

A Mark of Specificity in Indefinite Nominals

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In this paper, Diesing's (1992) proposal that indefinites can not uniformly be treated as variables or as quantifiers is defended. The empirical evidence for such a claim is based on the position of qualificative adjectives in Catalan indefinite determiner phrases. Qualificative adjectives appear prenominally if the indefinite is interpreted as specific and postnominally if the indefinite is non-specific. It is thus shown that the distinction between specific and non-specific readings may have syntactic correlates in Romance languages such as Catalan.

The goal of this paper is to contribute some discussion and data from Catalan to a phenomenon observed for the first time in Bosque (1993) with data from Spanish. The phenomenon is the property that a type of qualificative adjectives have of triggering the specific reading in indefinite nominals. This study is basically descriptive. I limit myself to discussing empirical evidence in the context of some theoretical proposals.

1. The Ambiguity of Indefinite Nominals

It is well known that verbs of propositional attitude and deontic modals, among other elements, can create interpretive ambiguities when combined with indefinite nominals. Consider the following examples:

- (1) a. En Joan vol comprar *un llibre*.
the Joan wants buy a book
'Joan wants to buy a book.'

- (1) b. En Joan ha de llegir *un poema*.
 the Joan has of read a poem
 'Joan has to read a poem.'

The indefinites *un llibre* ('a book') and *un poema* ('a poem') in (1a) and (1b) respectively can be understood specifically or non-specifically. In the first case, we express a proposition about an object. The indefinite that denotes it takes scope over the verb or the modal:

- (2) a. un llibre_i [en Joan vol comprar [e]_i]
 a book the Joan wants buy
 b. un poema_i [en Joan ha de llegir [e]_i]
 a poem the Joan has of read

Under a second interpretation, the indefinites in (1a,b) refer to an object in John's world of desires or obligations respectively. We represent this interpretation with the nominal *in situ*:

- (3) a. en Joan vol comprar [un llibre]
 the Joan wants buy a book
 b. en Joan ha de llegir [un poema]
 the Joan has of read a poem

The readings (2) and (3) correspond to the classic *de re* and *de dicto* interpretations respectively. There is a huge bibliography devoted to discussing these interpretive ambiguities. One of the issues that has been under discussion centers on the question of whether the ambiguity is really semantic or, on the contrary, the ambiguity has to be accounted for by a theory of use.

Some authors have considered that the interpretive contrast that we have represented in (2) and (3) is not semantically significant. Kripke (1977) and Ludlow and Neale (1991) suggest that the

two readings of (1a) and (1b) do not correspond to a real semantic ambiguity, but to an ambiguity in how the speaker can use a given expression. That is, the distinction between the two readings is pragmatic according to these authors. Under such a proposal, all indefinites are treated uniformly. Ludlow and Neale (1991) analyze indefinites as quantificational entities (see also Russell (1905, 1919) and Kripke (1977)). Adopting an opposite analysis, but following the idea of uniformly treating indefinite nominals, Kamp (1981) and Heim (1982) propose that indefinites should be treated as variables. As such, they can be bound to a local quantifier, if there is one in a local domain.

The opposite view claims, on the contrary, that the ambiguity of indefinite nominals is semantically relevant. Fodor and Sag (1982) propose that the *de re* vs. the *de dicto* interpretation corresponds to the difference between specific and referential expressions vs. non-specific and non-referential expressions respectively.¹ Enç (1991) follows a similar line and suggests that a specific indefinite has a (weak) discourse antecedent whereas a non-specific one has none. Enç shows that the contrast between a specific nominal vs. a non-specific nominal correlates with a Case-marking difference in Turkish as well as with the impossibility for specific indefinites to appear in some constructions. Diesing (1992) does not analyze the distinction on referential terms, but bases specificity on the notion of presupposition. She suggests that specific indefinites form operator-variable structures whereas non-specific indefinites introduce variables and do not have quantificational force on their own.

