

# N-words and *Wh*-in-situ in Spanish

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## 0. Introduction

It is usually assumed that *Wh*-elements-in-situ undergo movement at LF and that the ECP is the responsible principle constraining their distribution (see Huang 1982, Lasnik and Saito 1984, Aoun 1986, Chomsky 1986, among others). In this view, *Wh*-elements that remain unmoved at S-structure are later (in the LF component of the grammar) raised to the specifier position of a higher CP, in which they are paired to another *Wh*-word that previously has undergone a process of *Wh*-movement.

Concerning *n*-words,<sup>1</sup> most of the recent discussion in Romance centers on the nature of these elements. Several suggestions have been advanced ranging from views that claim that *n*-words are better treated as full-fledged negative quantifiers, negative polarity items or even as both (see Zanuttini 1991 for a survey of the different proposals). These suggestions also vary in the way the behavior of *n*-words should be captured, especially in what concerns the role of negation and whether movement is involved or not.

In this paper, we show that there is a strong parallelism between *Wh*-in-situ and *n*-words in Spanish. At the same time, we will show that the existence of a Subjunctive Effect (SE) provides evidence that suggests the inadequacy of a movement/ECP analysis for these elements in the language in question.

Based on the treatment of *Wh*-elements in Chinese proposed by Aoun and Li (to appear) and in the proposal of Progovac 1988 concerning polarity sensitivity, we will suggest a uniform account for these phenomena that treats *wh*-elements-in-situ and *n*-words as polarity items (in the sense that they are subject to specific locality and licensing constraints, their occurrence is restricted to specific environments that

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(1) *N*-words are elements such as *nadie* "anyone", *nada* "anything", *ningún* "any", etc., also referred as negative quantifiers or negative polarity items. The neutral label "*n*-word" comes from Laka 1990.



non-echo reading involve multiple interrogation. There always has to be a moved *Wh*-element (a *Wh*-element in [Spec,CP]) accompanying the unmoved one.

It is necessary to note that not all *Wh*-elements may remain in-situ —with a non-echo interpretation, as illustrated in (2).

- (2) a. \*¿Quién vino por qué?      b. \*¿Quién vino cómo?  
       "Who came why?"                "Who came how?"

In these examples, we observe that the reason or causal *Wh*-expression *por qué* and the manner *Wh*-expression *cómo* cannot stay in-situ.<sup>2</sup> This is not the case for other adjunct *Wh*-phrases. For example, the *Wh*-expressions *cuándo* "when" and *dónde* "where" may remain in-situ, as shown in (3).

- (3) a. ¿Quién vino cuándo?      b. ¿Quién compró dónde?  
       "Who came when?"            "Who bought where?"

The distribution of *Wh*-in-situ elements in Spanish follows the typology of *Wh*-phrases proposed in Aoun (1986) (also see Aoun et al. 1987, Aoun and Li (forthcoming) and Huang 1982). According to this typology, *Wh*-elements may be distinguished in relation to the kind of expressions they may quantify over: referential or non-referential. For instance, argumental *Wh*-phrases (eg. *quién* "who" and *qué* "what") are (potentially) referential, since they range over referential expressions (i.e. individuals). This is supported by the fact that generally answers for these interrogative elements are names for individuals (NPs).

Concerning adjunct *Wh*-phrases, some may be classified as referential, others do not. Locational and temporal expressions (i.e. *dónde* and *cuándo*, respectively) are considered potentially referential, since they may range over individuals. These elements may occur in NP positions, for instance as complements of prepositions, similarly to the case of argumental *Wh*-phrases (see Huang 1982 and Aoun and Li (forthcoming)):

- (4) a. ¿De dónde vino?              b. ¿Hasta cuándo lo tendremos que ver?  
       "From where did he come?"    "Until when will we have to see him?"

Contrarily, the manner and reason *Wh*-expressions *cómo* and *por qué* are classified as non-referential (see also Cinque 1990 and Rizzi 1990). These expressions range over predicates or propositions, and not over individuals. Consequently, they cannot appear in positions typically reserved for NPs. It is necessary to note that *cómo* ("how") may stay in-situ in cases where an instrumental reading is available. For example, in (2b) there is a grammatical non-echo reading that presupposes an answer such as *Juan vino en carro y María vino en tren* ("Juan came by car and Maria came by train"). A strict manner answer such as *Juan vino cansado y María vino*

(2) As known, these facts are not particular to Spanish, similar data is found in languages such as English and French. See (i) and (ii), respectively. (Examples in (i) and (ii) from Aoun (1986)).

(i) a. \*Who bought the books why?      (ii) a. \*Tu es venu pourquoi?      "You came why?"  
       b. \*Who bought the books how?      b. \*Tu es venu comment?      "You came how?"

*nerviosa* ("Juan came tired and Maria come nervous") is not possible for (2b). In the instrumental reading, *cómo* would behave more like a referential *Wh*-adjunct.<sup>3</sup>

In brief, *Wh*-elements in Spanish may remain in-situ with a non-echo interpretation only in cases of multiple interrogation. In other words, *Wh*-phrases in-situ require the presence of a moved *Wh*-expression. Moreover, only referential *Wh*-elements may stay in their D-structure position (see Aoun 1986 for an explanation).

## 1.2. *N*-words: Basic Distribution.

Here, our intention will be to establish those contexts where *n*-words are "allowed" and, at the same time, determine the set of possible licensors for them. In order to do so, we will consider the contexts where negative polarity items may appear in other languages (eg. English, see Progovac 1988 and references cited there) and check if they carry into Spanish.

### 1.2.1. *Simple Clauses.*

Let us start by considering the behavior of *n*-words in matrix clauses. As it is well-known in Spanish (and other Romance languages, see Jaeggli 1982, Rizzi 1982, Longobardi 1991, Zanuttini 1991, among others), a preverbal *n*-word does not co-occur with the negative marker *no*;<sup>4</sup> on the other hand, a postverbal *n*-word must co-occur with a negative marker. Consider the following examples.

- (5) a. *Nadie* baila  
"Nobody dances"  
b. \**Nadie no* baila  
Nobody/Anybody neg. dances
- (6) a. Los padres de *nadie* han sido invitados  
"Nobody's parents have been invited"  
b. \*Los padres de *nadie no* han sido invitados  
Nobody's/anybody's parents neg. have been invited
- (7) a. *A nadie* le regalaron un carro  
To anybody they-gave a car  
"They did not give a car to anybody"  
b. \**A nadie no* le regalaron un carro  
To anybody neg. they-gave a car

(3) The same instrumental/manner distinction is observed in French *comment* ("how"), see Aoun (1986: 27).

Aoun (1986) suggests that the distinction between referential and non-referential is further supported by the existence of indexical expressions (personal pronouns, temporal and locational deictics) corresponding only to the referential *Wh*-elements. In Spanish, this correspondence breaks down: *Cómo* has its corresponding indexical in *así* ("in this way/manner"), the so called manner deictic. Obviously, this fact does not invalidate the proposed typology. Still, referential *Wh*-elements are those that quantify over individuals and may occupy typical NP position.

(4) In the dialect studied in Laka (1990), a preverbal *n*-word may co-occur with the negative marker (Laka 1990: 104):

- (i) *Nadie no* vino  
Nobody not came = "Nobody didn't come"

As it appears in the text (see (1b)), this is not the case in the dialect we are drawing the data from (see also Jaeggli 1982). Besides, if we would have to assign a meaning to (i), it would be "Nobody came", as it is the case in Catalan (see Progovac 1988 and Zanuttini 1991).

- (8) a. *No baila nadie*  
Neg. dances anybody  
= "Nobody dances"
- b. \**Baila nadie*  
Dances anybody/nobody
- (9) a. *No han invitado a los padres de nadie*  
Neg. have invited anybody's parents =  
"Nobody's parents have been invited"
- b. \**Han invitado a los padres de nadie*  
Have invited anybody's/nobody's parents
- (10) a. *No compraste nada*  
Neg. you-bought anything  
= "You did not buy anything"
- b. \**Compraste nada*  
You-bought anything/nothing

Examples (5) through (7) illustrate that *n*-words in preverbal position do not tolerate the negative marker; whereas—as illustrated in (8), (9) and (10)—in postverbal position, they require the presence of this marker.

### 1.2.2. Embedded Clauses

In the context of embedded clauses, we need to consider three sets of cases. Two of them related to the mood of the verb: indicative or subjunctive, and a third one that involves infinitival clauses. The examples in (11) and (12) present *n*-words in indicative embedded clauses:

- (11) a. *Juan no dijo que nadie llamó*  
"Juan did not say that nobody called"
- b. \**Juan no dijo que llamó nadie*  
"Juan didn't say that called *nadie*"
- (12) a. \**Juan no dijo que María había comprado nada*  
"Juan did not say that Maria had bought *nada*"
- b. *Juan no dijo que María no había comprado nada*  
"Juan did not say that Maria had not bought anything"

(11a) shows that an *n*-word in preverbal subject position is allowed in an indicative embedded clause, but notice that its interpretation is independent of the negative marker in the matrix clause. On the other hand, (11b) shows that a postverbal subject in this same context is not allowed, even though there is a negative marker present in the root clause. (12a) shows the same as (11b), only that in this case the *n*-word is in object position, and (12b) differs from (12a) in that a negative marker is present in the embedded clause. In brief, a postverbal *n*-word in an embedded indicative clause cannot occur with (or be licensed by) a negative marker in the matrix.

