The Grammatical Representation of Topic and Focus: implications for the Structure of the Clause. 1

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0. Introduction.

1. Topic vs. Focus.

The grammatical notions of "topic" and "focus" are grounded to some extent in the discourse notions of "old" (or "given") and "new" information. Such dichotomy has to do with the manner in which the flow of information is articulated within a discourse at a given point in time and space.

In defining the discourse notions of "old" and "new" information, it is useful to keep in mind the pragmatic distinction between "Common Ground" and "Universe of Discourse". (See Stalnaker (1978), Calabrese (1990).) Common Ground (CG) consists of the set of referents and properties shared permanently by speakers and hearers. On the other hand, the Universe of Discourse (UD) includes the set of referents and properties that are shared by the speaker and the hearer in the instant of the utterance. The notions of old and new information are defined with respect to the UD (and not with respect to the CG). Since the UD has a temporary existence (i.e. it is bounded in space and time), a referent or property may be "old" or "new" with respect to a given discourse D.

In other words, in the instant of utterance U within a discourse D, "old" information is constituted by referents and properties that have been introduced prior to U and "new" information is constituted by referents and properties that had not been introduced prior to U. Thus, there may be properties and referents that are part of the CG but are not part of the UD. (This point is illustrated below with a paradigm from Calabrese (1990)). A referent may be introduced in the discourse not only by linguistic utterances, but also by "bodily gestures" (as that involved in pointing) and "visual gestures" (as that involved in registering the appearance in the scene of a new individual or event).

Contreras (1983) and others after him note that the discourse notions of "old" and

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1. This is a preliminary version of work in progress written in May/June of 1993, while I was teaching at the Instituto Universitario Ortega y Gasset. It was also presented at a Workshop on Spanish Syntax at the University of Venice, and at UNICAMP (Brasil). Since then, my views on focus and its relation to PF and LF have matured. Consequently, several aspects of the analysis presented here need to be refined or changed (see fn. 6). I would like to thank the audience at my seminar at Ortega & Gasset for very valuable discussions. Thanks are also due to J. Aoun, G. Cinque, V. Demonte, O. Fernández Soriano, and C. Galves, J.R. Vergnaud, as well as to A. Arnaiz, E. Herburger, and L. Sánchez.

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"new" are reflected in the manner in which phrases are structured in a sentence. For example, as has often been noted, in a sentence with unmarked intonation (in a sense of "unmarked" to be characterized below), postverbal subjects in Romance languages such as Italian and Spanish must constitute "new" information. Thus, postverbal subjects contrast with preverbal subjects in this respect. This is illustrated by the contrast below due to Calabrese (1990):

(1)  

a. Vino el cartero esta mañana. Para mi gran alivio, 
   llegó la carta (que estábamos esperando).  
   "Came the postman this morning. To my great relief, arrived the letter   
   (that we were waiting for.)."

b. Esta mañana llegó una carta de París.  
   "This morning arrived a letter from Paris."

c. Mario me ha escrito una carta. Llegó la carta ayer.  
   "Mario to me-has written a letter. Arrived the letter yesterday."

d. Mario me ha escrito una carta. La carta llegó ayer.  
   "Mario to me-has written a letter. The letter arrived yesterday."

Calabrese points out that a definite description denotes a referent which is part of the CG but not part of the UD. The underlined postverbal subject in (1a) is a "descriptive" definite NP; it constitutes "new" information. Definite descriptions thus pattern with nonspecific indefinites which typically constitute "new" information (cf. Donnellan (1966)). As illustrated in (1b), indefinite subjects may appear in postverbal position. On the other hand, an anaphoric definite denotes a referent that is already part of the UD. It constitutes "old" information and it may not appear in postverbal position. It must appear in preverbal position (as shown by the contrast between (1c) and (1d). (Note that within this view a focused proper name is a definite description, rather than like an anaphoric NP.) These facts suggest the following generalization for languages like Spanish and Italian:  

(2)  

A postverbal subject in Spanish or Italian must be focused (or part of the focus).

A question that arises at this point is how to articulate the discourse notions of "old" and "new" information with the grammatical notions of "topic" and "focus". The grammaticalization of such discourse notions must account for the generalization in (2) We will adopt (and adapt) a proposal put forth by Herburger (1993), which achieves just this. Herburger proposes (following work by J. Higginbotham) that all noun phrases take an e(vent) argument and that if an NP is in the scope of the Ev(ent) operator, its e argument is bound by the Ev operator. In such a case the NP is interpreted as introduced by the event denoted by S: it constitutes "new" information. If an NP is outside the scope of the EV operator (i.e. the Asp node), it's e arg is free, in which case it is interpreted as linked to an event previously introduced in the discourse: it constitutes "old" information. Let us furthermore

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2. The generalization disregards cases of right-dislocated subjects. Such cases are irrelevant. See below for further discussion.
assume (following de Miguel (1990), Stowell (1992), and others) that the Event
operator is contained in the Aspectual node, a functional category that takes the VP as
complement. ³ We may then state the following principle: ⁴

(3) At the level of logical form (LF), if an NP is focus, it is within the
    scope of the Aspect node; if it is topic, it is outside the scope of the
    Aspect node.