In this paper, we bring forward some arguments and empirical evidence in favor of Diesing's (1992) proposal. We show that indefinites can not be uniformly treated and that the specific/non-specific ambiguity can not be considered pragmatic. We demonstrate that the

¹ Their arguments are mainly based on the atypical behavior of specific indefinites with respect to their scope taking abilities. The referential character of specific indefinites is shown by their immunity to scope islands. For arguments against Fodor and Sag's proposal, see Ludlow and Neale (1991), Diesing (1992) and references cited therein.

distinction has syntactic effects in Catalan when qualificative adjectives modify an indefinite nominal.²

2. Indefinites and Adjectives

Indefinite nominals may be modified by prenominal or postnominal qualificative adjectives in the Romance languages. With few exceptions,³ the position of a qualificative adjective does not alter its meaning. For example, the adjective *divertit* ('amusing') in (4) refers to the same property, whether it is in its canonical postnominal position or in the non-canonical prenominal position in Catalan:

- (4) a. un dibuix *divertit* d'en Joan
 a drawing amusing of-the Joan
 b. un *divertit* dibuix d'en Joan
 a amusing drawing of-the Joan

Bosque (1993) notes, however, that a qualificative adjective in prenominal position in a Spanish indefinite has an interpretive effect on the determiner: it triggers its specific interpretation. The same phenomenon obtains in Catalan. Following Diesing's (1992) hypothesis, we could say that a qualificative adjective in its non-canonical position marks the quantifier status of the indefinite in Catalan or Spanish.

² As an anonymous reviewer points out, it is also known that the *de dicto* and *de re* interpretations can have morphosyntactic correlates in some Romance languages. If an indefinite DP is modified by a restrictive relative clause, the subjunctive mood is generally used for the *de dicto* reading and the indicative mood for the *de re* interpretation.

³ The exceptions are a small set of adjectives of the types *bon-bo* ('good') that have a different meaning depending on whether they are in prenominal or in postnominal position. We do not take them into consideration because they are not relevant to the discussion.

With respect to the data we want to discuss, we can divide the class of qualificative adjectives in two broad subclasses. One is formed by adjectives that denote evaluative properties in general, like the ones exemplified in (5):

- (5) a. una proposta *interessant*
a proposal interesting
- b. un objecte *sorprenent*
a object surprising
- c. una aquarel·la *petita*
a water-color small
- d. un amonestament *sever*
a reprimand severe

The other subclass corresponds to adjectives that denote physical non-evaluative properties, such as color and form, and to perfective adjectives, as in the following examples:

- (6) a. una llum *verda*
a light green
- b. un paper *triangular*
a piece-of-paper triangular
- c. una persona *malalta*
a person sick
- d. una capsa *plena*
a box full

We will not elaborate further on these distinctions. Here we are only interested in paying attention to the fact that only *evaluative* adjectives of the types exemplified in (5) can appear in

two positions in an indefinite nominal. They can canonically appear to the right of the noun, as in (5) above, or to its left as in (7):⁴

- (7) a. una *interessant* proposta
a interesting proposal
b. un *sorprenent* objecte
a surprising object

⁴ S. Oliva (p.c.) has pointed out to us that prosodic structure can slightly affect the acceptability of nominals with prenominal adjectives. Constructions where the adjective's stressed syllable is adjacent to that of the noun are perceived as less acceptable than constructions where one or more unstressed syllables intervene. Although the data are not clear-cut, there appear to be contrasts like the following:

- (i) a. una *sorprenent* vegetació
a surprising vegetation
b. ?una *sorprenent* flora
a surprising flora
(ii) a. un intel·ligent *especialista*
a intelligent specialist
b. ?un intel·ligent *metge*
a intelligent doctor

In this paper, examples of the types (ib) and (iib) are not used in order to avoid prosodic judgements from interfering with syntactic or interpretive judgements. Interestingly, there are no contrasts of the types exemplified in (i) and (ii) when the adjectives are postnominal:

- (iii) a. un *soldat* *lúcid*
a soldier lucid
b. un *soldat* *antipàtic*
a soldier unkind
(iv) a. un *capellà* *carca*
a priest reactionary
b. un *capellà* *eixerit*
a priest smart

- (7) c. una *petita* aquarel·la
a small water-color
d. un *sever* amonestament
a severe reprimand

As opposed to evaluatives, the adjectival elements of the types exemplified in (6a-d) must always appear in the canonical postnominal position, as shown by the ungrammaticality of the following examples:

- (8) a. *una *verda* llum
a green light
b. *un *triangular* paper
a triangular piece-of-paper
c. *una *malalta* persona
a sick person
d. *una *plena* capsa
a full box

We center our discussion on the apparent optional position of evaluative adjectives. We have seen that two grammatical word orders are allowed in indefinite DPs with evaluative adjectives: the order exemplified in (5), where the qualificative adjective is in its canonical position to the right of the N head, and the order shown in (7), where the adjective precedes the noun.

