Full Feature Specification & Negative Lexicalization in Spanish

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0. Introduction.
Sentential negation in Spanish is usually expressed by placing the sentential negator (**SNEG**) *no* before the verb complex (cf. 1.a). Other negative elements may cooccur with a SNEG. When these elements occur postverbally, they obligatorily require the surface realization of a SNEG (cf. 1.b). However, if one (or more) of these elements appears preverbally, the SNEG may be phonetically absent (cf. 1.c).

(1)
a. El cuadro *no* obtuvo buenos resultados
the painting not obtain good results
b. *No* tuvo buenos resultados *ningún* cuadro
no got good results any painting
c. *Ningún* cuadro obtuvo buenos resultados
no painting obtained good results

Suñer (1995) proposes a uniform treatment of negative elements as negative polarity items (**NPI**). The obligatory surface coocurrence of NIPs and NEGs is explained as an instance of licensing. When the NPI phrase c-commands the head of a NegP as in (1.c), it voids the need for phonetic matrix on that head. Licensing of the null Neg is interrupted, however, when a "wh-island" intervenes between the NPI phrase and Neg (cf. 2.a-d).

(2)
a.A ninguno de ellos quisiera saber *por qué* Picasso *(no) les escribió en vida
none of them would I-like know why Picasso not them write while alive
b. ¿En nadie dijo Picasso que *quién* *(no) podria confiar?
in noone said Picasso that who not could trust
c. ¿Ninguno de los cuadros *de quién* *(no) fueron vendidos?
none of the paintings by whom not were sold?
d. [Ninguno de los cuadros]i, este es [el pintor [que *(no) los, pintaría]]
none of the paintings this is the painter that not them would-paint

This paper presents a straightforward Minimalist account of the wh-island effects observed in (2) and makes additional predictions concerning non-wh islands between an NPI phrase and Neg.

I propose that in a negative sentence containing a SNEG and a NPI phrase, both constituents are marked with the feature [+neg], which must be matched before Full Interpretation. Matching takes place in the overt syntax when the SNEG is realized or when the negative element occupies spec,NegP. Once matched, the feature [+neg] disappears from both Neg and NPI. Alter-

natively, [+neg] may be matched at LF. In order to match [+neg], either NPI raises to Spec,NegP or a null negator (Negn) is inserted in Neg. In the latter case, the full content of Negn must be recovered, which is attained via c-command by the NPI.

As observed in (2), Negn must be present when the NPI is linked to a SNEG inside an interrogative sentence. In these clauses the verb must raise through Neg on its way to Comp to match [+wh]. This movement is impossible if the [+neg] feature in Neg is unmatched. More formally, a condition on feature specification (**CFS**) requires that a head must advance cyclically in its feature matching, satisfying all its feature requirements at every cycle. Only when the negator is overt, the verb proceeds to Comp. In relative clauses, the [+wh] feature of Comp need only be matched at LF and verb raising may take place after Negn insertion. Once the feature [+neg] is matched, the verb may proceed onto Comp without violation of the CFS. However, NPI cannot identify Negn in [$_{Neg}$n V]. No such problem arises if a SNEG occurs overtly and no recovery of semantic content is necessary.

The present analysis accounts for differences and similarities between interrogative sentences, relative clauses, and topic structures. A SNEG must be overt only in those cases where it must raise along with the feature-containing verb to Comp at LF, thus becoming invisible to the c-commanding NPI. When the NPI occupies a local position with respect to a SNEG, Negn recovers its content and the derivation converges at LF. It also explains the unexpected contrast between wh-islands on the one hand and other subjacency islands. Any subjacency barrier which does not involve a [+wh] feature should allow insertion of Negn at LF.

1. Negative elements as Negative Polarity Items

Spanish is a "negative agreement" or "negative concord" language in that negative elements such as *nadie*, *nunca*, *ninguno*, *tampoco*, obligatorily cooccur with the sentential preverbal negator whenever they appear postverbally. Both constituents, the SNEG and the negative element, jointly mark a single instance of sentential negation. In other words, the negative elements does not contribute additional negative content to the sentence. Instead, they are interpreted as indefinite expressions in the scope of the SNEG.

(3)
a. Picasso *(no) conocía a nadie al llegar a Paris.
Picasso not would-know anyone upon arrive in Paris'
b. Picasso *(no) retrataría a ninguno de los generales nazis.
Picasso not would-paint any of the generals nazi
c. Picasso *(no) fotografió jamás a nadie.
Picasso not photograph never anyone

Whenever one or more of these elements appear(s) preverbally, the SNEG is absent from the surface even if another negative element appears postverbally in the same clause.

(4)
a. Nadie (*no) pintaría tal cuadro en esa época.
noone not would-paint such painting in that period
b. Nunca jamás nadie (*no) sería famoso pintando cuadros conformistas
never ever anyone no) would-be famous painting paintings conventional
c. A nadie (*no) retrataría un pintor decente meramente por dinero.
anyone not would-paint a painter decent merely for money
d. Jamás a nadie le explicó Picasso el "Guernica".
never anyone him explained Picasso the "Guernica"
e. Tampoco explicó ninguna otra pintura.
neither explained any other painting
f. A nadie le daría la clave de "Las Señoritas de Avignon".
to noone him would-give the key to "Damoiselles d'Avignon"

According to Suñer (1995), Spanish negative elements are amenable to a uniform treatment as NPIs, i.e. indefinite expressions dependent on negation (Zanuttini 1989/1991); rather than as independent negative quantifiers (cf. Longobardi 1991). The semantic interdependence between the NPI phrase and the SNEG is unaffected by the surface realization of the negator. In fact, the relation is between the NPI phrase and the functional head in which the negator is generated, i.e. Neg, which projects its features independently of the presence of a lexical item. This relation between the NPI phrase and the SNEG not only semantically licenses the former, but also allows the latter to remain morphologically null when c-commanded by the NPI phrase.

Suñer's main argument in favor of treating negative elements as NPIs comes from their patterning with respect to wh-islands between the negative element and the NegP which signals its scope. This can be observed in left-dislocated constructions. In these constructions, the dislocated element may be linked to a clitic pronoun over a subjacency barrier.

(5)
a. Picassok, sus cuadrosi, prok los$_i$ pintaba de madrugada
Picasso his paintings, them painted late at night
b. Los retratosi, les pregunté [que [quién querría subastarlosi]]
the portraits, them I-asked that who would-want auction

Negative elements may also be left-dislocated in Spanish. However, when the left-dislocated negative element is linked to the clitic over a an embedded CP wh-island, the SNEG must be lexically realized, contrry to what we find in the absence of wh-islands.