Consider now the following examples where the verb of the embedded clause is in the subjunctive mood:

- (13) a. *No* pretendo que *nadie* te arreste  
 b. *No* pretendo que te arreste *nadie*  
 "I do not expect anybody to arrest you"<sup>5</sup>

In (13a), a preverbal *n*-word is allowed in subject position, but it differs from cases such as (11a) in that it has to be construed with the matrix *no* (in this case, *nadie* cannot be understood/translated as nobody). (13b) shows, contrary to the cases that involve the indicative mood, that a postverbal subject *n*-word is possible even if the negative marker is in the matrix clause. The same facts are obtained in the case of *n*-words in object position:

- (14) a. *No* pretendo que arrestes a *nadie*  
 "I do not expect you to arrest anybody"  
 b. Pedro *no* cree que Juan haga *nada*  
 "Pedro does not believe Juan to do anything"

The third set of cases is that of infinitival clauses. Here, a postverbal *n*-word is allowed to appear with a negative marker in the matrix clause:

- (15) a. Juan *no* quiere traer *nada*  
 "Juan does not want to bring anything"  
 b. María *no* piensa saludar a *nadie*  
 "Maria is not planning to greet anybody"

### 1.2.3. Questions

It is known that in some languages certain kinds of questions allow the occurrence of *n*-word type elements (this is the case, for example, in Catalan, English, French and Italian with yes/no questions; see Progovac 1988, Longobardi 1991, Zanuttini 1991, among others). Here, we show that in Spanish, this is not so: interrogative contexts alone do not license *n*-words.

First, consider the examples in (16) that illustrate Yes/No questions.

- (16) a. \*¿Ha llamado *nadie*?                      c. ¿*No* ha llamado *nadie*?  
 "Has anybody called?"                      "Hasn't anybody called?"  
 b. ¿*Nadie* ha llamado?  
 "Has nobody called?"

(5) This kind of examples has been often discussed in the Romance literature as the "*personne/nessuno/nadie*" facts (see Kayne 1981, Rizzi 1982, Jaeggli 1982, Aoun 1985, among others). It has been assumed that Spanish follows the same interpretative pattern as French and Italian, where there is an asymmetry that concerns the position of the *n*-word: if it appears in preverbal position, its interpretation is independent of the matrix negative marker; but, if it appears in postverbal position, its interpretation is construed with the negative marker. See the Italian examples in (i).

- (i) a. *Non* pretendo che *nessuno* ti arresti                      b. *Non* pretendo che ti arresti *nessuno*  
 "I do not expect NOBODY to arrest you"                      "I do not expect ANYBODY to arrest you"

Jaeggli (op.cit.) presents data in Spanish similar to (ia), but in his fn.4 (p.171) he states that a special stress/intonational pattern is required to get this interpretation: the verb must bear stress and the *n*-word must bear very little or no stress at all. The example (7a) in the text presents the natural interpretation, in the sense that no special proviso is needed.

(16a) shows that *n*-words are not allowed to occur alone (eg. without negation) in postverbal position in this kind of questions. On the other hand, they may appear in this context (16b-c), in configurations similar to the ones discussed in section 1.2.1 (see (5a) and (8a)).

Second, in the case of *Wh*- and indirect questions equivalent facts are obtained. See (17) and (18).

- (17) a. \*¿Quién ha llamado a *nadie*?  
 "Who has called anybody?"  
 b. Quién *no* ha llamado a *nadie*?  
 "Who hasn't called anybody?"  
 c. ¿Por qué *nadie* llama?  
 "Why does nobody call?"
- (18) a. \*Me preguntaron si Juan compró *nada*  
 "They asked me whether Juan bought anything"  
 b. Me preguntaron si Juan *no* compró *nada*  
 "They asked me whether Juan did not buy anything"  
 c. Me preguntaron si *nadie* compró el periódico  
 "They asked me whether nobody bought the newspaper"

As stated before, interrogatives *per se* do not license *n*-words in Spanish. Observe that the grammaticality of the (b-c) cases in (16-18) is independent of the interrogative context: *n*-words in preverbal subject position, and objects with a clausemate negative marker are always allowed (see above).

There are other cases involving questions (similar to (17) and (18)) that are worth considering. See (19) and (20). To our knowledge, Bosque (1992) is the first to discuss cases of this sort.

- (19) a. *No sé* quién compró *nada*  
 "I do not know who bought anything"  
 b. *No sé* qué trajo *nadie*  
 "I do not know what anybody brought"
- (20) a. *No sé* si Juan compró *nada*  
 "I do not know whether Juan bought anything"  
 b. *No sé* si vino *nadie*  
 "I do not know whether anybody came"

In these examples, *an*-word in postverbal position (subject or object) is allowed to occur even though there is no negative marker in the clause containing this element. In other words, the matrix *no* seems to be able to license the occurrence of *nada* and *nadie*. Observe that the only other cases that show something similar are those that involve the subjunctive mood (see (13) and (14)); in (19) and (20) no subjunctive is involved.

It is interesting to note that the sentences in (19) entail only a distributive reading. For example, consider (19a). The interpretation of this sentence may be paraphrased as "there is a set of buyers and a set of objects bought by this people, and I do not know which buyer bought any of the objects (=which buyer bought which object)". The relevance of this observation will become clear later, see section 3.

### 1.2.4. Conditionals

Some languages (eg. English) allow elements of the *n*-word type in conditional clauses. This is not the case in Spanish:

- (21) a. Si *nadie* viene/viniera, nos vamos/iríamos  
 "If nobody comes/comes(subj.), we will/would go"  
 b. \*Si Juan invita/invitara a *nadie*, nos vamos/iríamos.  
 "If Juan invites/(subj.) anybody, we will/would go"

Observe that the grammaticality of (21a) does not mean that the conditional environment is licensing *nadie*. Recall that preverbal subject *n*-words are usually allowed despite the context they appear in. On the other hand, if it were the case that this context is licensing the *n*-word, we would expect *nadie* to be interpreted as "anybody". Besides, a postverbal *nadie* is not allowed in the absence of negation (21b).

### 1.2.5. Adversative predicates

A last context we want to consider is that of adversative predicates. It has been often noted in the literature (see Progovac 1988, Laka 1990, among others), that verbs like "to doubt" and "to deny" —among others— allow the occurrence of a *n*-word in their complement clause without the presence of an overt negative marker. This is illustrated in the examples in (22) for Spanish.

- (22) a. Dudo que *nadie* venga      b. Dudo que venga *nadie*  
 "I doubt that anybody will come"<sup>6</sup>

### 1.2.6. Summary

In the data presented above, there are two issues that stand out. The first one concerns the role of negation in its relation with *n*-words. The second one relates to the distance allowed between the *n*-word and its possible licensors.

Concerning the role of negation, in all the grammatical contexts presented above, there are only two that do not show an overt negative marker *no*: the case of *n*-words in preverbal position and that of adversative predicates. All the other cases suppose a negative marker c-commanding the elements in question. Later, we will show that those cases that do not present an overt negative marker entail a covert instance of negation, see section 2.

In relation to the issue of distance, at first sight, there seems to be no restriction on how much apart could the *n*-word be from the negative marker. There are cases where these elements are clausemates (eg. (8-10)) and others where they are not (eg. (13-14)). But, recall that not all cases involving superordinate negation are allowed (see (11b) and (12a), for example). Superordinate negation seems to be allowed only if there is a certain element intervening between the negative marker and the *n*-word. For a detailed characterization of the "interveners" see section 3.

(6) There is at least one dialect of Spanish in which (22a) is ambiguous between the interpretation in the text and another like (i) (see Laka 1990: p.226): (i) "I doubt that nobody will come"

We will return to these issues in the following sections. The main generalization(s) concerning the distribution of *Wh*-in-situ and *n*-words will be presented and discussed in section 2.

## 2. On the Parallelism between *N*-words and *Wh*-in-situ

Recently, it has been noted that there seems to be a relation between *Wh*-elements (particularly, those in-situ) and polarity items (see Nichigauchi 1990).<sup>7</sup> For example, Li (1991) shows that in Chinese, *Wh*-words present a double function: they are interrogative elements in some contexts, and indefinite elements in others. In this second function, their distribution is restricted to certain environments, some of them characterized as negative polarity contexts (eg. negation, yes/no questions, etc.). Likewise, Aoun and Li (to appear) propose an account of the phenomenon of interrogatives in Chinese that supposes the treatment of *Wh*-elements-in-situ as a kind of polarity items (this proposal also advocates the existence of question operators and no *Wh*-movement at LF).

In this line, this section will show that the proposed parallelism mentioned above is also found in Spanish. The following subsections present a comparison between *Wh*-movement, *Wh*-in-situ and *n*-words. The purpose of this comparison is to show that *Wh*-in-situ and *n*-words behave in a similar fashion and share the same locality conditions in a number of contexts.