In the following section, we frame indefinite nominals of the types (5) and (7) —with postnominal and prenominal adjectives respectively— in some contexts. We will see that the position of the adjective is related to the property of specificity, as Bosque (1993) has observed.

3. Specificity and the Position of Adjectives

We first examine the interpretation of indefinite nominals modified by adjectives in constructions that contain verbs of propositional attitude or deontic modals. We will see that the interpretive ambiguities noted in section 1 do not obtain when the adjective is in the non-canonical prenominal position.

Consider first the following examples with postnominal adjectives in these contexts:

- (9) a. L'Anna creu que una periodista *important* li demanarà una
the-Anna believes that a journalist important 3sgDat ask-FUT-3sg-for a
entrevista.
interview
'Anna believes that an important journalist will ask her for an interview.'
- b. La Joana ha de parlar amb una actriu *famosa*.
the Joana has of talk with a actress famous
'Joana has to talk with a famous actress.'

The existence of an individual denoted by the indefinite nominal is not necessarily presupposed in these cases. It is possible that such an individual is in the world of the subject's beliefs or necessities. The non-specific interpretation is naturally obtained in (9):

- (10) a. l'Anna creu que [[una periodista *important*] li demanarà una entrevista]
b. la Joana ha de parlar amb [una actriu *famosa*]

It should now be pointed out that the indefinites exemplified in (9a) and (9b) can be *used* specifically. They are so used when the speaker has an individual in mind when uttering them. This presupposition of existence by the speaker may not necessarily be shared by the listener. Kripke (1977) and Ludlow and Neale (1991) argue that the *use* of an expression in a given discourse has to be explained by a general theory of communication and inference. According

to these authors, formal semantics has nothing to say about the speaker's use of expressions in a given situation.

However, we can only accept such a claim if applied to the Catalan indefinite expressions exemplified in (9a,b), which show the adjective in the canonical postnominal position. This proposal can not be accepted if we consider indefinites modified by prenominal adjectives in Catalan.⁵ Consider the following:

- (11) a. L'Anna creu que una *important* periodista li demanarà una
the-Anna believes that a important journalist 3sgDat ask-FUT-3sg-for a
entrevista.
interview
'Anna believes that an important journalist will ask her for an interview.'
- b. La Joana ha de parlar amb una *famosa* actriu.
the Joana has of talk with a famous actress
'Joana has to talk with a famous actress.'

In these cases, and as opposed to (10a,b), the ambiguity does not exist because the specific reading is the only possible interpretation to obtain in Catalan. The speaker, as well as the listener, must presuppose the existence of an individual denoted by the indefinite DP. Following Diesing (1992), the nominal forms an operator-variable structure where the quantifier takes wide scope, as in (12a,b) respectively:

- (12) a. una important periodista; [l'Anna creu que [e]; li demanarà una entrevista]
b. una famosa actriu; [la Joana ha de parlar amb [e];]

⁵ It must be pointed out that the indefinite nominals used by these authors to prove their point do not contain modifying adjectives. In any case, they use English examples to illustrate their proposal. Hence, the phenomenon we show is impossible to obtain in English because adjectives internal to DP are always prenominal in English.

Note that we can no longer claim that the interpretation of indefinites has to be accounted for by a theory of use. On the contrary, the interpretation of these expressions has to be accounted for by the grammar. It is grammatically significant that a particular reading for an indefinite can be triggered by a syntactic procedure such as word order in languages like Catalan or Spanish. Recall that the only possible interpretation of (12a,b) is induced by the position of the adjective.

The examples we have discussed in this section, with their natural or obligatory reading, show that a prenominal qualificative adjective is a mark of quantification. We will now see that agrammaticalities obtain in contexts where quantification is not possible.

