

1985

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Recommended Citation

Jakubowicz, Celia (1985) "Do Binding Principles Apply to INFL?," *North East Linguistics Society*. Vol. 15 : Iss. 1 , Article 14.

Available at: <https://scholarworks.umass.edu/nels/vol15/iss1/14>

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DO BINDING PRINCIPLES APPLY TO INFL?*

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Although some facts involving subjunctive subcategorized complements might best be explained in semantic terms (cf. Pollock, 1971; Rivero, 1976; Ruwet, 1984; Suñer and Padilla, 1984), I attempt to show that certain properties with semantic import which distinguish subjunctive from indicative complements -- as illustrated with data drawn from Romance, particularly from Spanish -- are inevitably syntactic. They can be accounted for once it is assumed, following Aoun (1981 and further work) that there are anaphoric relations between non-argument positions (see also Finer, 1984). I argue that an extension of Binding Theory from its usual domain of application -- the Noun Phrase -- to the INFL node, provides a maximally general and simple account of the properties of finite inflections. The core of my proposal consists of analyzing a subjunctive INFL as an \bar{A} -anaphor and an indicative INFL as an \bar{A} -R-expression, conforming to principles A and C of Binding Theory respectively.

1. I will first present some basic facts concerning certain finite inflections -- such as indicative and subjunctive, in Spanish :

Consider the 1st person plural of the verb enviar (send), in (1).

	Present	Past Imperfect
(1) a	Indicative	envi <u>á</u> <u>ba</u> <u>mos</u>
	stem INFL	INFL
	(-P) (AGR)	(+P) (AGR)
b.	Subjunctive	envi <u>e</u> <u>mos</u> ,
		envi <u>á</u> <u>ra</u> <u>mos</u>
	INFL	INFL
	(-P) (AGR)	(+P) (AGR)

We can see that, in both cases, the inflection is composed by 2 set of features, Tense features - labelled (+Past) and person-number features, labelled (AGR) in the example above. The tense forms are less rich in the subjunctive than in the indicative ; for the former only four forms are available, whereas for the latter there are nine (1).

Consider now (2)

(2) $\left\{ \begin{array}{l} \text{Ellos} \\ \text{pro} \end{array} \right\}$ exigieron que $\left\{ \begin{array}{l} \text{nosotros} \\ \text{pro} \end{array} \right\}$ enviáramos el telegrama
 IND SUBJ

$\left\{ \begin{array}{l} \text{They} \\ \text{pro} \end{array} \right\}$ required that $\left\{ \begin{array}{l} \text{we} \\ \text{pro} \end{array} \right\}$ send the telegram
 3rd pl 1st pl

As with indicatives, the subject of a subjunctive clause may be either lexical or phonologically unrealized. If lexical, it will receive nominative Case. If empty, it will have the same interpretation as the null subject in indicative clauses. In this respect, I will assume Rizzi's (1978) analysis of the INFL node and consider the null-subject as pro.

Apart from some limited exceptions that I will ignore in this paper, like infinitivals, sentences in the subjunctive appear in embedded contexts. (2) Nevertheless, not every embedded context is permitted, neither for a subjunctive nor for an indicative clause. An examination of a wide range of data (Gily-Gaya, 1974; Subirats, 1981; Salamanca, 1981) shows that the distribution of subjunctive and indicative complements is dependent on selectional properties of lexical heads. More precisely :

- (i) A particular class of verbs (the so-called "volitional" verbs), nouns, adjectives and prepositions - henceforth $X^{\circ}W$ elementos of the \bar{X} system-select only for subjunctive complements. I call these complements Primary Subjunctives. Examples are given in (3) below. For simplicity I will only present examples of the category Verb.

(3) Juan exigió que Pedro enviara |* envió el telegrama
 IND SUBJ IND
ordenó
 etc.

Juan required that Pedro send |* sent the telegram
 ordered

Verbs with similar behaviour are : mandar (demand), pedir (ask), aconsejar (advise), preferir (prefer), desear (wish), querer (want), etc.

- (ii) Another class of verbs (question verbs, verbs of saying, epistemic verbs), adjectives and nouns (- henceforth X°_E elements of the \bar{X} system - select only for indicative complements with either (+WH) or (-WH) complementizers. I call these : Indicative Complements. Examples are given in (4) below.

(4) a. Juan supo que Pedro había enviado |* haya enviado el telegrama
 IND IND SUBJ
pensó
 etc.

Juan knew that Peter has sent |* send the telegram
 thought

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b. Juan preguntó quien había enviado |* haya enviado....
 IND IND SUBJ
 averiguo

Juan asked who has sent |* send....
 inquired
 etc.