In the next sections, we will see precisely how (2) follows from (3).
As is common practice, we will assume that referents and properties are simply
represented by indices. We may then say that a focused NP does not refer in UD;
there is no index in UD that corresponds to a focused NP. Since they are not
referential expressions, quantificational NPs do not have an index in UD either, but
they may range over entities that do refer in UD.
Suppose that noun phrases that do not refer in UD cannot enter into coreference
relations. They only enter into binding relations. As is well-known, binding, unlike
coreference, requires a relation of c-command between the antecedent and the
anaphor. This explains the following paradigm (as noted by Chomsky (1976)):

(4) a. *The woman he₃ loved betrayed someone₃.
    b. *The woman he₃ loved betrayed JOHN₃₁.
(5) a. Someone₃ was betrayed by the woman he₃ loved.
    b. JOHN₃₁ was betrayed by the woman he₃ loved.

(4b) contrasts minimally with (6), where the focus is the verb and not the direct
object:

(6) The woman he₃ loved BETRAYED John₃₁.

(As is standard practice, we use capital letters to mark the lexical item on which
the phrasal accent falls. It is generally the case that the phrasal accent falls on the
nucleus of the focused constituent, but see below for further discussion.)

The analysis outlined above for (4b) is basically the one proposed by Calabrese
(1990). This analysis basically defines as "referential" those NPs in S that are part
of the UD at the point in time when S is uttered. The problem with this hypothesis is
that, as we have seen above, descriptive definite descriptions are part of the CG but
they are not members of the UD. Still, they can enter into coreference relations (cf.
Vergnaud & Zubizarreta (1990)):


⁴ The reader will notice that the generalization in (3) and its effect are very close to the analysis
proposed in Diesing (1992) (based on I. Heim's work) in terms of existential closure. As pointed out
by Stowell (1992), the existential quantifier may be assimilated to the Ev-operator.
(7) Whoever he might be, John's murderer must be insane.

Similarly, generic NPs that are not part of the UD may enter coreference relations:

(8) a. When he is hungry, a tiger may be dangerous.
   b. When they are not ripe, grapes can be hard to digest.

Such facts suggest that it is undesirable to define coreference relations purely in terms of discourse concepts. An alternative view (more in line with Chomsky's treatment of focus) would be to assimilate focused NPs with quantified phrases. Focused NPs are not QP,s, but like QPs, they are operator-bound: i.e. they are bound by the EV operator. We may then postulate the following descriptive generalization:

(9) An NP that is operator-bound must c-command the anaphor which it is coindexed with.

(Note that (9) implies that generic NPs like the ones in (8) are not operator-bound.)

It is important to recognize that there is a close correspondence between the grammatically defined notions of "focus" and "topic" and their discourse counterparts ("old" and "new" information). But it is equally important to keep in mind that discourse and sentence grammar are independent levels of analysis (with distinct vocabulary and distinct syntax). The notions of "topic" and "focus" are grammatically encoded in sentence grammar in a purely formal way, which makes no use of their status as "old" or "new" within the discourse. It should therefore come as no surprise if there actually exists linguistic entities that are undefinable as "old" or "new" at the discourse level. A case in point are WH phrases. They are neither "old" nor "new" information to the extent that they do not introduce referents into the discourse; nevertheless they are formally characterizable in terms of the "topic/focus" dichotomy within sentence grammar. Since there is often but not always a one-to-one correspondence between the grammatical notions of "topic" and "focus" and the discourse notions of "old" and "new" information, it is useful to use a battery of tests when studying the grammatical notions of "topic" and "focus", which includes both discourse contexts as well as purely grammatical heuristic devices (such as association with "focus markers" like only and even).

A popular operational test to determine topics and focus within a sentence is by judging the wellformedness of question/answer pairs. Thus, the following pairs of sentences identify, respectively, the subject and the object as the focus of S.

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5. Wilkinson (1991) suggests that indefinites and bare plurals with a generic interpretation (like those in (8)) be treated as variables bound by a generic time operator (following proposals by Kamp and Heim). The generic operator could then be assumed to bind the pronoun within its scope. The basic problem with this approach is that in Romance we get a definite NP (in lieu of a bare NP) in examples like (8b). Cf. Quand ils ne sont pas mûrs, les raisins sont difficile à digérer 'When they are not ripe, the raisins are difficult to digest'. Treating definites like variables creates unsurmountable problems, as shown in Zubizarreta & Vergnaud (1992).
(10) a. WHO likes Mary?
   b. JOHN likes Mary.

(11) a. WHOM does John like?
    b. John likes MARY.

As is wellknown, there is a close connection between phrasal accent and focus. The focus of the sentence must bear the prominent accent of the sentence. Thus, in (10b) and (11b) the accent falls respectively on the subject and on the object. There has been much discussion in the literature concerning the algorithm that determines (phrasal) accent. See Rochemont & Culicover (1990) for discussion and Cinque (1993) for a recent proposal. Cinque (1993) notes that there is a relation between the directionality of recursion and the directionality of unmarked accent assignment in a given language. Thus, English or Spanish is right recursive and the accent falls to the right of the head, while in German the verb phrase is left-recursive and the accent falls to the left of the verb in embedded clauses (where there is no V-to-C movement). To capture this fact, Cinque proposes an algorithm with the following effect (See Cinque for qualifications):

(12) The most prominent accent in S falls on the most embedded constituent in S.