4. 'There-Be' Sentences in Opaque Contexts

Milsark (1974) argues that indefinite nominals are not ambiguous in 'there-be' sentences under deontic modals or verbs of propositional attitude. The indefinite can not take scope, and only the non-specific reading seems to be possible. The same phenomenon can be observed in Catalan in constructions equivalent to those discussed by Milsark for English:

(13) En Joan creu que hi ha *un espia* a la Facultat de Lletres.

the Joan believes that there has a spy at the Faculty of Letters

'Joan believes that there is a spy at the Faculty of Liberal Arts.'

(14) a. **un espia*; [en Joan creu que hi ha [e]_i a la Facultat de Lletres]

a spy the Joan believes that there has at the Faculty of Letters

b. en Joan creu que [hi ha [un espia] a la Facultat de Lletres]

the Joan believes that there has a spy at the Faculty of Letters

(15) Hi ha d'haver *una taula* al rebedor.

there has of-have a table at-the lobby

'There must be a table at the lobby.'

(16) a. **una taula*; [hi ha d'haver [e]_i al rebedor]

a table there has of-have at-the lobby

- (16) b. hi ha d'haver [una taula] al rebedor
 there has of-have a table at-the lobby

The impossibility of obtaining interpretations corresponding to the representations (14a) and (16a) suggests that *haver-hi* ('there be') constructions under the domain of modals or propositional attitude verbs block the specific reading of an indefinite. This phenomenon is clearly manifested in Catalan when indefinite nominals are modified by evaluative qualificative adjectives. Grammaticality judgements depend on the position of this element in the DP.

Haver-hi ('there be') sentences under modals or verbs of propositional attitude are always grammatical if the qualificative adjective is in its canonical postnominal position. However, the degree of acceptability of these constructions is very low when the adjective is prenominal. Consider the following contrasts:

- (17) a. En Joan creia que hi havia un polític *corrupte* en el Senat.
 the Joan believed that there had a politician corrupt at the Senate
 'Joan believed that there was a corrupt politician at the Senate.'
- b. (*)^{??}En Joan creia que hi havia un *corrupte* polític en el Senat.
 the Joan believed that there had a corrupt politician at the Senate
 'Joan believed that there was a corrupt politician at the Senate.'
- (18) a. Hi ha d'haver un polític *honest* en el Senat.
 there has of-have a politician honest at the Senate
 'There must be an honest politician at the Senate.'
- b. (*)^{??}Hi ha d'haver un *honest* polític en el Senat.
 there has to-have a honest politician at the Senate
 'There must be an honest politician at the Senate.'

The contrast between (17a) and (18a) versus (17b) and (18b) respectively shows that a prenominal adjective renders the specific interpretation obligatory. The indefinite determiner is a

wide scope quantifier, but Quantifier Raising (QR) is blocked in these types of constructions (see (14a) and (16a)). This fact causes the unacceptability of the interpretations represented in (17b) and (18b).

On the other hand, a postnominal adjective (cf. (17a) and (18a)) allows the non-specific reading of the indefinite. According to Diesing (1992) the indefinite DP is a variable in these cases (see Kamp (1981) and Heim (1982)). As such, the indefinite DP does not take scope at the interpretive component.

Diesing's (1992) proposal that indefinites can not uniformly be treated as quantifiers or as variables, together with the data we have been discussing, allows us to make a prediction. If specific indefinites — that is, those with prenominal adjectives— form operator-variable structures, they should not be able to appear in constructions where they are interpreted as bound to an operator. On the contrary, non-specific indefinites should be allowed in such constructions. Recall again that the latter have no quantificational force because they are variables and, moreover, they must appear with postnominal adjectives in Catalan. This prediction is borne out, as we will now see.

5. Adverbs of Quantification and 'Donkey Sentences'

Indefinite nominals with a postnominal qualificative adjective can always appear in contexts of non-selective binding. These are cases where an indefinite has to be interpreted under the scope of an external operator. The following examples are adapted from examples in Heim (1982):

- (21) a. Sempre que un antiquari té una peça valuosa, se la vol vendre.
always that a antiquarian owns a piece valuable SE 3sgAcc wants sell
'Whenever an antiquarian owns a valuable piece, he wants to sell it.'