Verbs with similar behaviour are : creer (believe), suponer (suppose), declarar (declare), decir (say), investigar (investigate) etc. A small number of lexical heads (such as decir, sugerir (suggest) select either subjunctive or indicative complements. Since the meaning of these elements shifts according to the mood of the complement clause, I will consider that when they take subjunctive they belong to the X_W^o class and that when they take indicative, they belong to the X_E^o class. (3)

(iii) It is known that, under negation, a X_E lexical head can take the subjunctive in its sentential complement. I call these complements Secondary Subjunctives. Note, in the examples given in (5) that indicative and subjunctive complements co-occur in these contexts.

(5) Juan no cree que Pedro envíe / enviará el telegrama
 IND SUBJ IND

Juan does not believe that Pedro send / will send the telegram

With respect to Secondary subjunctives it has to be noticed that not every X_E lexical head under negation can take the subjunctive in its sentential complement. As shown in (6), a question verb under negation excludes a subjunctive complement. We come back to this fact below.

(6) Juan no preguntó quien había enviado |* haya enviado
 IND IND SUBJ

Juan did not ask who has sent |* send

However, even among the X_E^o elements which, under negation, can take subjunctive in their sentential complements (i.e. verbs like pensar (think), creer (believe), etc.) it is not the case, however, that a secondary subjunctive can occur in every syntactic context. Consider the following contrast : ((7) a. and b.).

(7) a. pro Prefiero que Pedro no exija que Maria se quedel*queda
 IND SUBJ SUBJ IND

(I) Prefer that Pedro not require that Maria stay | stays

b. pro Prefiero que Pedro no piense que Maria se *quedelqueda
 IND SUBJ SUBJ IND

(I) Prefer that Pedro not think that he * stay | stays

In (7) a. a $X_{\bar{W}}^{\circ}$ (*exigir*) under negation must take subjunctive in its sentential complement. In (7) b. $X_{\bar{E}}^{\circ}$ (*pensar*) under negation, does not allow subjunctive in its sentential complement.

(iv) Finally, note that in some dialects of Spanish, Italian and Portuguese, complements of factive verbs may be either subjunctive or indicative. Examples are given in (8) below

(8) pro Lamento que Pedro vino | haya venido tarde
IND IND SUBJ
Deploro
etc

(i) regret that Pedro came | come late
deplore

Verbs with similar behaviour are : sentir (be sorry); alegrarse (be happy) confiar (be confident) sorprenderse (be surprised) etc.

As for tense co-occurrences between matrix and embedded clauses, in some recent studies about subjunctives in Spanish (Rivero 1971, Lujan 1979, Salamanca 1981, Picallo 1984) as well as in some older references, it has been claimed that in this respect there is a crucial distinction between indicative and subjunctive complements. Indicative inflections are always free to carry any tense regardless the tense of a superordinate inflection.

Subjunctive Inflections, on the other hand, have their Tense "dependent" on that of a superordinate inflection "in the sense that (\pm Past) in subjunctives is restricted to the marks for (\pm Past) in the main predicate" (cf. Picallo 1984 p. 87, see also K. Johnson 1984 and A. Giorgi 1984). An opposite view is presented by Suñer and Padilla, 1984, who claim that it is impossible to maintain that the morphological features of every subjunctive verb are inherited from the tense specification of a superordinate verb. After looking at a wide range of data these authors conclude "that there is a continuum which goes from completely free to rather strict agreement of tenses" (p. 14). Thus, there is no "mechanical" rule of agreement between the matrix INFL and the subordinate one. Rather, tense frame features are generated freely and "illegal" sequences are filtered out by rules of semantic interpretation that are based on the lexical idiosyncratic properties of each matrix verb. A closer inspection of the facts shows that the claim, as formulated in Picallo (1984) is too strong ; and that Suñer and Padilla are right in claiming that there is a continuum which goes from completely free to rather strict agreement of tenses. However, for empirical and theoretical reasons, we cannot accept their claim that there exists no formal account of the properties of tense agreement.

The theoretical reasons in our inability to accept Suñer and Padilla's view derive from the facts of learnability. If there were no formal basis for tense agreement and tense agreement must be learned from the meaning of each sentence, it would be impossible for children to master these complex facts. Our empirical reasons are based on the fact that the noted cotinuum breaks at specific points which depend on the type of sentential complement. Thus, in Indicative Complements and in Subjunctive Complements of Factive verbs any combination of tenses is possible, hence the embedded INFL is free to carry

any tense in these cases. By contrast, Primary Subjunctive requires strict tense agreement between the matrix and the embedded INFL.(4) Hence the embedded INFL is dependant. Finally, Secondary Subjunctives are less restricted than Primary Subjunctives, but less free than Indicative Complements and Subjunctive Complements of Factive verbs.

The facts reviewed up to this point, plus the consideration of other syntactic facts that I cannot attempt to spell out here (i.e. behaviour of pronouns in secondary subjunctives ; "tous" mouvement in French; scope of negation, etc) permit us to conclude that Primary Subjunctives, Secondary Subjunctives and Subjunctive Complements of Factive verbs do not form a natural class. For simplicity reasons, in the remaining of this paper, I will focus on the behaviour of Primary Subjunctives and Indicative Complements.