### 2.1. Apparent Unboundedness

One of the properties usually ascribed to syntactic *Wh*-movement is its appearance to be potentially unbounded (see Chomsky 1977 Hornstein 1984, van Riemsdijk and Williams 1986 and Longobardi 1991), this is illustrated in (23).

- (23) a. ¿Qué dijo María que compró Pedro?  
 "What did Maria say that Pedro bought?"  
 b. ¿Qué dijo María que Rosa vio que compró Pedro?  
 "What did M. say that R. saw that P. bought?"

As noted in section 1.1, instances of *Wh*-in-situ —with a non-echo interpretation— only occur in multiple questions in Spanish; there always has to be a moved *Wh*-element (a *Wh*-element in COMP) accompanying the unmoved one. Therefore, the issue of unboundedness applies to the distance between the two *Wh*-elements. Now, consider (24):

- (24) a. ¿Quién dijo María que compró qué/qué libro?  
 "Who did Maria say that bought what/what book?"  
 b. \*¿Quién dijo que María compró qué/qué libro?  
 "Who said that Maria bought what/what book?"

At first sight, (24a) appears to suggest that the cases of *Wh*-in-situ follow the pattern exemplified in (23); but, (24b) shows that this cannot be the case. It seems,

(7) See also Hornstein (1984), Aoun (1985) and Aoun and Hornstein (1985) for previous proposals suggesting a relation between *n*-words (in particular the French *personne*) and *Wh*-in-situ.

informally speaking, that *Wh*-elements-in-situ require —at least— the presence of a trace of the other *Wh*-phrase close to them (i.e. in the COMP of the same clause that contains the *Wh*-element); in other words, there seems to be a locality constraint.

*N*-words, as seen above, are not unbounded with regards to negation. See (25), repeated from (11b) and (12a) above.

- (25) a. \*Juan *no* dijo que llamó *nadie*  
           “Juan didn’t say that called *nadie*”  
       b. \*Juan *no* dijo que María había comprado *nada*  
           “Juan did not say that Maria had bought *nada*”

Let us now consider if the subjunctive mood has any effect in relation to this issue:

- (26) a. ¿Quién quería Juan que comprara cerveza?  
           “Who did J. want to buy beer?”  
       b. ¿Qué le ordenó a Pedro Juan que comprara?  
           What did J. order P. to buy?
- (27) a. ¿Quién quería que María comprara qué?  
           “Who wanted M. to buy what?”  
       b. ¿A quién le ordenó Juan que comprara qué?  
           “Who did J. order to buy what?”
- (28) a. Juan *no* quería que María comprara *nada*  
           “J. did not want M. to buy anything”  
       b. Juan *no* le ordenó a Pedro que comprara *nada*  
           “J. did not order P. to buy anything”

(26) shows that *Wh*-movement is not sensitive to subjunctive; in other words, whether the verb is in the subjunctive or not, this kind of movement appears to be unbounded (cf. (23)). On the other hand, *Wh*-in-situ is sensitive to subjunctive, see (27). Observe that this example differs only from (24b) with respect to the mood of the embedded verb. Finally, (28) shows that *n*-words are also sensitive to subjunctive contexts, a point we already discussed in section 1.2.2.

We have seen that *Wh*-extraction appears to be unbounded —as standardly assumed. On the other hand, instances of *Wh*-in-situ and *n*-words do not appear to follow this pattern, they seem to be clause-bounded; and contrary to the case of *Wh*-movement, they are sensitive to the distinction indicative/subjunctive. In the following section, we turn to the comparison of these elements in the context of *Wh*-islands.

## 2.2. *Wh*-Islands

Spanish displays an argument/adjunct asymmetry with regard to *Wh*-islands. More precisely, *Wh*-arguments are able to escape this constraint; whereas, *Wh*-adjuncts are subject to it (as known, this has been observed for other languages; see

Aoun and Li (to appear) and references cited there). Consider the case of *Wh*-movement illustrated in the following examples:<sup>8</sup>

- (29) a. ¿Qué curso no sabes quién aprobó?  
 "Which course don't you know who approved?"  
 b. ¿Quién no sabes qué curso aprobó?  
 "Who don't you know which course approved?"
- (30) a. ¿Qué curso no sabes por qué aprobó Juan?  
 "Which course don't you know why Juan approved?"  
 b. ¿Qué curso no sabes cómo aprobó Juan?  
 "Which course don't you know how Juan approved?"
- (31) a. \*¿Por qué no sabes quién aprobó historia?  
 "Why don't you know who approved history?"  
 b. \*¿Cómo no sabes quién aprobó historia?  
 "How you don't know who approved history?"
- (32) a. \*¿Por qué no sabes cómo aprobó historia Juan?  
 "Why you don't know how Juan approved history?"  
 b. \*¿Cómo no sabes por qué aprobó historia Juan?  
 "How you don't know why Juan approved history?"

The examples in (29)–(30) show that an argument *Wh*-element can be extracted out of a *Wh*-island regardless the nature of the *Wh*-phrase in the lower COMP. (31)–(32), on the other hand, show that adjunct *Wh*-elements cannot get extracted out of this island.

Let us now consider the other two cases under comparison. First, the examples (33) and (34) illustrate the situation of *Wh*-in-situ.

- (33) a. ¿Quién no sabe qué curso aprobó quién?  
 "Who doesn't know which course who approved?"  
 b. ¿Quién no sabe quién aprobó qué curso?  
 "Who doesn't know who approved what course?"
- (34) a. \*¿Quién no sabe por qué aprobó qué curso?  
 "Who doesn't know why he-approved which course?"  
 b. \*¿Quién no sabe cómo aprobó qué curso?  
 "Who doesn't know how he-approved which course?"<sup>9</sup>

Contrary to the case of *Wh*-movement, the examples in (33) do not involve an island violation. The *quién* in-situ in (33a) and the unmoved *Wh*-phrase *qué curso* in (33b) cannot be interpreted as having matrix scope. The interpretation of these sentences entails only a distributional (list) reading in which the element in-situ has to be paired with the lower *Wh*-phrase in COMP.

(8) See Contreras (1982) and Lasnik and Uriagereka (1988: Ch.4) for similar facts.

(9) As we know from section 1.1, adjunct *Wh*-elements cannot stay in-situ (see (2)). Thus, it would be redundant to complete the paradigm. Concerning a special interpretation of (34b) see fn. 11.

Second, consider the following paradigm in which the case of *n*-words is illustrated.

- (35) a. No sé qué curso aprobó nadie  
 "I don't know which course approved anybody"  
 b. No sé quién aprobó ningún curso  
 "I don't know who approved any course"
- (36) a. \*No sé por qué aprobó ningún curso  
 "I don't know why he-approved any course"  
 b. \*No sé cómo aprobó ningún curso  
 "I don't know how he-approved any course"
- (37) a. \*No sé quién aprobó historia por ninguna extraña razón  
 "I don't know who approved history for any strange reason"  
 b. \*No sé quién aprobó historia con ningún método  
 "I don't know who approved history with any method"
- (38) a. \*No sé cómo aprobó historia por ninguna extraña razón  
 "I don't know how he-approved history for any strange reason"  
 b. \*No sé por qué aprobó historia con ningún método<sup>10</sup>  
 "I don't know why he-approved history with any method"

At first sight, *n*-words appear to violate *Wb*-islands. This would indicate that they behave like instances of *Wb*-movement (see Bosque 1992) and different from *Wb*-in-situ. The apparent violation comes from the consideration that the relation between the *n*-word and the negative marker *no* is the relevant one. In regards to this point, we need to be cautious. Observe that the examples in (35) (as the ones in (33)) have only a distributional reading in which the *n*-words are paired with the *Wb*-element in COMP. In addition, when the pairing is not possible the sentences are clearly worse (see (36)).<sup>11</sup> Moreover, *n*-words cannot have a matrix scope interpretation in cases such as (39), cf. (33).

(10) Cases like this one become acceptable if instead of using the preposition *con* "with", the preposition *sin* "without" is used. This is explained in the assumption that *sin* is an inherently negative P, a potential licenser for *n*-words.

(11) Concerning (36b), it is necessary to note that it becomes grammatical under an instrumental interpretation of *cómo*, the same is true for (34b), see section 1.1. The examples in (34) and (36) show that the pairing between two elements (i.e. absorption) is only possible in case both elements are of the same nature. Here it is interesting to note that Aoun's (1986) classification (see sec. 1.1) seems to play a crucial role: only referential *Wb*-expressions may undergo a process of absorption. Consider the cases in (i)(ib)=(37b)(see also Bosque 1992) and contrast them with (ii):

- (i) a. \*No sé a quién vimos en ningún lugar  
 "I don't know who we saw in any place"  
 b. \*No sé quién aprobó historia con ningún método  
 "I don't know who approved history with any method"
- (ii) a. No sé a quién vimos en ninguno de los lugares que marcamos en el mapa  
 "I don't know who we saw in any of the places we marked in the map"  
 b. No sé quién aprobó historia con ninguno de los métodos que recomendamos  
 "I don't know who approve history with any of the methods we recommended"

Apparently, the only difference between (i) and (ii) is that the *n*-word expressions in (ii) might be considered more referential, in the sense that they refer to a predetermined set of objects; hence, they are able to absorb with the referential *Wb*-element in COMP. The ones in (i) appear to refer to "no place" and "no method"; not being referential, they are not able to be paired with the *Wb*-expression.