- (21) b. En la majoria dels casos, si *una calaixera resistent* ha durat trenta anys, en
 in the majority of-the cases if a chest resistant has lasted thirty years Part
 durarà uns altres trenta.
 last-FUT-3sg ones others thirty
 'In the majority of cases, if a resistant chest has lasted for thirty years, it will last
 for thirty more.'
- c. Algunes vegades, si *un equilibrista hàbil* cau del trapezi s'espanta.
 some times if a acrobat skillful falls from-the trapeze himself-scared
 'Sometimes, if a skillful acrobat falls from the trapeze he gets scared.'

Heim (1982) argues that indefinites are not quantificational entities, even though they may apparently show scope ambiguities. Their apparent quantificational force is due to the fact that they can be bound to a local quantifier. The adverbial elements *sempre* ('always') in (21a), *en la majoria dels casos* ('in the majority of cases') in (21b), and *algunes vegades* ('sometimes') in (21c) are non-selective quantifiers that can bind more than one variable (see Lewis (1975)). In these cases, the adverbials can bind the indefinite, which has the status of a free variable. The expressions (21a,b,c) can be paraphrased as (22a,b,c) respectively. The following are also adapted from Heim (1982):

- (22) a. Cada antiquari i cada peça valuosa són tals que quan el primer poseeix la
 each antiquarian and each piece valuable are such that when the first owns the
 segona sempre se la vol vendre.
 second always SE 3sgAcc wants sell
 'Each antiquarian and each valuable piece are such that when the first one owns the
 second one he always wants to sell it.'

- (22) b. La majoria de calaixeres resistents que han durat trenta anys en duren
 the majority of chests resistant that have lasted thirty years Part last
 uns altres trenta.
 ones others thirty
 'The majority of resistant chests that have lasted for thirty years last for thirty
 more.'
- c. Alguns equilibristes hàbils que cauen del trapezi s'espanten.
 some acrobats skillful who fall from-the trapeze themselves-scare
 'Some skillful acrobats who fall from the trapeze get scared.'

The qualificative adjective is in its canonical postnominal position in examples (21a,b,c) paraphrased as (22a,b,c) respectively. We can now invert the position of the adjective. If we do so, either the grammaticality status of the sentences or their interpretation vary. Consider first (23a) and (23b), which are the prenominal adjective counterpart of (21a) and (21b) respectively:

- (23) a. ?Sempre que un antiquari té una valuosa peça, se la vol vendre.
 always that a antiquarian owns a valuable piece SE 3sgAcc wants sell
 'Whenever an antiquarian owns a valuable piece, he wants to sell it.'
- b. (??)*En la majoria dels casos, si una resistent calaixera ha durat trenta anys,
 in the majority of-the cases if a resistant chest has lasted thirty years
 en durarà uns altres trenta.
 Part last-FUT-3sg ones others thirty
 'In the majority of cases, if a resistant chest has lasted for thirty years, it will last
 for thirty more.'

According to our intuitions, (23a) is better than (23b), although their grammaticality status is low in both cases. However, sentence (24a) below, with a prenominal adjective, is fully grammatical according to our judgements. Nevertheless, it can not be paraphrased as (22c) but as (24b):

- (24) a. Algunes vegades, si un *hàbil equilibrista* cau del trapezi s'espanta.
 some times if a skillful acrobat falls from-the trapeze himself-scares
 'Sometimes, if a skillful acrobat falls from the trapeze he gets scared.'
- b. Hi ha un *hàbil equilibrista* que algunes vegades s'espanta si cau del
 there has a skillful acrobat that some times himself-scares if falls from-the
 trapezi.
 trapeze
 'There is a skillful acrobat that sometimes gets scared if he falls from the trapeze.'

In (24a), *hàbil equilibrista* ('skillful acrobat') is not bound to the adverbial phrase *algunes vegades* ('sometimes'). The former is interpreted outside of the scope of the latter as (24b) shows.

Ungrammatical sentences or impossible paraphrases obtain because indefinites with pronominal adjectives block the interpretation of the indefinite as a free variable.

Similar contrasts can be observed with the classical 'donkey sentences'. We have seen that postnominal adjectives allow the non-specific (free variable) reading. Consider (25) where the indefinite nominal is bound to the universal quantifier. The subsequent pronoun (an accusative clitic) is interpreted as a logical variable as well:

- (25) Tot pagès que té una truja eixerida l'alimenta.
 every farmer that owns a sow smart 3sgAcc-feeds
 'Every farmer that owns a smart sow feeds it.'

