

# Spanish non Agreeing Quantificational Nominals

Anna Bartra and Xavier Villalba  
Universitat Autònoma de Barcelona

## 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):

- (1) a. *Lo* sabía, que llegarías tarde.  
it(clit.) knew-I-Past that would arrive-II-Cond late  
‘I knew it, that you would arrive late’  
b. ¿Inteligente? No *lo* es  
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):<sup>1</sup>

---

\* We would like to thank Laura Brugè for her patience, the audiences at *Going Romance 2004* (University of Leiden, NL) and at *XV Colloquium on Generative Grammar* (University of Barcelona, Spain) for their comments and suggestions, and to José Diego for helping us with subtle grammaticality judgements. All remaining errors are ours. This work has been sponsored by grants BFF 2003-08364-C02-01 of Spanish Ministerio de Educación y Ciencia and 2005SGR-00753 of the Generalitat de Catalunya.

<sup>1</sup> See Bello (1847), Alcina and Blecau (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*, RAE]<sup>2</sup>  
 ‘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.<sup>3,4</sup>

---

<sup>2</sup> 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.

<sup>3</sup> 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:

- (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

<sup>4</sup> As we have already mentioned, the basic properties of the different types of *lo* constructions and also their meanings will become 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):<sup>5</sup>

---

<sup>5</sup> 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
- (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.

- (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 difícil 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)):<sup>6</sup>

---

<sup>6</sup> 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 ⇒ “the mayor is very foolish”  
 b. ...lo caro del piso ⇒ “the flat is very expensive”  
 c. ¡Qué caro que es el piso! ⇒ “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 relative 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:<sup>7</sup>

- (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.

<sup>7</sup> 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!*<sup>8</sup>  
how expensive-*plu* that are few flats

- generic DPs:

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

---

<sup>8</sup> 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. \*<sub>i</sub>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. \*<sub>i</sub>[En qué asunto]<sub>i</sub> te extrañó lo mezquino de su interés <sub>t<sub>i</sub></sub>?  
[in what matter] to.you struck LO mean of his/her interest
- b. \*<sub>i</sub>[De qué pueblo]<sub>i</sub> conoció Juan al idiota del alcalde <sub>t<sub>i</sub></sub>?  
[of which village] met Juan to.the fool of.the mayor
- (17) a. \*[EN COBRAR]<sub>i</sub> te extrañó lo mezquino de su interés <sub>t<sub>i</sub></sub>.  
[in get.paid] to.you struck LO mean of his interest
- b. \*<sub>i</sub>[ DE BARCELONA]<sub>i</sub> conoció Juan al idiota del alcalde <sub>t<sub>i</sub></sub>!  
[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. \*<sub>i</sub>[De qué]<sub>i</sub> te extrañó lo caro <sub>t<sub>i</sub></sub>?  
[of what] to.you struck LO expensive
- b. \*<sub>i</sub>[De qué alcalde]<sub>i</sub> conociste al idiota <sub>t<sub>i</sub></sub>?  
[of what mayor] (you) met to.the fool
- (19) a. \*[DEL PISO]<sub>i</sub> me extrañó lo caro <sub>t<sub>i</sub></sub>.  
[of.the flat] to.me struck LO expensive
- b. \*[DEL ALCALDE]<sub>i</sub> conoció Juan al idiota <sub>t<sub>i</sub></sub>.  
[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*.<sup>9</sup>  
 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 *suyo*.  
 (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’

---

<sup>9</sup> It has been claimed that the meaning of *lo-de* adjectives are similar to that of abstract de-adjectival feminine nouns (*lo inocente de Juan* ~ *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  
 (iv) {lo avaricioso / \*la avaricia} de su interés

- 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!<sup>10</sup>  
 [of the house]<sub>FOC</sub>, to.me surprised LO expensive  
 b. \*De la casa, me sorprendió lo caro.  
 [of the house]<sub>TOP</sub>, to.me surprised LO expensive  
 c. \*¡DEL ALCALDE, conocí el idiota!  
 [of the mayor], (I) met the idiot

• Nor can the *lo+A* group:

- (26) a. \*¡LO CARO, me sorprendió de la casa!  
 [LO expensive]<sub>FOC</sub>, to.me surprised of the house  
 b. \*Lo caro, me (lo) sorprendió de la casa  
 [LO expensive]<sub>TOP</sub>, 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]<sub>FOC</sub>, 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 LO tired

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

---

<sup>10</sup> 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- $\emptyset$ <sup>11</sup>

### 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.<sup>12</sup> 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’

---

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

- (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*

<sup>12</sup> 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.<sup>13</sup>

### 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!’

---

<sup>13</sup> 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.  
‘I was surprised by his naïveté’
- b. \*Hablé con el idiota de él.  
‘I talked with that fool of him’
- c. Me sorprendió lo inocente que era él.  
‘I was surprised by how naïve he 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.

*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 these 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*]<sup>14</sup>  
           ‘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.

---

<sup>14</sup> 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.<sup>15</sup>  
 (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

---

<sup>15</sup> 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

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

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 not 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 relative 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 sorprendió 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-Ø/\*expensive-*fem.sing*} of the house-*fem.sing* / {expensive-Ø/\*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-Ø/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 *lo-que* 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<sub>i</sub> [C' que [IP es [SC la casa t<sub>i</sub> ]]]]]  
b. [DP lo [PP car-<sub>i</sub> de [SC la casa t<sub>i</sub> ]]]

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<sub>j</sub> [D' lo [AgrP [AP estúpido]<sub>i</sub> [Agr' t<sub>j</sub> [Agr' [Agr e] [PP [P' de [DP tu pregunta t<sub>j</sub> [t<sub>i</sub>]]]]]]]]]]
- 

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).

$$(62) \quad [_{DP} [_{FP} [ [F' [ de [_{XP} [_{DP} [X' [X [_{AP} ]]]]]]]]]]]$$

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 AP<sup>16</sup> 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.

<sup>16</sup> 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) [DP [FP [F' F [XP DP [X' X AP ]]]]]

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).<sup>17</sup>

From this departing structure, Predicate Raising applies:

(64) [DP [FP [F' F [XP [ DP [X' X AP ]]]]]]



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

<sup>17</sup> 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,<sup>18</sup> 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<sub>Excl</sub>), 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’

---

<sup>18</sup> 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 non-agreeing 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** → The A is modified by a Maximum Degree Operator:

- (67) [<sub>AP</sub> A  $OP_{MAX}$ ]

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:<sup>19</sup>

(68) [<sub>DegP</sub> Deg [<sub>AP</sub> A OP<sub>MAX</sub>]]

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

**Stage3: Raising of the OP<sub>MAX</sub>:**

(69) [<sub>DegP</sub> OP<sub>MAXi</sub> [<sub>Deg'</sub> Deg [<sub>AP</sub> A t<sub>i</sub>]]]

The OP<sub>MAX</sub> 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)** → merger of X and DegP:

(70) [<sub>X'</sub> X [<sub>DegP</sub> OP<sub>MAXi</sub> [<sub>Deg'</sub> Deg [<sub>AP</sub> A t<sub>i</sub>]]]]]

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)** → merger of X' and DP:

(71) [<sub>XP</sub> DP [<sub>X'</sub> X [<sub>DegP</sub> OP<sub>MAXi</sub> [<sub>Deg'</sub> Deg [<sub>AP</sub> A t<sub>i</sub>]]]]]]]

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

---

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

**Stage 6: predicate inversion (I)** → 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)** → rising of DegP:

(73)  $[_{FP} [_{DegP} OP_{MAXi} [_{Deg'} Deg [_{AP} A t_i]]] [_F' X+F(=de) [_{XP} DP [_X' t_X t_{DegP} ]]]]$

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)** → merger of D:

$$(74) \left[ \begin{array}{l} \text{D}' \text{ D } \left[ \text{FP } \left[ \text{DegP } \text{OP}_{\text{MAX}i} \left[ \text{Deg}' \text{ Deg } \left[ \text{AP } \text{A } t_i \right] \right] \right] \right] \left[ \text{F}' \text{ X+F(=de)} \left[ \text{XP } \text{DP} \right. \right. \\ \left. \left. \left[ \text{X}' t_X t_{\text{DegP}} \right] \right] \right] \right] \end{array} \right]$$

The D gives the construction its nominal behavior.