2. Before entering into the core of my proposals, I will introduce some of the basic assumptions that underlie the analysis presented here. As a point of departure I assume Stowell's (1981) framework of \bar{X} Theory, where INFL is the head of S and COMP is the head of \bar{S} .

Taking into account the characterization of INFL given in (1) above, I will consider that INFL is expanded as in (9)

$$(9) \text{ INFL} \longrightarrow (\pm \text{ Past}) (\text{AGR})$$

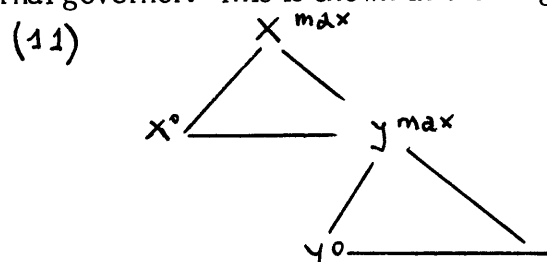
INFL is assigned a set of indices $\{i, j\}$ where i stands for the Tense features $(\pm \text{ Past})$ and j for the number and person features (AGR).

I also assume that AGR, if present, governs and assigns case to (NP,S), thus (NP,S) has the index of AGR (Chomsky 1981).

Further, following \bar{X} theory, the indices of the head of a phrase percolate up to the phrasal node as in (10) below

$$(10) \left[\text{INFL}_{ij} \dots \left[\text{INFL}_{ij} \dots (\pm \text{ Past})_i \text{ AGR}_j \right] \right]$$

I will also assume the definition of Government given in Belletti and Rizzi (1981), according to which the head of a maximal projection is accessible to an external governor. This is shown in the diagram (11)



We say then, that the relation of government holds between X^o and the head of its dependent, Y^o .

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To account for the distribution and tense properties mentioned above, and for some important syntactic differences between Primary Subjunctives and Indicative Complements that we will examine below, I will analyze a subjunctive INFL as an \bar{A} -anaphor and an indicative INFL as an \bar{A} -R expression, conforming to principles A and C of Binding Theory respectively (Chomsky, 1981). My minimal assumption is formulated in (12).

(12) X° subcategorizes for the expression type of the INFL of its S complement, namely X° subcategorizes for $\text{INFL} = (\pm a)$, (where $a = \text{anaphor}$).

(i) if $X^{\circ}_{\bar{W}} \rightarrow (\pm \text{Past})$ in INFL = anaphor

(ii) if $X^{\circ}_{\bar{E}} \rightarrow (\pm \text{Past})$ in INFL = R-Expression

Following Chomsky (1981) I assume that indices are freely assigned at S structure and, as in the case of nominal expressions, principles of Universal Grammar, namely, Binding Principles, account for what may be paired with what.

Consider first the case of Primary Subjunctives. By (12) (i) we know that $(\pm \text{Past})$ in INFL is an anaphor. If so, it is submitted to principle A of generalized Binding (Aoun, forthcoming). Call this expression α , and assume the definition of Minimal Tense Governing Category (henceforth MTGC) as in (13).

(13) The MTGC for α is the minimal tense category containing α , a governor for α and an accessible INFL. (5)

Consider the following sentence and its S Structure representation.

In (14) b. β stands for the indicative INFL in the matrix clause

(14) a. Exigí que Juan hablase en el meeting.
IND SUBJ

(I) required that Juan speak at the meeting.

b.
$$\left[\begin{array}{c} \text{pro} \\ \text{INFL} \end{array} \left[\begin{array}{c} \text{INFL} \\ \beta_i \end{array} \right] (+ \text{Past}) \text{ 1st sg} \text{ exigir} \left[\begin{array}{c} \text{que} \\ \text{S} \end{array} \left[\begin{array}{c} \text{Juan} \\ \text{INFL} \end{array} \right] \right. \\ \left. \left[\begin{array}{c} (+ \text{Past}) \text{ 3rd sg} \text{ hablar} \dots \\ \text{INFL} \alpha_i \end{array} \right] \right]$$