Again, the free variable interpretation is impossible if the adjective appears pronominally in these constructions. The indefinite can not be bound to the universal quantifier and the sentence is ungrammatical, or quite unacceptable at best:

- (26) (??)/*Tot pagès que té una eixerida truja l'alimenta.
 every farmer that owns a smart sow 3sgAcc-feeds
 'Every farmer that owns a smart sow feeds it.'

The difference between *una truja eixerida* (lit. 'a sow smart') in (25) and *una eixerida truja* (lit. 'a smart sow') in (26) is that the latter sentence, if admissible at all, could only mean that there is a particular sow such that it is multiply owned and each of its owners feeds it.

In the next section we will see that indefinites with pronominal adjectives can not appear either in other contexts that require the non-specific interpretation.

6. Floating Quantifiers

We now center our attention on the behavior of indefinite nominals with floating quantifiers of the types exemplified in (27a,b) that appear in the intermediate position in the sentence:⁶

- (27) a. Els nens han anat *tots* a Banyoles.
 the children have gone all to Banyoles
 b. Els teus amics han comprat *cada un* un ordinador.
 the your friends have bought each one a computer

⁶ Floating quantifiers can also appear in sentence final position in Catalan:

- (i) a. Els nens han anat a Banyoles *tots*.
 the children have gone to Banyoles all
 b. Els teus amics han comprat un ordinador *cada un*.
 the your friends have bought a computer each one

In this paper, sentence final floating quantifiers are not used because they do not add new evidence to the interpretive effects that are being discussed.

In this section, we show that specific indefinites can not be related to floating quantifiers of the types exemplified in (27a,b). On the contrary, non-specific indefinites can be bound to them. The discussion that follows is based on a recent proposal in Sánchez (1994) on floating quantification. We first summarize the aspects of Sánchez's hypothesis that are relevant for us.

6.1. *The Distributive Properties of Floating Quantifiers*

Sánchez (1994) applies to floating quantifiers Heim, Lasnik and May's (1991) hypothesis on the English reciprocal *each other*. According to Sánchez, floating quantifiers behave like *each other* in that they are distributive operators that relate two arguments. One of the arguments (the first term of the distribution) is the antecedent of the floating quantifier. The other argument (the second term of the distribution) is interpreted as a variable bound by this antecedent. The relation between the first term and the second term is mediated by the floating quantifier.

The lexical entry of the floating quantifier is able to select the type of argument that is interpreted as a variable (i.e., the distributed element). Some floating quantifiers select events as variables, others can only select thematic arguments, and other floating quantifiers can select either thematic arguments or eventive arguments as variables.

We limit ourselves to discussing the cases that are relevant for us by abstracting away from floating quantifiers that can only select events as the second term of the distribution. Consider now the following example:

- (28) Els meus germans van arribar *cada un* en una camioneta.
the my brothers PAST arrive each one in a van
'My brothers each arrived in a van.'

This sentence has an interpretation similar to the following: 'each one of my brothers arrived in a van (each one)', which we can represent as in (29):

- (29) [[cada (un)]_i meus germans]_j van arribar [[t_i] en [una camioneta]]_j
 each one my brothers PAST arrive in a van

Cada un ('each one') is a universal quantifier with a scope over the individuals that constitute the set denoted by the subject *els meus germans* ('my brothers'), which is the first term of the distribution. The floating quantifier adjoins to its antecedent at LF, leaving a variable in its base-generated position. The second term of the distribution, *una camioneta* ('a van'), is interpreted as a free variable. The relation between 'brothers' and 'vans' in (29) is satisfied when a different value for 'a van' is assigned to each individual of the set 'my brothers'.

