NON AGREEING QUANTIFIED NOMINAL EMBEDDED CLAUSES IN SPANISH^{*}

ANNA BARTRA AND XAVIER VILLALBA

Universitat Autònoma de Barcelona

1. Introduction

The aim of this paper is to analyze the following Spanish construction, which we will label *lo-de*:

(1)	Me	sorprendió	lo	caro	de	la				
	to.me	surprised	LO	expensive.MASC	of	the				
	casa.									
	house.FEM									
	"I was surprised by how expensive the house was."									

This construction is very similar to an apparently synonymous construction, which we will label *lo-que*:¹

(2) Me sorprendió lo cara que era to.me surprised LO expensive.FEM that was the house.FEM *la casa.*"I was surprised by how expensive the house was."

Syntactically, both constructions are headed by the so-called "neuter article" *lo*, and combined with a gradable adjective; semantically, they denote a maximum degree in the scale associated with the adjective, as the translations illustrate. However, despite their similarity, we will argue that there is enough empirical evidence for a different analysis. We will propose an analysis for *lo-de* along the lines suggested for the English DP predicate-

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¹ The Spanish neuter article *lo* appears in a wide range of constructions studied in depth by Bosque & Moreno (1988), Rigau (1999), and Leonetti (1999).

inversion construction (DP-PIC) *that idiot of a mayor* by den Dikken (1998), who presents evidence that DP-PIC involves raising of the predicate *idiot* over the DP *a mayor*.

The paper is organized 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 (1) and (2); in section 4 we argue against the claims and the analysis made in Gutiérrez-Rexach (1999). In section 5, we develop an alternative analysis of *lo-de* in comparison with *lo-que*.

2. The lo-de construction and the DP-internal predicate inversion construction

We will argue that *lo-de* and *lo-que* constructions cannot be unified and propose an analysis for the former along the lines suggested for DP-internal predicate-inversion constructions (DP-PIC) like *that idiot of a mayor* by den Dikken (1998) for English. Crucially, the two constructions share major properties (see Moro 1997 on copular inversion, and den Dikken 1998, in press, and den Dikken and Singhapreecha 2004 on DP-PIC). We consider them in detail in the following subsections.

2.1 *High degree quantification*

Both constructions under study involve a quantificational interpretation, so that in both instances we have the following interpretation -in parallel with exclamative sentences, which are known to have a high degree implicature (conventionally indicated by \rightarrow), namely they convey the meaning that the property of the gradable adjective is predicated to an extreme degree in the scale it denotes (see Gutiérrez-Rexach 1996, Portner and Zanuttini 2001, Villalba 2003):

- (3) a. *El idiota del alcalde* \rightarrow "the mayor is an utter fool"
 - b. Lo caro de la casa \rightarrow "the house is very expensive"
 - c. $Qu'e cara que es la casa! \rightarrow$ "the house is very expensive"

This high degree interpretation is known (see Villalba 2004) to be incompatible with other quantificational structures involving extreme degree, like absolute superlatives —*más caro* "(the) most expensive"— and arguably also with elative modifiers —*carísimo* "extremely expensive"— but they are possible with "lexical superlatives", like prefixes *requete*- "extremely". Here *lo-de* (4a), DP-PIC (4b), and English *wh*-exclamatives (4c) pattern alike:

(4) a. Me extrañó lo *más caro/² carísimo/requetecaro de la casa.
 "I was surprised by the extreme expensiveness of the house."

b. No hablaste con el *más idiota/^{??}idiotísimo/ requeteidiota del alcalde.

"You did not talk with that utter fool of a mayor."

c. ¡Qué *más caro/??carísimo / requetecaro es la casa! "How extremely expensive the house is!"