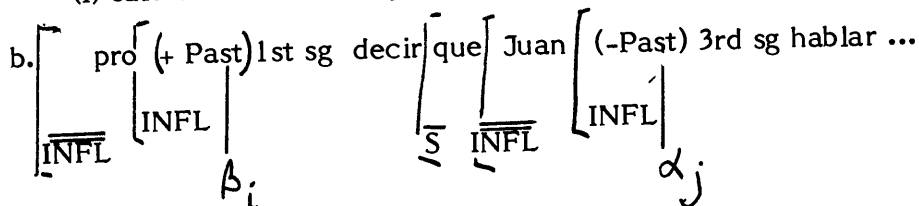
Under the definition of government given above, exigir (require) governs α . Note that we are assuming that in a Primary Subjunctive, S is not a barrier to government. Up to this point, this is no more than a stipulation. Further, we show that this stipulation is empirically motivated. Note that we could avoid this stipulation by assuming that INFL moves into the head of COMP, so as to be locally governed by $X^{\circ}_{\bar{W}}$. In this case, the trace of INFL is governed by INFL in COMP. It is a technicality whether the former or the latter solution is the most adequate. In any case, assume that $X^{\circ}_{\bar{W}}$ governs α . According to (13) the MTGC for α is the matrix clause. It contains α , a governor for α , and an accessible INFL (i.e. β). In this domain α is A-bound by β . Hence, the tense of the subjunctive INFL and the matrix tense share an index (i).

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Consider next, the case of an indicative complement. According to (12) (ii), Tense in an indicative INFL is a \bar{A} non-anaphoric expression. More precisely it is an \bar{A} -R expression, submitted to principle C of Generalized Binding. Call this expression α , and consider (15) a. and its S-Structure representation, (15) b.

(15) a. Dije que Juan hablará en el meeting
 IND IND

(I) said that Juan will speak at the meeting



In (15) b. α is an \bar{A} -R expression. By principle C α must be free. Hence, the tense of the matrix and the embedded INFL are contra-indexed ($i \neq j$).

3. In this section, I will show that the proposed extension of Binding Theory from its usual domain of application - the Noun Phrase - to the INFL node, provides a formal maximally general and simple account of some well known and some previously unnoticed syntactic differences between indicative and subjunctive complements.

Subjunctive and Indicative complements behave differently with respect to a variety of phenomena :

- (i) linking between pronouns in subject position;
- (ii) movement into or through COMP;
- (iii) the distribution of polarity items ;
- (iv) movement of quantifiers ("tous" in French);
- (v) binding of anaphors;
- (vi) subjacency...

As an illustration of my proposal, I will analyze the first 2 phenomena mentioned above.

3-1 Consider first, the behaviour of pronouns

It is widely known that in a subjunctive clause, but not in an indicative clause a pronoun in subject position in the embedded clause must be disjoint in reference from the matrix subject.

An example is given in (16) a. and b.

(16) a. * El presidente ; desea que { él } invite a todos
 IND { pro_i } SUBJ

The president desired that { he } invite everybody
 { pro }

- b. El presidente _i dijo que $\left\{ \begin{array}{l} \text{él} \\ \text{pro}_i \end{array} \right\}$ invitará a todos
IND
- The president said that $\left\{ \begin{array}{l} \text{he} \\ \text{pro} \end{array} \right\}$ will invite everybody

Several accounts have been offered for the ungrammaticality of (16) a. (The avoid Pronoun Principle, i.e. Gueron (1980), Salamanca (1981); the Elsewhere Principle as in Bouchard 1982; the Tensed Domain Principle as in Mireiles and Raposo 1983; the semantic features explanation as in Suñer and Padilla 1984, etc.). None of these accounts either noticed or, if noticed did not explain why, in parallel with the sentence in (16) a. there are constructions with Primary Subjunctives complements where obviation is not required. For instance, the constructions (17), (18) and (19) below.

Consider (17)

- (17) $\left[\begin{array}{l} \text{El candidato}_i \text{ deseaba} \\ \text{IND} \end{array} \left[\begin{array}{l} \text{que} \\ \bar{3} \end{array} \left[\begin{array}{l} \text{el presidente}_j \text{ pidiese} \\ \text{SUBJ} \end{array} \left[\begin{array}{l} \text{que} \\ \bar{3} \end{array} \left[\begin{array}{l} \text{él} \\ \text{pro}_i \end{array} \right] \text{ abriese el acto} \\ \text{SUBJ} \end{array} \right] \right] \right] \right]$
- The candidate desired that the president demand that $\left\{ \begin{array}{l} \text{he} \\ \text{pro} \end{array} \right\}$ open the meeting

Sentence (17) illustrates that in a triply embedded structure, the most deeply embedded subject (he / pro) must be disjoint in reference with respect to the subject of its immediately dominating clause, but can be coreferent with the subject of a higher clause (Salamanca, 1981).

Consider now (18)

- (18) Juan ordenó a Pedro _i que $\left\{ \begin{array}{l} \text{él} \\ \text{pro}_i \end{array} \right\}$ enviase el telegrama
IND SUBJ
- Juan ordered Pedro that $\left\{ \begin{array}{l} \text{he} \\ \text{pro} \end{array} \right\}$ send the telegram

In (18) the embedded subject can be coreferent with an NP in the matrix clause.

Consider now (19) a. through d.

