occupies a structural position higher than degreebien, the asymmetry in (31) follows in a natural way. That is, the latter, being a degree word, is incompatible with non-scalar adjectives such as gothic; hence, (31a) is ruled out. As for (31b), no incompatibility arises, since preverbal *bien* takes scope over the whole sentence (see (10)) rather than merely over the AP.

The preceding discussion seems to suggest that an interesting parallelism may be drawn between the distribution of "high" and "low" *bien* on the one hand, and its semantic interpretation on the other. If this supposition is correct, it should be expected that (preverbal) *bien* exhibits a different semantic behavior than its Romance counterparts, which surface in a low position (see examples in (17)-(19)). This expectation is supported by empirical evidence from Catalan. In this language, the two varieties of the *bien* counterpart are instantiated by means of two distinct lexical items—*ben* and *bé* ("well")—which fall under different distributional and semantic patterns. The relevant contrast is given in (32):

- (32) a. S'<u>ha</u> ben enfadat quan li ho han dit. = (19a) (He/she) CL has really got angry when (they) to him/her it have said
 - '(S)he got really angry when they told him/her'
 - b. Bé s'ha enfadat quan li ho han dit.
 (He/she) well CL has got angry when (they) to him/her it have said
 'But (he/she) indeed got angry when they told him/her'

Setting aside a closer examination of the paradigm of *ben/bé* in Catalan, a what is relevant for the purposes of this work is that the contrast in (32) is reminiscent of the asymmetry illustrated in (29)-(30). More precisely, the example in (32b), on a par with those in (29b) and (30b), in which *bé/bien* surface in a high position, signals a high degree of speaker's commitment to the whole content expressed in the proposition. On the other hand, in (32a), as well as in (29a) and (30a), the bulk of the emphatic assertion focuses on a single constituent (i.e., *enfadat /enfadada /importantes*), which turns out to be interpreted as implying that the property it denotes is somehow salient or

²³ See Hernanz (1999), (2006a), and Rigau (2004) for further discussion of this issue.

quantified in a high degree. If we take this view, it comes as no surprise that ben, like degree-bien (see (31a)), is incompatible with non-gradable predicates, whereas $b\acute{e}$, similarly to (preverbal) bien, may freely appear in a sentence regardless of the nature of the predicate. Compare, in this respect, (33) with (31):

- (33) a. *La soprano s'ha *ben* comprat un llibre.

 The soprano CL_{DAT} has indeed bought a book
 - b. Bé s'ha comprat un llibre la soprano.
 Well CL_{DAT} has bought a book the soprano 'But the soprano bought a book'

To summarize, several conclusions may be reached from the data examined so far. First, emphatic positive marker *bien* may be viewed as splitting into a high and a low variety (i.e., preverbal and degree-*bien*), which scope over the whole sentence or a single constituent, respectively. Second, the interpretive contrasts between the two instances of *bien* may be attributed to their different focal properties. Finally, the same holds in other Romance languages such as Catalan, where a rather similar semantic parallelism is attested between *bé* and *ben*, the former arising in a more prominent structural position than the latter.

3.3. **Bien** in pre-Comp position

In parallel with the constructions discussed in the preceding subsections, Spanish also displays sentences in which the emphatic affirmative word *bien* surfaces to the left of the complementizer *que* ("that").²⁵

(I) CL_{DAT} really promise that (I) CL_{ACC} will do

²⁴ Interestingly enough, a similar pattern has been claimed to exist in the case of emphatic affirmative marker si ("yes"), on the one hand, and evaluative words denoting extreme degree quantification, on the other (see footnote 19). According to González (2004: 53), both ΣP (*FocusP*, in my analysis) and *DegreeP* host an emphatic affirmative feature, the only difference consisting of its scope: while the former focuses on the whole sentence, the latter merely takes scope over the property denoted by the adjective.

²⁵ It is worth noting that Catalan *bé*—contrary to *ben*—patterns like Spanish *bien* in that it is also compatible with the complementizer *que*, as seen in (i):

 ⁽i) a. Bé que s'ha enfadat la soprano.
 Well that CL got angry the soprano 'But the soprano got really angry'

b. *Et ben que prometo que ho faré.

This is shown in (34):²⁶

- (34) a. "He aprendido el valseo y las habaneras. ¡Vaya!... ¡Y bien que me gustan!"
 - (I) have learnt the valseo and the habaneras. Go! And well that (they) CL_{DAT} please!
 - 'I have learnt the valseo and the habaneras [folkdances]. Imagine! And I do indeed like them!'
 - b. "Pues sí que tiene argumentos... Y bien que los muestra" So yes that ((s)he) has arguments... And well that ((s)he) CL_{ACC} show
 - 'She certainly does have arguments. And you can bet she uses them!'
 - c. A. ¿Por qué te has enfadado tanto? 'Why did you get so angry?'
 - B. ¿Y tú me lo preguntas? Pues bien que lo sabes! And you CL_{DAT} CL_{ACC} ask? So well that (you) CL_{ACC} know 'Are you really asking me? You know very well why!'

The examples in (34) may be regarded, *prima facie*, as nearly equivalent, on interpretive grounds, to those in (5b), (12), and (17), in which the complementizer que does not show up. In fact, they all share an emphatic affirmative meaning that derives from the core value of bien proposed in (15). A closer look at the data reveals, though, that despite their similarities, bien and bien que do not pattern alike. To begin with, it should be noted that sentences headed by bien que qualify as stronger assertions than those containing bien. More precisely, the function of bien when preposed to C is to focus on the truth of the whole assertion rather than just the event denoted in the proposition. Thus, (34a) reflects the speaker's emphatic claim that (s)he likes the *valseo* and the *habaneras*, despite the fact that the interlocutor could suspect otherwise. Similarly, bien que is used in (34c) to express a strong degree of confidence on the part of the speaker about the truth of the proposition (that is, "You know why I got so angry"), even though from the question raised in the previous discourse precisely the opposite could be inferred, namely, that the hearer does NOT know why the speaker got so angry. 27

The contrast illustrated in (i) provides further support for our claim that Romance equivalents of Spanish *bien* may be viewed as comprising a "high" and a "low" variety.

²⁶ The examples in (34a) and (34b) are from the data base: http:// www.corpusdelespanol.org Recall that *bien (que)*, due to its presuppositional import, cancels an implicit—hence not overtly formulated—negative expectation (see section 2.3). Accordingly, (34c) cannot qualify

In light of the preceding observations, it seems plausible to assume that the alternation between *bien* and *bien que* is constrained by discursive factors. The ill-formed examples in (35) show that this is effectively the case:

- (35) a. He aprendido el valseo y las habaneras. ¡Vaya!... *??Y bien me gustan!
 - b. Pues sí que tiene argumentos... *??Y bien los muestra.
 - c. A. ¿Por qué te has enfadado tanto?
 - **B**. ¿Y tú me lo preguntas? *Pues *bien* lo sabes!

The contrasts illustrated in (34)-(35) provide evidence that *bien* is precluded in a variety of cases where *bien que* is permitted. By the same token, it should be expected that some contexts compatible with *bien* prohibit the occurrence of *bien que*. The following examples confirm this expectation:

- (36) a. A. ¿Qué hora es?
 - 'What time is it?'
 - b. **B**. No sé, *bien* podrían ser las seis.
 - (I) not know, well could be six o'clock
 - 'I don't know, but it could well be six o'clock'
 - c. B. *No sé, bien que podrían ser las seis.
- (37) a. A. ¿Qué tiempo hace hoy?
 - 'What is the weather like today?'
 - b. B. Está muy nublado, bien podría llover.
 - (It) is very cloudy, well could rain
 - 'It is very cloudy, it could well rain'
 - c. **B**. *Está muy nublado, bien que podría llover.

The examples in (36c) and (37c) are clearly ill-formed. The explanation for this comes from the fact that *bien que* carries a strong assertive value which, contrary to what happens in (34), cannot be anchored in the previous

as a felicitous response to a previous sentence such as (ia), which corresponds to its negative counterpart:

- $(i) \ \ a. \ \ \underline{No} \ s\'e \ por \ qu\'e \ te \ has \ enfadado \ tanto.$
 - 'I don't know why you got so angry'
 - b. #Pues bien que lo sabes!

And the same applies, mutatis mutandis, to (34a) and (34b).

context. Consider, in this respect, (36). When saying (36a), the speaker **A** is actually asking what time it is, with no further subjective implicature; hence, this utterance qualifies as a neutral question, from which it is not inferrable that the speaker suspects that it may not be true that it is six o'clock. As a consequence, the sentence headed by *bien que* in (36c) is interpreted in this case as an inappropriate response, since it vacuously cancels—so to speak—an implicit negative statement which *bona fide* cannot be attributed to the interlocutor.

Additional support for the assumption that *bien que* focuses on the truth of the proposition comes from the fact that the examples in (34) allow (approximate) paraphrases such as those in (38), where *bien* takes scope over epistemic predicates like *verdad* ("truth"), ²⁸ *cierto* ("certain"), etc.:

(38) a. *Bien* es verdad que me gustan.

Well is truth that (they) CL_{DAT} please!

'It is indeed true that I like them!'

b. Bien es cierto que lo sabes.
 Well is certain that (you) CL_{ACC} know 'You know very well!'

Interestingly enough, bien que, as opposed to bien, cannot co-occur with verdad and cierto, which clearly suggests that the semantic content of the former, since it has to do with the truth value of the proposition, clashes with the modal value encoded by the predicates alluded to, and, as a result, the sentence is ruled out:

- (39) a. *Bien que es verdad que me gustan.
 - b. *Bien que es cierto que lo sabes.

Having established that discursive factors are at the root of the contrasts discussed in (34)-(37), we are in a position to provide a more precise analysis of the behavior of *bien que*. My claim is that when uttering a sentence with *bien que* the speaker implicitly evokes an assertion which is in some sense its negative counterpart, and reverses its polarity by reinforcing the truth value of the proposition containing it. According to this view, it seems plausible to suggest that the use of *bien que* is associated with a somehow echoic flavor that is mainly responsible for the semantic interpretation of the sentence.

²⁸ See Etxepare (1997) for a detailed account of *la verdad* constructions.