(6)
a. A ninguna de sus esposas]i, (*no) las$_i$ invitó a la exposición
none of his wives not them I-invited to the exhibition
b. Quisiera saber por qué [a nadie]i, Picasso (*no) le$_i$ dejó escrito lo que-quería
I-would-like know why to noone Picasso not him left in-writing what he-wanted

c. [A ninguno de ellos]i, dicen que Picasso (*no) les$_i$ dejará nada.
to none of them, they-say Picasso not them will-leave anything
d. [A ninguno de ellos]$_i$ me pregunto por qué Picasso *(no) les escribió en vida
to none of them, I-wonder why Picasso not them wrote while alive
e. A ninguno de ellos]$_i$ me dijeron que Picasso (*no) les$_i$ habia escrito en vida
to none of them, me they-told that Picasso not them had written while alive
f. [A ninguno de ellos]i, quién te dijo que Picasso *(no) les$_i$ habia escrito en vida?
to none of them, who you told that Picasso not them had written while alive

We find the same pattern in focus constructions. Negative elements may be focused in main and embedded clauses. The SNEG is phonologically present if there is a wh-phrase between the negative element and the coindexed trace and it remains null otherwise.

(7)
a. [A NADIE]$_i$ dijo Dali que Gris [$_{Neg}$ 0] podría retratar ec$_i$' fielmente
to noone said Dali that Gris could portray faithfully
b. [A NADIE]$_i$ dijo Dali que quién [$_{Neg}$ no] podría retratar ec$_i$' fielmente
to noone said Dali that who not could portray faithfully'

Obligatory lexicalization of the SNEG is also observed when the NPI phrase itself contains a wh-phrase.

(8)
a. Ninguno de los cuadros cubistas (dicen que) (*no) se subastó
none of the paintings cubist they-say that not it auctioned
b. [Ninguno de cuáles cuadros] (dicen que) *(no) se subastó?
none of which paintings they-say that not it auctioned
c. Ninguno de sus cuadros (*no) fueron vendidos
none of his paintings not were sold
d. [Ninguno de los cuadros de quién] *(no) fueron vendidos?
none of the paintings by whom not were sold

The effect of wh-islands on the link between the NPI phrase and negator is also observed with relative clauses. When the negator is inside a relative clause which also contains the trace of a left-dislocated NPI phrase, it must be realized overtly. That is, a relative clause constitutes an island for the licensing of a null SNEG.

(9) [Ninguno de los cuadros]$_i$, este es [el pintor [que *(no) los$_i$ pintaría ec$_i$]]
none of the paintings this is the pinter that not them would-paint

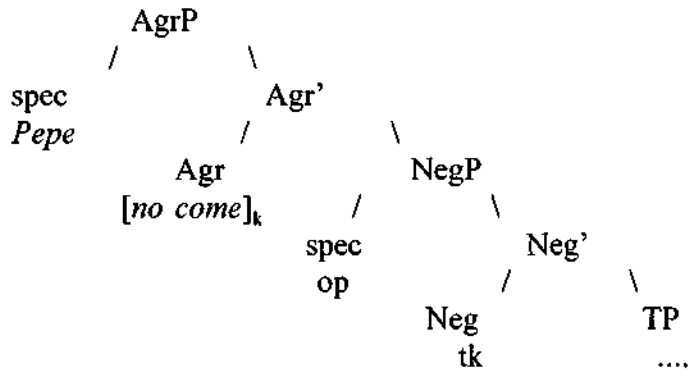
In summary, negative elements in Spanish are semantically linked to a SNEG and therefore function as NPIs. The SNEG must be phonetically pres-

ent unless it is c-commanded by the NPI, in which case it may occur covertly. An exception to the c-command rule is observed when the sentence containing the negator has a wh-phrase in spec,CP. Here again, the negator must be realized overtly.

2. Mutual licensing of NPI and SNEG.

We currently assume that the SNEG is generated in its own functional category Neg between AgrP and TP. According to Haegeman & Zanuttini (1991) and Haegemean (1994), this head Neg must be in a spec-head relationship with a (null) negative operator in spec,NegP (Neg Criterion). Neg is also the landing position of the verb on its way to Agr, carrying along the adjoined SNEG (cf. 10).

(10)



After movement, the foot of the SNEG's chain remains in a spec-head relationship with the (null) operator in spec,NegP.

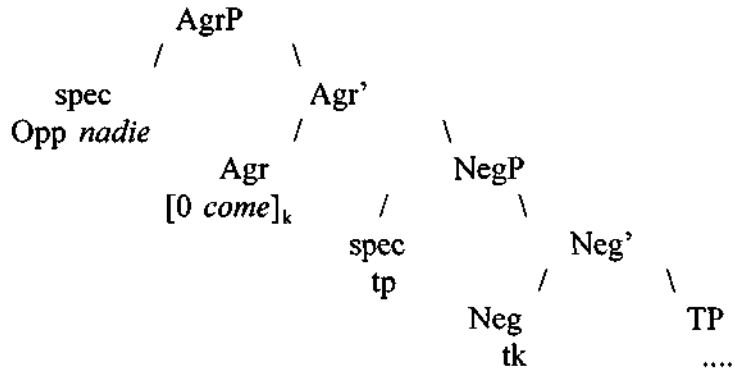
According to Suñer's analysis, negative elements in Spanish are NPIs irrespective of the position they occupy relative to the V. The NPI phrases always need licensing in order for their formal [+neg] feature to be neutralized. Licensing is carried out by the null negative operator so that these negative elements can ultimately be interpreted as indefinite expressions (or existential quantifiers), and must take place by s-structure in Spanish.

The null operator raises and adjoins to the constituent which contains preverbal NPI phrases, while it remains in its base generated position (spec of Neg) when the NPI phrases are postverbal. This symmetry is mandated by the requirement that Op must c-command the NPI phrase. Op-raising is morphologically motivated by the formal features of the NPI phrases, i.e. the preverbal NPI phrase "attracts" the operator because of its formal [+neg] feature. From the semantic point of view, NPI licensing is required in order to end up with a single instance of negation.

NPI licensing by s-structure has an important consequence, also morphologically motivated, since it is related to the identification or recoverability of the content of the negative features of the SNEG. If these features can be identified by an appropriate c-commanding element such as the operator binding the preverbal NPI phrase, the negative head remains null as required by the Economy Principle. Otherwise, the negative head lexicalizes in Spanish.