2.2 *The DP must be definite and 'strongly referential'*

The quantification constraint just displayed affects the "subject" DP of *lo-de* and DP-PIC, again in parallel with *wh*-exclamatives (see Villalba 2004). Consider the case of nonspecific DPs (5), bare plurals (6), NPI and downward entailing quantifiers (7), and indefinite generic DPs (8), for *lo-de* (a-sentences), DP-PIC (b-sentences), and wh-exclamatives (c-sentences):

- (5) a. *No me sorprenderá lo caro de una casa cualquiera."I will not be surprised by the expensiveness of any house."
 - b. **No hablaré con el idiota de un alcalde cualquiera*."I will not talk with that fool of any mayor."
 - c. *¡*Qué cara que es una casa cualquiera!* "How expensive any house is!"

(6) a. *No me extrañó lo caro de casas. "I was not surprised by the expensiveness of houses." b. *No hablé con los idiotas de alcaldes.

- "I did not talk with that fools of mayors."
- c. **¡Qué caras que son casas!*"How expensive houses are!"
- (7) a. *No me extrañó lo caro de ninguna casa/pocas casas.
 "I was not surprised by the expensiveness of no house/few houses."
 - b. *No hablé con el idiota de ningún alcalde/los idiotas de pocos alcaldes.

"I did not talk with that fool of no mayor/those fools of few mayors."

- c. **¡Qué caros que son pocas casas!*² "How expensive few houses are!"
- (8) a. **Me extrañó lo caro de una casa en general.*
 - "I was astonished by the expensiveness of a house in general."
 - b. **Es necesario hablar con el idiota de un alcalde en general.*

 $^{^2}$ There is no negative version of the exclamative sentence, because negation is generally forbidden in exclamatives (see Villalba 2004).

"It is necessary to talk with that fool of a mayor in general."

c. *¡Qué caro que es una casa en general! "How expensive a house in general is!"

The de+*DP sequence does not form a constituent* 2.3

When we consider the internal structure of *lo-de*, it turns out that constituency tests for the apparent PP headed by de do not obtain, just as happens with DP-PIC. The de+DP sequence can neither be subject to whmovement (9) nor focalized (10):

(9) a. *¿[De qué]_i te extrañó lo caro t_i ? "What surprised you the expensiveness of?" b. *; [De qué alcalde]; conociste al idiota t_i ?

"What mayor did you meet that fool of?"

(10) a. */DE LA CASA]_i me extrañó lo caro t_i "Of the house, I was astonished by the expensiveness." b. *[DEL ALCALDE]_i conoció Juan al idiota t_i

"Of a mayor, Juan met that fool."

As we will argue in more detail in section 4, this behavior results from the fact that de is not a true P in these constructions, nor is it forming a maximal projection with the DP (for similar conclusions regarding a subtype of exclamative sentence in Catalan involving de, see Villalba 2003).³ This conclusion is in agreement with the impossibility of the de+DP sequence being either pronominalized by a possessive pronoun (11)-(12) or gapped :

(11) a. Me extrañó lo inocente de Juan.

"I was astonished by Juan's naïveté."

b. *Me extrañó lo inocente suyo. "I was astonished by his naïveté."

¡Son de fuertes! "They are so strong!" (i) a. ¿Cómo es de caro este vino? "How expensive is this wine?" b.

- *¡Cómo es de caro este vino!* "How expensive this wine is!" C.
- d. Es así de largo.
- 'It is this long."

³ 3 A completely satisfactory analysis that unifies the *de* in *lo-de* and the *de* present in quantificational constructions of the sort exemplified below (see Gutiérrez-Rexach 1999, and Villalba 2003) has yet to be developed:

- (12) a. *Hablé con el idiota de Juan.* "I talked with that fool of Juan."
 - b. **Hablé con el idiota suyo*."I talked with that fool of his."
- (13) a. *Me extrañó lo mezquino de su interés, pero no lo desmesurado de su interés.

"I was astonished by the meanness of his/her interest, but not the immoderation."

b. *Conociste al idiota del alcalde, pero no al corrupto del alcalde. "You met that fool of a mayor, but not the corrupt."