It is worth noting, in this respect, that the case under consideration is reminiscent of an often observed phenomenon, namely the behavior of a number of particles closely related to emphatic polarity such as the enclitic form *-tu* in Quebec French (see Vinet (2000)), and the sentence-initial affirmative word *kyllä* ("yes") in Finnish (see Kaiser (2006)). More specifically, let us hypothesize, along the lines of Cormack and Smith's (1998) proposal, that there are two polarity positions in the sentential structure: an internal position corresponding to the functional projection *PolP*, and an external position in the CP domain—a position that these authors labeled *Echo(ic)*—whose scope encompasses the whole sentence. This is illustrated in (40):

Extending the parallelism between positive and negative polarity we discussed above to the case of *Echo*, we therefore assume two possible values [POS] and [NEG] for this node, as argued by Cormack and Smith (1998:28). Furthermore, similarly to *bien*, which has been claimed to behave as the positive emphatic counterpart of negative markers hosted in *PolP* (see (10)), I will take *bien que* to correspond to the positive version of the *Echo* position in (40). As a first approximation, to be modified throughout the following sections, let me tentatively propose the structure in (41), where *bien* is merged in a higher *PolP* position in the C domain and *que* fulfills the head of this projection:

(41)
$$[CP [PolP1$$
 bien $[[que] ... [PolP2 [IP ...]]]]]$

The existence of a special relation between polarity words and the head of CP is further attested by the case of the Spanish affirmative word *si* ("yes"), which may also occur left-adjacent to the complementizer *que* ("that"):

(42) a. Si ha venido. (Etxepare, 1997:124)
Yes (he) has come
'He did come'
b. Si que ha venido.
Yes that (he) has come

As has been observed by Etxepare (1997), the examples in (42) diverge in their communicative import. According to this author, "[42b] but not [42a] is felicitously uttered only if there is a previous assertion putting into question or denying that a given person is coming. The communicative import of

[42b] is then to counter that assertion by claiming that the relevant person is indeed coming" (see Etxepare (1997:125)). Setting aside an in-depth study of the alternation between *si* and *si que* in Spanish,²⁹ what is relevant for the purposes of this discussion is the fact that the latter is also compatible with not-denying contexts,³⁰ as illustrated in (43).³¹ This seems to suggest that *si que*, on a par with *bien que*, rather than merely stressing that the event denoted in the proposition did take place, serves to emphasize the truth value of the proposition:

(43) a. "Los niños vienen sin libros de instrucciones. Esto *sí que* es un milagro!"

The children come with no books of instructions. This yes that is a miracle!

'Children come without instruction manuals. That's *really* a miracle!'

b. "¿No decías que no te gustaban las bebidas de soja? Pues chica, he probado Puleva, y ésta *sí que* está buenísima!"

Didn't you say that you didn't like soy beverages? So, girl, (I) have tried Puleva, and it yes that is truly delicitious!

'Didn't you say that you didn't like soy beverages? Well, honey, I tried Puleva and it was truly delicicious!'

c. "Carrefour le ofrece este fin de semana precios de vértigo... Esto *sí que* es un aniversario!"

Carrefour CL_{DAT} offers this end of week prices of vertigo... This yes that is an anniversary!

'This weekend Carrefour is offering incredibly low prices! Now, that's a *real* anniversary!'

Now let us return to the representation in (41), where two polarity positions are categorially distinguished: the higher one is situated in the CP field, while the lower one precedes the IP domain. Given this distribution, we

²⁹ For a comparative analysis of *si que* and their equivalent in other Romance languages, see Martins (2006).

³⁰ I differ from Etxepare (1997) in finding (42b) quite acceptable when uttered as a response to a previous sentence like (i), from which it cannot effectively be inferred that Juan is not coming:

⁽i) ¿Ha venido Juan? 'Did Juan come?'

³¹ The examples in (43) are advertisements taken from advertising campaigns.

would expect both categories to have a distinct morphological realization. The examples in (44) confirm this prediction:

- (44) a. Pepito *sí que* <u>no</u> come pasta.

 Pepito yes that not eats pasta

 'Of course Pepito doesn't eat pasta, I'm positive'
 - b. Hoy *si que* no hace frío.

 Today yes that (it) is not cold 'It is certainly not cold *today*'

The above examples are perfectly acceptable sentences in Spanish, despite the presence of two mutually exclusive polarity markers, namely si and no, which, being in complementary distribution, fail to co-occur in the same sentence, as in (45):

- (45) a. *Pepito *si* <u>no</u> come pasta. Pepito yes not eats pasta
 - b. *Hoy *si* <u>no</u> hace frío. Today yes it is not cold

The sharp contrast between (44) and (45) clearly shows that *si que*, contrary to *si*, does not compete with *no* for the same position in the sentence. This leads us to conclude, as proposed in (41), that there are two **Pol** nodes available in Spanish, the higher one hosting *external* polarity markers which focus on the truth value of the proposition. This approach is in agreement with the fact that *si que*, rather than reversing the negative orientation of the events denoted in (44) (i.e., "Pepito does not eat pasta", "It is not cold"), serves to reinforce the positive value of the whole assertion.

Finally, the assumption that *bien* and *si*, when followed by *que*, behave as external affirmative markers is further substantiated by the pattern of negation, which has also been claimed, as widely known, to split into an external (or metalinguistic) negation and an internal one.³² Without embarking on a more detailed analysis of this issue, it is worth noting that Catalan provides compelling evidence to support the representation in (40). Consider, in this respect, the examples in (46),³³ where two positions for negation are attested:

³² See Cormack and Smith (1998), Vinet (2000), Kaiser (2006), and the references therein.

³³ It should be observed that Spanish sharply diverges from Catalan in precluding the *no que* strategy, as seen in the examples in (i), which are the counterparts of those in (46):

(46) a. *No que* no ha vingut la Lola. Not that not has come the Lola 'But Lola did *not* come'

b. No que no ballarà la Maria avui.
 Not that not will dance the Maria today
 'But Maria is not going to dance today'

As expected, the examples in (46) are by no means equivalent to their counterparts in (47), where a single *Pol* position is filled:

(47) a. *No* ha vingut la Lola.

'Lola did not come'

b. La Maria no ballarà avui.

'Maria will not dance today'

Like *si que* in Spanish, the *no que* strategy in Catalan is used to focus on the polarity of the whole assertion.³⁴ More precisely, preposed negation is not used in (46) to negate the denoted event of Lola's coming or Maria's dancing. Instead, it serves to contradict a previous affirmative assertion that is old information due to contextual reasons.³⁵

Summing up: in the preceding sections I have shown that there exist three distinct "spaces" for the emphatic affirmative marker *bien* in Spanish, namely, a low position (degree-*bien*), a high position (preverbal *bien*), and an "upper" position (pre-C *bien*). I also claimed that, due to their different scopal properties, each of these positions is associated with a different semantic interpretation. Finally, using data from the distributional behavior of both *bien* and *si* with respect to the complementizer *que*, I argued for two polarity positions: echoic and sentential.

Having provided empirical evidence that emphatic polarity words such as *bien* (and si) may precede *que* ("that") in the CP system (see (41)), the question arises as to whether the left periphery is also activated when preverbal *bien* is generated in the canonical *PolP* position (see (10)). I will turn to this issue in the next section.³⁶

⁽i) a. *No que no ha venido Juan.

b. *No que no bailará María.

³⁴ On external negation in Catalan, see Espinal (2002).

³⁵ See Kaiser (2006) for further discussion of fronted negation in Finnish, which exhibits striking similarities with the *no que* pattern in Catalan.

³⁶ In the remainder of this work, for reasons of space, I will disregard degree-*bien* and concentrate on the contrast between preverbal *bien* and *bien que*.

4. Syntactic analysis of bien

As mentioned at the outset of this work, *bien* is an affirmative marker which may be attributed the syntactic representation in (10), repeated here:

(10)
$$\lceil_{CP} \dots \lceil_{PolP} \text{ bien } \lceil_{Pol'} \lceil_{Pol} \rceil \rceil_{IP} \dots \rceil \rceil \rceil \rceil$$

The analysis in (10) is motivated by the fact that *bien* shares a number of salient properties with negative words. However, this is not all that can be said of this adverb. A closer examination of the data reveals, on the one hand, that *bien*, despite its polarity import, sharply diverges from negative markers in many relevant ways. On the other hand, there is compelling evidence suggesting that *bien* behaves like a *wh*-element: a pattern that cannot be captured by the analysis given in (10).

In this section, I will study both issues in some detail. Firstly, some asymmetries between *bien* and the negative adverb *no* will be examined. Secondly, I will discuss a variety of striking similarities holding between *bien*-sentences and *wh*-sentences. Finally, on the basis of such a parallel, I will argue that *bien* targets a high position in the Comp-layer, namely the Specifier of *FocusP* (see Rizzi (1997)):

(48)
$$\lceil_{ForceP} \lceil_{TopicP} \lceil_{FocusP} \mathbf{bien}_i \lceil_{PolP} t_i \lceil_{IP} \dots \rceil \rceil \rceil \rceil \rceil$$

4.1. **Bien** vs. **no**: some puzzling asymmetries

Beyond the common properties discussed in section 3.1, *bien* and *no* show a number of distributional differences. Firstly, note that quite generally *bien*, unlike negative adverb *no*, is restricted to main clauses.³⁷ That is, *bien* is banned from complement-tensed clauses (49), as well as embedded infinitives and gerunds (50):

- (49) a. Le aconsejaron que {*bien / no} fumara. They advised him {well / not} to smoke
 - b. Lamento que {*bien / no} sean ricos.
 I regret that they {well are/ are not} rich

³⁷ It should be noted that *bien* is allowed in indicative embedded clauses selected by the class of predicates belonging to the paradigm of declarative and epistemic predicates. This fact can be accounted for in a rather natural way under the largely motivated assumption that indicative dependent clauses seem to constitute independent assertions (see Torrego and Uriagereka (1992), Etxepare (1997) and Gallego (2004)).

- (50) a. Es necesario {*bien / no} decir la verdad. It is necessary {well / not} to tell the truth
 - b. {*Bien / no} diciendo la verdad, no le convencerás.By {well / not} telling the truth, you will not convince him

And the same holds for adverbial clauses, as in (51):

- (51) a. Como Julia {*bien / nunca} fuma, siempre se está quejando. Since Julia {well / never} smokes, she is always complaining
 - b. Cuando Pepe {*bien / no} trabaja, ve la televisión. When Pepe {well / not} works, he watches television

Secondly, in contrast with *no*, *bien* cannot appear in Root Infinitive constructions like (52), as illustrated in (53):

- (52) Julia comprar un Volkswagen?! No me lo puedo creer! Julia buy-INF a Volkswagen?! NEG CL_{DAT} CL_{ACC} can believe! 'Julia buy a Volkswagen?! I can't believe it!'
- (53) a. *Julia *bien* comprar un Volkswagen?!

 Julia well buy a Volkswagen?!
 - b. *No* comprar nadie un Volkswagen?! 'Nobody buy a Volkswagen?!' ((53b): Grohmann and Etxepare, 2003:215)

The data in (52)-(53) constitute clear evidence that bien and negative adverbs no and nunca sharply diverge on syntactic grounds. The point at issue here is the structural hierarchy of these polarity markers. To begin with, let me concentrate on the examples in (49)-(50). Suppose that subordinate clauses—along the lines of recent proposals (see Haegeman (2002))—may differ in the internal structure of their CP. As is well-known, Force is taken to encode the illocutionary value of the sentence (see Rizzi (1997)). Consequently, it seems plausible to suggest that, since they are dependent on the matrix force, complement clauses have an impoverished CP-structure, in which the top domain, including Force and Focus, does not project. If this suggestion is on the right track, the ill-formedness of the examples in (49)-(50) is predicted, as it comes from the fact that there is no functional projection FocusP to host bien in the embedded clauses. By the same token, we expect the contrast involving adverbial clauses illustrated in (51). Moreover, adverbial clauses provide additional support for the analysis I am proposing. It is common knowledge that these clauses do not constitute a homogeneous group. In this regard, Haegeman (2002), (2003:21) observes that they fall into two patterns in terms of their internal structure: i) central adverbial clauses, like those in (51), which lack the *Force* field, and ii) peripheral adverbial clauses, which pattern as root sentences in that they contain a full *Force* domain. Under this approach, we could expect *bien* to freely appear in the latter clauses, since they have a fully articulated CP-structure. This prediction is borne out, as illustrated by the minimal pair in (54a)-(54b), involving a central and a peripheral causal clause, respectively:³⁸

- (54) a. *Julia no ha ido a trabajar porque *bien* estaba enferma.