Cf. (11) below. As Suñer explains, her analysis accounts for two important facts of Spanish. First, the null operator can license more than one NPI phrase. This demonstrates that NPI phrases need not be in spec-head relation with separate Negs in negative concord languages. For her, the negative operator would behave as an "unselective operator" (Lewis 1975, Heim 1982), which "absorbs" all the formal negative features 0f these elements so that clause has only one instance of negation. Cf. (12).

(11)



(12)

a. Jamás nadie consiguió reproducir los cuadros de Picasso
never noone managed reproduce the paintings by Picasso

b. [$_{AgrP}$ Opp jamás [$_{AgrP}$ nadie [$_{NegP}$ TP [$_{Neg}$ 0] ...

Second, the hypothesis that licensing of NPI phrase(s) takes place by the head of NegP under c-command cannot be correct. Nor is it possible for preverbal NPI phrases themselves to be the elements which prevent the lexicalization of the Neg head under c-command in every instance, since the c-command relationship might not obtain when the NPI phrase is low within a given constituent.

(13)

a. [Los cuadros de ninguno de los pintores] [$_N$ 0] serán expuestos en esta sala.
the paintings of none of the painters will-be exhibited in this room

b. [Con los cuadros de ninguno de los pintores/de nadie], ellos estaban satisfechos.
with the paintings of none of the painters/of noone they were satisfied

The null negative operator adjoins to the relevant constituent, and from there it is not only able to c-command and bind the NPI phrase(s) but it also c-commands the negative head.

When a NPI phrase occurs postverbally, since the null operator c-commands and binds the NPI phrase from its base position, it effectively licenses it without need for raising. The spec-head configuration necessary for the satisfaction of the Neg-criterion obtains within NegP. The operator is able to license more than one NPI phrase without any trouble because it c-commands and binds all of them.

Long distance NPI phrases, just as short distance ones, are licensed by the

null Neg operator. This operator moves cyclically through spec,CP to adjoin to the constituent where the connected NPI phrase appears. The head of the chain formed by the raised null operator which binds the NPI phrase c-commands the negative head and obviates its lexicalization. Although the IP-adjoined let-dislocated NPI phrase is already in a scope position (i.e. A' and left-peripheral), the null negative operator must raise and adjoin to it in order to license it. The head Neg can remain null because it is c-commanded by the operator which binds the NPI phrase.

Op-raising is constrained by the connectivity effects, i.e. it moves from the NegP of the clause where the NPI phrase is connected to and adjoins to the constituent that contains the NPI phrase.

(14) *Le pedí a nadie que *(no) vendiera el cuadro de Picasso
him I-asked noone that not sell the painting by Picasso

When the spec of CP position is occupied by an affective wh-phrase. Even though the null Neg operator still raises to its adjunction site, the chain is split by the wh-island. As a result, the Neg head must be spelled out to overcome the minimality effect created by the wh-phrase so as to unambiguously ascertain the scope of the NPI phrase; it achieves this by c-commanding the original trace of the operator (in spec of Neg). For Suñer, this spelling of the null Neg is an instance of resumptive negator. The empty category in spec, NegP is interpreted as a bound pronominal. Null pronominals must meet an identification requirement (Rizzi 1986) so that their content can be recovered. The sentential lexical negator fulfills this identification condition by directly identifying the bound *pro* with its negative features. The Neg-criterion is again met within NegP by the relevant elements in a spec-head configuration.

Whenever an affective wh-phrase interrupts the "connectivity" effect between the constituent with the preverbal NPI phrase and its co-indexed element (i.e. the clitic), the sentential Neg head of the clause where the co-indexed element is found must obligatorily be overt. Resumptive here must be interpreted not as a reflex of lack of syntactic movement (the null negative operator raises to license the NPI phrase) but as a rescue mechanism which provides licensing for what would otherwise be an offending trace.

The use of resumptive pronouns is not unknown in other areas of Spanish, i.e. in long extraction of wh-phrases over wh-islands.

(15)
a.*Qué cuadros no sabías [a quién había entregado Picasso]?
what paintings not you-knew to whom had given Picasso
b. Qué cuadro$_i$ no sabían [a quién se lo$_i$ había entregado Picasso]?
what painting not knew to whom him it had given Picasso

A head becomes lexical in order to overtly mark the site of an Xmax empty category when the intermediate spec,CP is occupied in order to overcome a lack of antecedent government. In interrogatives, it is the clitic head in a chain with the empty category left by the moved wh-phrase which lexicalizes

in order to identify this empty category (i.e. bound *pro*). With preverbal NPI phrases which are separated from their connected site by a wh-island, it is the Neg head that acquires phonetic matrix so it can identify the content of the negative bound *pro* caused by the raising of the null negative operator.

A potential counterexample to the assumption that wh-phrases block the licensing relation between a preverbal NPI phrase and its SNEG can be found in cases where the NPI phrase forms part of the antecedent of the relative clause. In these contexts, the NPI phrase may cooccur with a phonetically null negator in its complement clause. However, when the relative clause (and hence the negative element) is postverbal, the SNEG is obligatorily overt.

(16)

a. [Ninguno de los cuadros cubistas [que ec (*no) se vendio ayer]] (*no) era original
   none of the paintings cubist that not it sold yesterday not were original
b. [Ninguno de los cuadros [por los que (*no) pagaron ec los turistas]] (*no) van a exponer en esta sala
   none of the paintings for which not they-paid the tourists not go to exhibit in this room
c. *(No) tenía rasgos específicos [ninguno de los cuadros cubitas [que ec (*no) se vendió ayer]]
   not had features specific any of the paintings cubist that not it sold yesterday

In cases where the relative pronoun forms part of a partitive together with the NPI phrase, the SNEG in the IP-complement of the relative pronoun must be covert.

(17)

a. Tengo varios cuadros cubistas, [ninguno de los cuales] (*no) vendería en mi vida
   I-have several paintings cubist any of which not would-sell in my life
b. Vendí varios cuadros, [ninguno de las cuales] (*no) me satisfacía.
   I-sold several paintings any of which not me satisfied

These constructions are problematic for Suñer's analysis, forcing her to assume that relative pronouns are "non-affective" [-wh] phrases. These two characteristics of relatives render them incapable of blocking the linkage between the negative element in CP and sentential negation in IP, wherefrom the SNEG remains null. The assumption that relative pronouns are not [-wh] phrases fails to explain their systematic displacement to spec,CP, otherwise attributable to the wh-criterion. In section (4) I propose that examples such as (17) demonstrate that a potential barrier between the NPI and the SNEG blocking licensing can be nullified if the NPI occupies a position which is closely related to the negator, such as spec,NegP.