- (19) a. Juan _i desea que $\left\{ \begin{array}{l} \text{él} \\ \text{pro}_i \end{array} \right\}$ pueda _{t_i} invitar a todos
IND SUBJ
- Juan desires that $\left\{ \begin{array}{l} \text{he} \\ \text{pro} \end{array} \right\}$ be able to invite everybody
- b. Juan _i exigió que $\left\{ \begin{array}{l} \text{él} \\ \text{pro}_i \end{array} \right\}$ fuera nombrado _{t_i} embajador
IND SUBJ
- Juan required that $\left\{ \begin{array}{l} \text{he} \\ \text{pro}_i \end{array} \right\}$ be nominated ambassador

$$(21) \left[\begin{array}{c} \dots \dots \dots \left[\text{INFL}_{ij} \dots \right] \\ \text{INFL}_{i,j} \end{array} \right]$$

Note that in (21) a X category, indexed $\{ij\}$ contains a X category of the same type and level also indexed ij . Thus, configuration (21) can be thought of as a i -within- i type violation. Recall that the well formedness condition in (22), put forth by Chomsky (1981) accounts for the impossibility of constructions like the ones in (23).

$$(22) * \left[\begin{array}{c} \dots \dots \dots \beta \dots \\ \gamma \end{array} \right] \quad \text{where } \gamma \text{ and } \beta \text{ bear the same index.}$$

$$(23) \text{ a. } * \left[\begin{array}{c} \text{The friends } i \text{ of } \left[\text{NP}_i \text{ their } i \text{ parents} \right] \\ \text{NP}_i \end{array} \right]$$

$$\text{ b. } * \left[\begin{array}{c} \text{a picture } i \text{ of } \left[\text{NP}_i \text{ itself}_i \right] \\ \text{NP}_i \end{array} \right]$$

In (23) their nor itself may be coreferential with the NP which contains it. In (21) a maximal projection (INFL) cannot share the set of indices with a maximal projection of the same type (INFL) which contains it. Given that this configuration results from coindexing the subjects, that should be disallowed. (6)

Consider now the S-Structure representation of (18) which we repeat as (24) below :

$$(24) \left[\begin{array}{c} \text{Juan } j \left[\text{INFL}_{ij} \text{ (+ Past)}_i \text{ 3}^r \text{ sg}_j \text{ ordenar a Pedro } k \left[\begin{array}{c} \text{que} \\ \text{S} \end{array} \right] \right. \\ \left. \left[\text{INFL}_{ik} \text{ el } k \text{ (+ Past)}_i \text{ 3 sg}_k \text{ enviar } \dots \right] \right] \end{array} \right]$$

Under our hypothesis, the tense of the subjunctive complement and the matrix tense are coindexed. But crucially, since the subjects are not coindexed, the matrix INFL and the embedded INFL bear a distinct set of indices, each. Hence, configuration (21) does not arise in this case. The pronoun is free in its governing category (the embedded clause) and may corefer with a non-subject antecedent in the matrix clause.

Crucially note that configuration (21) above prohibits coindexing of subjects but does not disallow cases of referential inclusion which are perfectly natural, as noticed in Salamanca (1981). An illustration is given in (25) :

- c. Juan _i desea que $\left\{ \begin{array}{l} \text{el } \{ \text{parezca } t_i \text{ sobrio} \\ \text{pro}_i \text{ SUBJ} \end{array} \right.$
 IND
- Juan desires that $\left\{ \begin{array}{l} \text{he} \\ \text{pro} \end{array} \right.$ seem not drunk
- d. Juan _i ansia que $\left\{ \begin{array}{l} \text{el } \{ \text{esté } t_i \text{ tranquilo la noche del estreno} \\ \text{pro}_i \text{ SUBJ} \end{array} \right.$
 IND
- Juan_i wishes anxiously that $\left\{ \begin{array}{l} \text{he} \\ \text{pro}_i \end{array} \right.$ be t_i calm the night of the premiere

With respect to (19) a. through d., note the following points.

- (i) the sentential complements are Primary Subjunctives
- (ii) even if speakers differ in their judgements, a sharp contrast is found between (16) a. where coreference is excluded and (19) a. through d. where coreference is accepted
- (iii) the pronouns are derived subjects
- (iv) for each construction, a PRO option is available.

My explanation for all these facts relies on the assumption that (\pm Past) in INFL Subjunctive is an \bar{A} anaphor, and that the domain of binding is the embedded clause, where the pronoun is free satisfying Principle B. I will show that linking the pronoun to the matrix subject gives rise to an i - within i type violation only in the case of (16) a.

Consider the S-Structure representation of (16) a. which we rewrite as (20) below

$$(20) \left[\overline{\text{INFL}}_{ij} \text{ Juan}_i \left[\text{INFL} \text{ (- Past)}_i \text{ 3 sg}_j \text{ desear } \left[\text{que } \left[\overline{\text{INFL}}_{ik} \left\{ \begin{array}{l} \text{el } \{ \\ \text{pro}_k \end{array} \right\} \left[\text{INFL} \text{ (- Past)}_i \text{ 3 sg}_k \text{ invitar...} \right. \right. \right. \right. \right. \right. \right. \right. \right. \right.$$

Under the hypothesis argued for above, the Tense of subjunctive is necessarily bound by an accessible Tense. Hence the Tense of the Subjunctive complement and the matrix tense share an index (i). Further, AGR and the subject NP are coindexed by convention.