- (39) a. ¿Quién no sabe qué curso aprobó nadie?  
 "Who doesn't know which course approved anybody?"  
 b. ¿Quién no sabe quién aprobó ningún curso?  
 "Who doesn't know who approved any course?"

These facts suggest, contrary to the appearance, that *n*-words do not violate *Wh*-islands, showing a behavior parallel to that of *Wh*-in-situ elements. As we will see later, certain *Wh*-elements in COMP may act as "interveners" for *n*-words.

The same pattern exemplified by the previous cases of this section is also displayed by cases involving the interrogative complementizer *si* "whether". See the following examples:

- (40) a. ¿Qué curso no sabes si Juan aprobó?  
 "What course don't you know whether Juan approved?"  
 b. \*¿Por qué/cómo no sabes si Juan aprobó historia?  
 "Why/how don't you know whether Juan approved history?"
- (41) ¿Quién no sabe si Juan aprobó qué curso?  
 "Who doesn't know whether Juan approved which course?"
- (42) a. ¿Quién no sabe si Juan aprobó ningún curso?  
 "Who doesn't know whether Juan approved any course?"  
 b. \*¿Quién no sabe si Juan aprobó historia por ninguna extraña razón/con ningún método?  
 "Who doesn't know whether Juan approved history for any strange reason/with any method?"

### 2.3. CED Effects

It is a known fact that an element cannot be *Wh*-extracted from within an adjunct clause, as illustrated in (43).

- (43) a. \*¿Quién no se molestó Juan porque trajo una película porno?  
 "Who didn't Juan get upset because brought a porno movie?"  
 b. \*¿Por qué no se molestó Juan porque María trajo una película porno?  
 "Why didn't Juan get upset because María brought a porno movie?"

A similar effect is observable in the case of *Wh*-in-situ and *n*-words. These elements cannot be related to (or licensed by) elements outside the adjunct clause. See (44) and (45).

- (44) \*¿Quién no se molestó porque María trajo qué?  
 "Who didn't get upset because María brought what?"
- (45) a. \*Juan no se molestó porque María trajo nada  
 "Juan didn't get upset because María brought anything"  
 b. \*Juan no se molestó porque María trajo una película porno por ninguna extraña razón  
 "Juan didn't get upset because María brought a porno movie for any strange reason"

The previous examples involve adjunct indicative clauses (i.e. the verb of the adjunct clause is in the indicative mood). Consider now, parallel cases but, this time, with adjunct subjunctive clauses:

- (46) a. \*¿Quién no se molestó Juan porque trajera una película porno?  
 “Who didn’t Juan get upset because brought(subj.) a porno movie?”  
 b. \*¿Por qué no se molestó Juan porque María trajera una película porno?  
 “Why didn’t Juan get upset because María brought (subj.) a porno movie?”
- (47) ¿Quién no se molestó porque María trajera qué?  
 “Who didn’t get upset because Maria brought(subj.)what?”
- (48) a. Juan no se molestó porque María trajera nada  
 “Juan didn’t get upset because Maria brought(subj.)anything”  
 b. \*Juan no se molestó porque María trajera una película porno con ninguna intención oculta  
 “Juan didn’t get upset because Maria brought(subj.) a porno movie with any hidden intention”

(47) and (48) show that *Wh*-in-situ and *n*-words are subject to a Subjunctive Effect (*N*-words showing an argument/adjunct asymmetry). Observe that the only difference between these examples and the ones in (44-45) is the mood of the verb in the adjunct clause, however *Wh*-in-situ and *n*-words are allowed to occur. These two cases pattern together against *Wh*-extraction, which appears insensitive to the distinction indicative/subjunctive.

#### 2.4. Complex NPs

The facts about complex NPs are similar to the case just presented in the previous section. *Wh*-movement cannot extract an element out of a complex NP (regardless of the mood of the verb in the clause headed by the NP). However, *Wh*-in-situ and *n*-words appear to be able to be licensed by elements outside the complex NP, provided that the verb of this clause is in the subjunctive.

First, consider the following cases of adnominal clauses. (49) through (51) present indicative verbs:

- (49) a. \*¿Quién no le gustó el hecho de que le regaló un collar a María?  
 “Who didn’t he-like the fact that gave a necklace to Maria?”  
 b. \*¿Por qué no le gustó el hecho de que Juan le regaló un collar a María?  
 “Why didn’t he-like the fact that Juan gave a necklace to Maria?”
- (50) \*¿A quién no le gustó el hecho de que Juan le regaló qué a María?  
 “Who didn’t like the fact that Juan gave what to M.?”
- (51) a. \*No le gustó el hecho de que Juan le regaló nada a María  
 “He didn’t like the fact that J. gave anything to M.”  
 b. \*No le gustó el hecho de que Juan le regaló un collar a María por ninguna extraña razón  
 “He didn’t like the fact that J. gave a necklace to Maria for any strange reason”

In contrast, similar cases with a subjunctive verb become acceptable for *Wh*-in-situ and *n*-words in argument position:

- (52) a. \*¿Quién no le gustó el hecho de que le regalara un collar a María?  
 “Who didn’t he-like the fact that gave(subj.) a ecklace to Maria?”  
 b. \*¿Por qué no le gustó el hecho de que Juan le regalara un collar a María?  
 “Why didn’t he-like the fact that Juan gave(subj.) a necklace to Maria?”
- (53) ¿A quién no le gustó el hecho de que Juan le regalara qué a María?  
 “Who didn’t like the fact that Juan gave(subj.) what to Maria?”
- (54) a. No le gustó el hecho de que Juan le regalara nada a María  
 “He didn’t like the fact that Juan gave(subj.) anything to Maria”  
 b. \*No le gustó el hecho de que Juan le regalara un collar a María por ninguna extraña razón  
 “He didn’t like the fact that Juan gave(subj.) a necklace to Maria for any strange reason”

Second, consider cases involving relative clauses. Here, the same facts are obtained. (55) through (57) are examples of relative clauses with indicative verbs, and (58) through (60) involve subjunctive verbs.

- (55) a. \*¿A quién vio Juan a la mujer que le dio un libro?  
 “To whom did Juan see the woman that gave a book”  
 b. \*¿Por qué vio Juan a la mujer que le dio un libro a Pedro?  
 “Why did Juan see the woman that gave Pedro a book?”
- (56) \*¿Quién vio a la mujer que le dio un libro a quién?  
 “Who saw the woman that gave who a book?”
- (57) a. \*Juan no vio a la mujer que le dio un libro a nadie  
 “Juan didn’t see the woman that gave a book to anyone”  
 b. \*Juan no vio a la mujer que le dio un libro a Pedro con ninguna intención  
 “Juan didn’t see the woman that gave a book to Pedro with any intention”
- (58) a. \*¿A quién buscaba Juan una mujer que le diera(subj.) un libro?  
 “To whom was Juan looking for a woman that give a book?”  
 b. \*¿Por qué buscaba Juan una mujer que le diera(subj.) un libro a Pedro?  
 “Why was Juan looking for a woman that give a book to Pedro?”
- (59) ¿Quién buscaba una mujer que le diera(subj.) un libro a quién?  
 “Who was looking for a woman that give a book to whom?”
- (60) a. Juan no buscaba una mujer que le diera(subj.) un libro a nadie  
 “Juan was not looking for a woman that give a book to anyone”  
 b. \*Juan no buscaba una mujer que le diera(subj.) un libro a Pedro por ninguna razón  
 “Juan was not looking for a woman that give a book to Pedro for any reason”

## 2.5. Sentential Subjects

Instances of *Wh*-in-situ and *n*-words are not permitted in cases involving sentential subjects (SSC). Only *wh*-arguments may be extracted out of this island. This is illustrated in (61)-(63).

- (61) a. ¿A quién cree que llamar no será posible?  
 "To whom does he believe to call won't be possible?"  
 b. \*¿Cómo cree que llamar a Juan no será posible?  
 "How does he believe to call Juan won't be possible?"
- (62) \*¿A quién cree que comprarle qué no será posible?  
 "To whom does he believe to buy(him) what won't be possible?"
- (63) a. \*Él cree que llamar a nadie (no) será posible  
 "He believes to call anybody won't be possible"  
 b. \*Él cree que llamar a Juan por ninguna extraña razón (no) será posible  
 "He believes to call Juan for any strange reason won't be possible"

## 2.6. Extraction from DP

*Wh*-movement, *Wh*-in-situ and *n*-words behave in a similar fashion with respect to DPs (see Bosque 1992, and also Moritz and Valois 1991 for similar facts in French). Consider the following examples, adapted from Bosque (op.cit.).