 Julia not has gone to work because (she) well was ill
 - b. Julia no debe de estar enferma, porque *bien* ha ido a trabajar. Julia not must be ill, because (she) well went to work 'Julia must not be ill, because indeed she went to work'

Further evidence supporting the distributional asymmetry between negative and positive markers is provided by Root Infinitives in (53). These constructions have been argued to exhibit a deficient structure in the Complayer (see Grohmann and Etxepare (2003)). This hypothesis, combined with my claim that *bien* targets *FocusP*, easily accounts for the fact that *bien*, unlike *no*, is precluded in these constructions.

4.2. The status of bien as a wh-operator

In this section, I will examine a number of salient syntactic properties of sentences headed by *bien*, and I will show that they can be accounted for under the assumption that *bien*, being a focal adverb, behaves like a *wh*word.

To begin with, recall that *bien* must precede the finite verb (see section 3.1.). Note, in this respect, that examples like (55), where the subject intervenes between *bien* and V, are systematically ruled out:

(55) a. *Bien Juan podría ayudarme. Well Juan could help+CL_{ACC}

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³⁸ As is widely known, central causal clauses differ from peripheral causal clauses in terms of their logical and syntactic relationships. Thus, while in (54a) the subordinate clause expresses the cause that triggers the event denoted by the main clause, in (54b) the subordinate clause expresses the reason why the event denoted by the main clause is asserted.

b. *Bien Julia se ha molestado cuando se lo han dicho. Well Julia CL has got upset when (they) CL_{DAT} CL_{ACC} have said

The ungrammaticality illustrated in (55) clearly suggests that adjacency between *bien* and V is required. As is well-known, the same restriction holds for *wh*-elements in both interrogative (56) and exclamative sentences (57):

- (56) a. *¿Qué <u>la soprano</u> dijo? What the soprano said?
 - b. ¿Qué dijo la soprano? What said the soprano? 'What did the soprano say?'
- (57) a. *¡Qué cosas <u>la soprano</u> dice!
 - b. ¡Qué cosas dice la soprano!'What things the soprano says!'

The paradigm in (55)-(57) may be taken as evidence allowing us to postulate that *bien*, like *wh*-elements, triggers **V-to-Comp** movement. I will turn to this issue later on.

Secondly, the view that *bien* and *wh*-elements pattern alike in significant ways is also supported by the distribution of topicalized constituents. Notice that clitic left dislocated elements may freely occur in front of *bien*, as illustrated in (58):

- (58) a. La carta *bien* la escribimos ayer.

 The letter, (we) well CL_{ACC} wrote yesterday
 'But we did write the letter yesterday'
 - b. La carta, a Pepe *bien* se la escribimos ayer. The letter, to Pepe (we) well CL_{DAT} CL_{ACC} wrote yesterday 'But we did write the letter to Pepe yesterday'

The examples in (58) parallel interrogative sentences, which also allow for topicalized phrases to precede the *wh*-element:

- (59) a. La carta, ¿quién la escribió? The letter, who CL_{ACC} wrote? 'Who wrote the letter?'
 - b. La carta, a Pepe, ¿quién se la escribió?

 The letter, to Pepe, who CL_{DAT} CL_{ACC} wrote?

 'Who wrote the letter to Pepe?'

Note that an alternative order in which topicalized constituents appear between *bien* and V is, however, excluded:

(60) a. *Bien la carta la escribimos ayer.
Well the letter (we) CL_{ACC} wrote yesterday
b. *Bien la carta, a Pepe se la escribimos ayer.
Well the letter, to Pepe (we) CL_{DAT} CL_{ACC} wrote yesterday

As is well-known, the same restriction holds for wh-words.³⁹

(61) a. *¿Quién, la carta, la escribió? Who, the letter, CL_{ACC} wrote?

b. *¿Quién, la carta, a Pepe, se la escribió? Who, the letter, to Pepe, CL_{DAT} CL_{ACC} wrote?

Given my claim that *bien* falls under the paradigm of *wh*-elements, the word order illustrated in (58) and (60) is predicted, as it is reminiscent of a more general pattern involving the distribution of *Wh* operators and Topics (see Rizzi (1997:291)):

(62) TOPIC – WH *WH – TOPIC

A third piece of evidence suggesting that *bien* behaves as a *wh*-element comes from the fact that *bien* is banned from (standard) constructions submitted to *wh*-movement. That is, *bien* is incompatible with interrogative and exclamative clauses. This is seen in (63) and (64), respectively:

- (63) a. ¿Qué ha comido Julia? What has eaten Julia? 'What did Julia eat?'
 - b. *¿Qué *bien* ha comido Julia? What well has eaten Julia?
- (64) a. ¡Qué casa se ha comprado Julia! What house CL_{DAT} has bought Julia! 'What a house Julia has bought!'

 39 See Hernanz and Brucart (1987:chapter 3) for a more detailed analysis of this issue in Spanish.

b. *¡Qué casa *bien* se ha comprado Julia! What house well CL_{DAT} has bought Julia!

And the same prohibition also extends to sentences with a preposed constituent bearing focal stress, as in (65):

- (65) a. UNA CASA se ha comprado Julia (y no un apartamento).
 A HOUSE CL_{DAT} has bought Julia (and not an apartment)
 'It's a house that Julia has bought, not an apartment'
 - b. *UNA CASA *bien* se ha comprado Julia (y no un apartamento). A HOUSE well CL_{DAT} has bought Julia (and not an apartment)

The contrasts illustrated in (63)-(65) provide support for the view that *bien* enters the paradigm of *wh*-elements. If *bien* and *wh*-operators behave alike, targeting a unique structural position, it comes as no surprise that they are in complementary distribution. Putting it differently, the illformedness of the examples in (63b), (64b) and (65b) is consistent with the assumption that only a single focus projection is available in a sentence (see Rizzi (1997: 290)).

4.3. The position of the subject

A further parallelism between *bien* and *wh*-elements is provided by word order. Going back to the examples discussed at the outset of this work, note that *bien* (like *sî*) triggers the inversion of the subject. Compare (66a) with (66b):

- (66) a. Pepito ha comido pasta.
 - b. Bien ha comido pasta Pepito.

Given that subjects in Spanish can easily appear in post-verbal position, (66b) could be regarded as a case of free inversion, similar to (67):

(67) Ha comido pasta Pepito.

However, a closer look at the data shows that this parallelism cannot be mantained. As widely assumed,⁴⁰ post-verbal subjects in Spanish are interpreted as the focus of the sentence;⁴¹ hence, the DP *Pepito* counts as

⁴⁰ See Contreras (1978) and Zubizarreta (1999), among other authors.

Following Zubizarreta (1999:4233), I assume that word order VOS is obtained from a rule that rearranges the constituents [S] and [VO], as schematically represented in (i):

new information in (67). This pattern, though, does not extend to *bien*-sentences. Contrary to what happens with (67), in (66b) the underlined subject is interpreted as old information rather than as a focal constituent. The need to make a distinction between the two post-verbal positions in (67) and (66b) is shown by the following contrast:⁴²

- (68) a. Ha comido pasta <u>Pepito</u>, y no Julia. Has eaten pasta <u>Pepito</u>, and not Julia 'It was <u>Pepito</u> that ate pasta, not Julia'
 - b. *Bien ha comido pasta Pepito, y no Julia.

Given my claim that the informative status of post-verbal subjects clearly diverges in both unmarked declarative sentences and *bien*-sentences, the contrast in (68) is expected. Namely, it comes from the fact that the negative conjunct *y no Julia* ("and not Julia"), conveying a contrastive reading, is only compatible with a focal subject, as in (68a).

Setting aside the controversial issue of the position of the subject in Spanish, ⁴³ what is relevant for the purposes of this discussion is the fact that post-verbal subjects in *bien*-sentences do not qualify as a case of free inversion, as the contrast between (68a) and (68b) is intended to show.

A potential problem for the claim that *bien*-sentences do not behave like declarative sentences with respect to subject word order is given in (69). This example, when compared to (66b), might indeed suggest that subject inversion is putative rather than compulsory in *bien*-sentences:

(69) Pepito bien ha comido pasta.

My contention is that, although it precedes the V, the underlined DP in (69) occupies not a subject position, but rather a topic position, as illustrated in (70). This assumption is substantiated by the fact that $TopicP^{44}$ is an available position in front of FocusP (see Rizzi (1997)):

⁽i) [[F S][V O]] [[V O][F S]]

⁴² Additional support for this claim is provided by intonational factors. Thus, in the examples in (66b), in contrast to those in (67), postverbal subjects are set off from the rest of the sentence by a slight pause.

⁴³ See, on this question, Ordóñez (1998).

⁴⁴ Note, in this connection, that *Clitic Left Dislocation* (CLLD) is clearly attested in *bien*-sentences, as shown in (i):

(70) [ForceP [TopicP Pepito_i [FocusP bien_i [PolP t_i [IP e_i ...]]]]]

Strong evidence against the assumption that subject position is available for preverbal DPs in *bien*-sentences comes from quantified DPs. As is widely known, ⁴⁵ bare quantifiers (*all*, *nobody*, etc.), as well as non-specific quantified NPs, are banned from topic position. ⁴⁶ Accordingly, if the underlined DP in (69) were in the canonical subject position, one would expect that it could be replaced by a quantified DP. This expectation is not fulfilled, as shown in (71):

- (71) a. Todo el mundo (*bien) comió pasta.Everybody (well) ate pastab. Poca gente (*bien) ha comido pasta.
 - b. Poca gente (*bien) ha comido pasta. Few people (well) ate pasta

Further evidence supporting the analysis given in (70) comes from superlatives. Note that superlative-DPs cannot be dislocated, as shown in (72):

- (72) a. Las dudas, Julia no las soporta. (Villalba, p.c.)

 Doubts, Julia does not CL_{ACC} stand

 'Julia can't stand not knowing for sure'
 - b. *La más pequeña duda, Julia no la soporta. (Villalba, p.c.) The most little doubt Juan does not CL_{ACC} stand

Again, *bien*-sentences where a superlative DP emerges in preverbal position are ruled out, as predicted by my analysis:

(i) La carta bien la escribimos ayer.
 The letter, (we) well CL_{ACC} wrote yesterday
 'But we did write the letter yesterday'

⁴⁶ This is shown in (i):

(i) a. *Nessuno, lo conosco in questa città. (Rizzi, 1986:395) Nobody, I know him in this city

b. *Tutto, lo dirò alla polizia.Everything, I will say to the police

See also Belletti (1990), Rizzi (1997), and Haegeman (2000), among other authors.

⁴⁵ See Rizzi (1986) and Cinque (1990).

- (73) a. La más pequeña duda le pone nervioso.

 The most little doubt CL_{ACC} makes him upset 'The slightest doubt upsets him'
 - b. *La más pequeña duda bien le pone nervioso.