It is not the case that the phrasal accent always falls on the most embedded constituent of the sentence. Cinque suggests that we distinguish between the unmarked accent from the marked one. The unmarked accent is given by a sentence grammar rule and it identifies the unmarked focus of the sentence. The result of this rule can be overridden by a discourse level rule. Since the focus constituent must always bear the main accent, a discourse level rule can shift the accent from the constituent identified as the focus by the sentence grammar to the constituent identified as the focus by the discourse (if the two happen not to coincide). The accent given by the discourse rule is called marked accent and it identifies a marked focus. (On the distinction between these two notions, see also Guéron (1980)).

The unmarked focus (unlike the marked focus) can propagate. In other words, the focus of the sentence may be exactly the constituent that bears the (phrasal) accent, but it need not be. The focus may be a phrase that dominates the constituent that bears the main accent of the sentence. In line with Cinque's algorithm for determining accent assignment, we may assume the following algorithm for identifying the domain of propagation:

(13) **Rule of focus propagation**: The focus may propagate upward from the constituent that bears the unmarked accent along a continuous path that includes the nodes on the recursive side of the tree and the nodes that are projections of the head.

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6. Lexical prominence is referred to as *stress* and phrasal prominence is referred to as *accent*. While the former cannot be modified, the latter can be (see Rochemont & Culicover (1990)). Here we will be concerned only with (phrasal) accent.
This means that in the following tree, focus may propagate upward to include \{Y, Y', YP, X', XP\}.

(14) \[
\begin{array}{c}
\text{XP} \\
\text{ZP} \quad \text{X'} \\
\text{X} \quad \text{YP} \\
\text{WP} \quad \text{Y'} \\
\text{Y'} \quad \text{........}
\end{array}
\]

Thus, a sentence like (15) has multiple possible focus structures: the NP direct object, the VP, and S.

(15) \{Bill \{saw \{SUE\}\}\}

Typically, in the case of a sentence that initiates the discourse, the entire S is focused.

The propagation of focus can also be illustrated with quantificational elements like only, which associate with focus. In the example below (from Tancredi (1992)), only can have scope over the direct object Sue or over the VP saw Sue:

(16) a. Bill only saw \{SUE\} (not Mary).
    b. Bill only \{saw SUE\} (that is, he didn't hear Mary).

Consider a case of marked focus, as in the following case where the accent falls on the verb (which is not the most embedded constituent in S). Note that the sentence in (17a) can be followed by the sentence in (17b) but not by the sentence in (17c). This clearly illustrates the point that marked focus does not propagate.

(17) a. Bill only SAW Sue
    b. That is, he didn't HEAR her.
    c. %That is, he didn't hear MARY / HEAR Mary.

Interestingly, the results of the only test coincides with the Q/A test. Thus, (19a) can constitute an answer either to the question in (18a) or in (18b), while (19b) can only be an answer to the question in (18c).

(18) a. What did John do?
    b. Who did John hit?
    c. What did John do to Mary?
(19) a. John hit MARY.
   b. John HIT Mary.

Cinque's accent algorithm is built in such a way as to identify the most embedded node in S as the one associated with the main accent. The accent rule thus identifies the unmarked focused position in languages like English and Spanish. In this article, we take the inverse position: the most embedded node in S is the unmarked focused position. It is identified by the feature [+F(ocus)]. Given that a lexical item dominated by the feature [+F] must be assigned the main accent, it follows that the main accent will fall on the most embedded node in S in the unmarked case. The [+F] feature may percolate upward. In such cases, phrasal accent identifies the nucleus of the focalized constituent. 7

More precisely, we assume the algorithm in (20) for computing focal accent and focus propagation. It applies at S-S.

(20) 1. Designated Element (DE): the most embedded node in the structure.
  2. Assign [+F] or [-F] to DE.
  3. Rule of focal accent: Assign the feature [accent] to the lexical item immediately dominated by a [+F] node.
     (This rule applies only once and it is obligatory.)
  4. Rule of focus propagation: The feature [+F] may propagate upward along the right-branching side of a structure in a right-recursive language and along the left-branch in a left-recursive language. As the feature [+F] propagates upward, it may not skip nodes. In other words, if [+F] propagates from Y to X in the following structure: [...X....Z....Y...], where X dominates Z and Z dominates Y, Z must also be marked [+F].

We must also acknowledge the existence of "constructional focus" (see Rochemont & Culicover (1990) and references cited therein). The best known of these is the cleft-construction:

(21) It is SUE that Bill saw.

We assume that in the case of constructional focus, a particular position in the structure (which does not correspond to the DE) is marked [+F]. In the case of the cleft-construction, the object of the copula is marked [+F]. Since the main accent rule applies only once, it follows that in cases of "constructional focus" rule (20.2) does not apply.

Note that the wellformedness condition on LF in (3) provides an explanation as to why the DE that identifies the focal accent-bearing lexical item is the most embedded node in S. If the least embedded node (i.e. the highest node) in S were  

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7. In more recent work, we argue that Cinque's position is in effect the correct one: the grammar of languages like English and Spanish should not stipulate the unmarked focus position. This should follow from the accent algorithm.
systematically identified as the nucleus of the focus by the accent rule (instead of the most embedded node), the generalization in (3) would never be met at S-S. As we will see in the next section, the condition in (3) must be assumed to apply at LF because there exist cases in which S-S and LF do not coincide (i.e. cases of "reconstruction" at LF). Still, it is reasonable to assume that in a significant sub-set of cases, LF and S-S (which feeds both PF as well as LF) do coincide. In other words, the grammar favors a transparent relation between S-S and LF (although it does not impose it), thus making the acquisition task a feasible one for the child. And it is for this reason that the accent rule picks out the most embedded node (rather than the least embedded one).