As for the *lo*+A sequence, movement tests also fail (*wh*-movement (14) and focalization (15)):

- (14) a. *¡Qué caro, me sorprendió de la casa!"How expensive I was surprised of the house!"
 - b. *¡A qué idiota, conocí del alcalde! "What a fool, I met of a mayor."
- (15) a. *¡LO CARO, me sorprendió de la casa!"The expensiveness, I was surprised of the house."
 - b. *¡AL IDIOTA, conocí del alcalde! "That fool, I met of a mayor."

Rather, the phrase must be moved or gapped as a whole:

- (16) a. ¡LO CARO DE LA CASA, me extrañó! "The expensiveness of the house astonished me!"
 - b. ¡AL IDIOTA DEL ALCALDE, conocí! "That fool of a mayor, I met."
- 2.4 Islandhood

Another property that makes *lo-de* constructions and DP-PIC similar is islandhood, as can be easily observed in the following examples, which correspond to *wh*-movement and focalization respectively (on islandhood DP-PIC, see den Dikken 1998, and den Dikken & Singhapreecha 2004):

(17) a. *¿[En qué asunto]i te extrañó lo mezquino de su interés ti?
 "Which matter did the meanness of his/her interest in astonish you?"

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- b. *¿[De qué pueblo]_i conoció Juan al idiota del alcalde t_i?
 "Which village did Juan meet that fool of a mayor of?"
- (18) a. *[En cobrar]_i me extrañó lo mezquino de su interés t_i
 "In getting paid, the meanness of his/her interest astonished me."
 - b. *¿[De Barcelona]_i conoció Juan al idiota del alcalde t_i?
 "Of Barcelona, Juan met that fool of a mayor."

2.5 The inverted predicate is interpreted as a focalized element

Den Dikken & Singhapreecha (2004) claim that in DP-PIC, the DP receives a focus interpretation, whereas the inverted predicate is interpreted as topic. Against this claim, we argue that in Spanish the inverted predicate is interpreted as focus with respect to the topic DP (see Bosque 2001 for a similar intuition, and García & Méndez 2002 for a different proposal based on modality). The clearest prediction following 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 (19), and DPs associated with *sólo* 'only' (20), which are known to be typically focused:

- (19) a. *No te extrañó lo caro de qué piso
 "How expensive what flat was didn't surprise you."
 - b. *No hablaste con el idiota de qué alcalde"You didn't talk with that fool of what mayor"
- (20) 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"

As the examples make apparent, the prediction is correct, so that henceforth we will assume that in Spanish *lo-de* and DP-PIC the inverted predicate is interpreted as focus.⁴

- 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.'

⁴ The informational structure suggested may help us explain the otherwise surprising ban against strong pronouns found in *lo-de* (ia), and DP-PIC (ib) (in contrast with the *lo-que* (ic)):

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

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

3. *Lo-de* versus *lo-que*

Before considering the major similarities between the *lo-de* construction and the DP-PIC, in this section we will concentrate on the main differences between *lo-de* and *lo-que* constructions, on which we will ground our critique in section 4 of the unifying analysis proposed by Gutiérrez-Rexach (1999), before presenting our own alternative proposal in section 4.

- 3.1 *Selection restrictions* Contrary to *lo-que*, *lo-de* cannot be independent:
- (21) a. **¡Lo caro de la casa!* "How expensive the house!"
 - b. *¡Lo cara que era la casa!* 'How expensive the house was!'

Lo-de constructions must be selected by a verb that takes 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* 'surprise', *asombrar* 'amaze', *extrañar* 'astonish', *maravillar* 'astonish' (in a negative sense), *indignar* 'indignate', *molestar* 'bother', etc. A lexicosyntactic property of these verbs is the fact that they can select either a DP or a CP:

- (22) a. *Me extrañaron sus palabras* 'His/Her words astonished me.'
 - b. Me extrañó que hablara

'I was astonished that (s)he spoke.'