Another problem with Suñer's proposal is that if it is indeed a barrier that breaks the chain between the raised operator and the SNEG, other configurations identifying the same type o brrier should prevent this relation. Wh-islands

belong to the groups of islands identified as subjacency barriers. These include — in addition to wh-islands — complex NP structures an IP-adjoined structures. Surprizingly, neither complex NPs nor IP-adjoined configurations prevent a NPI from licensing a null SNEG. An NPI phrase may be linked to a null SNEG in ackowledged subjacency islands such as (cf. 18.a-a' and 18.b-b'), while it may not do so in contexts not blocked by subjacency such as (cf. 18.d-d').

(18)

a. Jamás, a las exposiciones (*no) invitaron a los pintores (SUBJ)
Never to the exhibition not they-invited the painters

a'. *En qué época, a las exposiciones *(no) invitaron a los pintores
in what period to the exhibition not they-invited the painters

b. A ningún pintor, he oido [el rumor que (*no) invitaron a la exposición] (SUBJ)
no painter I-have heard the rumour that not they-invited to the exhibition

b'. *Este es el perro que me molesta el hecho de que ese hombre se haya robado (D'Introno 1985:104)
this is the dog that me bothers the fact that that man him has stolen

c. Ningún pintor, [a qué negociante dijeron que *(no) invitó a la fiesta] (no SUBJ)
no painter what dealer they-said that not he-invited to the exhibition

c'. Este es el hombre que *(no) sabiamos a quién ha visto
this is the man that not we-knew who he-has seen

d. A ninguna ciudad son muchos los pintores que *(no) han venido a parar (no SUBJ)
to no city are many the painters that not they-have come to roam

d'. Esta es una ciudad a la que son muchos los vagabundos que han venido a parar (D'Introno 1985:123)
this is a city to which are many the bums that have come to roam

This indicates that it is not only the presence of a subjacency barrier, but also the nature of the intervening element, that is relevant in the interruption the chain between NPI and a null negator. In this respect, it must be pointed out that both topicalized elements and wh-elements in spec,CP have the same effect on the presence/absence of a SNEG. In section (4) I argue that verb raising is the determining factor in preventing the NPI from properly identifying the features present on the null negator.

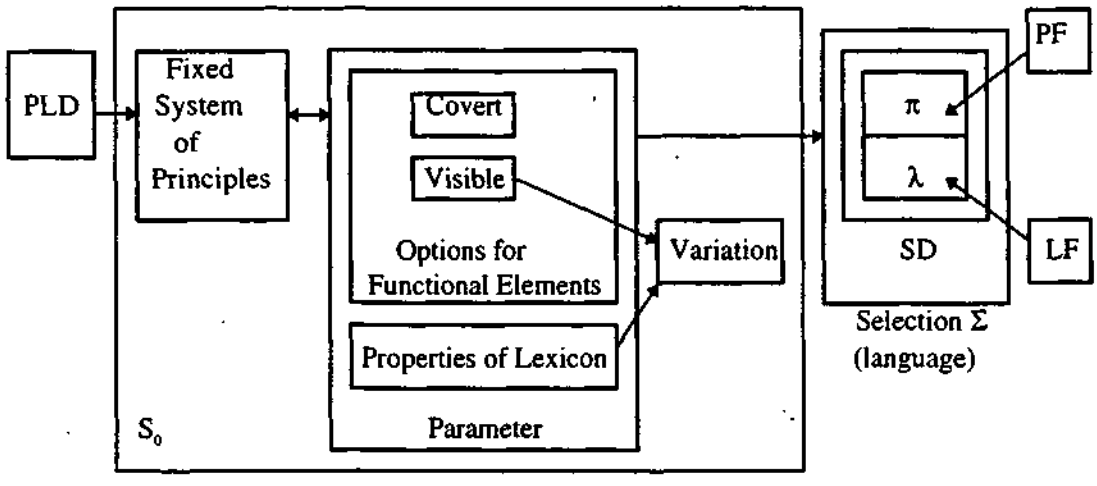
More importantly, Suñer's analysis cannot be upheld under Minimalist principles. While we may assume that a wh-phrase is inserted in the derivation of the matrix clause (thus satisfying the wh-criterion) and subsequently coindex it with the resumptive pronoun in the embedded clause, no such insertion is permitted for the null operator. If displacement of a constituent in overt syntax is limited to morphologically conditioned operations on that constituent (see section 3), it is hard to find a reason why the null element should be adjoined to the NPI phrase since an operator cannot independently raise in the absence of a preverbal NPI phrase because nothing would justify its raising and/or its position. Therefore, the adjunction of the null operator

constitutes an altruistic operation contrary to Minimalist assumptions. Even if such considerations were put aside, no explanation is given for the counterintuitive proposal that an overt movement of a covert element (the operator) is necessary to license another (the NPI phrase) which has consequences in PF (the non-lexicalization of the negator). In other words, an overt morphological requirement on the NPI phrase must be satisfied by a null (i.e. covert) element. Also, as Suñer herself points out, satisfaction of the Neg would have to differ from other agreement relations such as wh-movement and Case, which require movement of the specific constituent carrying the necessary feature to the spec location where that feature can be matched. Finally, Suñer's proposal involves an unexpected asymmetry in the "matching" relation between the NPI phrase and the raised operator: the operator neutralizes the neg-feature of the NPI phrase, while the NPI phrase simply provides "the clue" for the raised position of the operator.