2. **Word Order in Spanish, the Focus/Topic Distinction, and Binding.**

Since Pollock's work on verb movement (published in 1988), there has been an explosion of functional categories postulated as part of the clausal projection, some of them with semantic content (such as Tense and Aspect), others with a purely morpho-syntactic function (such as Subj Agreement and Obj Agreement), and others with a less clear function like that of the ACC and DAT clitics in Romance languages (Sportiche (1990) calls them "voices", while Fernández Soriano (1989) and Franco (1993) assimilate them to agreement elements in the case of Spanish). Since the AGR nodes will play no role in what we have to say here, we will ignore them. Among the L-related functional nodes that are part of the clausal structure, we will assume the existence of a Tense, Aspect, and ACC/DAT Clitic projections. The clausal structure we will assume is therefore the following (the CIPs are optional):
The functional heads T(ense), Cl(itic), and Asp(ect) are all L-related; consequently their specifier will be defined as L-related positions as well (or A-positions). \(^{10}\) Comp subcategorizes for Tense; Aspect subcategorizes for VP. Consequently, the Cl projection must be located somewhere between T and Asp.

Interestingly, there is some binding facts (pointed out to me by J. Aoun) that actually support the hypothesis that a preverbal subject (in Spec of T) is higher than the CIP and that the postverbal subject (in Spec of VP) is lower than the CIP, as postulated in (22). While a pronoun contained in a preverbal subject may be coreferential with a pronominal clitic object, a pronoun contained in a postverbal subject may not be coreferential with a pronominal clitic object.

\[(23)\]
\[
\begin{align*}
\text{a. La madre de Juan lo castigó.} & \\
& "The mother of Juan him-punished." \\
\text{b. * Lo castigó la madre de Juan.} & \\
& "Him-punished the mother of Juan." \\
\end{align*}
\]

The illformedness of (23b) follows from Principle C if we assume that the pro ACC object has raised to Spec of CIP (as suggested in Sportiche (1992)). We may assume that this movement is obligatory for the identification of the phi-features of the silent pronominal by the clitic. Given the structure in (22), a pro in Spec of CIP

\(^{10}\) On the notion of L-relatedness, see Mahajan (1990a), Chomsky (1992).
would c-command a pronoun contained within a postverbal subject (in Spec of VP). Coreference between the two would therefore violate Principle C.

We will examine next the interaction of word order with the topic/focus distinction in Spanish, and we will see that the rules in (20) and the wellformedness condition in (3) provides us with a correct and insightful analysis of the facts.

**Structures with postverbal subject.**

2.1. **Structures with [-Focus] objects.**

2.1.1. **Right-dislocation of the object: \( V[S] \#O \).**

If the accent falls on the subject, the subject is the focus, the object is deaccented and it is topic. Thus, while (24a,b) and (25a,b) are wellformed Q/A pairs, (25a,c) is not:

(24) a. ¿Quién ha comido la manzana?
"Who ate the apple?"

b. Ha comido PEDRO la manzana.
"Has eaten PEDRO the apple."

(25) a. ¿Qué ha comido el niño?
"What has eaten the boy?"

b. El niño ha comido UNA MANZANA.
"The boy has eaten AN APPLE."

c. % Ha comido el niño UNA MANZANA.
"Has eaten the boy AN APPLE."

Furthermore, there is reason to believe that the object in (24b) is right-dislocated (the phenomenon referred to as "emarginazione" by Cinque & Antonucci (1977)). (20) provides an account of these facts.

A VSO sentence has the following (partial) D-S:
The object is identified as the DE (i.e. it is the most embedded node in S). It is therefore assigned an [F] feature by rule (20.2). Suppose it is assigned [-F]. Recall that the focal accent rule must assign the feature [accent] to a lexical item immediately dominated by a [+F] node. Therefore, the only way to save the structure is to move the object out of the VP, thus allowing rule (20.2) to reapply. There are various possibilities, one of which is to right-dislocate it. As Ross (1966) has noted, right-dislocation is a strictly local process; it is constrained by what he called the "right-roof constraint". Let us assume the following version of the right-roof constraint:

**The Right-Roof Constraint (RRC):** If a phrase P in position X is moved to position Z by rightward adjunction, then
(a) the position immediately dominating Z must be the first maximal functional projection that dominates X.
(b) if X is an A- (A'-) position, there is no position Y, where Y is an A- (A'-) position and is coindexed with X and Z.

After right-dislocating the object and raising the verb to Tense, we obtain the following structure:
The rule of [F]-assignment reappears to (28). The DE node in this structure is the subject (i.e. the most deeply embedded node in S). Suppose it is assigned the [+F] feature. The focal accent rule will then assign it the [accent] feature. We thus obtain the desired result: V[S]#O, where the postverbal subject is focused (it is within the scope of Asp). The object is right-dislocated and it is topic (it is outside the scope of Asp).