These predicates share some properties, the most outstanding being factivity.

3.2 *Factivity*

As has been widely recognized (see Portner and Zanuttini 2001, Villalba 2003, to name two recent works), exclamative sentences have a factive interpretation, just as the constructions under analysis. This is the reason why assertive (*verba dicendi*) or volitional predicates do not admit the *lo-de* construction:

(23) a. *Sospechó lo caro de la casa

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

"(S)he suspected how expensive the house was."

- b. ??/*Esperaba lo favorable de la respuesta
- "(S)he expected how encouraging the answer was."c. ??/**Temia lo desfavorable de la respuesta*
 - "(S)he was afraid of how discouraging the answer was."

Interestingly enough, among an apparently uniform class of predicates, 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, (24a) and (24b):

- (24) a. *Te sorprenderá lo enorme de los coches americanos* "You will be surprised by how huge American cars are."
 - b. *A Luis* *(*no*) *le importa lo enorme de los coches americanos* "Luis cares (*doesn't care) about the hugeness of American cars."

Whereas *sorprender* "surprise" has the inherent lexical property of admitting a quantified or exclamative complement, a verb like *creer* "believe" acquires this possibility by means of its negative use, for it is not inherently factive.

3.3 Nominal character

A rather obvious property of *lo-de* is its clear nominal character, which it shares with DP-PIC. Consequently, *lo-de* and DP-PIC can be clefted, contrary to what we find with sentential arguments (25c), and *lo-que* (25d):

- (25) a. Fue lo caro de la casa lo que me extrañó
 - "It was how expensive the house was that surprised me."
 - b. *Fue el idiota del alcalde quien dijo eso* "It was that fool of a mayor who said so."
 - c. **Fue que se había ido de viaje lo que me dijo Pedro* "It was that he had gone on a trip that Peter told me."
 - d. **Fue lo cara que era la casa lo que me extrañó*"It was how expensive the house was what surprised me."

Furthermore, *lo-de* (a-examples) and DP-PIC (b-examples) can appear as preverbal subjects, whereas this possibility is highly restricted for *lo-que* (c-examples) and other sentential arguments (d-examples):

- (26) a. Lo grosero de su respuesta merece un castigo "The rudeness of his/her answer deserves a punishment."
 - b. *El idiota del alcalde merece un castigo* "That fool of a mayor deserves a punishment."

- c. **Lo grosera que es su respuesta merece un castigo* "How rude his/her answer is deserves a punishment."
- d. **Que su respuesta sea grosera merece un castigo* "That her answer is rude deserves a punishment."
- (27) a. *Lo enorme de los coches americanos te sorprenderá* "How huge American cars are will surprise you."
 - b. *El idiota del alcalde te sorprenderá* "That fool of a mayor will surprise you."
 - c. *??Lo enorme que son los coches americanos te sorprenderá* "How huge American cars are will surprise you."
 - d. *??Que los coches americanos sean enormes te sorprenderá* "It will surprise you that American cars are huge."
- 3.4 Only adjectives are admitted

Unlike *lo-que*, *lo-de* admits no categories other than adjectives, as is illustrated by the following examples with adverbs, NPs, and PPs:

- (28) a. *Es increíble lo bien que está Juan* "It is incredible how well John looks."
 - b.**Me sorprendió lo bien de Juan* "I was surprised by how well John looks."
- (29) a. *Es increíble lo hombre que es Juan* "It is incredible what a real man John is."
 - b. **Me sorprendió lo hombre de Juan*"I was surprised by what a real man John is."
- (30) a. *A Mafalda le maravilló lo en su punto que estaba la sopa* "Mafalda was amazed by how perfectly cooked the soup was."
 - b. **A Mafalda le sorprendió lo en su punto de la sopa* "How perfectly cooked the soup surprised Mafalda."
- 3.5 *Specificity*

The DP within *lo-de* cannot be unspecific, whereas this is not the case for *lo-que*:

- (31) a. **Es increíble lo feroz de un león {que tenga hambre/ cualquiera}*"It is incredible how fierce {a hungry / any} lion is."
 - b. *Es increíble lo feroz que es un león {que tenga hambre/ cualquiera}* "It is incredible how fierce {a hungry / any} lion is."