3. Minimalism

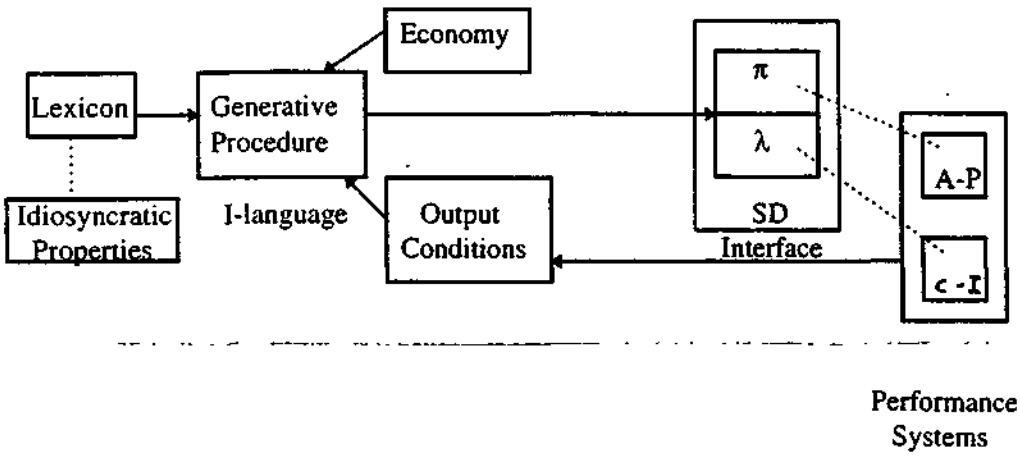
In Chomsky's Minimalist framework, the initial state S0 in the process of language acquisition is a function mapping experience (primary linguistic data, PLD) to a language. S0 is constituted of a fixed system of invariant principles with options restricted to functional elements and general properties of the lexicon. A selection _ among these options results in a language. The principles are sufficiently restrictive so that PLD normally suffice to set the parameter values that determine a language. The principles regulate what counts as a possible derivation and a possible derived object (SD), each a pair (_, _), where _ and _ are relevant at the phonological (PF) and semantic (LF) levels respectively. Parametric variation from language to language is determined by what is "visible" to the child acquiring language. Hence, it is limited to PF options, lexical arbitrariness, nonsubstantive parts of the lexicon and general properties of lexical items.

(19)



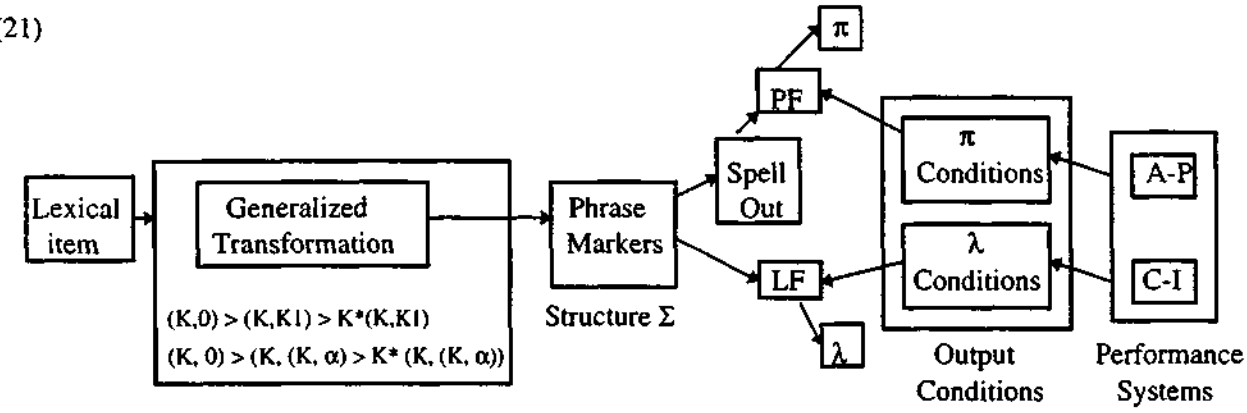
Under this approach, the language faculty has two crucial components: (a) the lexicon, and (b) the generative procedure (I-language) which produces structural descriptions (the expressions of the language). The lexicon specifies the idiosyncratic properties of the items that enter into the computational system. Choosing from the lexicon, the computational system generates a particular linguistic expression SD by constructing the pair of interface representations (_, _). These interface representations provide the instructions for the articulatory-perceptual (A-P) and conceptual-intentional (C-I) performance systems in which the language faculty is embedded. For these instructions to be properly interpreted, SDs must comply with output conditions at the interface. That is, SDs are nothing other that formal objects that satisfy the interface conditions in the optimal way (i.e. according to economy conditions).

(20)



Syntactic constituents are projected from lexical items by a generalized tramsformation (GT). GT is a binary substitution operation. It target K, adds 0, and substitutes K1 for 0, forming K*: (K,0) > (K,K1) > K*(K,K1). Computation proceeds in parallel, selecting from the lexicon freely and forming a structure _ as a set of phrase markers. At any point, the operation Spell-Out applies, which switches to the PF component. If _ is not a single phrase marker, the derivation crashes at PF, since PF rules cannot apply to a set of phrase markers and no legitimate PF representation _ is generated. If _ is a single phrase marker, the PF rules apply to it, yielding _, which either is legitimate (so the derivation converges at PF) or not (the derivation crashes at PF). After Spell-Out, the computational process continues, with the sole constraint that it has no further access to the lexicon. The PF and LF outputs must satisfy the (external) interface conditions.

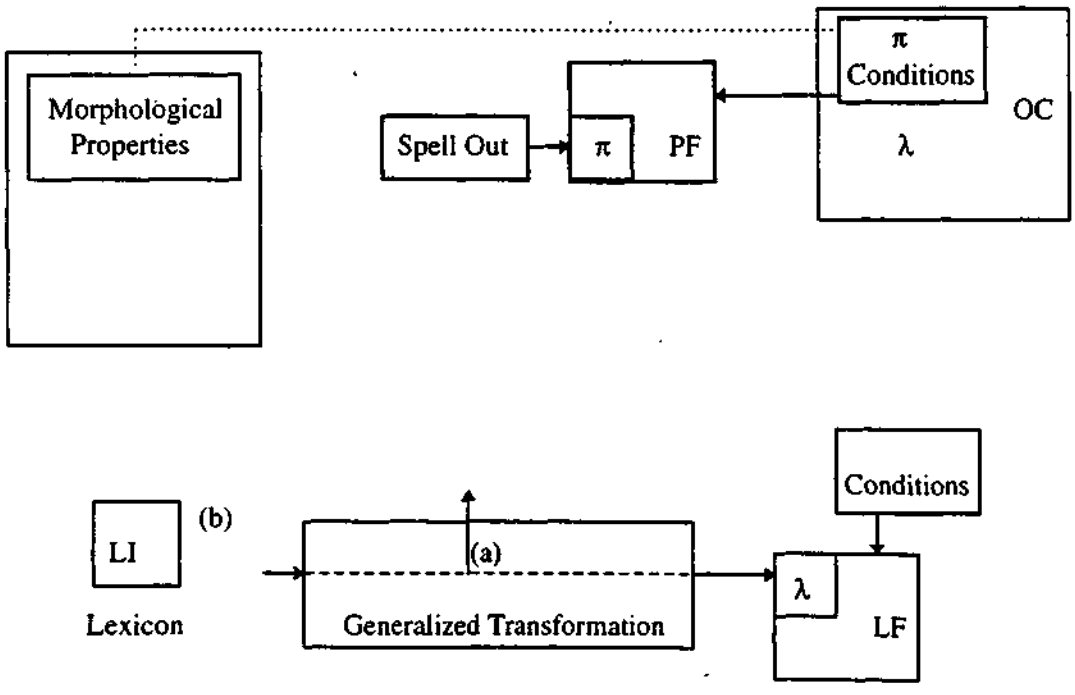
(21)



As shown in (21), GT also includes a singulary operation (Move _), which maps K to K*. It targets K, adds 0, and substitutes _ for 0, where _ in this case is a phrase marker within the targeted phrase marker K itself. The operation leaves behind a trace t of _ and forms the chain (_, t).