Suppose that $k = j$ in (20). Note that this would be the case if the complement and matrix subject were coreferent.

Suppose moreover that the indices of the head percolate up to the phrasal node. As also remarked by K. Johnson (1984), the following representation will result :

(25)a. Quiero que vayamos al cine
IND SUBJ

(I) want that (we) go to the movies

b. $\left[\begin{array}{c} \overline{\text{pro}}_k \text{ (- Past)}_i \text{ 1st sg}_k \\ \overline{\text{INFL}}_{ik} \end{array} \right] \text{ querer} \left[\overline{\text{S}} \text{ que} \left[\begin{array}{c} \overline{\text{pro}}_j \text{ (- Past)}_i \text{ (1st pl)}_j \dots \dots \dots \\ \overline{\text{INFL}}_{ij} \end{array} \right] \dots \dots \dots \right]$

Consider again sentence (17). Recall that this sentence shows that the obviation requirement in a primary subjunctive is limited to a certain local environment. Under the hypothesis and indexing convention argued for above, the following representation of (17) results (see (26)).

(26) $\left[\begin{array}{c} \overline{\text{INFL}}_{ij} \text{ NP}_j \text{ INFL}_{ij} \text{ X}^\circ_w \\ \overline{\text{INFL}}_{ik} \text{ NP}_k \text{ INFL}_{ik} \text{ X}^\circ_w \dots \dots \dots \end{array} \right]$
 $\dots \dots \dots \left[\begin{array}{c} \overline{\text{INFL}}_{ij} \text{ NP}_j \text{ INFL}_{ij} \text{ X}^\circ_w \\ \text{E} \end{array} \right]$

Since in (26) there is an intermediate clause between the matrix and the most deeply embedded clause configuration, (21) does not arise. Note that this configuration would result if the pronoun were coindexed with the subject of its immediately dominating clause.

A slight modification of the *i* - within - *i* condition to the effects of incorporating the observations above, is formulated in (27).

(27) *i* - within - *i* condition

* $\left[\begin{array}{c} \gamma \\ \dots \beta \dots \end{array} \right]$ where γ and β are

- (i) adjacent X of the same category and bar level
- (ii) $\gamma \neq \beta$
- (iii) γ and β bear the same set of indices

Up to this point, the *i* - within - *i* condition as in (27) has permitted us to explain the ungrammaticality of (16) a. and the well-formedness of (17) and (18) above. Finally, consider the subjunctive complements with derived subjects (sentences (19) a. through d. above). Recall that in these sentences obviation between the embedded and the matrix subject is not required. To explain why a coreferential reading is possible we will assume that the *i* - within - *i* condition applies at S-Structure, but it may not apply at LF just in case where a reconstruction rule would lead us to interpret the derived subject in the position of a trace (Chomsky, 1981).

To sum up : although it has been argued that the obviation requirement in subjunctives can be explained by semantic factors, by an avoid pronoun strategy, by an Elsewhere Principle or by the assumption that INFL subjunctives does not qualify as a SUBJECT, and hence the binding domain of the pronoun is

the matrix clause, I have shown that the domain of binding is the embedded clause where the pronoun is free satisfying principle B. Under the assumption that INFL subjunctive is an \bar{A} -Anaphor, I showed that linking the pronoun to the matrix subject gives rise to an i - within - i type violation which applies at S-Structure but may not apply at LF.

3.2 A second set of facts concerns the presence of WH elements in COMP

Consider sentences (28) a. and b.

(28) a. Juan preguntó / dijo quién (e) invitó a María
IND IND

..... a quien invitó (e) María

Juan asked/said who (e) invited María
- - - - - whom María invited (e)

b. *Juan deseó quien (e) invitase a María
IND SUBJ

- - - - a quien María invitase (e)

*Juan desired who (e) invite María
- - - - - whom María invite (e)

The ungrammaticality of (28) b. shows that a WH word is disallowed in COMP of Primary Subjunctives.

Since *preguntar* and *decir* in (28) a subcategorize, the former obligatorily, the later optionally for a (+ WH) complementizer, the ungrammaticality of (28) b. could be accounted in terms of selectional restrictions for complementizers.

If the prohibition of WH words in COMP subjunctive were to follow from selectional restrictions only, we would expect that other processes involving the COMP position, such as movement through COMP, would be possible. That prediction can be tested in French with informants for which the distinction *que* / *qui* is productive.