The addition of the relative clause in subjunctive mood or the modifier *cualquiera* 'any' forces the unspecific reading of the DP, and hence the ill-formedness of the *lo-de* sentence.

3.6 The properties of the A

Among the properties of the adjectives that occur in these constructions, some are allowed by both, whereas others are specific to only one or the other construction.

3.6.1 *Gradability*. The adjectives that enter *lo-de* and *lo-que* constructions need to be gradable. Therefore, relational adjectives like *francés* 'French' which are known to be ungradable are forbidden:

- (32) a. *la victoria (*muy) francesa* "the (*very) French victory"
 - b. **Me sorprendió lo francés de la victoria* "I was surprised by how French the victory was."
 - c. **Me sorprendió lo francesa que fue la victoria* "I was surprised by how French the victory was."

Adjectives like *musical* 'musical', which can be ambiguous between a relational and a qualificative reading, are permitted only in the latter:

- (33) a. *Me sorprendió lo musical de su tono de voz* "I was surprised by how musical his/her voice was."
 - b. *Me sorprendió lo musical del programa radiofónico "I was surprised by how musical the radio program was."

3.6.2 *Extreme degree interpretation*. The construction expresses the extreme degree of the property denoted by the adjective. Therefore, the quantifier *muy* 'very' can be added:

- (34) a. Sorprendió lo muy elaborado de su propuesta
 "Everyone was surprised by how very carefully prepared his/her proposal was."
 - b. *Sorprendió lo muy elaborada que era su propuesta* "Everyone was surprised by how very carefully prepared his/her proposal was."

For the same reason, it is not possible to have other degree quantifiers which do not establish an extreme interpretation, like *bastante* 'enough':

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- (35) a. *Me sorprendió lo bastante caro de la casa"I was surprised by how rather expensive the house was."
 - b. **Me sorprendió lo bastante cara que era la casa* "I was surprised by how rather expensive the house was."

3.6.3 *Stage level / individual level.* Vinet (1991) mentions the fact that nonverbal exclamatives in French cannot be constructed with stage-level predicates, but rather only with individual-level predicates, a phenomenon that is reproduced in Spanish, as Hernanz & Suñer (1999) point out:

- (36) a. *¡Enorme, tu nuevo apartamento!*'How huge, your new flat!'
 b. **¡Caducado, el yogur!*
 - "How past its sell-by date, the yoghourt"

The same restriction extends to *lo-de*:

- (37) a. *Me sorprendió lo angosto del desfiladero*"I was surprised by how narrow the pass was."
 - b. **Me sorprendió lo enfermo de tu jefe*"I was surprised by how ill your boss was."

This restriction does not hold in the case of *lo-que* (note the *ser/estar* 'to be' alternation):

- (38) a. *Me sorprendió lo angosto que era el desfiladero*"I was surprised by how narrow the pass was."
 - b. *Me sorprendió lo enfermo que estaba tu jefe* "I was surprised by how ill your boss was."

3.7 *Adjective agreement*

The most salient contrast between *lo-de* and *lo-que* concerns the agreement between the DP and the adjective: whereas in *lo-de* the adjective does not agree with the DP, in *lo-que* agreement is obligatory. Consider:

(39) a.	Me sorprendió	lo caro/*cara	de la		
	to.me surprised	LO expensive _{masc} /expensive _{fem}	of the	;	
	casa				
	house.FEM				
b.	Me sorprendió	lo *caro/cara	que	era	la
	to.me surprised	LO expensive _{masc} /expensive _{fem}	that	was	the
	casa				

house.FEM

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'):