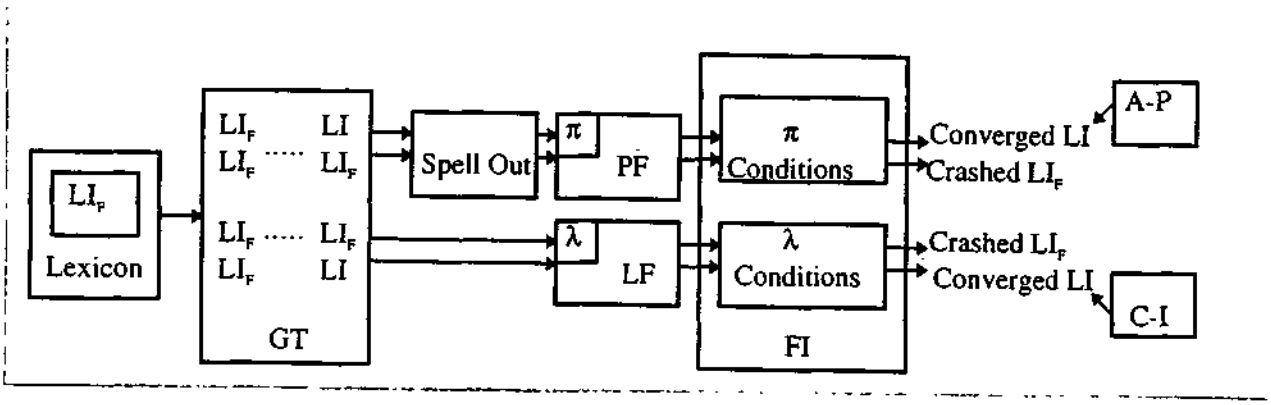
GT applies universally, with language variation being limited to two areas: (a) the location of Spell-Out in the derivation to LF - as determined by properties of the (interface) levels (PF and LF); (b) the morphological properties of lexical tems (LI) - exclusively limited to those concerning the PF domain, due to learnability.

(22)



PF is a representation in universal phonetics, with no indication of syntactic elements or relations among them. To be interpreted by performance systems A-P, _ must be constituted entirely of legitimate PF objects, i.e. elements that have a uniform, language-independent interpretation at the interface. If it complies with this provision, _ satisfies the condition of Full Interpretation (FI). If _ fails FI, it does not provide appropriate instructions to the performance systems. We take FI to be the convergence condition. If _ satisfies FI, the derivation D that formed it converges at PF; otherwise, it crashes at PF. D crashes if _ includes an impossible feature combination or if _ contains some morphological element that "survives" to PF. If D converges at PF, its output _ receives an articulatory-perceptual interpretation, perhaps as gibberish. At LF, each legitimate object is a chain CH = (_1,..._n): at least (perhaps at most) with CH a head; an argument, a modifier, or an operator-variable construction. The representation _ satisfies FI at LF if t consists entirely of legitimate LF objects. A derivation forming _ converges at LF if _ satisfies FI; otherwise it crashes. A convergent derivation may produce utter gibberish, exactly as at PF. Expressions have the interpretation assigned to them by the performance system in which the language is embedded.

(23)



A lexical element _ may have inflectional features in the lexicon as an intrinsic property; these features are then checked against the a functional head FC. When a lexical category LCF is adjoined to a functional head FC, the specific feature F is removed from LCF if it matches FC and LC enters the LF and PF component - the latter, under Spell-Out. If they conflict, F and FC remain and the derivation crashes at PF and/or LF. The function of the head features of a FC is to check the morphological property F of LCF selected from the lexicon (L-feature). The checking domain can be subdivided into two categories: nonadjoined (spec) (narrowly L-related) and adjoined (broadly L-related). The morphological features of FC have two functions: (a) they check properties of the LC that raises to them; and (b) they check properties of the XP that raises to their spec position. They ensure that XP and LC are properly paired. All movement operations are driven by morphological necessity. In other words, the F feature of LCF must be checked in the checking domain of a FC.

4. Condition on Feature Specification

Let us assume that both the Neg head and the NPI in a negative sentence contain the feature [+neg]. This feature must be matched by LF at the latest. Matching may take place in the overt syntax when Neg is filled by a SNEG (24.a) (an instance of head-head agreement) or when the negative element occupies spec,NegP (24.b) (an instance of spec-head agreement). Once matched through head-head or spec-head agreement, the feature [+neg] disappears from both Neg and NPI prior to LF. If [+neg] remains at LF, on the other hand, the feature must be eliminated by LF processes. One such process involves NPI-raising to Spec,NegP. Once in that position, the [+neg] of the NPI is matched and disappears. Another process involves the insertion of a null negator (Negn) which matches the [+neg] feature in Neg at LF (24.c). In this case, the full content of Negn must be recovered. This is attained via c-command by the NPI (24.d).

(24)
a. $[_{CP}[_{AgrP}\ [_{NegP}\ [_{Neg}$ no +neg $]...[_{VP}$ V$]]]]$ > $[_{CP}[_{AgrP}\ [_{NegP}\ [_{Neg}$ no $]...[_{VP}$ V$]]]]$
b. $[_{CP}\ [_{AgrP}\ [_{NegP}$ NPI $[_{Neg}$ +neg $]...[_{VP}$ V$]]]]$ > $[_{CP}\ [_{AgrP}\ [_{NegP}$ NPI Neg $...[_{VP}$ V$]]]]$
c. $[_{CP}\ [_{AgrP}\ _{NegP}\ [_{Neg}$ Negn +neg $]...[_{VP}$ V$]]]]$ > $[_{CP}\ [_{AgrP}\ _{NegP}\ [_{Neg}$ Negn $]...[_{VP}$ V$]]]]$
d. $[_{CP}$ NPI$_i$ ... $_{NegP}\ [_{Neg}$ Negn$_i$ $]...[_{VP}$ V$]]]$

Content recovery takes place at LF and is not constrained by subjacency. Therefore, it is irrelevant in principle whether any type of island - wh-island or otherwise - intervenes between the NPI and the Negn that it identifies semantically.