**Stage 9: building the DP (II)** → rising of the MAX operator:

$$(75) \left[ \begin{array}{l} \text{DP } \text{OP}_{\text{MAX}i} \left[ \text{D}' \text{ D } \left[ \text{FP } \left[ \text{DegP } \left[ \text{Deg}' t_i \right] \text{ Deg } \left[ \text{AP } \text{A } t_i \right] \right] \right] \right] \left[ \text{F}' \text{ X+F(=de)} \left[ \text{XP } \text{DP} \right. \right. \\ \left. \left. \left[ \text{X}' t_X t_{\text{DegP}} \right] \right] \right] \right] \end{array} \right]$$

The MAX operator ( $\text{OP}_{\text{MAX}}$ ) 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:**

$$(76) \left[ \begin{array}{l} \text{V}' \text{ V } \left[ \left[ \text{DP } \text{OP}_{\text{MAX}i} \left[ \text{D}' \text{ D } \left[ \text{FP } \left[ \text{DegP } \left[ \text{Deg}' t_i \right] \text{ Deg } \left[ \text{AP } \text{A } t_i \right] \right] \right] \right] \right] \left[ \text{F}' \text{ X+F(=de)} \right. \right. \\ \left. \left. \left[ \text{XP } \text{DP} \left[ \text{X}' t_X t_{\text{DegP}} \right] \right] \right] \right] \right] \end{array} \right]$$

Also, the placement of  $\text{OP}_{\text{MAX}}$  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.

e- mail: Anna.Bartra@uab.es  
Xavier.Villalba@uab.es

## References

- Aboh, Enoch. 2004. "Topic and Focus within D". In L. Cornips and J. Doetjes (eds.) *Linguistics in the Netherlands* 21:1-12.
- Alcina Franch, Juan and José Manuel Blecua. 1975. *Gramática española*. Barcelona, Ariel.
- Belletti, Adriana and Luigi Rizzi. 1988. "Psych verbs and  $\theta$ -theory". *Natural Language and Linguistic Theory* 6: 291-352.
- Bello, Andrés. 1847. *Gramática de la lengua española destinada al uso de los americanos*. Santiago de Chile, Imprenta del Progreso.
- Bonet, Sebastià. 2002. "Les subordinades substantives". In J. Solà, M.R. Lloret, J. Mascaró and M. Pérez Saldanya (eds.) *Gramàtica del català contemporani*, 3. 2321-2387. Barcelona. Empúries.
- Bosque, Ignacio. 1990. "Las bases gramaticales de la alternancia modal. Repaso y balance". In I. Bosque (ed.) *Indicativo y subjuntivo*. 13-65. Madrid, Taurus Universitaria.
- Bosque, Ignacio. 1994. "Degree quantification and Modal Operators in Spanish". Unpublished manuscript, Universidad Complutense de Madrid.
- Bosque, Ignacio. 2001. "Adjective Positions and the Interpretation of Indefinites". In J. Gutiérrez-Rexach and L. Silva-Villar (eds.) *Current Issues in Spanish Syntax and Semantics*. 17-37. Berlin/New York, Mouton de Gruyter.