We are assuming that Spanish and Italian (unlike English or French) can be assigned NOM Case in the VP or in Spec of TP. More precisely, we may assume that NOM Case is assigned by the inflected verb or its trace to Spec of VP or to Spec. of TP (via Spec-head agreement). In the above structure, NOM Case is assigned to Spec of VP; Spec of TP is therefore a Case-less position.

Data related to binding provide independent evidence for the structure in (28). In such structure, the subject may not bind the object because it does not c-command the object (as illustrated in (29a)). Nor may the object bind the subject. Although the object does c-command the subject in this structure, the resulting structure violates the Bijection Principle; see (29b). The Bijection Principle disallows a QP in an A'-position to locally bind both a pronoun and its trace (cf. Koopman & Sportiche (1982)).

(29) a. Q: Quisiera saber quién acompañará a su hijo.
   "I would like to know who will accompany his child."
   A: * Acompanionará CADA MADRE # a su hijo.
      "Will accompany EACH MOTHER (S) his son (O)."

11 In judging such examples it is important to make sure that the accent falls on the subject and not on the object. If the accent falls on the subject, the object is deaccented (the phenomenon called "emarginazione" by Antonucci & Cinque).
b. Q: Quisiera saber quién acompañará a cada niño.
   "I would like to know who will accompany his child."
A: * Acompañará SU MADRE # a cada niño.
   "Will accompany HIS MOTHER (S) each child (O)."

2.1.2. **Clitic-left dislocation followed by right-dislocation:**

\[ O#cl+V[S] \text{ and } cl+V[S]#O. \]

We have seen above that a VSO form in which the Object receives a [-F] feature and remains in-situ does not give rise to a wellformed structure, since such a feature is incompatible with phrasal accent. In such cases, the object must move out of the VP, leaving the subject as the DE of the structure. The subject may then be identified as the focus of S, and therefore as the locus of phrasal accent. In the previous section, we examined the option of right-dislocating the object to save the structure. Another option is to left-dislocate the object:

(30) a. (Dicen que) el libro *(lo)* destruyó el niño.
   "(They say that) the book *(it)-destroyed the boy."
   
   b. El libro, dicen que *(lo)* destruyó el niño.
   "The book, (they) say that *(it)-destroyed the boy."

(31) a. (Estoy segura que) a Juan *(le)* habló María.
   "(I am sure that) to Juan *(to him)-spoke Maria."
   
   b. A Juan, estoy segura que *(le)* habló María.
   "To Juan, (I) am sure that *(to him)-spoke Maria."

As shown by the above examples, left-dislocation, unlike right-dislocation, is not local. Furthermore, left-dislocation of an object requires clitic-doubling. We suggested above that right-dislocation is basically adjunction to the immediately dominating functional projection. Left-dislocation, on the other hand, is adjunction to TP. 12 From this position, it may cyclically move upward (left-adjoining to higher

12. In the case of embedded clauses left-dislocation adjoins a phrase to TP, but not to CP:

(a) Dicen que a María, Pedro no la saludó.
   "(They say that María, Pedro not her-greeted."
(b) * Dicen a María, que Pedro no la saludó.
   "(They) say María, that Pedro not her-greeted."
(c) Me preguntó por qué a María, Pedro no la saludó.
   "To me-asked why María, Pedro not her-greeted."
(d) * Me preguntó a María, por qué Pedro no la saludó.
   "To me-asked María, why Pedro not her-greeted."

The impossibility of adjoining to an embedded CP could be attributed to the ban against adjunction to arguments (cf. Chomsky (1986)). Interestingly, left-dislocation can adjoin a phrase to a matrix CP:

(e) * María, por qué Pedro no la saludó ?
   "María, why Pedro not her-greeted? "

"María, why Pedro not her-greeted? "

The impossibility of adjoining to an embedded CP could be attributed to the ban against adjunction to arguments (cf. Chomsky (1986)). Interestingly, left-dislocation can adjoin a phrase to a matrix CP:
TPs). 13

Clearly, we would like to relate the absence of clitic-doubling in right-dislocation structures to its strictly local character (it involves adjunction to AspP). And we would like to relate the presence of the clitic in the case of left-dislocation to the fact that it adjoins material to a higher position (namely, to TP). Note that the clitic projection in (22) is located below TP but above AspP. It is therefore reasonable to suggest that the presence of the clitic in left-dislocation can be attributed to the Minimize Chain Links Principle proposed by Chomsky & Lasnik (1990):

(32) Minimize Chain Links
Consider the chain of an argument $i$: $X_i, \ldots, Z_j, \ldots, Y_i$, where $X$ is the head and $Y$ is the tail of the chain. If $Z$ is a potentially available position for $i$, then $i=j$.

Left-dislocation of an object requires the presence of the clitic because its Spec. provides an intermediary landing site, thus minimizing the links in the chain.

13. Thus, as expected, left-dislocation obeys strong islands. The following examples are adapted from Cinque (1990):

(a) * A Carlos, Pedro conoce [a la persona [que lo visitó].
"Carlos, Pedro knows the person that him-visited."
*A Carlos, Pedro conoce [a la persona [que le habló].
"Carlos, Pedro knows the person that to him-spoke."
(b) * A María, [el que Juan la haya saludado] no significa nada.
"Maria, the fact that Juan her-has greeted does not mean much."
*A María, [el que Juan le haya hablado] no significa nada.
"Maria, the fact that Juan to him-has talked does not mean much."
(c) * A María, Juan se marchó [antes de que Pedro la hiciera entrar].
"Maria, Juan left before Pedro her-made enter."
*A María, Juan se marchó [antes de que Pedro le hablara].
"Maria, Juan left before Pedro to him-spoke."