(25)
a. [NPI$_i$ ... $[_{CP}$wh-phrase [C +wh V[Agr [Negn$_i$ tV]]] $[_{AgrP}$ tA$]\ _{NegP}\ [_{Neg}$ tN$]...[_{VP}$ tV$]]]]]$
b. [NPI$_i$ ... $[_{CP}$topic [C +wh V[Agr [Negn$_i$ tV]]] $[_{AgrP}$ tA$]\ _{NegP}\ [_{Neg}$ tN$]...[_{VP}$ tV$]]]]]$

The presence of Negn is obligatory in cases where the NPI is linked to a SNEG inside an interrogative sentence. Let us assume that in these clauses the verb raises overtly through Neg on its way to Comp. This operation is triggered by the [+wh] in Comp (the wh-criterion) and must be satisfied prior to Spell Out. I propose that a condition on feature specification (CFS) requires that a head must advance cyclically in its feature matching. Thus, a head which has not satisfied _ at cycle C cannot advance to match _+1 at cycle C+1. To be more specific, a verb marked [+wh] must move to Comp [+wh] (at the latest) by LF to satisfy the wh-criterion. Movement of V[+wh] through Neg onto Comp is impossible unless the [+neg] feature of Neg are released onto spec,NegP or is eliminated by the presence of a SNEG.

(26)
a. [A ninguno de ellos]$_i$ me pregunto [p*or qué* Picasso les' escribió en vida]
b. *$[_{CP}$[C V[+wh]] $[_{AgrP}$ [Agr tV$]\ _{NegP}\ [_{Neg}$ +neg tV$]...[_{VP}$ tV$]]]]$

If the negator is overtly present, the verb may proceed onto Comp in the absence of [+neg] in Neg. However, if no negator is overt, the verb may not move to Comp as this operation would violate the CFS. Since the verb must move overtly, the LF insertion of Negn is irrelevant in this derivation.

(27)
a.[A ninguno de ellos], me pregunto [*por qué* Picasso *no* les' escribió en vida]
b.[$_{CP}$ wh-phrase [C [no V[+wh]] [$_{AgrP}$ [Agr tV] $_{NegP}$ [$_{Neg}$ no tV]...[$_{VP}$ tV]]]]

As a result, the only possible structure is that in which the SNEG is phonetically realized, any other configuration being blocked by the unavailability of Negn licensing.

In both (26) and (27), the NPI must be "reconstructed" in Spec,NegP at LF to match its [+neg] feature. The chain formed is illegal and must be "repaired" by subsequent raising to the position of head of the chain. Assuming that LF movement is not constrained by subjacency, the final chain constitutes a proper chain.

Take now the case of relative clauses. Here the [+wh] feature of Comp need only be matched at LF. Therefore, verb raising may take place after Negn insertion, which also takes place at LF. Once the feature [+neg] is matched, the verb may proceed onto Comp without violation of the CFS. As discussed earlier, the presence of Negn imposes a new requirement, namely the recovery of the semantic content of this null category. The NPI must c-command Negn. However, as the verb containing [+wh] incorporates to Neg and forms the complex [Negn V], it is the features of the verb that must project and not those of Negn. Otherwise, the [+wh] feature could not be matched in Comp as required. Failure of the feature of Negn to project, on the other hand, prevents the NPI to identify Negn and the null head cannot receive the desired interpretation at LF. No such problem arises if the SNEG occurs overtly. The [+neg] feature of Neg being matched and hence deleted, the verb may move onto Comp as required. Furthermore, since the negator is overt, no recovery of semantic content is necessary.

(28)
a.[Ninguno de los cuadros]i, este es [el pintor [que *(no) los$_i$ pintaría]]
b.*[NPI,...[$_{CP}$wh-phrase [C [Negn V[+wh]] [$_{AgrP}$ [Agr tV] $_{NegP}$ [$_{Neg}$ tV]...[$_{VP}$ tV]]]]

Again, the NPI must be lowered to the Spec,NegP of the relative clause at LF to match its [+neg] feature, with subsequent raising to head-position to create a proper chain.

Other relative clauses allow the verb to raise to Comp even if Neg is not lexically realized. The question that must be answered is how Negn recovers its content in these cases. If the verb adjoins to Neg on its way to Comp as in the previously examined instances, Negn would again be invisible to the NPI.

(29)
a.[Ninguno de los cuadros cubistas [que ec se vendió ayer]] (*no) era original

b.Tengo varios cuadros cubistas,[ninguno de los cuales](*no)vendería en mi vida

c. $_{NegP}$ [DP [$_{CP}$wh-phrase ...]$_i$ [$_{Neg}$ Negn$_i$]...[$_{VP}$ tV]]]]

Observe, however, a crucial difference between these relative clauses and the one above. In the relative clauses under consideration (the antecedent of) the relative pronoun contains the [+neg] feature. Let us assume that this feature percolates to the entire DP, which can then serve as a NPI. If this NPI is in spec,NegP, it can identify the content of Negn before the verb raises to Comp at LF and the structure converges. Percolation of the [+neg] feature appears to be at work in other instances such as (30.b).

(30)

a. *No* trajeron [el cuadro de nadie famoso], sólo basura
not they-brought the painting of noone famous only trash

b. [El cuadro de nadie famoso] trajeron, sólo basura
the painting of noone famous they-brought only trash

Our analysis accounts for the contrast between (30.a) and (30.b) as arising from the position of the NPI containing the relative clause. The acknowledged difference between the two stuctures is left unexplained under Suñer's proposal. If - as she assumes - relative pronouns do not block the licensing relation established between the NPI and the SNEG, we should expect the negator to remain unlicensed in both cases and hence to be obligatorily overt. A related question that remains unanswered under Suñer's is the fact that "the negative element in the antecedent is not licensed by a Neg head in its complement clause but by a null *no* in the matrix" (244). This is clearly observed when the negator is overt.

(31)

a. [Ninguno de los cuadros cubistas [que ec se vendió ayer]] era original

b. [$_{NegP}$ [$_{DP}$ [$_{CP}$ wh-phrase ...]$_i$ [$_{Neg}$ Negn$_i$]...[$_{VP}$ tV]]]]

The interpretation of the embedded relative clause differs from (28.a) in that the sentence without an overt negator means that the paintings were indeed sold. However, if - as she argues - when the negative element forms part of the antecedent, or when it belongs with the relative pronoun" (245) the NPI would be permitted to link with a null negator, then the latter should be possible and the verb should receive a negative reading. It is unclear why this link is impossible in (31.a). The present analysis covers the unavailability of this interpretation. As pointed out earlier, a null Negn in the Neg of the relative clause must recover its content at LF. This is not possible after the verb containing the feature [+wh] moves through Neg on its way to Comp at LF. The feature [+neg] is unreachable for the NPI at that level.