Consider first, the case of WH extraction from subject position in Indicative Complements. As discussed in Kayne (1975) and Pesetzky (1982), French has a language specific "escape" from the "that-t" effect : a special rule copies the index of WH or trace in COMP into the complementizer *que* yielding an indexed allomorph, *qui*, when WH or trace locally binds a nominative position. An example is given in (29) below :

(29) Qui_i pensais/tu qui_i (e)_i choisirait
IND ces livres ?

Who did you think (that) (e) would choose these books ?

Consider now sentence (30) where the sentential complement is a Primary

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- (30) *Qui_i souhaitais/tu qui_i (e)_i choisisse ces livres ?
SUBJ

Who did you desire that choose these books ?

The ungrammaticality of (30) shows that the morphological rule que qui cannot apply in Primary Subjunctives (nor it can in Subjunctive Complements of Factive verbs as noticed in Zubizarreta, 1982).

This rule crucially involves the presence of the trace of the nominative WH in the lower COMP. If, for some reason, there was not a landing site for the trace in the lower COMP, cyclic movement of the embedded subject, (qui), would be blocked and, consequently, the rule que → qui would not apply.

Stylistic Inversion in French is another phenomenon which permit us to test the prediction above. Stylistic Inversion is a rule which postpones the subject : it takes place within a clause introduced by a WH word in COMP of a relative, question, cleft and comparative construction. Kayne and Pollock (1978), suggest that the WH word trigger of Stylistic Inversion must precede the subject NP that is moved.

Consider now (31) a., b. and c.

- (31)a. Quels livres pensais/souhaitais-tu que ta fille choisirait/choisisse (e)?
X_E^o X_W^o IND SUBJ

What books did you think/desire that your daughter would choose/choose (e) ?

- b. Quels livres pensais-tu que choisirait ta fille ?
IND

What books did you think that would choose your daughter ?

- c.* Quels livres souhaitais-tu que choisisse ta fille ?
SUBJ

What books did you desire that choose your daughter ?

The ungrammaticality of (31) c. is exactly what we would expect if movement through COMP of Primary Subjunctives were, for some reason, not possible. (7)

To sum up : neither a WH word nor a trace of WH is allowed in COMP of Primary Subjunctives. Since movement through COMP is disallowed, an account of the ungrammaticality of (28) b. solely in terms of selectional restrictions for complementizers appears to be insufficient. In contrast, under the assumption that (+ Past) in INFL Subjunctive is an \bar{A} -anaphor, the generalization above can be captured.

Suppose, as suggested in section 2, that, at S-Structure, INFL moves into COMP. Assume that the filter $[* \text{COMP } \bar{A}]$ which bars doubly-filled COMP holds just in case where at least one of α / β is an argument. This is expressed in (32)

(32) * $\left[\begin{array}{cc} \alpha & \beta \\ \text{COMP} & \end{array} \right]$ unless neither α nor β are arguments.

Thus, the doubly-filled COMP does not bar (33) a. but does disallow (33) b.

(33) a. $\left[\begin{array}{ccc} & \text{INFL} & \text{COMP} \\ \text{COMP} & & \end{array} \right]$
b. * $\left[\begin{array}{ccc} & \text{INFL} & \left\{ \begin{array}{c} \text{WH} \\ t \end{array} \right\} \\ \text{COMP} & & \end{array} \right]$

Beyond all the technical details, the intuitive idea of the proposal is that a WH element in COMP creates opacity in the binding domain of an \bar{A} -anaphor. Hence a WH element in COMP subjunctive must be prohibited.

Finally note that extraction from object position is possible with Primary Subjunctives. An example is given in (34).

(34) Qui souhaitais-tu que Marie ait invité (e) ?
 IND SUBJ

Who did you wish that Marie invite (e) ?

Under our account, since cyclic movement is inapplicable in COMP subjunctive, extraction from the complement of a Primary Subjunctive must cross over \bar{S} and S. According to our analysis, direct movement into the higher COMP is allowed and no subjacency violation arises.

It has been suggested that \bar{S} but not S^{a} bounding node in French (Sportiche (1979)). Since \bar{S} and INFL of the matrix clause share indices, \bar{S} of subjunctive is not a bounding node either. Data that I cannot present here show that subjunctive complements (marginally) allow WH island violations of a type that should be ungrammatical for a language in which S is a bounding node. Hence, \bar{S} of Primary Subjunctives is not a bounding node.

To conclude : a wide range of phenomena concerning not only finite but also infinitive inflections (see A. Rochette, forthcoming) gives further support to our hypothesis and suggests that an analysis along these lines might be correct. If it is, namely, if an extension of Binding Theory from its usual domain of application - The Noun Phrase - to the INFL node is justified, a picture of Universal Grammar is reinforced in which an extremely limited variety of fundamental principles permits to derive complex properties of particular natural languages.

FOOTNOTES

* This research was partly sponsored by a fellowship of the "Philippe Foundation Inc." (New York), and by the "Foundation pour la Recherche Médicale Française" (Paris). Special thanks should go to Messrs N. Chomsky, M. Halle and L. Rizzi for discussion and criticism. Thanks also to L. Burzio, J. Haik, K. Hale and J. Higginbotham for useful comments.