To sum up, the data discussed so far lead us to conclude that *bien*, being an emphatic affirmative marker, is quantificational in nature; hence, it shares relevant properties with *wh*-elements: i) it must appear left-adjoined to the verb; ii) it is incompatible with focal operators; iii) it may co-occur with topicalized constituents in the fixed order {TOP-*bien*}; and iv) it triggers subject inversion. Furthermore, the approach presented here is consistent with the observed parallelism between the syntax of Negative Inversion and that of *wh*-sentences (see Haegeman (2000)).⁴⁷ As already noted, negation and affirmation have been argued to belong to a more abstract category (*PolP*) that encodes the polarity of the sentence (see Laka (1990)). Consequently, we would expect that some syntactic properties holding for negative sentences may hold across the whole paradigm of negative and positive polarity, as seems to be the case.

4.4. **Bien** in the articulated CP domain

I would now like to turn to the syntactic analysis proposed in (48). Recall that *bien*, being a positive marker, merges with *PolP* (see (10)), and from this category moves to a higher syntactic position. In a theory assuming an articulated CP-structure along the lines of Rizzi (1997), the question arises as to which node in CP triggers movement of positive polarity to the CP-domain. I claim that it is *FocusP*, which has been conceived as a category subsuming both contrastive focus and focused polarity, that does it. That is, *bien* (like *si*) targets *FocusP* in order to express emphatic affirmation, as schematized in (48). More precisely, I propose that *bien* is attracted to [Spec, FocusP] in order to check off an interpretable feature [+ EMPH(atic)] (see

(Haegeman, 2000)

⁴⁷ It is worth emphasizing in this regard that *bien*-sentences parallel English Negative Inversion in many significant ways (see Haegeman (2000)). That is, both constructions pattern alike in that they trigger subject-auxiliary inversion, they are incompatible with *wh*-inversion, and they allow for the preposing of topicalized constituents:

⁽i) a. On no account will I read e-mail.

b. *On no account where should I go?

c. During my sabbatical, on no account will I read e-mail.

⁴⁸ See Holmberg (2001) for a detailed account of this issue.

(15)), this movement being required by the FOCUS-criterion (see Rizzi (1997)).⁴⁹ The hypothesis that the FOCUS-criterion is at work in the case under study is supported by the fact that *bien*-sentences have a distinctive emphatic caracter,⁵⁰ which suggests that the focus layer of the left periphery is indeed activated.

In accordance with the view that *bien* moves from *PolP* to *FocusP* on the left periphery, the facts illustrated in (55)-(68) follow in a rather natural way. Let us examine this issue in some detail. Consider, first, subject inversion, illustrated in (55)-(57). I suggest that the impossibility of (55), similarly to the ill-formedness of (56)-(57), comes from a violation of the FOCUS-criterion, which has to be satisfied by moving the finite verb to the head of *FocP*, in order to create a specifier-head configuration between the **EMPH**-feature on T⁵¹ and the focus operator.⁵² This movement yields the adjacency effect between *bien* and V observed above.

As for the distribution of *bien* with respect to topics, it seems plausible to postulate that the paradigm discussed in (58)-(62) follows from the ordering constraints holding for *Topic* and *Focus* in the left periphery (see Rizzi (1997:297)).

Finally, going back to the examples in (63)-(65), the contrasts between (a) and (b) can be accounted for by claiming, as suggested above, that the ill-formedness of the examples in (b) is the result of a *collision* between two quantified elements: that is, the [+ **EMPH**] feature competes with the [+*Wh*-] feature in Spec of *Focus*—see Rizzi (1997:325).⁵³

The partial structure for *bien*-sentences is given in (74):⁵⁴

⁴⁹ Following Rizzi (1997:325), I assume that "All instances of preposing to the left periphery must be triggered by the satisfaction of a Criterion". The FOCUS-criterion is conceived in Rizzi (1997:299) as comprising both the Wh-criterion and the NEG-criterion (see Haegeman (2000:23)).

⁵⁰ See Gutiérrez-Rexach (2001), among others, for a similar claim with respect to exclamative sentences.

⁵¹ Transposing the standard analysis for negative sentences (and *wh*-sentences) to the constructions under study, I assume that the quantificational feature conveying the emphatic positive import in *bien*-sentences is generated under T, which gives rise to V-to-C movement. See Rizzi (1997), and Haegeman (2000), among other authors.

⁵² Alternatively, one could opt for a reformulation of this analysis within the framework of Chomsky (1995) and subsequent works. I leave the question open, as it is not crucial for the purposes of this study.

For reasons of space, I do not address the analysis of the postverbal subject in *bien*-sentences. In line with the proposal presented in Belletti (2004), a possible approach may be that the postverbal subject fills a Topic position in the low IP area.

⁵⁴ On the basis of the preceding discussion, I tentatively assume that the analysis given in (74) also holds for emphatic affirmative sentences with si. Given that bien, unlike si, encodes a presuppositional import (see (15)), it might be the case, as I suggested in a previous work

(74)
$$[F_{orceP} | F_{ocusP} | bien_i | F_{oc'} | F_{oc0} | ha comido] [F_{olP} | t_i | F_{ol'} | F_{ol'} | F_{ol} | t_v]]]]]$$
 = (5b)

The analysis proposed accounts for the fact that *bien* is barred in a variety of constructions undergoing *wh*-movement. As observed, this incompatibility follows from the fact that no more than one operator can occur in *bien*-sentences since only one of them can be in Spec of *FocusP*. Moreover, under the assumption that *bien* targets the CP domain, some further effects are predicted, which suggests that this particle interacts with a variety of operators conveying the illocutionary force of a sentence. I will turn to this issue in the next section.

4.5. A final remark: bien and directive speech acts

Now I will briefly explore a further relation between *bien* and modality. It concerns the fact that *bien* is precluded in a number of constructions introducing directive speech acts. Let us consider a set of data which illustrate this point.⁵⁵

To begin with, note that *bien* is incompatible with imperative sentences (75), as well as with deontic futures, which mean an impositive order (76):

- (75) a. ¡Hacedme caso de vez en cuando! 'Pay attention to me from time to time!'
 - b. *¡Bien hacedme caso de vez en cuando!
- (76) a. ¡Harás lo que te diga! (You) will do what (I) CL_{DAT} tell_{SUBJ} 'You will do what I will tell you!'
 - b. *Bien harás lo que te diga.

Secondly, *bien* is also prohibited in subjunctive sentences expressing either an attenuated order (77) or a desiderative content (78):

⁽see Hernanz (2003)), that the presuppositional value of *bien* is checked in *ForceP*, the locus of illocutionary force.

⁵⁵ The facts considered in this section sharply parallel the paradigm of *anti-directive polarity* discussed in Bosque (1994).

- (77) a. ¡Que tengas suerte!
 That (you) have_{SUBJ} luck!
 'May you have good luck!'
 b. *¡Que bien tengas suerte!
- (78) a. ¡Ojalá cantara la soprano! OJALÁ would sing the soprano! 'If only the soprano would sing!'
 - b. *¡Ojalá bien cantara la soprano!

Thirdly, auxiliary modal *poder* ("may"), when used in its deontic reading of "to be allowed", is also incompatible with *bien*. As the following contrast shows, *bien* and the "permission" meaning of *bien* in (79b) are mutually exclusive:

(79) a. Puede usted sentarse. poder = "to be allowed"
 May you sit down
 'Sit down, please' 'You may sit down'
 b. *Bien puede usted sentarse. poder ≠ "to be allowed"

Finally, an additional piece of evidence which points in the same direction, namely that *bien* is banned from constructions qualifying as directive speech acts, is provided by the behavior of this particle with predicates such as *ordenar* ("to order"), *pedir* ("to ask"), *prometer* ("to promise"), etc. Note that the presence of *bien* is incompatible with the illocutionary reading of these predicates as verbal actions, which is attested by the ill-formed examples in (80):

- (80) a. *Bien te ordeno que te calles.

 Well (I) CL_{DAT} order that (you) CL remain silent
 - b. *Bien te pido que salgas de aquí. Well (I) CL_{DAT} ask that (you) leave
 - c. *Bien te prometo que todo se arreglará.
 Well (I) CL_{DAT} promise that everything will be all right

The examples in (80) contrast with those in (81), where the predicates alluded to do not fulfill all the necessary requirements for the performative reading (that is, they are inflected in past tense and take subjects other than a first pronominal person). As a result, they do not render the illocutionary force of a directive speech act; rather, they are interpreted as statements allowing for *bien* to freely appear:

- (81) a. Bien le ordenaron que se callara.
 - Well (they) CL_{DAT} ordered that (s(he)) CL remain silent
 - 'But they did order him/her to remain silent'
 - b. Bien te han pedido que salgas de aquí.
 - Well (they) CL_{DAT} have asked that (you) leave
 - 'But they did ask you to leave'
 - c. Bien te prometí que todo se arreglaría.
 - Well (I) CL_{DAT} promised that everything would be right
 - 'But (I) did promise you that everything would be right'

Given the analysis I am proposing, the ungrammaticality of the examples discussed in this section is expected, as it follows from the fact that bien, being quantificational in nature, is ruled out in syntactic structures where the CP domain is filled by a variety of modality markers which have been claimed to occur in a high position in the sentence. Formulated in intuitive terms, what goes wrong in (75b), (76b), (80), etc. is the fact that they entail a rather contradictory modal value, so to speak. That is, one cannot order an action, or promise something, etc., while at the same time stressing the positive value of a propositional content. In order to illustrate this point in a more precise way, let us concentrate on impositive sentences like those in (75)-(76). I assume, along the lines of Zanuttini's (1997) proposal, among other authors, 56 that imperative clauses are subject to the syntactic requirement that the functional domain expressing the illocutionary force of the sentence, namely the CP field, must be filled. As is well-known. imperative verbs have been argued to move to Force⁰, in order to check an [IMPERATIVE] mood feature hosted in ForceP (see Rizzi (1997)). In such a situation, it may be claimed that bien is prohibited due to an intervention effect. In other words, in the ungrammatical examples alluded to, bien counts as a harmful intervener which prevents the trace of the moved imperative from binding. I will not engage in a more detailed account of this issue here.

5. From bien to bien que: on the status of C

In the preceding sections, I have shown that Spanish has two options to stress the affirmative value of an assertion, namely, the *bien* strategy and the *bien que* strategy. I have also provided evidence supporting the claim that both options, as they convey an emphatic meaning to the sentence, activate the domain of the left periphery. I will now concentrate on the role played by

⁵⁶ See also Rivero (1994), and Rivero and Terzi (1995).

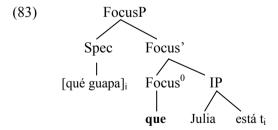
the complementizer *que* ("that") when it emerges in emphatic sentences, and I will explore two possible ways to address this issue: *que* may be viewed as the head of *Focus*, or, alternatively, as the head of *Force*. I will argue that the alternation between *bien* and *bien que* can only be accounted for under the second approach. Let us consider both possibilities in turn.

5.1. Alternative **I**: que heads FocusP

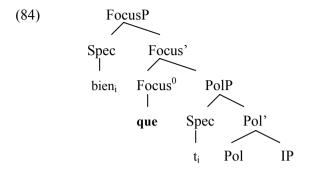
In accordance with the view that *bien* targets *FocusP*, it would be tempting to suggest that the alternation between *bien* and *bien que* falls under the general pattern exhibited by exclamative sentences, which also activate the Focus layer. Consider, in this respect, the examples in (82):

- (82) a. ¡Qué guapa está Julia! What beautiful is Julia! 'How beautiful Julia is!'
 - b. ¡Qué guapa que está Julia! What beautiful that is Julia! 'How beautiful Julia is!'