- (64) a. \*El barco del que vi tus fotos...  
 "The ship I saw your pictures of..."  
 b. \*¿Quién vio tus fotos de qué barco?  
 "Who saw your pictures of which ship?"  
 c. \*No vi tus fotos de ningún barco<sup>12</sup>  
 "I didn't see your pictures of any ship"
- (65) a. El barco del que vi fotos...  
 "The ship I saw pictures of..."  
 b. ¿Quién vio fotos de qué barco?  
 "Who saw pictures of which ship?"  
 c. No vi fotos de ningún barco  
 "I didn't see pictures of any ship"

(64a) shows that a *Wh*-phrase cannot be extracted out of a DP in the presence of a possessor (possessive pronoun *tus* "your"). Similarly, *Wh*-in-situ and *n*-words are not allowed in this configuration. In contrast, similar cases without the possessive pronoun are grammatical, as seen in (65).

(12) As pointed out by Bosque (1992), it is interesting to note that this sentence —with the appropriate intonation— might have an interpretation parallel to an echo reading, "echo negation". This fact has been recognized in traditional grammar under the label "controversial negation".

2.7. Weak Crossover Effects

As a final point of comparison, it is interesting to note that the three cases under study display WCO effects, as illustrated by these examples:

- (66) a. \*¿A quién<sub>i</sub> ama su<sub>i</sub> madre?  
 "Who does his mother love?"
- b. \*¿Quiénes no saben si su<sub>i</sub> madre ama a quién<sub>i</sub>?  
 "Who(pl.) don't know whether his mother loves who?"
- c. \*Su<sub>i</sub> madre no ama a nadie;  
 "His mother does not love anyone"

2.8. *Wh*-movement, *Wh*-in-situ and *N*-words: Summary

The previous subsections show evidence that indicates a parallelism between *Wh*-elements-in-situ and *n*-words: they seem to share a similar locality constraint (*Wh*-in-situ with respect to the moved *Wh*-element and *n*-words with respect to negation —on possible "interveners" see sec. 3) and both are sensitive to subjunctive contexts. On the other hand, *Wh*-movement (i.e. overt extraction) does not display these characteristics. The findings of the above subsections are summarized under the following table. See (67), where (SE) indicates the existence of a subjunctive effect that reverses the value shown in the table,  $A/\bar{A}$  indicates an argument adjunct asymmetry, and the "-" under (67)6. refers to cases involving a possessor.

(67)		<i>Wh</i> -movement	<i>Wh</i> -in-situ/ <i>N</i> -words
	1. Unboundedness	+	- (SE)
	2. <i>Wh</i> -Islands	$A/\bar{A}$	-
	3. CED	+	+ (SE)
	4. CNPC	+	+ (SE)
	5. SSC	?? $A/\bar{A}$	+
	6. Extraction from DP	-	-
	7. WCO	+	+

Before leaving this section, we would like to present and discuss what we believe is the main generalization and some of the consequences concerning the data previously presented.

As we noted in section 1.2.6, there are two issues that deserve special attention. One concerns the fact that *Wh*-in-situ and *n*-words generally occur with other elements. In particular, the occurrence of an unmoved *Wh*-element presupposes another *Wh*-expression in a neighboring COMP; for *n*-words, there is always negation (overt or covert, see below). The other issue is the one related to the distance allowed between the elements in question and their apparent licensors.

Let us start by considering the first issue. For *Wh*-in-situ elements, it is clear from the data presented before that they always co-occur with another *Wh*-expression (i.e. in cases of multiple questions). On the contrary, the data on *n*-words present two cases that do not show overtly the presence of negation: the case of

*n*-words in preverbal position and that of adversative predicates. All other cases involve a negative marker *c*-commanding these elements.

Rizzi (1982) and Jaeggli (1982) have proposed that in the case of preverbal *n*-words, there is also a negative marker present, and that this element is deleted in these contexts by a PF rule such as this: neg. marker  $\rightarrow \emptyset / n\text{-word\_X}$  (see also Aoun 1985). More recently, Laka (1990) has proposed that a preverbal *n*-word supposes the existence of a phonologically empty negative morpheme with whom it enters into a relation of Spec-head agreement (see also Arnaiz 1991 and Zanuttini 1991). In other words, these cases may also be seen as involving the presence of negation, the only difference being that it does not manifest overtly (for a detailed treatment of this cases, see section 3).

Concerning the case of adversative predicates, Laka (1990) (see also Progovac 1988) shows that verbs like "to doubt" (usually thought to be inherently negative) select for a negative complementizer (a *C* that has the [+neg] feature). Observe that cases where the complementizer is absent, do not allow the occurrence of *n*-words; it is the complementizer, not the verb itself, what allows a *n*-word to appear in this context (cf. (22)):

- (68) \*Juan duda ninguna teoría            "Juan doubts any/no theory"

The same as in the previous case we may conclude that negation is present in adversative predicates.

Now, we can state the first part of the generalization concerning *Wh*-in-situ and *n*-words in Spanish: *A moved Wh-element and negation are necessary conditions for the occurrence of these elements, respectively.*

Notice that the co-occurrence of the "licensors" does not guarantee the grammaticality of sentences containing the elements under study. For example, cases involving negation in the matrix clause or a *Wh*-element extracted from the root clause do not allow a *n*-word or a *Wh*-in-situ in an embedded indicative clause, respectively (see (24b) and (25)). From this observation, we may add to the first part of the generalization that the licensing elements *are a necessary, but not a sufficient condition.*

Let us turn now to the issue of distance between the potential licensors and *Wh*-elements in-situ and *n*-words. At first sight, there seems to be no restriction on how much apart could the *n*-word and the *Wh*-in-situ be from their potential licensors. There are cases where these elements are clausemates (eg. (5-10)/(1b)) and others where they are not (eg. (27)/(28)). But, recall that not all cases where the relevant elements are not clausemates are allowed (see (25)/(24b), for example). Besides, the asymmetry between indicative and subjunctive appears suspicious: why is it the case that the elements under study are sensitive to a SE?, or why the behavior of these elements is sensitive to a mood distinction between indicative and subjunctive. This effect reminds, in some sense, of the so called Disjoint Reference Effect (DRE) (see Kempchinsky 1986 and Sánchez 1987), illustrated in (69a), cf. (69b):

- (69) a. \*Juan<sub>i</sub> quiere que él<sub>i</sub> gane(subj.) la carrera  
           "Juan wants him to win the race"  
       b. Juan<sub>i</sub> dice que él<sub>i</sub> ganó(ind.) la carrera  
           "Juan says that he won the race"

(69a) shows that the subject of the embedded subjunctive verb cannot corefer with the subject of the matrix. In (69b), both subjects may corefer freely, the indicative mood does not induce this effect. This has been explained by assuming the existence of an abstract subjunctive operator in [Spec,CP].<sup>13</sup>

For the cases that concern us, one may say that the possibility of having the licensor and licensee in configurations where they are not clausemates is due to the presence of an "intervener";<sup>14</sup> possible interveners are the subjunctive operator and interrogative operators.<sup>15</sup>

In brief, a licensor can reach its licensee via an "intervener" (the subjunctive or interrogative operator, these elements apparently are able to carry over or transmit the features of the licensor —the exact role of these elements will be discussed later. At the same time, if no intervener is present, *Wh*-in-situ and *n*-words are not allowed in contexts of "superordinate licensing" (cf. indicative embedded clauses). We take these facts as an indication that *n*-words and *Wh*-elements in-situ are clause-bound.

Now, we may state what we believe is the generalization concerning the phenomena that interest us here:

(70) Generalization:

- I. Negation/moved *Wh*-elements are a necessary, but not a sufficient condition for *n*-words/*Wh*-in-situ, respectively.
- II. *N*-words and *Wh*-in-situ are clause-bounded.

Finally, the difference in behavior between the two types of *Wh*-expressions merits some discussion. The results of the comparison presented above raise some questions concerning the difference between *Wh*-movement and *Wh*-in-situ. One of the most interesting ones relates to the nature of this difference: which is the factor responsible for these facts?. The SE appears to shed some light on this issue. Assuming that movement is uniform across the relevant levels and that both phenomena are subject to it, as the standard view suggests, it is not clear why *Wh*-in-situ is sensitive to the SE and cases of overt *Wh*-extraction are not. The fact that *Wh*-in-situ elements are sensitive to the SE seems to suggest that movement is not involved in this phenomenon. Observe that *Wh*-in-situ and overt *Wh*-extraction behave similarly in cases involving the indicative mood, but they differ only in those cases where a subjunctive operator is presented, it is not clear how a movement analysis will handle this difference.

### 3. A Uniform Analysis for *N*-words and *Wh*-in-situ

In this section, we propose an analysis for *n*-words and *Wh*-in-situ in Spanish that treats these elements as -anaphors, as such they will be required to be bound by

(13) According to Kempchinsky (1986), the embedded I moves to C at LF in order to identify the abstract operator. Thus, the governing category of the subject gets extended one clause up, inducing a Principle B violation of the Binding theory.

(14) See Linebarger (1981) for a discussion of the possible interveners for English NPIs.