6.2. Floating Quantifiers and Indefinites with Adjectives

Interesting contrasts are obtained when the second term of the distribution is an indefinite modified by an evaluative adjective. If the adjective is postnominal, we obtain the distributive reading observed in (29). Consider the following examples and their abstract LF represented in (31):

- (30) a. Els meus germans van arribar cada un en una camioneta impressionant.
 the my brothers PAST arrive each one in a van impressive
 'My brothers each arrived in an impressive van.'
- b. Aquelles senyores van parlar cada una d'un tema delicat.
 those ladies PAST talk each one about-a issue delicate
 'Those ladies each talked about a delicate issue.'
- c. Els pastissers van repartir cada un una llaminadura extravagant.
 the pastry-cooks PAST distribute each one a delicacy extravagant
 'The pastry-cooks each distributed an extravagant delicacy.'
- (31) [[each (one)]_i DP]_j ... [[t_i] [a N AP]]_j

If the adjective appears prenominally, the sentences have a high degree of unacceptability:⁷

- (32) a. ?Els meus germans van arribar cada un en una impressionant camioneta.
the my brothers PAST arrive each one in a impressive van
'My brothers each arrived in an impressive van.'
- b. ?Aquelles senyores van parlar cada una d'un delicat tema.
those ladies PAST talk each one of-a delicate issue
'Those ladies each talked about a delicate issue.'
- c. *Els pastissers van repartir cada un una extravagant llatinadura.
the pastry-cooks PAST distribute each one a extravagant delicacy
'The pastry-cooks each distributed an extravagant delicacy.'

The prenominal adjective renders the specific reading obligatory in (32a,b,c). The indefinite can not be interpreted as a bound variable and is thus unable to be assigned different referential values to satisfy the distributive relation induced by the floating quantifier.

Constructions with floating quantifiers are not always unacceptable if the second term of the distribution is an indefinite with a prenominal adjective. In this respect, we can examine the behavior of floating *tots* ('all') in some examples. The data are interesting because we are able

⁷ These sentences are fully grammatical without the floating quantifier. Moreover, the indefinite has a specific interpretation:

- (i) a. Els meus germans van arribar en una impressionant camioneta.
the my brothers PAST arrive in a impressive van
'My brothers arrived in an impressive van.'
- b. Aquelles senyores van parlar d'un delicat tema.
those ladies PAST talk of-a delicate issue
'Those ladies talked about a delicate issue.'
- c. Els pastissers van repartir una extravagant llatinadura.
the pastry-cooks PAST distribute a extravagant delicacy
'The pastry-cooks distributed an extravagant delicacy.'

to see that the argument that is being interpreted as the second term of the distribution (i.e., the free variable) can vary according to the position of the adjective modifying the indefinite.

According to Sánchez (1994), the quantifier *tots* ('all') in the floating position is a distributor that can select either an event or a thematic argument as a variable. Consider first example (33):

- (33) *Els meus amics van anar tots a la festa.*
the my friends PAST go all to the party
'My friends all went to the party.'

In this case, the bound variable is the event of 'going' and not the locative *la festa* ('the party'), which is a definite and a specific nominal. However, sentence (34) is ambiguous:

- (34) *Els alumnes van resoldre tots un problema.*
the students PAST solve all a problem
'The students all solved a problem.'

Under one interpretation, *un problema* ('a problem') is the variable. We understand that there are as many problems solved as there are students in the subject set. The speaker may, however, use *un problema* as a specific indefinite. If the specific reading is intended, the free variable is the event of solving and we have as many events as students.

Consider now an indefinite with an adjective in this context. The distributive effect of the floating quantifier depends on the position of the adjective in the DP. In example (35) below, the adjective *difícil* ('difficult') is postnominal and *tots* ('all') may distribute over problems. We have as many of these as students:

- (35) Els alumnes van resoldre tots *un problema difícil*.
the students PAST solve all a problem difficult
'The students all solved a difficult problem.'

This interpretation is impossible if the adjective appears in prenominal position, as in (36):

- (36) Els alumnes van resoldre tots *un difícil problema*.
the students PAST solved all a difficult problem
'The students all solved a difficult problem.'

We can only understand here that there is a unique (difficult) problem and as many solving events as students are in the first set. That is, the position of the adjective renders the variable interpretation of the event argument obligatory.

Summarizing, the floating quantification test also shows that the position of the adjective marks either the quantificational or the variable status of an indefinite in Catalan. If the indefinite forms operator-variable structures, the adjective is prenominal and the indefinite can not be bound to another quantifier. In the context of floating quantification, the indefinite can not be interpreted as the second term of a distribution. On the contrary, if the indefinite is interpreted as a free variable, the adjective should always be in the canonical postnominal position. In the latter case, the indefinite can be bound to a local quantifier and be interpreted as the distributed element.