Assuming, along the lines of Rizzis's (1997) proposal, that movement of *wh*-phrases such as *qué guapa* to the left periphery is required by the FOCUS-Criterion, I take the sequence *qué guapa que* in (82b) to instantiate a case of "Doubly-filled Comp". That is, the construction in (82b) includes both a *wh*-phrase and a subordination particle *que*, the former targeting the [Spec, *FocusP*] position, and the latter located in the head of *FocusP*, as in (83):



Extending the analysis given in (83) to the case under study, it could be suggested that the alternation between *bien* and *bien que* is amenable to the alternation between **null** C and **overt** C in exclamative sentences:



Attractive as it may seem, this analysis is not tenable. Recall that the alternation between *bien* and *bien que* is by no means semantically innocuous, as already discussed (see section 3.3). This pattern clearly contrasts with the paradigm of exclamative sentences, in which the complementizer *que* is semantically inert. ⁵⁷ That is, (82a) and (82b) are in fact synonymous in Spanish, as the English glosses show. Consequently, the two kinds of constructions cannot be subsumed under the same syntactic representation.

Further evidence against alternative **I** comes from the fact that si and (marginally) *bien*, when followed by *que*, are compatible with negation, as illustrated in (44), repeated here as (85), and (86):

- (85) a. Pepito *si que* <u>no</u> come pasta.

 Pepito yes that not eats pasta

 'Of course Pepito doesn't eat pasta, I'm positive'
 - b. Hoy *si que* <u>no</u> hace frío.

 Today yes that (it) is not cold

 'Certainly, it is not cold *today*'
- (86) *Bien que* no fuma Pepito.
 Well that not smokes Pepito 'Pepito does *not* smoke'

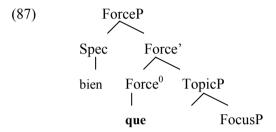
Given that, as noted above (see (7) and (45)), *bien* and *si* fail to co-occur with negative markers in the same sentence, the well-formedness of the examples in (85) and (86) clearly indicates that these particles, when followed by *que*, do occupy a structural position higher than *FocusP*. This

⁵⁷ See Brucart (1993) for a more detailed account of the nature of *que* in Spanish exclamatives. For further discussion about the properties of exclamatives in Romance, see also Villalba (2003).

means that the structure in (84) must be discarded, since it cannot capture the fact that {bien/si} and {bien/si que} do not merge in the same position.

5.2. Alternative II: que heads ForceP

In this section I would like to argue that the sequence *bien que* is obtained by merging *bien* in *ForceP*, as seen in (87):



This approach is consistent with the largely motivated assumption that *Force* is the syntactic domain that expresses assertion and which provides the structure to host modality operators. In this connection, I would like to suggest that *bien que* exhibits appealing similarities with the so-called *of course*-type adverbs (i.e., *desde luego*, *la verdad*, etc.), which have been claimed to behave as truth operators (see Etxepare (1997:50)). Note, in this respect, that the adverbs alluded to, as well as evidential adverbs such as *ciertamente* ("certainly"), *obviamente* ("obviously"), *evidentemente* ("obviously"), etc., may also co-occur with *que*:

- (88) a. {Evidentemente / ciertamente / desde luego}, Julia está muy enfadada.
 - '{Obviously / certainly / of course}, Julia is very angry'
 - b. {*Evidentemente / ciertamente / desde luego*} que Julia está muy enfadada.
 - {Obviously / certainly / of course} that Julia is very angry

It is worth noting that (88a) and (88b) are by no means semantically equivalent. As has been observed by Etxepare (1997:98), "there is a subtle but nevertheless clear and substantial difference" between the two cases: unlike those in (88b), the examples in (88a) can be uttered out of the blue. In other words, (88a) qualifies as an appropriate construction in the following situation: someone is late and realizes that Julia got very angry. By contrast, (88b) are emphatic sentences that can only be used to stress an alreadymentioned proposition [i.e., *Creo que Julia está muy enfadada* ("I think that

Julia is very angry")]. That is, in order to utter (88b) felicitously, "you need a linguistic antecedent" (see Etxepare (1997:99)). This clearly suggests that the presence of *que* in (88b) is associated with an **echoic** value. Interestingly enough, this pattern resembles the pattern displayed by the alternation between *bien/bien que* discussed above (see the examples in (34)-(39)).

Moreover, the subset of attitudinal adverbs which precede the complementizer *que* behave like *bien/si* with respect to polarity markers.

Compare, in this respect, (89) with (44)-(45):

- (89) a. ¿Se ha enfadado Julia? 'Did Julia get angry?'
 - b. *Evidentemente sí / no Obviously yes/not
 - c. Evidentemente *que* sí / no Obviously that yes/not 'It's obvious that she did'

Returning to (40), what I am proposing is that ForceP is the locus of **Echo** (that is, "high" polarity). More precisely, I suggest that bien, like other attitudinal adverbs, may occupy the Spec position of ForceP and take scope over the main assertion of the sentence, which gives rise to an echoic interpretation. Following this interpretation, it is predicted that bien and si, when followed by que, allow for a "low" polarity marker such as no/si (located in PolP) to appear. Since the two kinds of elements do not compete for the same position, they do not clash. This is illustrated in (90):

(90)
$$[ForceP [bien [[que] ... [PolP no [IP ...]]]]]]$$

In sum, the alternative \mathbf{II} accommodates the data discussed so far rather naturally, by simply assuming that two polarity layers are at work in the sentential structure. However, several questions remain open and more research is needed to substantiate a relevant proposal concerning the role played by the complementizer *que* in emphatic sentences. I speculate that the option for \mathbf{C} to be null or phonologically realized in modality-marked sentences obeys parametric factors. A relevant piece of evidence in this regard comes from Catalan, which shows a strong preference for the second strategy. The relevant data are given in (91)-(92):

(91) a. Fa calor a Barcelona? 'Is it hot in Barcelona?'

- b. *Sí hi fa calor. Yes CL_{LOC} it is hot
- c. Sí que hi fa calor.
 Yes that CL_{LOC} it is hot
 'Yes, it is hot'
- (92) a. No ha vingut la Maria? Not has come the Maria? 'Didn't Maria come?'
 - b. *Sí ha vingut. Yes has come
 - c. Sí *que* ha vingut. Yes that has come 'Yes, she did come'

As the paradigm in (91)-(92) is intended to show, the option for a null complementizer in emphatic affirmative sentences is fully excluded (or rather marginal) in Catalan. The same does not hold for Spanish, which allows both strategies, as already discussed (see (42)).⁵⁸

In light of these data, it could be hypothesized that the head *que* in *ForceP* spells out illocutionary features associated with an abstract operator of the required type hosted in this projection. However, I will not pursue this issue here

6. Conclusion

In this study I have addressed the analysis of emphatic affirmative sentences in Spanish, and have argued that they activate the domains of *Focus* and *Force* in the left periphery. I have mainly concentrated on the study of the particle *bien*, which has been claimed to behave as an assertive operator which, besides its affirmative value, encapsulates both an emphatic reading and a presuppositional interpretation. It has been shown that Spanish makes use of three varieties of *bien*, whose contribution to the semantic interpretation of the sentence is reminiscent of their respective scopal domain. The status of *bien* in the left periphery has been examined in the second part of this work, where I have showed that the properties of this particle crucially parallel those of the *wh*-words, and I have argued as well that *bien* moves from *PolP* to *FocusP* in order to check its emphatic value. I have then turned to the alternation between *bien* and *bien que*, and have

⁵⁸ See Hernanz and Rigau (2006), for a more detailed account of this issue.

suggested that the latter option provides support to postulate that *bien* may also merge in *ForceP*. In this connection, I have claimed that the presence of the complementizer *que* ("that") is associated with an echoic value, and that the *bien/bien que* pattern extends to other constructions where a similar picture arises. Finally, in light of the proposed analysis and on the basis of some comparative data, I have proposed that emphatic affirmative sentences which exhibit the alternation between a null and an overt complementizer may be taken as relevant evidence to claim that the largely motivated bifurcation between internal and external negation also holds for the paradigm of affirmation.

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A Comparative Analysis between the English and Spanish Aspectual Systems

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1. Introduction*

In this paper, I would like to make a contrastive study between English and Spanish in relation to their aspectual systems. The verbal form composed by the auxiliary *have* in English or *haber* in Spanish in present tense plus the past participle (the *present perfect* in the English terminology) in these languages will be discussed, as well as the temporal structure of this form. We will also study the combination of the present perfect with the temporal complements introduced by the preposition *since* in English and the preposition *desde* in Spanish. I will cover different aspectual interpretations of the form combined with these kinds of complements, which are not similar in all the cases among these languages.

The first part of the paper is concerned with the different aspectual interpretations of the present perfect in English and Spanish when it is combined with the complements introduced by *since* and *desde*, respectively.

The second part is a closer look at the complements introduced by *since* in English, as complements of *Perfect-level*, following Iatridou *et al.* (2001), because they always require the Perfect morphology, differently to Spanish complements introduced by the preposition *desde*.

2. The aspectual interpretation of the present perfect in English and in Spanish

In this section of the paper we will study the verbal form built by the auxiliary *have* or *haber* in present tense plus a past participle in English and in Spanish, respectively. As we will see, this verbal form has different

^{*} I thank Luis García Fernández and Alessandra Giorgi for all the comments and corrections on an earlier version of this paper.

temporal structures in the two languages, which explains its different compatibility with punctual adverbial complements in the two languages.

The English present perfect, morphologically constituted by the auxiliary *have* in present tense and the past participle of a different verb, is incompatible with the complements which make a reference previous to the utterance time. This explains the contrast between the different sentences, taken from Giorgi and Pianesi (1997:85):

- (1) a. John left at four.
 - b. John has left.
 - c *John has left at four

As shown in example (1), the temporal complements as *at four* are compatible with the simple past, but it is not the case with the present perfect. As was shown in Giorgi and Pianesi (1997:85), there are adverbs such as *yesterday*, *on Thursday*, *at four o'clock*, *in 1947* and *before the war* that are ungrammatical when co-occurring with the present perfect. Notably different however, adverbs such as *recently*, *today* or *just*, are compatible with the present perfect.

As the authors also say this contrast with the temporal adverbs is characteristic of the present perfect, because the other perfect tenses do not show this, as it is demonstrated in the following examples taken from the authors (page 85):

(2) **Past perfect**: Sam had finished his paper *yesterday*.

(Heny, 1982:141)

Modals: Bill may have been in Berlin *before the war*.

(Comrie, 1976:55)

Infinitives: The security officer believes Bill to have been in

Berlin *before the war*. (Comrie, 1976:55)

Gerunds: Having been in Berlin *before the war*, Bill is surprised

at the many changes. (Comrie, 1976:55)

To explain this we will make a reference to the present perfect temporal structure and to its corresponding aspectual interpretation in English and Spanish.

I agree with García Fernández's (2000) hypothesis about the two different temporal structures of the compound forms in Spanish, so of the two different temporal structures of the present perfect: one of these structures is of Present, aspectually interpreted as a Perfect, and the other one of Antepresent, aspectually interpreted as an Aorist. The existence of

these two structures is shown with the combination with different classes of adverbial complements. According to Reichenbach (1947), García Fernández represents the temporal structure of the Antepresent, aspectually interpreted as an Aorist, as we show now:

$(3) \quad \mathbf{E} - \mathbf{S}, \mathbf{R}$

In this temporal structure **E** represents the *event*, **S** the *speech time* and **R** the *reference point*, with the following explanation: there is an event previous (the anteriority relation is represented with the hyphen) to the utterance time and this is simultaneous (the simultaneity relation is represented with the comma) to the point of reference.