(15) Recall in this regard that the cases of indirect questions entail only a distributive reading a fact that suggests that some kind of absorption process is taking place between the *n*-word and the *Wh*-phrase. Infinitival clauses will be discussed in the following section.

an operator in the clause they are contained. In this way, the generalization stated in the previous section will be accounted for. We will also discuss the role of the possible “interveners” and review the issues and cases presented in the previous sections.

### 3.1. *N*-words and *Wh*-in-situ as $\bar{A}$ -anaphors

The parallel behavior of *Wh*-in-situ and *n*-words in Spanish is, in a certain degree, reminiscent of the situation of Chinese *Wh*-elements. In this language, as pointed out by Aoun and Li (to appear) (see also Li 1991), *Wh*-elements—which always remain in-situ and are not subject to LF movement—may be treated as a kind of polarity items, and not as true operators. In this proposal these elements need to be related to a question operator (Qu-Op). The interpretation of *Wh*-expressions in this language is achieved at S-structure via their coindexation with a Qu-Operator that sits in the appropriate [Spec,CP].

In Spanish, one way to account for the behavior of *Wh*-in-situ and *n*-words is to treat them as polarity items. We propose that these elements should be characterized as  $\bar{A}$ -anaphors (see Progovac 1988) functioning as variables, not subject to LF movement (see section 2.8).<sup>16</sup> This would mean that *Wh*-in-situ and *n*-words must be  $\bar{A}$ -bound in their governing category, according to the Generalized Binding Theory.<sup>17</sup> In other words, they need to be clause-bounded to an  $\bar{A}$ -binder, an element in an  $\bar{A}$ -position. This characterization takes care of the second part of the generalization stated in (70), the locality requirement follows naturally from the nature attributed to these elements.

Concerning the issue of the role of the “licensor”, it is necessary to note that we need to characterize it as an  $\bar{A}$ -binder or related to an element of this nature. Let us consider first the case of *Wh*-operators. Following Aoun and Li (to appear), we would like to propose that Spanish also presents a Qu-operator in [Spec,CP] and that this operator incorporates with a *Wh*-element (after *Wh*-movement, incorporation takes place, the Qu-Op and the *Wh*-element become one). This proposal follows in spirit Rizzi (1991)’s *Wh*-Criterion, with the difference that a *Wh*-element becomes

(16) Concerning *n*-words, see Longobardi (1991), Zanuttini (1991) and Bosque (1992) for a movement analysis.

(17) Aoun (1981,1985) states the following principles for the Generalized Binding Theory:

- (i) Generalized Binding Principles
  - A. An anaphor must be X-bound in its governing category.
  - B. A pronominal must be X-free in its governing category.
  - C. A name must be A-free.
 (where X =  $\bar{A}$  or )

“Governing category”, “bound”/“free” and “accessibility” are defined as follows:

- (ii) a.  $\alpha$  is a governing category for  $\beta$  iff  $\alpha$  is the minimal maximal projection containing  $\beta$ , a governor of  $\beta$ , and a subject accessible to  $\beta$ . Subject = AGR or [NP,S].
- b. An element  $\alpha$  is bound by an element  $\beta$  iff it is coindexed with  $\beta$  and c-commands  $\alpha$ . If  $\alpha$  is not bound, it is free.
- c.  $\alpha$  is accessible to  $\beta$  iff  $\beta$  is in the c-command domain of  $\alpha$  and coindexing of ( $\alpha$ ,  $\beta$ ) would not violate principle C of the binding theory.

See also Hornstein (1984) and Chomsky (1981).

an operator once it incorporates with the Qu-operator and enters in a Spec-head agreement relation with a [+WH] head.<sup>18</sup> Another possibility would be to say that *Wh*-elements are potential operators that need to be activated as such in a relation of Spec-head agreement with a [+WH] X° (the Qu-morpheme of Aoun and Li, that in Spanish appears to be abstract). Notice that we are suggesting that *Wh*-elements become operators once they move to a [Spec,CP] position by virtue of either incorporating to the abstract Qu-operator or by entering into Spec-head agreement with an interrogative morpheme. These elements are not operators by themselves. The fact that *Wh*-in-situ requires to be related to another *Wh*-element<sup>19</sup> (Qu-operator) is captured by the characterization suggested in the previous paragraph: in-situ elements as  $\bar{A}$ -anaphors functioning as variables need to be bound to a Qu-operator in the clause they are contained (for the role of the interveners, see below).

Second, consider the case of negation as  $\bar{A}$ -binder for *n*-words. One way to treat negation as an  $\bar{A}$ -binder is found in the proposals made in Rizzi (1990) and Ouhalla (1990). These proposals suggest the existence of a null negative operator in the specifier position of the projection headed by the negative marker, a projection higher than VP.<sup>20</sup> Another possibility, transposing Pollock's (1989) theory of Tense to negation, would be to propose to treat Neg° (lexically realized or not) as an operator (probably an  $\bar{A}$ -head, see Roberts 1990). This operator, then, would function as a possible binder/antecedent for the elements that concern us here. Note that the first part of the generalization in (70) requires all *n*-words to be mandatorily related to the negative marker, the nature of the operator/variable relation between these elements would explain this fact.

In brief, the proposal advanced here assumes *Wh*-in-situ and *n*-words to be  $\bar{A}$ -anaphors. And, as variables, they need to be bound to an operator. Moreover, we are proposing —based on the observation of the SE— that there is no need to resort to any kind of movement (see Aoun and Li (to appear)).

The suggestions made, up to this point, take care of several of the cases presented in the previous sections. Consider, first, those cases where *Wh*-in-situ and *n*-words occur in matrix clauses. See (1) and (8), for example, repeated here as (71) and (72), respectively.

(18) Rizzi (1991: 2) states the *Wh*-Criterion as in (i):

- (i) The *Wh*-Criterion
  - A. A *Wh*-Operator must be in a Spec-head configuration with an X°<sub>[+WH]</sub>.
  - B. An X°<sub>[+WH]</sub> must be in a Spec-head configuration with a *Wh*-operator.

(19) As known, French *Wh*-in-situ elements do not require the presence of another *Wh*-expression, as illustrated in (i) —from Aoun (1986):

- (i) tu as vu qui?      "Whom did you see?"  
you saw whom?

Cases such as this one suggest that French *Wh*-elements are allowed to incorporate with the Qu-operator (or be activated) at LF, contrary to Spanish where this process has to take place at S-structure. See Aoun (1986) and Rizzi (1991).

(20) Here, we do not commit to any particular theory about negation, it suffices for us a NegP higher than VP. For different proposals about the nature and structural position of NegP, see Chomsky (1989), Pollock (1989), Belletti (1990), Rizzi (1990), Ouhalla (1990), Laka (1990) and Zanuttini (1991), among others.

- |         |  |    |   |
|---------|--|----|---|
| (71) a. | ¿Quién compró qué?<br>"Who bought what?"                   | b. | *¿Juan compró qué?<br>"Juan bought what?" |
| (72) a. | No baila nadie<br>Neg. dances anybody<br>= "Nobody dances" | b. | *Baila nadie<br>Dances anybody/nobody     |

In (71a), the unmoved *qué* is bound by the Qu-operator in [Spec,CP]. Similarly, in (72a), *nadie* is bound by the negative operator. No violation occurs. On the other hand, in (71b) and (72b), the *Wh*-in-situ and the *n*-word—respectively—are free in their governing category incurring in a violation of principle A of the Generalized Binding Theory (see fn. 17).

Second, another group of cases that may be accounted for are those in section 2.6, under extraction from DP. Following Aoun (1985), we may assume that the possessive pronoun (a clitic in this view) occupies an  $\bar{A}$ -position—the [Spec,DP] position—and acts as accessible SUBJECT; therefore, the governing category for a variable inside the NP is DP. Thus, a *n*-word or a *Wh*-in-situ (characterized as variables in our proposal) inside a DP that presents a possessive pronoun would fail to be bound by an operator in its governing category, violating principle A. The same applies to the variable left by *Wh*-extraction. See Hudson (1989).

Third, the WCO effect shown in section 2.7 is expected, under the view that the relation between the *Wh*-in-situ/*n*-word, and their "licensors" (the Qu-operator and negative operator, respectively) is a case of operator/variable relation.

Next, we turn to discuss those cases that appear to violate the locality requirement mentioned above.

### 3.2. Interveners

In the previous sections, we presented some examples in which it appears that a *Wh*-in-situ and/or a *n*-word were being licensed by an element outside their clause. But, we noted that all these cases have in common the occurrence of an element (more precisely, an operator) mediating or intervening in the COMP between the apparent licensor and the elements under study. Based on this observation, we stated that the relation between the two elements in question was still local. Here, we intend to give content to this idea. The three possible interveners we have seen are Subjunctive, *Wh*-operators and the interrogative complementizer *si* "whether". Now, we turn to deal with each of these "interveners".

The subjunctive mood has a particular effect with regards to *n*-words and *Wh*-in-situ (see section 2.1 and table in (67)): it allows these elements to occur with a non-local licensor, while the indicative mood does not. In section 2.8, we relate this effect with the so called DRE. But, it is necessary to note that the SE found with *n*-words and *Wh*-in-situ differs from the DRE in a major way: the DRE affects only subjects, whereas the SE affects also objects. This suggests that the particular mechanisms at play in these two subjunctive effects are different, so are the elements they involve.