- Bosque, Ignacio and Juan Carlos Moreno. 1988. "Las construcciones con *lo* y la denotación de lo neutro". *Lingüística* 2: 5-50.
- Corver, Norbert. 2000. "Degree adverbs as displaced predicates". *Rivista di linguistica* 12:155-191.
- den Dikken, Marcel. 1995. "Copulas". Unpublished manuscript, Vrije Universiteit Amsterdam /HIL.
- den Dikken, Marcel. 1998. "Predicate Inversion in DP". In A. Alexiadou, and C. Wilder (eds.) *Possessors, Predicates and Movement in the Determiner Phrase*. 177-214. Amsterdam / Philadelphia, John Benjamins.
- den Dikken, Marcel. 2006. *Relators and linkers: A Study of Predication, Predicate Inversion, and Copulas*. Cambridge MA, MIT Press.
- den Dikken, Marcel and Pornsiri Singhapreecha. 2004. "Complex Noun Phrases and Linkers". *Syntax* 7.1:1-54.
- Doetjes, Jenny. 1997. *Quantifiers and Selection. On the Distribution of Quantifying Expressions in French, Dutch, and English*. The Hague (NL), HIL.
- Fernández Ramírez, Salvador. 1986. *Gramática española. 3.1. El Nombre*. Vol. Preparado por José Polo. Madrid, Arco Libros.
- García, Analía G. and José Luis Méndez. 2002. "Sobre la naturaleza modal de las construcciones nominales atributivas". In M. Leonetti, O. Fernández Soriano and V. Escandell Vidal (eds.) *Current Issues in Generative Grammar*. 83-107. Madrid, Universidad de Alcalá/ UNED/UAM.
- Grimshaw, Jane. 1979. "Complement Selection and the Lexicon". *Linguistic Inquiry* 10:279-326.
- Gutiérrez-Rexach, Javier. 1999. "The structure and interpretation of Spanish Degree Neuter Constructions". *Lingua* 109:35-63.
- Gutiérrez-Rexach, Javier. 2001. "Spanish Exclamatives and the Interpretation of the Left Periphery". In J. Rooryck, Y. de Hulst and J. Schroten (eds.) *Selected Papers from Going Romance 1999*. 167-194. Amsterdam/Philadelphia, John Benjamins.
- Hernanz, M. LLuïsa and Avel.lina Suñer Gratacós. 1999. "La predicación: La predicación no copulativa. Las construcciones absolutas". In I. Bosque and V. Demonte (eds.) *Gramática Descriptiva de la Lengua Española*. 2525-2560. Madrid, Espasa Calpe.
- Kayne, Richard. 1994. *The Antysymmetry of Syntax*. Cambridge MA, MIT Press.
- Kayne, Richard. 2000. *Parameters and Universals*. Oxford/New York, Oxford University Press.

- Leonetti, Manuel. 1999. "El artículo". In I. Bosque and V. Demonte (eds.) *Gramática Descriptiva de la Lengua Española*. 787-890. Madrid, Espasa Calpe.
- Moro, Andrea. 1997. *The Raising of Predicates*, Cambridge, Cambridge University Press.
- Moro, Andrea. 2000. *Dynamic Antisymmetry*. Cambridge MA, MIT Press.
- Ojeda, Almerindo. 1991. "On Conceptual Neutrality". Reproduced in J. Gutiérrez-Rexach (ed.) *Semantics. Critical Concepts in Linguistics. Vol. III. Noun Phrase Classes*. 391-414. London/New York, Routledge, 2003.
- Picallo, Carme. 1994. "Catalan possessive pronouns - The Avoid Pronoun Principle revisited". *Natural Language & Linguistic Theory* 12:259-299.
- Rigau, Gemma. 1988. "Strong Pronouns". *Linguistic Inquiry* 19:503-511.
- Rigau, Gemma. 1999. "La estructura del sintagma nominal: los modificadores del nombre". In I. Bosque and V. Demonte (eds.) *Gramática Descriptiva de la Lengua Española*. 311-362. Madrid, Espasa Calpe.
- Ruwet, Nicolas. 1982. *Grammaire des insultes et autres études*. Paris, Seuil.
- Villalba, Xavier. 2003. "An Exceptional Exclamative Sentence Type in Romance". *Lingua* 113:713-745.
- Villalba, Xavier. 2004. "Exclamatives and negation". Research Report GGT-2004-02, Grup de Gramàtica Teòrica, Universitat Autònoma de Barcelona. [Downloadable at <http://seneca.uab.es/ggt/reports>].
- Vinet, Marie-Thérèse. 1991. "French non-verbal exclamative constructions". *Probus* 3:77-100.
- Zanuttini, Raffaella and Paul Portner. 2001. "Exclamative Clauses at the Syntax-Semantics Interface". *Language* 79:39-81.