In the Aoristic interpretation, the present perfect in Spanish, diversely to English, is compatible with the punctual adverbial complements, as shown in the following sentences:

- (4) a. María ha venido a las siete.
 - 'Mary has come at seven o'clock'
 - b. El jefe se ha marchado a las dos y media.
 - 'The boss has gone away at two thirty'

In these two sentences the temporal complements *a las siete* and *a las dos y media* localize the event, which is previous to the utterance time, as it corresponds to the Aorist. This aspect focalizes the whole event, including its left and right borders.¹

From the morphological point of view, in Spanish there is a verbal form, the simple past, which always expresses Aorist.

The different aspectual varieties Klein (1992) and (1994) distinguishes can be represented, as appears in García Fernández (2000: 49 and 50), in the following way: the Time of the Situation (the time of the event) by the – sign, the time that follows or precedes the Time of the Situation by the + sign and Topic Time (the time focalized in each aspectual variety) between square brackets []:

event. See García Fernández (2000: 50-51) on this same subject.

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¹ We do not follow Klein (1992: 50) in the definition of Aorist ("Topic Time including end of Time Situation and beginning of time after Time Situation"), as it is not indicated here, as though it is in Smith (1991), that in Aorist is focalized the end as well as the beginning of the

(5) Perfective or Aorist

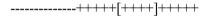


As I first mentioned, the Spanish present perfect also has a Present temporal structure aspectually interpreted as a Perfect, as shown in (6):

(6) S, R, E

In this second temporal structure, the event, the point of reference and the moment of speech are simultaneous. This temporal structure, diversely to the Antepresent temporal structure, has restrictions in combining with punctual adverbial complements. The reason, as García Fernández (2000:216-226) explains, is the following: in the Perfect temporal structure the event is contemporaneous to the utterance time, so it cannot be compatible with an adverbial complement indicating a temporal point previous to the utterance time. As I have shown before with the Aorist, the Perfect can be graphically represented, following Klein (1992), as:

(7) **Perfect**



In this aspectual variety, the Topic Time, represented with the + sign, follows the Time Situation, represented with the – sign. In the Perfect aspectual variety, the event result is focalized, so it is necessary the event has finished and there is a result to be focalized. In the Perfect aspectual variety, three subvarieties are usually distinguished: the Resultative Perfect, the Experiential Perfect and the Continuative Perfect.² As it corresponds to the Perfect, in all three varieties, the event is finished. The Resultative Perfect is particularly characterized by focalizing the result of an event; the Experiential Perfect by focalizing the subject experience after the event has happened at least once time and the Continuative Perfect by focalizing an event which continues at the utterance time.

The combination of the predicate with the adverb *ya* (*already* in English) contributes to the Perfect interpretation of the compound form, which permits me to illustrate the incompatibility with these complements as seen in these sentences taken from García Fernández (2000:219):

² See Fenn (1987) to study the different subvarieties of Perfect Aspect.

- (8) a. (*P) Juan ya ha llegado a mediodía. 'John has already arrived at midday'
 - b. (*P) A mediodía Juan ya ha llegado.'At midday John has already arrived'
- (9) a. (*P) Ya he hecho las maletas a las diez.'I have already packed the suitcases at ten o'clock'
 - b. (*P) A las diez ya he hecho las maletas.

 'At ten o'clock I have already packed the suitcases'

(*P) represents that the sentence is ungrammatical in the interpretation of resultative Perfect, so in the interpretation which focalises the result of an event at the moment of speech, which explains the impossibility of combination with adverbial complements previous to the moment of speech. These sentences are grammatical in the interpretation of experiential Perfect, which can be paraphrased as follows: for sentences in (8): 'Juan has arrived at midday at least once time' and for the sentences in (9): 'I have packed the suitcases at ten o'clock at least once time'.

Turning to the aspectual variety of resultative Perfect, it is characterized by focalising the result or *telos* of an event which has happened previously. Because of this, as Bertinetto (1986) points out, this aspectual variety is possible only with telic predicates, so with predicates oriented to a *telos*. This variety is illustrated once more with this sentence:

(10) Pedro y Marta han llegado.

'Peter and Marta have arrived'

In this sentence the result of the telic *to arrive* is focalized at the moment of utterance, so this sentence is equivalent to the one in (11) with a present tense verbal form:

(11) Pedro y Marta están aquí.³ 'Peter and Marta are here'

Iatridou *et al.* (2001:192) show the next example in English of this aspectual variety:

(12) I have lost my glasses.

³ See Fernández Ramírez (1986:245-246) about this idea (thanks to Luis García Fernández (p.c.) for providing me this information).

As the authors explain, this sentence expresses the variety of resultative Perfect if it is pronounced while the glasses are lost. If the sentence is pronounced when the glasses have been found, it just can express the variety of experiential Perfect, whose paraphrase is: at least once time before the utterance time I have lost my glasses.

The incompatibility of the punctual adverbial complements can also be illustrated with the verbal periphrasis *<tener* (*to have*) + past participle>, which can just be interpreted as expressing the variety of resultative Perfect. The reason for the ungrammaticality of the sentences in (8) and (9) shown before is the same that the reason for the ungrammaticality of the next sentences:

- (13) a. *Tengo hechas las maletas a las diez.
 - 'I have the suitcases packed at ten o'clock'
 - b. *A las diez tengo hechas las maletas.
 - 'At ten o'clock I have the suitcases packed'

In these two sentences, in which the auxiliary form *tener* of the verbal periphrasis is in present tense, the result of the event is focalized at the moment of speech, which explains the incompatibility with a punctual complement as *a las diez* (*at ten o'clock*), which points out the result of the event at a moment previous to the moment of speech.

As I have discussed, in English the present perfect is always incompatible with punctual adverbial complements. The reason is the same as the one I have offered for the Spanish compound form with the Perfect aspectual interpretation: the event coincides with the moment of speech, which is the reason for not combining with adverbial complements previous to the moment of speech. The main difference between English and Spanish is that the second language has a second temporal structure for the present perfect: the Antepresent temporal structure, which is aspectually interpreted as an Aorist. When this verbal form has the temporal structure of Antepresent, it is compatible with punctual adverbial complements. Diversely to Spanish, the *present perfect* in English has only a Present temporal structure, aspectually interpreted as a Perfect, which explains that it is always incompatible with punctual adverbial complements. I repeat here the temporal structure of Present interpreted as a Perfect, which corresponds to the English present perfect:

(14) S, R, E

⁴ About this verbal periphrasis see, among others, Harre (1991), Martínez-Atienza (2006:254-257), Olbertz (1998:305-315) and Squartini (1998:162-164).

3. The aspectual interpretation of the present perfect with the complements introduced by *since*

This next section looks at study the combination of English compound forms with the temporal complements introduced by the preposition *since*. From the aspectual point of view, as will be seen, there can be two interpretations: 1) the aspectual interpretation of "Experiential Perfect", which corresponds to the inclusive interpretation of *since*; and 2) the interpretation of "Universal Perfect", which corresponds to the durational interpretation. In the case of Experiential Perfect, the subject experience is focalized at the moment of speech after the event has happened at least once. In the case of Universal Perfect, the event starts at a moment previous to the moment of speech and continues or is on-going at the moment of speech.

In this section we will make a contrastive analysis between these structures in English and the corresponding ones in Spanish.

3.1. The ambiguity of the English present perfect with **since**. The durational and the inclusive interpretation

English sentences such as the ones presented in (15) and (16) are ambiguous, because they can have two different interpretations:

(15) I have been sick since 1990. (Iatridou *et al.*, 2001:191)

(16) I have lived in New York since 1982.⁵

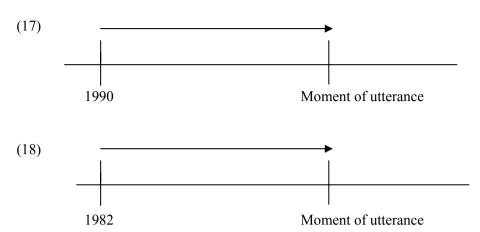
Iatridou *et al.* (2001) studied the ambiguity of this type of sentences and wrote about "durational interpretation" and "inclusive interpretation" of *since*, the preposition corresponding to *desde* in Spanish. To observe the previous sentences in examples (15) and (16), in the durational interpretation in (15) the subject has been sick since 1990 and continued to be sick up to and including the moment of utterance.

In sentence (16), the subject has lived in New York since 1982, and at the moment of speech he still lives there, so during this period the subject has always lived there.

The durational interpretations of (15) and (16) can be represented graphically as follows:

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⁵ Thanks to James Higginbotham (p.c.) for this example and for all the comments about it.



In these two diagrams, the arrow represents the point in the past in which the event starts: 1990 in sentence (15) and 1982 in sentence (16), and its continuation until the moment of speech.

Iatridou *et al.* (2001) called it the "perfect time span" referring to the period indicated by the Perfect in which the event takes place. Here are the paraphrases corresponding to the durational interpretation of *since* of the sentence in (15) as proposed by Iatridou *et al.* (2001:201 and 202):

(19) There is a time span (the perfect time span) whose LB is in 1990 and whose RB⁶ is the utterance time, and throughout that time span I was sick.

or

There is a time span (the perfect time span) whose LB is in 1990 and whose RB is the utterance time, and all the points of that time span are points of my being sick.

or

There is a time span (the perfect time span) whose LB is in 1990 and whose RB is the utterance time, and that entire time span is filled with one eventuality of my being sick.

The logic representation corresponding to this interpretation, following Iatridou *et al.* (2001: 202), is shown here:

(20)
$$\exists i \text{ (LB = 1990 \& RB = Now \& } \forall t \in i \text{ (Eventuality (t)))}$$

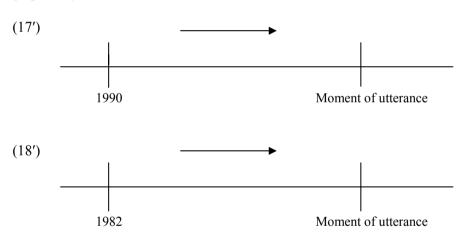
 $\exists i \text{ (LB = 1990 \& RB = Ahora \& } \forall t \in i \text{ (Eventualidad (t)))}$

⁶ LB represents "left boundary" and RB "right boundary". In the sentence (15), LB is the left boundary of the temporal period of the Perfect, specified by the argument of *since*, and RB the right boundary specified by the tense.

This diagram shows that in the durational interpretation, the event takes place during the entire period between 1990, the initial limit, and the utterance time, the final limit.

I now address the second interpretation of the sentences (15) and (16), which corresponds to the interpretation called "inclusive" by Iatridou *et al.* (2001). According to this interpretation, a possible paraphrase for sentence (15) would be: from 1990 until the utterance time the subject has been sick sometime. In the case of (16), the interpretation would be: from 1982 until the moment of speech the subject has lived in New York sometime. In both cases the event is included inside the period which is limited at the beginning by the complement introduced by *since* and whose right temporal limit, following the terminology of Iatridou *et al.* (2001), arrives until the utterance time.