Again, there are two issues that must be considered: the locality requirement and

the role of the licenser. Concerning the former, recall that we have proposed to treat *n*-words and *Wh*-in-situ as  $\bar{A}$ -anaphors, this means that these elements need to be bound by a binder in  $\bar{A}$ -position in their governing category. The main candidate that fulfills this is the subjunctive operator.

Regarding this, we need to establish how the licenser reaches the elements in question. One possibility is to assume that the subjunctive operator is transparent or capable to transmit the [+wh] feature and/or negation—it may be the case that this element bears the relevant feature when c-commanded by a (licensing) operator. In this way, *Wh*-in-situ and *n*-words would be bound and licensed by this operator. A potential objection to this possibility is that it is not clear how and why the subjunctive operator should be transparent for *Wh*-elements. Note that there are no other cases—that we know of—where these elements interact; contrary to the case of negation, as noted by J. Franco (p.c.), negation itself is a trigger for subjunctive in certain cases.

Another option—that we take here—is to assume Aoun and Li's (forthcoming) proposal that suggests that a distinction needs to be recognized between local binder and appropriate antecedent for variables and anaphors. To illustrate this, consider the following example from Aoun and Li (op. cit.):

(73) John<sub>i</sub> seems [<sub>t<sub>i</sub></sub> to like himself<sub>i</sub>]

In this sentence, the reflexive pronoun *himself*, as an anaphor needs to be bound in the embedded clause. The NP-movement trace *t<sub>i</sub>* fulfills this requirement acting as binder for the reflexive. On the other hand, this element has an antecedent in the NP *John*, from which it gets its reference. According to these authors, anaphors and variables are subject to two requirements: they must have an antecedent (antecedent requirement) and they must have a binder in a certain domain (locality requirement).<sup>21</sup> Informally speaking, the binder is the element through which the bindee fulfills its binding requirement, and the appropriate antecedent (that must be the most local potential antecedent) is the one that relates to the interpretation or reference of the element in question. In this line, *Wh*-in-situ and *n*-words may find their binder in the subjunctive operator, for example, and its appropriate antecedent in the moved *Wh*-element and the negative marker, respectively. In other words, we are proposing that the subjunctive operator is capable of binding *Wh*-in-situ and *n*-words (as  $\bar{A}$ -anaphors, they would be bound in their governing category); but this is not sufficient. As we know from the discussion above, negation is a prerequisite for the occurrence of *n*-words and a moved *Wh*-element for *Wh*-in-situ. Here, the notion of appropriate antecedent enters into the picture, this function can only be carried out by the negative marker for *n*-words and by a *Wh*-operator for *Wh*-in-situ. Note that the functions of binder and proper antecedent may be fulfilled by a single element. This would be the case of negation (via the negative operator) for *n*-words in contexts of clausemate negation, and that of *Wh*-elements occurring in the same clause with *Wh*-in-situ.

(21) See Aoun and Li (forthcoming) for an explicit definition of these requirements.

This proposal accounts for the behavior of *n*-words and *Wh*-in-situ in subjunctive contexts. The cases of island violations in the presence of subjunctive are also explained by these suggestions. Notice that these elements as  $\bar{A}$ -anaphors may be licensed by the subjunctive operator, being able to override the effect of the island (see sections 2.3 and 2.4). As expected, these elements cannot escape those islands that do not offer the possibility of subjunctive, see the case of the SSC (section 2.5), for example. This fact is explained in the standard assumption that the indicative mood does not entail the presence of any operator in particular.

It is interesting to note that cases involving movement are insensitive to subjunctive, this is explained by the fact that these elements do not enter into a relation with the operator in question.

Let us turn now to cases that present *Wh*-elements as interveners for *n*-words. Section 2.2 shows some examples where a *n*-word is allowed to occur with superordinate negation in cases that do not involve the presence of the subjunctive operator. All these cases have in common the occurrence of a *Wh*-operator between the negative marker and the *n*-word. This situation is similar to the cases discussed immediately above. In other words, the *Wh*-operators may act as binders for *n*-words. Similar to the case of subjunctive, negation is necessary: the negative operator acts as the appropriate antecedent.

An aspect that points out that the relation between the *n*-word and the *Wh*-operator is not a mere formal artifact is found in the possibility of having a distributive (list or paired) reading between the *Wh*-element in COMP (the interrogative operator) and the *n*-words in the lower clause, provided that these elements are of the same nature (eg. potentially referential, see example (35)). The fact that an absorption process is present in the case of argument (referential) *Wh*-in-situ and *n*-words in contexts of *Wh*-islands suggests that these elements must have something in common. This common behavior could be related to the similar nature of these elements; as we have proposed, in both cases we are dealing with  $\bar{A}$ -anaphors acting as variables. Also, it seems that the notion of referentiality presented in section 1.1 (see Aoun 1986) plays a crucial role in this issue. Observe that *Wh*-in-situ and *n*-words may only be related to a *Wh*-element in COMP if they are potentially referential (see fn. 11). In a speculative way, we might think that the *Wh*-operator belongs to the set of possible binders for polarity items. Because of this, it may act as intervener for a *n*-word (the *Wh*-operator cannot act as antecedent for a *n*-word because, as negative polarity items *n*-words are required to have a negative antecedent).<sup>22</sup> At the same time, as we saw, *Wh*-elements may be characterized as potentially referential or non-referential. And, as suggested in Aoun (op.cit), referential *Wh*-expressions can only bind a referential variable (one that ranges over individuals). Then, a *n*-word may be related to a *Wh*-operator (since it is a possible binder for a polarity item), but only in the case the *n*-word shares the referential feature with this operator. The process of absorption comes as consequence that both ele-

(22) Similarly, a negative operator cannot act as antecedent for a *Wh*-in-situ because, as an interrogative element, it is required to have an interrogative antecedent.

ments share the same referential nature (as we pointed out above, it appears that absorption can only take place between referential expressions, at least for Spanish).

A final intervener is found in the interrogative complementizer *si*, see (40-42). For this case, we want to propose —once more— that a similar process takes place. Suppose that an operator is present in the specifier of the projection headed by *si*. Hence, this element would act as binder for the elements under discussion. Note that this operator cannot be the proper antecedent, since *n*-words still need a c-commanding negation and *Wh*-in-situ requires the presence of a lexical *Wh*-operator (a moved *Wh*-element), as illustrated in (74).

- (74) a. \**María sabe si Juan aprobó ningún curso*  
           “*Maria knows whether Juan approved any course*”  
       b. \**María no sabe si Juan aprobó qué curso*  
           “*Maria doesn’t know whether Juan approved which course*”

Summarizing, we have proposed in this section that certain operators (i.e. subjunctive, *Wh*-, an the one accompanying the interrogative complementizer *si*) act as “interveners” for *n*-words and *Wh*-in-situ. These interveners act as  $\bar{A}$ -binders for these elements.<sup>23</sup>

### 3.3. Preverbal *N*-words and Adversative predicates revisited

In section 2.8, we present two proposals concerning the cases of *n*-words in preverbal position and adversative predicates that recognize the role of negation in these contexts, even though it does not manifest itself overtly. Here, we want to review these suggestions in the light of the proposal developed above.

The examples in (5-7) show that a *n*-word in preverbal (subject)<sup>24</sup> position cannot co-occur with the negative marker. The absence of this marker has been attributed to the fact that the *n*-word enters into a Spec-head agreement relation with the negative head. This would account also for the negative meaning of the polarity element in this context. In this line, we would like to suggest an alternative view of this phenomenon. Recall that we have proposed that NegP involves a negative operator (either in [Spec, NegP] or under Neg°). In a speculative way, one may suggest that the preverbal *n*-word (after moving to or through out Spec of NegP) gets associated to this operator (maybe becoming itself an operator). Cases such as (6a), repeated here for convenience as (75), are relevant in regards to the position the negative operator may occupy inside NegP and to the way in which the mentioned association is achieved.

- (75) *Los padres de nadie han sido invitados*  
       “*Nobody’s parents have been invited*”

If we assume the possibility under which the negative operator occupies the Spec position of NegP, it is not clear how the association is done. Observe that incorpora-

(23) This proposal reaffirms Kempchinsky’s (1986) treatment of subjunctive as involving an operator.

(24) For different proposals about the positions a subject may occupy in Spanish, see Zubizarreta (1992), Contreras (1991) and Arnaiz (1991), among others.

tion of the *n*-word (embedded under an NP) with the operator seems out of the question. On the other hand, if the operator is in Neg°, the association could be achieved via Spec-head agreement. This would suggest that cases such as (75) entail a process of percolation, where the [+neg] feature of the *n*-word is transmitted to the head of the constituent containing this element.<sup>25</sup> Thus, the absence of the negative marker resides on the fact that the *n*-word identifies or licenses the negative operator (at the same time, the operator licenses the *n*-word). Also, the negative meaning of the *n*-word is just a consequence of this process (the licensing through the Spec-head relation activates the [+neg] feature of the *n*-word).