1. The following table of correspondances between Subjunctive and Indicative tense forms is given in Gili y Gaya, 1964, p. 176.

Subjunctive Forms	Aspect	Temporal Meaning	Indicative Equivalents
(1st sing)			(1st sing)
cante	imperfect	present future	canto cantaré
cantara o cantase	imperfect	past future	cantaba cantaré
haya cantado	perfect	past future	he cantado habré cantado
hubiera o hubiese cantado	perfect	past future	había cantado habría cantado

2. Non-subordinate Subjunctive clauses may appear in: (i) commands: Corra más rapido (=you)run faster); (ii) exhortations or exclamations: Que Dios me perdone (=That God pardon me); (iii) introduced by an adverb: Quizás venga mañana (=Perhaps (3rd sing) come tomorrow); (iv) in verbal duplicated contexts: LLame quien llame, no le abras la puerta (=3rd sing) call who call, (you) do not (him/her) open the door= Whoever calls, do not open the door).

3. Verbs such as decir and sugerir, with subjunctive complements, have the meaning of "order" or "permission". Some other examples are: admitir (admit); conceder (concede), etc. Beside the above cases, there are some other - verbs of doubt and negation -, where the mood of the complement clause (indicative or subjunctive) does not produce a shift of meaning (i.e. dudar (doubt); negar (negate); ignorar (ignore); etc. I consider these cases as instances of Secondary Subjunctives.

4. In some very marginal cases, the INFL of a Primary Subjunctive Complement may be (+Past) when the matrix INFL is (-Past) as in (i)a.

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- (i) a. Quiero que Pedro haya ganado la carrera
 (I) want that Pedro had won the race

However, the two remaining (-Past) / (+Past) co-occurrences, are disallowed. (i.e., (i)b and c.).

- b.* Quiero que Pedro ganase la carrera
 Past Imperfect SUBJ
 c.* Quiero que Pedro hubiese ganado la carrera
 Pluperfect SUBJ

Finally note that if, in a structure such as (i)a, an agentive verb appears in the embedded clause, the sentence is ruled out, (i.e. (II) a) unless a temporal specification with future meaning, is added (i.e., (ii)b)).

- (ii) a.)* Quiero que Pedro haya enviado el telegrama
 (I) want that Pedro has sent the telegraphm
 b. Quiero que Pedro haya enviado el telegrama antes de las cinco.
 (I) want that Pedro has sent the telegram before five o'clock.

5. Consider the following sentences:

- (i) El Gobierno deseaba que el conflicto, que era evidente, se solucionase/*solucionaría lo antes posible.
 SUBJ IND

The Government desired that the conflict, which was evident, be solved/*would be solved as soon as possible.

- (ii) El Gobierno afirmó que el conflicto, que era importante, se solucionaría /*se solucionase lo antes posible.
 IND SUBJ

The Government affirmed that the conflict, which was important, would be solved/*be solved as soon as possible.

In (i), the INFL of the lowest clause must be subjunctive in spite of the fact that the adjective evidente takes only indicative complements. In (ii), the INFL of the lowest clause must be indicative, in spite of the fact that the adjective importante takes only Primary Subjunctive complements.

Note now that neither evidente in (i), nor importante in (ii) is accessible to the lower INFL. But the matrix INFL in (i) does command the lowest INFL. Since the matrix verb subcategorizes for an anaphoric INFL, and there is an accessible INFL in its domain, the lower INFL must be subjunctive in Romance.

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6. In Chomsky, 1981, it is assumed that all noun phrases of a syntactic structure are assigned some arbitrary referential index, and Binding Theory consists of conditions governing the output of such a coindexing. In my proposal, I have supposed that indices serve to encode, in a convenient form, the assignment of linguistic relations, whether referential (as in the case of NPs), or not (as in the case of INFLs). Interestingly, what my account shows, is that certain formal configurations are excluded. With respect to this point, see Zubizarreta, 1982, who attempts to derive the *i* within *i* condition from a general principle: "a category has a unique head".

7. In fact, judgements about subject extraction and stylistic inversion are not crystal clear. On the one hand, some informants accept subject extraction neither in subjunctive nor in indicative complements. On the other hand, among those who accept subject extraction, some find ungrammatical (or less acceptable) sentences where extraction or stylistic inversion occur in subjunctive complements. However, for some informants, there is no difference in well-formedness between the two types of embedded clause. Thus, for the former, neither a WH word nor a trace is allowed in COMP of a subjunctive clause. For the latter, a WH word is excluded but a trace is accepted. Note that all informants exclude a phonologically realized WH element in COMP. With respect to traces, the former seem to be more restrictive. I will not pursue this issue here, but see C. Jakubowicz, in preparation.

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