The inclusive interpretations of (15) and (16) can be represented graphically as follows:



In these two diagrams, the arrow arbitrarily represents the event of being sick or of living in New York, which is included inside the period which begins at 1990 and at 1982, respectively in the sentences (15) and (16), and which arrives until the utterance time.

Here is the paraphrase corresponding to the inclusive interpretation of (15), as is shown in Iatridou *et al.* (2001:202):

(21) There is a time span (the perfect time span) whose LB is in 1990 and whose RB is the utterance time, and in that time span is an eventuality of my being sick.

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The logic representation which corresponds to this interpretation, as shown in Iatridou *et al.* (2001), would be:

```
(22) \exists i (LB = 1990 \& RB = Now \& \exists t \in i (Eventuality (t)))
\exists i (LB = 1990 \& RB = Ahora \& \exists t \in i (Eventualidad (t)))
```

As in the case of the durative interpretation, the starting point is 1990 and the final point is the moment of utterance, but in this case the event is included in this period; it does not take place continuously during the entire period, as in the case of the durational interpretation.

Here now, are the two sentences in Spanish which correspond to the English sentences presented in (15) and (16):

- (23) He estado enfermo desde 1990. 'I have been sick since 1990'
- (24) He vivido en Nueva York desde 1982. 'I have lived in New York since 1982'

In Spanish, in contrast to English, these sentences do not present ambiguity. In the first, the clear cut meaning is that the subject has been sick during the entire period from 1990 until the moment of speech, and in the case of sentence (24), the interpretation is that the subject since 1982 has always lived in New York. Both cases have clearly the durational interpretation.

In Spanish, to demonstrate the inclusive interpretation of *desde*, an explicit expression is needed indicating that the event takes place during the period limited at the beginning by the complement introduced by *desde*. Here are two examples:

- (25) He estado enfermo {en una sola ocasión / una vez} desde 1990. 'I have been sick {just in one occasion / once time} since 1990'
- (26) He vivido en Nueva York {únicamente dos meses / durante un año} desde 1982.

'I have lived in New York {only two months / during a year} since 1982'

These sentences show that in Spanish *desde*, as compared to the English *since*, always has a durational interpretation if there is no explicit expression indicating the inclusive interpretation.

This characteristic of the temporal complements introduced by *desde* in Spanish is a characteristic that also have some complements in English which have only a durative interpretation. Some of these complements, as shown in Iatridou *et al.* (2001), are: *at least since*, *ever since* and *for five days now*.

3.2. The inclusive interpretation of since: The Experiential Perfect

As I have shown in the previous section, one of the interpretations of the complements introduced by *since* combined with the compound forms is the inclusive one. From the aspectual point of view, it can be identified with the Experiential Perfect. Examples (15) and (16) are repeated here for convenience as (27) and (28):

- (27) I have been sick since 1990.
- (28) I have lived in New York since 1982.

According to the inclusive interpretation, in the case of (27) the subject has been sick sometime during the period specified by the complement introduced by *since*, and in the case of (28), the subject has lived in New York during sometime inside the period specified by the complement. From the aspectual point of view, the aspectual variety expressed in these cases by these sentences is the Experiential Perfect, which is characterized by asserting that the subject has a certain experience after the event has happened at least once time.

Fenn (1987:76) asserts that the Experiential Perfect, as the Universal Perfect (which in Fenn (1987) is called 'Continuative Perfect'), implies a period including the moment of speaking. The difference, however, as the author asserts, is that in the Experiential Perfect the event is not continuous during the entire period, but only on some occasions inside this period. Zandvoort (1957), as is shown in Fenn (1987:76), asserts that the Experiential Perfect "expresses what has happened, once or more than once, within the speaker's or writer's experience."

The aspectual variety of Experiential Perfect differentiates from the Universal Perfect because in the first variety the adverbial complement is not obligatory. It can be seen in the following sentences:

⁻

⁷ Iatridou *et al.* (2001) call this Perfect aspectual variety "Existential Perfect", following McCawley (1971), who uses the term "Existential" for also referring to the variety of resultative Perfect, noting, however, that the prototypical Existential Perfect is the Experiential.

- (29) John has been to Australia.
- (30) Antonio ha visitado Caracas.

The first sentence refers to the subject experience after having visited Australia at least one time before the moment of utterance, and in the case of (30) it refers to the subject experience after having visited Caracas at least one time. In both cases there is no adverbial complement and the aspectual variety is Experiential Perfect, which would not be possible in the case of the variety of Universal Perfect.

3.3. The durational interpretation of **since**: The Continuative or Universal Perfect

In this section of the paper we will study an interesting contrast between English and Spanish respect to the aspectual meaning of the present perfect combined with the temporal complements introduced by the preposition *since* in English and *desde* in Spanish.

When the predicates combined with the complements introduced by *since* have a durational interpretation, the aspectual variety expressed is the "Universal Perfect". The use of the adjective "universal" by Iatridou *et al.* (2001) is motivated by the kind of quantification it introduces, which is universal, as represented by the symbols $\forall t \in i$ in the logic representation in (22).

"Universal Perfect" is not the only denomination for this aspectual variety. Fenn (1987) uses the term "Continuative Perfect", who attributes to Kruisinga (1931). Bertinetto (1994) employs the term "Inclusive Perfect" and Havu (1997:226) "Persistent Perfect".

In contrast to Spanish, the English present perfect combined with the complements introduced by *since* implies that the underlying eventuality is still valid and continuing at the utterance time. Iatridou *et al.* (2001:195) demonstrate it with the following sentences, which claim that the event is not still occurring at the moment of speech and are therefore contradictions:

- (31) a. *She has been sick at least / ever since 1990 but she is fine now.
 - b. *She has always lived here but she doesn't anymore.

However, if these sentences are translated into Spanish, they are grammatical, as seen in (32):

- (32) a. Ha estado enferma como mínimo / siempre desde 1990 pero ahora está bien.
 - b. Ha vivido siempre aquí, pero ya no vive.

These examples show the differences between the languages, because in English the event continues at the moment of speech, but not in Spanish. In the case of Spanish, as García Fernández (2004) explains, the compound forms combined with the adverbial complement introduced by *desde* express the aspectual variety of Aorist. In Spanish the last moment coincides with the moment of speech. These verbal forms express the aspectual variety of Aorist whose last moment coincides with the moment of speech, so these forms express an aspectual variety which, as we have studied in section 2, focalizes the end as well as the beginning of the event and the end coincides with the utterance time.

In Spanish to obtain a similar interpretation to the one of the sentences (31) in English it is necessary for the verb to be in present tense, as in the following examples:

- (33) a. *Está enferma desde 1990 pero ahora está bien.
 - 'She is sick since 1990 but she is fine now'
 - b. *Vive siempre aquí pero ya no vive.
 - 'She always lives here but she doesn't anymore'

This data permits us the conclusion, if we observe the compound forms combined with an adverbial complement introduced by *since* in English or *desde* in Spanish, that the aspectual variety of Continuative or Universal Perfect is expressed only by the sentences in English, because in Spanish the aspectual variety expressed in similar cases is Aorist, as García Fernández (2004) shows; it is a case of Aorist in which the last moment coincides with the moment of speech.

We can conclude that to have in Spanish the meaning corresponding to the one expressed by the present perfect combined with the complements introduced by *since* in English, we cannot use the compound forms combined with *desde*, respectively, but a verbal form as the present tense. Observe the next sentences:

- (34) He has been sick ever since 2000.
- (35) Está enfermo desde 2000.

In these two cases there is an event which starts in the past, in 2000, and is still occurring at the moment of speech. In the first sentence (34) in English the verbal form is the present perfect, and in the sentence (35) in Spanish the verbal form is the present tense and not the compound form.⁸

We conclude this part of our paper explaining the reason for the contrast between English and Spanish. The reason in English the present perfect combined with the temporal complements introduced by *since* is aspectually interpreted as a Perfect (in the subvariety of Experiential or Universal Perfect) and in Spanish the corresponding verbal forms combined with the temporal complements introduced by *desde* can aspectually be interpreted as an Experiential Perfect or as an Aorist is the different temporal structure the present perfect has in these two languages: as we have studied in section 2, the present perfect in English has only a temporal structure of Present aspectually interpreted as a Perfect, diversely to Spanish, where the present perfect has a temporal structure of Present, aspectually interpreted as a Perfect, and a temporal structure of Antepresent, aspectually interpreted as an Aorist

4. The contrast between the complements introduced by *since* in English and *desde* in Spanish

The next part of the paper is a contrastive study between the complements introduced by *since* in English and the corresponding complements in Spanish introduced by *desde*.

4.1. *Since* as a Perfect level adverbial

Iatridou *et al.* (2001) consider that there are at least two levels of adverbials: perfect-level and eventuality-level. When there is a perfect-level adverbial, the Perfect morphology is obligatory, and when there is an eventuality-level

About this periphrasis see Camus (2004), García Fernández (2006:193-195), Gómez Torrego (1988:152-156), Lorenzo (1966 [1994]:255-260), Morera (1991:225-229), Squartini (1998: 297-298 y 332-333) and Yllera (1999:3419-3420).

⁸ In Spanish the present tense is not the only verbal form to express the meaning corresponding to (34) in English. The verbal periphrasis <*llevar* + gerund> also expresses this meaning. The similar meaning of the following sentences illustrate it:

⁽i) Vive en París desde 1996.'He/she lives in Paris since 1996'

⁽ii) Lleva viviendo en París desde 1996.

adverbial, the predicate can have Perfect morphology or a different morphology.⁹

In the case of the complements introduced by *since*, Iatridou *et al.* (2001) consider them inside the group of the perfect-level adverbials. This explains the impossible combination of these temporal complements with a predicate in present tense or simple past, which is the reason for the ungrammaticality of the next sentences:

- (36) a. *I am sick since yesterday. (Iatridou *et al.*, 2001:199) b. *I am waiting for the bus since six o'clock.¹¹
- (37) *I was sick since 1990. (Iatridou *et al.*, 2001:199)

In sentence (36a) the verb is in present tense, and in sentence (36b) in the progressive form of present tense. In sentence (37), which is also ungrammatical, the verb is in simple past. In any of these three sentences the morphology is of Perfect, which is a requirement imposed by the complements introduced by *since* in English and by all the complements of perfect-level.¹²

This predicate, as Bertinetto (1986) explains, is originally an activity, but in contexts similar to the one in (i) expresses a characteristic of the subject, in this case the characteristic of dancing with a group.

If the predicate is habitual, the sentence is ungrammatical too, as we show in (ii):

(ii) *He eats every day at three o'clock since he lives here.

-

⁹ They consider that these adverbs occupy two different syntactic positions: perfect-level adverbials are situated higher than eventuality-level adverbials, reflecting the fact that the perfect morphology is higher in the tree than the part describing the eventuality.

The authors consider that between the complements and the predicate there is agreement, in a similar way to the agreement there is between the subject and the verb. They assert:

⁽i) "When the subject is *Peter* and the verb is inflected, the morphology that appears must be third person singular. [...] Similarly in the domain of temporal interpretation: the adverbial determines the meaning and if the verb inflects, it must do so appropriately".

We thank James Higginbotham (p.c.) for this example and for all the comments about it.