In testing for island effects in left-dislocation it is important not to confuse the "Hanging Topic" construction which has the semantics of "as for NPs" with left-dislocation. See Cinque (1977) and Dolci (1986) on this point. There is much confusion in the literature on Spanish due to a failure to distinguish adequately these two constructions. See for example Hernanz & Brucart (1987), Campos (1991).

Cinque (1990) argues in favor of base-generation of left-dislocation despite its sensitivity to islands, but see Iatridou (1990) for a critique of Cinque on this point.
Consider next the case of right-dislocation. Due to the RRC, right-dislocation is local; its target is AspP, which is lower than the CIP. Therefore, there is no CIP "activation". The question then arises as to the analysis of examples in which right-dislocation of an object coexists with a clitic, as in (34a):

(34) a. La comió EL NIÑO # la torta.
   "It-ate THE CHILD the cake."
   b. Comió EL NIÑO # la torta.
   "Ate THE CHILD the cake."

We suggest that this is a case of left-dislocation (to TP) followed by right-dislocation (to CP). In other words, (34a) has an analysis distinct from (34b): in the latter the direct object is attached to AspP, while in the former the direct object is attached to CP.

The difference in the analysis of the right-dislocated object in (28) and (33) is confirmed by binding facts. Recall that in the structure V[S]#O, S cannot bind O (cf. (29a)). Similarly, if the object is clitic left-dislocated, and whether or not this is followed by right-dislocation, the postverbal subject cannot bind the object. Again, this is due to the fact that the postverbal subject does not c-command the object. (See section 3 for further discussion.)

(35) a. Quisiera saber quién acompañará a su hijo.
   "(I) would like to know who will accompany his child."
b. *A su hijo lo acompañará CADA MADRE.
   "His child (O) him-will accompany EACH MOTHER (S)."

c. *Lo acompañará CADA MADRE # a su hijo.
   "Him-will accompany EACH MOTHER (S) his child (O)."

In the V{S}#O structure, the O cannot bind the S either (cf. (29b)). We
attributed the illformedness of such examples to the BP. On the other hand, the O
may bind the S in cases of clitic-left dislocation and in cases of clitic-left dislocation
followed by right-dislocation:

(36) a. A cada niño lo acompañará SU MADRE.
   "Each child (O) him-will accompany HIS MOTHER (S)."

   b. Lo acompañará SU MADRE # a cada niño.
   "Him-will accompany HIS MOTHER (S) each child (O)."

These sentences do not give rise to a BP violation because in these cases, it is not
the dislocated QP, but the Spec of CIP (an A-position) that locally binds
the pronoun. (See the structure in (33)).

2.1.3. Focus Propagation: {cl+V S}#O vs. *[V S]#O.

Another argument in support of the structures in (28) and (33) has to do with
the availability of focus propagation. Focus may propagate so that it includes the subject
and the verb in cl+VS#O structures, but not in VS#O. This is shown by the fact that
(37a) may be followed by (37b), but not by (37c): (NIÑO is the nucleus of the focal
constituent; it bears focal accent.)

(37) a. Pedro compró un libro. Y luego,
   "Pedro bought a book. And then,"

   b. Lo destruyó un NIÑO # el libro.
   "It-destroyed a BOY the book."

   c. % Destruyó un NIÑO # el libro.
   "Destroyed a BOY the book."

The Q/A test gives the same results. The Q in (38a) may be answered by (38b) but
not by (38c). The focus may propagate to include the verb in T in (38b), but not in
(38c).

(38) a. ¿Qué pasó con el libro?
   "What happened with the book?"

   b. Lo destruyó JUAN # el libro.
   "It-destroyed JUAN the book."

   c. % Destruyó JUAN # el libro.
   "Destroyed JUAN the book."

14. See Mahajan (1990b), (1991) who develops arguments along these lines as to why clitic-
doubling of wh-extracted phrases in certain Romance languages voids WCO effects.
(37b) has a structure comparable to (33). The feature [+F] assigned to the DE (i.e. the Spec of VP) percolates upward along the right side of the tree. Suppose it percolates upward to VP, Asp', AspP, Cf, CIP, and T, in which case the focus constituent includes the verb and the subject: \{lo destruyó el NIÑO \} el libro. The resulting structure is perfectly well-formed if we make the reasonable assumption that empty categories are irrelevant to the computation of focus. Thus, the fact that CIP (which is [+F]) immediately dominates the trace of NP2 (which is [-F]) does not create a feature conflict.

Consider next (37c), which has a structure comparable to (28). Suppose the [+F] feature on the subject (the DE of the structure) percolates upward to VP, Asp', AspP1, AspP2, and T (thus including the verb as part of the focal constituent). A clash of features arises: the AspP that immediately dominates the right-dislocated object will be marked [+F], but the right-dislocated NP is [-F] and it dominates lexical material. The result is therefore illformed. Thus, we explain why focus propagation is ruled out in such structures: *[destruyó el NIÑO] # el libro.