(40) 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

(41) 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:

(42) $\begin{bmatrix} DP & Op_j \end{bmatrix} \begin{bmatrix} D' & lo \end{bmatrix} \begin{bmatrix} AgrP & [AP & estúpido]_i \end{bmatrix} \begin{bmatrix} Agr' & t_j \end{bmatrix} \begin{bmatrix} Agr' & e \end{bmatrix} \begin{bmatrix} PP & P' & de \end{bmatrix} \begin{bmatrix} DP & tu \\ Pregunta & t_j \end{bmatrix} \end{bmatrix}$

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 3.7). Second, no explanation is offered for the lexical differences between the two constructions concerning selection restrictions (see 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 3.1-3.2). Fourth, the analysis makes the wrong predictions concerning the presumed PP with respect to constituency tests (see 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:* lo-de *as a DP-internal predicate inversion construction*

In agreement with the vast bulk of empirical evidence presented in sections 2 and 3, we assume an analysis of *lo-de* that is different from that of *lo-que* (as against Gutiérrez-Rexach 1999) and is capable of accouting for the systematic set of properties *lo-de* shares with DP-PIC. The analysis is based on some previous work by Kayne (2000), Den Dikken (1995), Den Dikken & Singhapreecha (2004), Villalba (2003), and references therein.

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

5.1 *Common features of the three constructions*

As a point of departure, *lo-de*, *lo-que*, and DP-PIC involve a small clause XP headed by a functional projection that articulates the subject-predicate relation, as is standardly assumed since Kayne (1994):

(43) $\left[_{DP} \left[_{FP} \left[_{F'} F \left[_{XP} DP \left[_{X'} X AP \right] \right] \right] \right] \right]$

Here X^0 and F^0 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).

From this departing structure, Predicate Raising applies:

(44)
$$\begin{bmatrix} DP \begin{bmatrix} FP \end{bmatrix} \begin{bmatrix} F' \end{bmatrix} \begin{bmatrix} F \end{bmatrix} \begin{bmatrix} XP \end{bmatrix} \begin{bmatrix} DP \begin{bmatrix} X' \end{bmatrix} \\ A \end{bmatrix} \begin{bmatrix} P \end{bmatrix} \\ P \end{bmatrix} \begin{bmatrix} P \end{bmatrix} \begin{bmatrix} P \end{bmatrix} \begin{bmatrix} P \end{bmatrix} \\ \begin{bmatrix}$$

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 fulfil Kayne's Linear Correspondence Axiom. Yet we discard this line of research, for we are making the standard assumption that the small clause is headed by a null functional head. A second approach is that taken by den Dikken (in press), 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 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 2.4).

We will follow a different line, and assume that the AP must raise to obtain the correct interpretation as focus (see Bosque 2001 for a similar intuition, and García & Méndez 2002 for a different proposal based on modality). 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 2.4) and constraints on quantification (see 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, so that the neutral label of the functional projection F should rather be renamed as FocP.

5.2 Differences

5.2.1 Lexical vs. 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* 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 & Méndez 2002):

(45) 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"

Cf. with *lo-de*:

(46) *lo idiota/corrupto/loco/malo/pomposo/peligroso del alcalde*"that foolish/corrupt/crazy/bad/pompous/dangerous of a mayor"

The hypothesis that there is an Op_{Excl} in *lo-de* and *lo-que* has major consequences. On the one hand, Op_{Excl} moves to Spec, AP to bind the degree variable of the adjective, from where 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 Op_{Excl} blocks DP-AP agreement *within the small clause* (but see 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_{Excl} must move to Spec, DP to check its exclamative 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 the chance to get the DP and the AP into an agreement configuration.

5.2.3 *Derivation of the lo-de construction*. Once we have settled the main points of the analysis, we will conclude this section by working out the derivation of the *lo-de* construction, based on ex. (1), which we repeat for ease of reference:

(47) Me sorprendió lo caro de la casa.to.me surprised LO expensive.MASC of the house.FEM "I was surprised by how expensive the house was."