¹² The reason for the ungrammaticality of the present tense does not depends on the *Aktionsart* of the predicate; it is just the morphology of the present tense which is incompatible with the complements introduced by *since*. In fact, if the predicate is not a state, as in (36a), but what Bertinetto (1986) calls an "attitudinal", the sentence is also ungrammatical. We can show it with the next sentence:

⁽i) *She dances with this group since she was a child.

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Vlach (1993:264) has also researched cases similar to those in (36) and (37). The author presents the next sentences:

- (38) I saw John {Thursday / *since Thursday}.
- (39) I have seen John {*Thursday / since Thursday}.

Vlach (1993: 264) asserts that "since Thursday is an extended now, or XN adverbial, because it specifies a time that extends up to (but does not necessarily include) the speech situation. Thursday on the other hand is a non-XN adverbial, because it is an adverbial whose time is past and which does not extend up to the speech situation, in the sense that there is a past time, in this case midnight of Thursday, which comes after the time of Thursday and is separated from the present situation by some nonmomentary interval".

In Spanish the preposition *desde* corresponding to *since* in English is different. It is possible to have sentences with the verb in present tense, which shows that the morphology of Perfect is not obligatory, but just one of the possibilities. I can demonstrate it with the following sentences, in which the verb is in present tense (in the case of (40a)) and in the progressive form of present tense (in (40b)), similarly to the ungrammatical English sentences presented in (36):

- (40) a. Estoy enfermo desde ayer.
 - 'I am sick since yesterday'
 - b. Estoy esperando el autobús desde las seis.
 - 'I am waiting for the bus since six o'clock'

As I have shown in section 3.3, the complements introduced by the preposition *desde* in Spanish can be combined with the predicates with Perfect morphology; however, the meaning in these cases, is not the same as the meaning when the predicate is in present tense. In Spanish, differently to English, the event has finished at the utterance time, as it is explained in García Fernández (2004). The next sentences illustrate this idea:

- (41) a. He estado enfermo desde ayer.
 - 'I have been sick since yesterday'
 - b. He estado esperando el autobús desde las seis.
 - 'I have been waiting for the bus since six o'clock'

The predicate of the sentence (41a) is the same as the predicate of (40a): estar enfermo, but in (41a) is in present perfect and in (40a) in present tense, and as such the event continues at the moment of speech, but does not continue in sentence (41a) with the present perfect. In both sentences the initial limit is the same, expressed by the temporal complement desde ayer (since yesterday). However, in the sentence with the predicate in present perfect the last moment of the event coincides with the utterance time, and the aspectual variety expressed in these cases is Aorist.

In the case of the sentence (41b) the predicate is in the progressive form of the present perfect. The last moment of the event coincides with the utterance time, as in the case of (41a). The subject has been waiting for the bus since six o'clock with respect to the moment of speech, and the last moment of the event coincides with the utterance time. The contrast respect to the sentence in (40b) with the predicate in the progressive form of the present tense is the same that the contrast presented between (41a) and (40a) before: in the case of (41b) the aspectual variety expressed is Aorist.

Another difference between the temporal complements introduced by *since* and the temporal complements introduced by *desde* is that only the second ones can be combined with a predicate in simple past, as García Fernández (2000:99-105) shows. This is illustrated with the next sentence, which contrasts with the English example presented in (37) that I repeat here as (43):

- (42) Estuve enfermo desde 1990.
- (43) *I was sick since 1990.

The aspectual variety expressed in (42) is Aorist, the only aspectual variety the simple past can express in Spanish. The event expressed by the predicate *estar enfermo*, which started in 1990, has finished at a moment previous to the moment of speech; but the initial and the final time are both previous to the utterance time. In (42) the final limit is not specified, but it could be, as in (44):

(44) Estuve enfermo desde 1990 hasta 1995. 'I was sick since 1990 until 1995'

In this case the only possible interpretation is the durative one, meaning that the subject has been sick for the whole period which started in 1990 and concludes at 1995. To obtain an inclusive interpretation, it is necessary to

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have an explicit expression indicating that the event has happened in a period included during the span indicated by *desde*. See example (45):

(45) Estuve enfermo {en una sola ocasión / sólo una vez} desde 1990 hasta 1995.

'I was sick {just in one occasion/just once time} since 1990 until 1995'

In sentence (45) there is an explicit reference to a time span included within the period starting in 1990.

The situation is different in the case of the sentences with the predicate in present tense. These sentences can never have an inclusive interpretation, which explains their ungrammaticality:

- (46) a. *Estoy enfermo {en una sola ocasión / sólo una vez} desde ayer. 'I am sick {just in one occasion/just once time} since yesterday'
 - b. *Estoy esperando el autobús {en una sola ocasión / sólo una vez} desde las seis.

'I am waiting for the bus {just in one occasion/just once time} since six o'clock'

The explanation for this fact is the following: the inclusive interpretation of *since* and *desde* when they are combined with a predicate in present perfect, which corresponds to the Experiential Perfect, implies that the event is previous to the moment of speech, and the same in the case of a predicate in simple past, as in (45), which expresses the aspectual variety of Aorist. In both cases there is an event previous to the moment of speech; there is an event which happens during the period specified at the beginning by *desde*, and this event is previous to the moment of speech, which is not the case of the present tense.

This fact contrasts with the cases in which the predicate is in present tense. In these cases the event necessarily continues at the moment of speech, which is not the case with the simple past.

In cases in which the predicate in present tense is combined with a complement introduced by the preposition *desde*, it is expressing an event which starts at a moment previous to the moment of speech and at that moment it has not yet finished. Here some sentences which were presented in the previous section:

(47) a. Estoy enfermo desde ayer. 'I am sick since yesterday' b. Estoy esperando el autobús desde las seis.'I am waiting for the bus since six o'clock'

In the case of sentence (47a) the subject is sick at the moment of utterance and he has been sick since a day before the moment of speech. In (47b), the subject is waiting for the bus at the moment of speech and he has been waiting since an hour before the moment of speech.

Another characteristic of the complements introduced by *since* in English, which is different to *desde* in Spanish, is that it cannot form a correlation with another temporal complement establishing the right temporal limit. So *since* establishes the initial temporal limit but the final limit cannot be explicitly expressed by a complement, but it is established by the principal predicate. This is the reason for the following contrast of grammaticality:

- (48) a. James has been sick since 1992.
 - b. *James has been sick since 1992 to 1995.

As I have already discussed, in cases like (48a) the event continues at the moment of speech, so it is possible to understand the ungrammaticality of a sentence like (48b), where there is a complement, *to 1995*, which explicitly expresses the final limit.

In Spanish, as we can expect too, the corresponding sentences to the ones in (48) are both grammatical:

- (49) a. Antonia ha estado enferma desde 1992.
 - b. Antonia ha estado enferma desde 1992 hasta 1995.

In English to explicitly express the initial and the final limit we have to use different temporal complements, such as *from...to* or *from...till*. The following sentences exemplify it:

- (50) a. James was sick from 1992 to 1995.
 - b. James was sick from 1992 till 1995.

As we can observe, the predicates in (50) are in simple past. In effect, if the predicates are in present perfect, the sentences are ungrammatical:

- (51) a. *James has been sick from 1992 to 1995.
 - b. *James has been sick from 1992 till 1995.

The ungrammaticality of these sentences confirms the idea we defend in this paper: the present perfect in English, diversely to Spanish, has only a temporal structure of Present aspectually interpreted as a Perfect, so it is incompatible with a complement that focalizes an event which has finished before the utterance time.

4.2. 'It is two years since I have seen him': The use of a non-Perfect morphology

It is interesting to show that in English there is a certain construction with *since* in which the Perfect morphology is not the only one. In these cases the predicate can be in present tense and simple past too. The next sentences show it:

- (52) a. It is ten years since John's father died.
 - b. It was five years since we met her.
 - c. It has been two months since Paul met her.

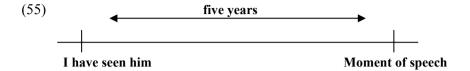
These sentences contrast with the ungrammatical ones studied before in this section, because the predicate was in present tense or in simple past. However, as Iatridou (2003, 2004) points out, this construction is not the same as the one I am discussing in this work. The author, in fact, presents a specific analysis for this construction. I present here a sentence from Iatridou and the analysis she offers:

- (53) It has been five years since I have seen him.
- (54) existential light verb [five years] $_{\alpha}$

[in the period since I saw him] $_{\beta}$

As latridou explains, these sentences express the time span after the event has happened. In this kind of construction the event introduced by *since* is punctual, and it measures the elapsed time since the event has happened. In fact the event expressed in all the previous sentences in (52) and (53) is punctual: in (52a) *to die* is an achievement, according to Vendler's (1957) terminology or a transformative predicate according to Bertinetto's (1986) terminology; in the case of sentences (52b) and (52c), *to meet someone* is a punctual predicate, and the same in the case of the predicate *to see someone* of the sentence (53). In the sentences we have studied in the sections before, there is a durative event.

To graphically represent sentence (53) with a temporal line, the diagram would be the following:



In Spanish the corresponding sentences to the ones presented in (52) for the English are:

- (56) a. Hace diez años (desde) que el padre de Paul murió.
 - b. Hacía cinco años (desde) que la conocimos.
 - c. Ha hecho dos meses (desde) que Paul la conoció.

García Fernández (2000:161-167) has studied these kind of constructions in Spanish and considers that in sentences like (56) the constituent which starts with *que* is a subordinate relative clause without explicit antecedent, which constitutes the term of the temporal preposition *desde* in the cases in which this preposition is present. As is shown with brackets, in these sentences the preposition *desde* is optional, because the predicates express in these three cases the aspectual variety of Aorist. However, if the predicate of the sentence expresses the aspectual variety of Imperfect (so if it is in present tense or in imperfect), *desde* cannot be present. I show it with the following sentences:

- (57) a. Hace diez años (*desde) que nos conocemos. 'It is ten years since we know'
 - b. Hacía cinco años (*desde) que vivía en esta ciudad.
 'It was five years since he / she lived in this city'
 - c. Ha hecho tres horas (*desde) que estamos sentados. 'It has been three hours since we are sat'

In these cases, as García Fernández (2000: 164) says, the constituent which starts with *que* is different to the one shown in sentences (56), because in these cases the syntactic function is not of an adverbial sentence, but of subject of the verb *hacer*.

5. Conclusion

The predicates in present perfect combined with the temporal complements introduced by the preposition *since* in English have two aspectual interpretations: the Experiential Perfect, which corresponds to the inclusive interpretation of *since*, and the Continuative or Universal Perfect, which corresponds to the durative interpretation of the preposition. In relation to the Universal Perfect, if I define this aspectual variety as focalising an event which starts at a moment in the past and continues at the moment of speech, then it is just English and not Spanish which expresses this variety. In Spanish the aspectual variety expressed in similar contexts is Aorist. We defend the idea that the reason for the different aspectual interpretation of the present perfect combined with *since* in English or with *desde* in Spanish is the different temporal structures the present perfect has in these two languages.

As I have also demonstrated, the temporal complements introduced by *since* in English impose a Perfect morphology on the predicate, with the exception of structures as *It is two years since I have since him*. In Spanish, however, it is possible to have a verbal morphology of present or of simple past. Because of this, Iatridou *et al.* (2001) consider *since* complements as complements of Perfect-level, which is not the case for Spanish, as we have demonstrated.

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