Furthermore, note the contrast in (39). (39b) is illformed due to the presence of the temporal adverb ayer between the subject (in Spec of VP) and the right-dislocated object (adjoined to AspP). Temporal adverbs modify tense; therefore it must be dominated by a projection of T. On the other hand, in (39a), the temporal adverb may appear between the postverbal subject and the right-dislocated object. This is possible because, as indicated by the presence of the clitic, the right-dislocated object is attached higher than TP (namely, to CP).

(39) a. Lo destruyó JUAN # ayer # el libro.
    "It-destroyed JUAN yesterday the book."

b. * Destruyó JUAN # ayer # el libro.
    "Destroyed JUAN yesterday the book."

Thus, the above contrast constitutes a further argument in favor of the postulated structural difference between a clitic-doubled right-dislocated object and a non clitic-doubled one.

2.1.4. \(VO\{S\}\).

We have seen above that a [-F] object must move out of the VP. It may be moved to the right (right-adjoining to AspP) or may be moved to the left. In the latter case, it may move all the way up to TP (left-adjoining to it). But there is another possibility if the choice is left-ward movement: it may move to Spec of AspP, in which case a different word order is obtained, namely VOS. Thus, (40b) can be an answer to (40a). The phrasal accent falls on the subject. 15

(40) a. Quién comió la torta ?
    "Who ate the cake?"

b. Comió la torta JUAN.
    "Ate the cake JUAN."

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15. Such structures also exist in Italian, contrary to what Calabrese (1990) claims.
(40b) has the structure below: 16

(41)

The focus may not propagate upward given that the object in Spec of AspP is [-F]. Focal propagation would give rise to a feature clash. This is illustrated by the following facts. As shown in (42a), sólo (only) may associate with the subject in a VOS structure. It may not associate with the entire sentence, as shown by the illformedness of the discourse in (42b).

(42) a. Sólo ha terminado el trabajo MARÍA; o sea, no ha terminado el trabajo
JUAN.
"Only has finished the job MARÍA; that is, has not finished the job
JUAN."

b. Sólo ha puesto la mesa MARÍA; % o sea, no ha preparado la comida
JUAN,
"Only has set the table MARÍA; that is, has not prepared the dinner
JUAN."

Once more, the binding facts provide striking confirmation for the postulated structure. In (41) the object is higher than the subject. As expected, O may bind S, but not viceversa:

(43) a. El primer día de escuela acompañará a cada niño SU MADRE.
"The first day of school will accompany each child (O) HIS MOTHER (S)"

16. Alternatively, we may consider that the preposed object is in the Spec of CIP. Sportiche (1990) suggests that there is a filter banning the simultaneous presence of phonological material in the Spec of CIP and the head of CIP (a sort of generalized "doubly filled Comp" filter, which will incidentally apply to DP as well). This would account for the fact that the clitic is phonologically present when the preposed object moves through the Spec of CIP and adjoins to TP, but not when the preposed object remains in Spec of CIP. To settle this issue we would have to await a better understanding of the nature of clitics and of functional categories in general.
b. * El primer día de escuela acompañará a su hijo CADA MADRE.
"The first day of school will accompany his child (O) EACH MOTHER (S)."

2.2. Structure with [+Focus] object: {V S O}
Consider once more the structure in (26). Suppose the object is assigned the [+F] feature. The object would then be interpreted as focused. What about the subject in Spec of VP? Let us suppose, following Chomsky (1992), that movement rules are governed by a Principle of Procrastination. This principle attributes an intrinsic inertia to constituents: they only move if there is motivation for movement; that is, to avoid violating a grammatical principle (like the Focal Accent Rule or the Case Filter). In the structure under discussion the focal accent will fall on the [+F] object. Therefore, there would be no violation of the Focal Accent Rule. As for Case, recall that in Spanish, the subject may be assigned NOM Case in one of two positions: in Spec of VP or in Spec of T. Therefore, the only motivation for moving the subject would seem to be Case. If NOM Case is not assigned to Spec of VP, then the subject must move to Spec of TP. If NOM Case is assigned to Spec of VP, then there is no motivation for moving the subject. And recall that an NP in the scope of Asp must be focused (i.e. it is bound by the EV operator in Asp). This means that the [+F] feature assigned to the object in the structure under consideration must percolate upward to include the subject. The prediction corresponds to native speaker's intuition: when the focal accent falls on the object (or, more precisely, on the most embedded constituent within the DO) in a VSO structure, the entire sentence is focused: 17

(44) a. Q: ¿Qué ocurrió?
"What happened?"
A: Acaba de romper Juan la lámpara de CRISTAL.
"Has just broken Juan the cristal lamp."
b. Q: ¿Qué pasó?
"What happened?"
A: Acaban de ganar los españoles el mundial de FOOTBALL.
"Has just won the Spaniards the football championship."
c. Q: ¿Qué pasó?
"What happened?"
A: Se comió Juan toda la TORTA.
"Has eaten Juan all the cake."

The above sentences have the structure given in (26), where the subject c-commands the object. As expected, the subject may bind the object in sentences where the focal accent falls on the object, as exemplified in (45a). (This sentence contrasts minimally with (29a), where the focal accent falls on the subject and the

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17. VSO structures where the accent falls on the object and the entire sentence is focused do not exist in Italian. This difference between Spanish and Italian still remains to be explained. Perhaps it can be related to the existence in Spanish (and the lack of it in Italian) of an overt accusative marker (namely a).
object is "emargined"). On the other hand, the object may not bind the subject, as illustrated in (45b), due to lack of c-command.