As a starting point, we assume that the adjective selects a DegP containing an exclamative null operator (Op_{Excl}) in both the *lo-de* and *lo-que* constructions (but not DP-PIC), which is responsible for the high degree interpretation associated with the constructions under study (see 2.2), and requires that the adjective be gradable (see 2.4) —for arguments to assume this configuration for gradable modified adjectives, see Corver (2000). Op_{Excl} moves to Spec, AP in order to bind the degree variable of the gradable adjective. This movement will later have a blocking effect on the agreement relationship between the DP and the AP (see below).

As argued above, the articulation of the small clause is done by means of the functional head X à la Kayne, so that at this stage the A imposes morphosemantic restrictions on the DP (see 2.6 and 3.3). Moreover, the DP probes the A for agreement, but Op_{Excl} acts as an intervener.

(48) $[_{XP} [_{DP} la casa] [_{X'} X [_{AP} Op_{Excl} [_{A'} car- [_{DegP} t_{op}]]]]]$

Then, the functional head F is merged and X incorporates, which results in the *de* 'of' particle:

(49) $[_{F'} X+F(=de) [_{XP} [_{DP} la casa] [_{X'} t_X [_{AP} Op_{Excl} [_{A'} car- [_{DegP} t_{op}]]]]]$

As noted in 2.5, *de* is the overt manifestation of the quantificational nature of the structure. Moreover *de* and the DP do not form a maximal projection, and

this forbids their extraction and replacement with a possessive pronoun (see 2.5).

Now there is structure for PI to happen, and this fact renders the structure an island for extraction (see 2.4):

(50) $\begin{bmatrix} FP & AP & Op_{Excl} & ar - [DegP & t_{op} \end{bmatrix} \end{bmatrix} \begin{bmatrix} F' & X+F(=de) & [XP & [DP & la & casa] & [X' & t_X & t_{AP} \end{bmatrix} \end{bmatrix} \end{bmatrix}$

Now the D merges and gives the construction its nominal behavior (see 2.3 and 3.4):

(51) $[_{D'} l - [_{FP} [_{AP} Op_{Excl} [_{A'} car - [_{DegP} t_{op}]]] [_{F'} X + F(=de) [_{XP} [_{DP} la casa] [_{X'} t_X t_{AP}]]]]]$

At this point, the exclamative operator (Op_{Excl}) must raise to Spec,DP to check its exclamative feature, which will have three major consequences. First of all, it enters in spec-head agreement with D, which realizes as the neuter determiner *lo* (see 3.1). Second, this spec-head agreement renders the DP exclamative, thus explaining selection restrictions (see 2.3 and 3.4). Finally, the operator-variable configuration formed will interact with other quantifiers, yielding the tight restrictions on quantification (see 2.2-2.3 and 3.3). Moreover, the adjective gets the default gender marker: -*o*.

(52) $[_{DP} Op_{Excl} [_{D'} lo [_{FP} [_{AP} t' [_{A'} caro [_{DegP} t_{op}]]] [_{F'} X+F(=de) [_{XP} [_{DP} la casa] [_{X'} t_{X} t_{AP}]]]]]$

Finally, the predicate is merged:

(53) $\begin{bmatrix} V & \text{extrañó} \begin{bmatrix} DP & Op_{\text{Excl}} \begin{bmatrix} D & lo \end{bmatrix} \end{bmatrix} \begin{bmatrix} P & AP & t' \end{bmatrix} \begin{bmatrix} AP & t' \\ \\ AP & t' \end{bmatrix} \end{bmatrix} \begin{bmatrix} AP & t' \end{bmatrix} \begin{bmatrix} A$

5. Conclusions

In this article, we have shown that the Spanish nominal exclamative 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 exclamative operator, which is responsible for not only the exclamative behaviour 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 [that we feel 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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