The distributive effects observed with constructions having floating quantifiers obtain in other cases, as we will now see.

7. On the *Type/Token* Distinction

The quantifier vs. variable interpretation of an indefinite is somewhat similar to the distinction between *type* and *token* that Vergnaud and Zubizarreta (1992) propose for some nominals

containing definite determiners. According to these authors, the *type* reading obtains when the definite nominal refers to a set of objects. The *token* reading is the instantiation of a type. A definite nominal interpreted as a token does not denote a set but a particular individual within a set. The following example is ambiguous in that the same definite DP can refer either to a token or to a type:

- (37) Van veure *la mateixa litografia* de Miró al Museu d'Art Modern.
PAST see the same lithography of Miró at-the Muscum of-Art Modern
'They saw the same lithography by Miró at the Museum of Modern Art.'

In (37) we can either be referring to any of the copies of a given series (the *type* reading) or to a particular numbered copy of a given series (the *token* interpretation).

The concepts *type* vs. *token* can be applied to indefinite nominals and would roughly correspond to the variable vs. quantifier difference respectively that we have been discussing. In the case of indefinites, however, a *type* can refer to a family of sets (i.e., a set of sets), whereas the *token* reading refers to a unique set within the family.

With respect to adjectival modification, this *type* interpretation of an indefinite can only be obtained when the adjective is postnominal. A distributive reading may occur if the indefinite with a postnominal adjective is framed in certain contexts such as the following:

- (38) En Joan va regalar *una novel·la interessant* al Pere i al Lluís pel seu
the Joan PAST give a novel interesting to-the Pere and to-the Lluís for-the their
aniversari.
birthday
'Joan gave an interesting novel to Pere and Lluís for their birthday.'

In (38), it is possible to understand that Joan gave two objects of the family of sets 'interesting novels', say, a copy (whichever) of *Lolita* to Pere and a copy of *Opus Nigrum* to Lluís.

The evaluative adjective can also appear prenominal. In these cases the *token* interpretation appears to be the only one possible to obtain. Consider (39):

- (39) En Joan va regalar *una interessant novel·la* al Pere i al Lluís pel seu
the Joan PAST give a interesting novel to-the Pere and to-the Lluís for-the their
aniversari.
birthday
'Joan gave an interesting novel to Pere and Lluís for their birthday.'

We interpret now that there is only one novel given to Pere and Lluís: either two copies of the same novel (say, one copy each of *War and Peace*) or only one copy to both.

Although interpretive judgements about these types of constructions are less clear than the cases discussed in the previous sections, they appear to be along the same lines. The adaptation to indefinites of the distinction *type* vs. *token* proposed by Vergnaud and Zubizarreta (1992) for definites are similar to the distributive reading induced by floating quantification.

8. Conclusion

We have shown that indefinite nominals can not always receive a variable or a quantifier analysis. Our discussion has been based on the specificity effects triggered by evaluative qualificative adjectives discovered in Bosque (1993). It has been shown that qualificative adjectives can only appear in prenominal position if the indefinite determiner is specific. Following Diesing (1992), we have assumed that specificity is syntactically manifested by the formation of operator-variable structures. In these cases, the process of relating the variable left by indefinite QR to another local operator can not obtain. This is presumably a consequence of

the principle of Full Interpretation (Chomsky (1986)) which, among other restrictions, forbids a unique variable from being bound by two operators. The ungrammaticality of some sentences or the impossibility of certain interpretations we have been discussing is a consequence of this fact.

We have also assumed that non-specific indefinites are variables. As such, they can be bound to an external local quantifier. In these cases, an evaluative adjective must obligatorily appear in the canonical postnominal position in Catalan.

Summarizing, the distinction between the specific and the non-specific interpretation of an indefinite may have syntactic effects in some Romance languages like Catalan or Spanish. It is manifested by word order when indefinites are modified by evaluative adjectives. The empirical evidence we have offered supports Diesing's (1992) claim that the grammar can not uniformly treat indefinite nominals either as quantifiers or as variables.

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