Concerning the case of adversative predicates, we adopted in section 2.8 the view put forward in Laka (1990). According to Laka, *n*-words are licensed in this context by a negative C° selected by this sort of verbs. Notice that in our proposal *n*-words as  $\bar{A}$ -anaphors need to be  $\bar{A}$ -bound. For the sake of consistency, we assume that in this context, there is also a negative operator accompanying the negative complementizer (see Progovac (1992)). Hence, this operator licenses and acts as a proper antecedent for *n*-words.<sup>26</sup>

#### 3.4. On the Argument/Adjunct Asymmetry: promissory note

As we saw in section 2, *n*-words present an argument/adjunct asymmetry in certain cases: *n*-words in argument position are allowed to occur in certain constructions, whereas the adjunct counterpart of these elements are banned in these same contexts.

We have already advanced a suggestion to deal with this asymmetry in those cases discussed in section 2.2 (see fn. 11 and sec. 3.2). The asymmetry relates to the typology of *Wh*-expressions of Aoun (1986) (see also Aoun and Li (forthcoming)). We have observed that an *n*-word in order to be bound by *Wh*-element must be able to absorb with it, and a condition for this process to take place is that both element must be of the same nature (referential/non-referential). Moreover, we have indicated that absorption appears to apply only in those cases involving potentially referential expressions.

(25) We may assume the following percolation convention, based on Longobardi (1991):

- (i) If a lexical head  $\alpha$  governs a lexical head  $\beta$  bearing a feature [+neg], then  $\alpha$  may inherit the feature [+neg] from  $\beta$ .

(26) Before closing this subsection, we want to discuss briefly the suggestion of Progovac (1988) which posits the existence of a polarity operator. Progovac proposes that those contexts of negative polarity in which negation is not overtly realized entail the presence of a polarity operator responsible for the licensing of *n*-words. For example, cases such as those that present superordinate negation will presuppose the presence of this element. The cases discussed in this paper seem to shed some light on this issue. Recall that we have seen that an operator (subjunctive, interrogative or negative) is always present in contexts that allow the occurrence of *n*-words. This fact suggests a reformulation of Progovac's proposal. Instead of postulating the existence of a special polarity operator, it could be suggested that certain operators conform the set of possible licensors for polarity items in a particular language, subject to variation. This would explain why certain languages, as English, license these elements in conditional contexts, while other do not —as in the case of Spanish. This would mean that polarity contexts presuppose the presence of an operator (that belongs to the set allowed in the language in question), but not necessarily a special polarity operator (in the sense that it only works in this context). See Progovac (1992).

The other cases that present an asymmetry are those involving CED effects and complex NPs in the presence of a subjunctive intervener (see (48) and (54)/(60)). *N*-words may be related to a negative operator outside an adjunct clause and/or a complex NP if a subjunctive operator is present and they occupied argument positions. If the *n*-word occupies an adjunct position this relation is not possible. As an illustration, consider the following examples involving complex NPs, repeated from (60):

- (76) a. Juan no buscaba una mujer que le diera(subj.) un libro a nadie  
 "Juan was not looking for a woman that give a book to anyone"  
 b. \*Juan no buscaba una mujer que le diera(subj.) un libro a Pedro  
 por ninguna razón  
 "Juan was not looking for a woman that give a book to Pedro  
 for any reason"

Here also, the distinction concerning referentiality seems to be the responsible for the asymmetry (and not the difference argument/adjunct). Contrast (76b) with (77).

- (77) Juan no buscaba una mujer que le diera(subj.) un libro Pedro  
 por ninguna de las razones que discutimos ayer  
 "Juan was not looking for a woman that give a book to Pedro  
 for any of the reasons we discussed yesterday"

Notice that the only difference between this case an (76b) is that the *n*-word refers to a particular set. The striking fact about these cases is that the subjunctive operator seems to be sensitive to the referential nature of the *n*-word. In other words, it appears that the subjunctive operator may act as binder only for *n*-words in a "referential use". It is not clear to us how to account for these facts, we leave this issue for further research.

### 3.5. Two Residual Cases

Finally, we will consider the case of infinitival clauses and that of preverbal *n*-words in subjunctive clauses.

#### 3.5.1. Infinitival Clauses

The behavior of *Wh*-in-situ and *n*-words in infinitival clauses appears to posit a problem for the proposal presented in this paper. Recall, that *n*-words in embedded clauses headed by an infinitive verbal form are allowed to occur with the negative marker in the matrix, this is illustrated in (78), repeated from (15).

- (78) a. Juan no quiere traer *nada*  
 "Juan does not want to bring anything"  
 b. María no piensa saludar a *nadie*  
 "Maria is not planning to greet anybody"

Similarly, a *Wh*-in-situ may occur in infinitival clauses, as illustrated in (79):

- (79) a. ¿Quién no quiere traer qué?  
 “Who does not want to bring what?”  
 b. ¿Quién no piensa saludar a quién?  
 “Who is not planning to greet whom?”

In our account, this should only be possible if an intervener is present or if these cases involve a peculiar process. The first possibility that comes to mind is that a process of “restructuring” may be involved in this context. But, the fact that this phenomenon is observable with all verbs, suggests that this is not the case. Another possibility (suggested by J. Aoun (p.c.)) is to assume that infinitival clauses involve an infinitival operator in CP. This may be seen as the reason why infinitival clauses cannot occur on their own, the operator needs to be licensed (probably by a *c*-commanding tense operator). In the case that this operator exists, the proposal presented above applies directly to *Wh*-in-situ and *n*-words in infinitival clauses. The infinitival operator would act as an intervener, a potential binder for polarity elements.

### 3.5.2. Preverbal *N*-words in Subjunctive Clauses

The other issue to discuss here, concerns the interpretation of preverbal *n*-words in subjunctive clauses in its interaction with matrix negation. As (80a) shows, the only interpretation available for these cases implies that *nadie* is related to the matrix negative marker *no*. Thus, an interpretation along the line of “I do not expect nobody to arrest you” is not possible under normal circumstances, (cf. fn. 5).

- (80) a. No pretendo que nadie te arreste  
 “I do not expect anybody to arrest you”  
 b. Espero que nadie te arreste  
 “I hope that nobody arrests you”

(80b) shows, on the other hand, that in the absence of negation in the matrix clause *nadie* is allowed to occur, as it is expected (see section 3.3).

Notice that we have to derive the interpretation in (80a) from two different sentences: one involves —covert— negation in the embedded clause, the other does not (both involve negation in the matrix). The case that does not involve negation in the embedded clause is accounted straightforward by the proposal presented above, in the same fashion as those that present the *n*-word in postverbal position.

The case that does involve negation in the embedded clause is problematic for the proposal presented here. Notice that the negation in the embedded clause should be able to license the *n*-word. Hence, the interpretation of this *n*-word should be independent of the matrix negation. A possible account may be found in Kempchinsky’s (1986) proposal concerning the operations related to the subjunctive operator in COMP. According to Kempchinsky, INFL must move at LF to C° in order to identify the subjunctive operator. Assuming that this instance of I°-to-C° movement takes place, one may suggest that negation moves with the verb to C° (this would presuppose that the negative operator sits in the head of NegP —as sugges-

ted—and incorporates with the verb, as part of the process of  $V^{\circ}$ -to- $I^{\circ}$  movement).<sup>27</sup> Thus, we have a situation similar to the one involving the licensing of postverbal *n*-words. One problematic aspect of this suggestion is that this process would be overriding (or destroying) the licensing of this element—at S-structure—as proposed in section 3.3 for cases of preverbal subjects in matrix clauses. (Observe that it cannot be the case that the movement of the verb to  $C^{\circ}$  takes place at S-structure since this would imply that subjects of embedded subjunctive clauses should always follow the verb). We leave this matter open for further research.

#### 4. Conclusion

In this paper, we have shown that there is a parallelism in behavior between the phenomena of *Wh*-in-situ and *n*-words in Spanish, behavior that differs in several aspects from that of instances of overt *Wh*-extraction. Also, we have proposed that these phenomena do not entail movement as evidenced by the Subjunctive Effect and contrary to recent proposals (see Longobardi 1991, Zanuttini 1991 and Bosque 1992). Based on the treatment of *Wh*-elements in Chinese proposed in Aoun and Li (to appear) and on the proposal of Progovac (1988) concerning polarity sensitivity, we have suggested a unified account for both phenomena that treats these elements as  $\bar{A}$ -anaphors—standing in an operator/variable relation with their potential licensors. Likewise, we have proposed that these elements are polarity items, establishing their locality restrictions and the set of possible licensors (binders /antecedents). Finally, more research is needed specifically in the comparative level in order to unveil the true nature of these phenomena and to achieve a complete understanding of them.

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(27) In a theory of negation such as Laka's (1990) in which it is postulated that the projection occupied by negation (P) is the highest one, this is achieved once  $V^{\circ}$  moves to the head of  $\bar{P}$  under the requirement of the Tense c-command condition (see Laka 1990: Ch.1). See also, Belletti (1990) for a theory of negation that treats the negative marker as a clitic, adjoined to  $V^{\circ}$ .

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