Furthermore, we expect that even if the SNEG is phonetically overt, the sentence should be ungrammatical with the intended interpretation linking the NPI and *no*. We have posited that the NPI must match its [+neg] feature at LF by lowering and subsequent raising. Assuming that lowering of an antece-

dent into its relative clause is impossible, the needed NPI-Spec,NegP chain would constitute an improper chain at LF.

(32) *[Ninguno de los cuadros cubistas [que ec *no* se vendió ayer]] era original

Let us now turn to instances where no [+wh] feature is involved, as in complex NPs or IP-adjoined structures. In these cases, the verb need not raise to Comp prior to LF. Hence, insertion of Negn at LF is possible and recovery of the content of Negn may take place by linking it to the appropriate c-commanding NPI.

(33)
a. A ningún pintor, he oido [el rumor que (*no) invitaron a la fiesta]
b. Jamás, [*a las fiestas* (*no) invitaron a los pintores]
c. NPI$_i$ ... [IP V [DP DP [$_{CP}$[IP [$_{AgrP}$ [Agr [$_{Neg}$ Negn$_i$ V]] $_{NegP}$ tV... [$_{VP}$ tV]]]]]]
d. NPI$_i$ ... [IP PP [IP [$_{AgrP}$ [Agr [$_{Neg}$ Negn$_i$ V]] $_{NegP}$ tV...[$_{VP}$ tV]]]]]

In contrast with the grammatical sentence in (33.b), a topicalized phrase blocks the relation between the NPI and the null negator, i.e. the negator must be present where the NPI is linked to the SNEG of a sentence containing a topicalized phrase in spec,CP (cf. 34.a).

(34)
a. [Ningún cuadro]$_i$, me dijeron que EN ESTA SALA *(no) expondrán ec$_i$, pero sí en la otra
b. *[NPI$_i$ ... [$_{CP}$[$_{CP}$topic [C [Negn V[+top]] [$_{AgrP}$ [Agr tV] $_{NegP}$ [$_{Neg}$ tV]...[$_{VP}$ tV]]]]]

In these clauses, both the topicalized phrase and the embedded verb move to the domain of Comp where they match their [+topic] feature under spec-head agreement (topic criterion) (cf. Mallen 1992). Matching may take place at LF in Spanish as evidenced by (33.c). In other words, the verb must raise covertly through Neg on its way to Comp. In accordance with the CFS, the head must advance cyclically in its feature matching. Not having satisfied the [+neg] feature in Neg, the [+topic] verb cannot move on to Comp to match its feature as required. Insertion of Negn could in principle save the derivation. However, even if Negn matches [+neg] at LF, the feature content of Negn cannot be recovered for the same reasons specified for relative clauses. The feature [+topic] must be the one projecting. As a result, the [+neg] feature is unavailable for the NPI at LF.

Compare sentence (34.a) with topicalization in matrix clauses in (35.a-b). In contrast with (34.a), both preverbal nominal phrases in (35.a) are in the domain of the same Comp. However while the NPI is adjoined to CP, the topic phrase is in spec,CP, where it matches the [+topic] feature of Comp as required. Verb raising - as in (34.a) - makes the presence of the SNEG obligatory. That is, the verb may only proceed to Comp to match [+topic] after the [+neg] feature of Neg is checked by an overt SNEG. This situation contrasts

with what we observe in (36.c). Here the SNEG must be absent as in (34).

(35)
a. [A ningún pintor]i, ESTE CUADRO *(no) le han encargado, pero sí ese otro
to no painter this painting not him they-have commissioned, but yes that other
b. *[$_{CP}$NPI, [$_{CP}$topic [C [Negn V[+top]]] [$_{AgrP}$ [Agr tV] $_{NegP}$ [$_{Neg}$ tV]...[$_{VP}$ tV]]]]]
c. ESTE CUADRO, [a ningún pintor], (*no) le han encargado, pero sí ese otro
d. [$_{CP}$topic [$_{C}$ [Negn V[+top]]] [$_{AgrP}$ [Agr tV] $_{NegP}$ [$_{Neg}$ tV]...[$_{VP}$ tV]]]]]

This result is not unexpected under our analysis if the NPI is not adjoined to CP in this case, but it is instead in spec,NegP. The NPI may then identify the content of Negn in Neg prior to verb-movement through it on its way to Comp to match [+topic] at LF.

The proposed analysis is further confirmed by sentences such as (36). We mentioned earlier that percolation of [+neg] allows a DP containing a NPI to match this feature in Spec,NegP and/or to identify the content of Negn. Notice, however, that when the NPI is contained in a wh-phrase or a topicalized phrase, the verb must raise to Comp to match independent [+wh] or [+topic] features. As a result, the feature of Negn is unavailable to the NPI and Negn cannot be identified.

(36)
a. [Qué cuadro de ningún pintor famoso] *(no) trajiste a la exposición
what painting of no painter famous not you-brought to the exhibition
b. [ESE CUADRO de ningún pintor famoso] *(no) trajiste a la exposición
that painting of no painter famous not you-brought to the exhibition

In summary, our account explains the differences and similarities between interrogative sentences, relative clauses, and topic structures. The SNEG must be overt only in those cases where it must raise along with the feature-containing verb to Comp at LF, thus becoming invisible to the c-commanding NPI. When the NPI occupies a local position with respect to the SNEG, Negn recovers its content and the derivation converges at LF.

Our analysis also explains the unexpected contrast between wh-islands on the one hand and other subjacency islands. If lexicalization of the SNEG is forced by the unavailability of operator raising, any subjacency island (and not just wh-islands) should block the relevant derivation. As pointed out, this is not the case. However, under the assumption that it is the [+wh] feature that is responsible for verb raising prior to the potential LF insertion of Negn, we explain the difference in grammaticality between these configurations. Any subjacency barrier which does not involve a [+wh] feature should allow insertion of Negn at LF.

Finally, our analysis avoids the problems mentioned earlier which are noticeable in previous proposals. We do not force a null element to move overtly in order to identify an overt element. Moreover, we do not require raising of an element (a null operator) in order to identify another element (the overt NPI) in violation of Economy.

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