(45) a. El primer día de escuela acompañará cada madre a su HIJO.
"The first day of school will accompany each mother (S) his CHILD (O)."

b. * El primer día de escuela acompañará su madre a cada NIÑO.
"The first day of school will accompany his mother (S) each CHILD (O)."

2.3. Aspectual restrictions.
As noted by Calabrese (1990) for Italian, some structures with postverbal subjects seem to be lexically constrained to eventive predicates. Stative predicates like amar, detestar, temer cannot appear in VSO and VOS structures.

(46) a. María ama / detesta / teme a los GATOS.
"María loves/hates/fears CATS."

b. * Ama / detesta / teme MARÍA a los gatos.
"Love/hates fears MARÍA cats."

c. * Ama / detesta / teme María a los GATOS.
"Loves/hates/fears Maria CATS."

d. * Ama / detesta / teme a los gatos MARÍA.
"Loves/hates/fears the cats MARÍA."

Following Calabrese's suggestions, we may assume that in VSO and VOS sentences, there must be an implicit spatio-temporal argument (i.e. the so-called Davidsonian argument) that can function as the Subject of Predication. As argued by Kratzer (1989), eventive but not stative predicates take a spatio-temporal argument (or LOC argument). Let us assume that the argument in Spec of T is the Subject of Predication, and furthermore every clause must have a Subject of Predication (cf. the Extended Projection Principle proposed by Chomsky (1981)). We may assume that the implicit LOC argument is mapped onto Spec of AspP, if some other argument occupies Spec of T, as in structure (33). Alternatively, it is mapped onto Spec of T, if this position is available, as in structures (26), (28), and (41). Thus, in (47a) the Subject of Predication is the subject of leer, in (47b) the Subject of Predication is the object of leer, and in (47c, d, e) the Subject of Predication is the implicit LOC argument of leer. Note that when the entire sentence is focused (that is, when the sentence introduces a discourse) as in (47e), an overt temporal or locative adverb is required to identify the implicit LOC argument.

(47) a. Juan leyó el LIBRO.
"Juan read the BOOK."

18. If a LOC implicit argument occupies the Spec of AspP in (33), then the left-dislocated object cannot move through this position.
b. *El libro lo leyó JUAN / Lo leyó JUAN # el libro.*
   "The book it-read JUAN / It-read JUAN the book."

c. *Leyó JUAN # el libro.*
   "Read JUAN the book."

d. *Leyó el libro JUAN.*
   "Read the book JUAN."

e. *(Sentado) en este banco, leyó Juan su primer LIBRO.*
   "(Sitted) on this bench, read Juan his first BOOK."

Similarly, in (46a) the Subject of Predication is the subject of *amar/detestar/temer,* and in (48a,b) the Subject of Predication is the object of *amar/detestar/temer.*

(48) a. *A los gatos los ama / detesta / teme MARÍA.*
   "CATS them-loves/hates/fears MARÍA."

b. *Los ama / detesta / teme MARÍA # a los gatos.*
   "Them-loves/hates/fears MARÍA cats."

But in (46b-d), given that static verbs lack a LOC argument, there is no Subject of Predication; hence, the illformedness of these sentences. 19

2.4. Summary.

We have constructed a system in which the identification of the nucleus of the focus constituent (i.e. the most deeply embedded node in the structure) interacts in a fundamental way with movement. In other words, we assume (following Chomsky) that syntactic movement only occurs when necessary, namely to avoid violation of a grammatical constraint such as the morpho-syntactic requirement that NPs bear Case, or the phono-syntactic requirement that the most deeply embedded lexical item be identified as the focus (or the nucleus of the focus) via phrasal accent. We have examined cases in which the object is moved right-ward or left-ward (outside the scope of Aspect) to avoid violating the phono-syntactic requirement. These are all cases in which the object is a topic. After the object has moved out, the subject in Spec of VP becomes the most deeply embedded constituent and may be identified as the locus of the focal accent (via assignment of the abstract [+F] feature). If the subject in Spec of VP is assigned the [-F] feature, then it must also move out, leaving the verb as the most deeply embedded node and as such, it will be the locus of the focal accent. This is illustrated below with some of the possible answers to a Q that requests information pertaining to the action performed by a given agent on a given object:

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19. Note that if the focal accent falls on the verb, such sentences become possible; e.g. *AMA / DETESTA / TEME # a los gatos # Maria 'LOVES/HATES/FEARS # cats # Maria.' In such cases, both the object and the subject are right-dislocated and deaccented. The subject of predication is the right-dislocated subject, which has raised to Spec of T before right-adjoining to CP.
(49) Q: ¿Qué hizo el niño con el libro?
   "What did the child with the book?"

      "The book it-DESTROYED the child."
   b. El libro el niño lo DESTRUYÓ.
      "The book the child it-DESTROYED."
   c. DESTRUYÓ el libro el niño.
      "DESTROYED the book the child."
   d. Lo DESTRUYÓ el niño el libro.
      "It-DESTROYED the child the book."
   e. Lo DESTRUYÓ el libro el niño.
      "It-DESTROYED the book the child."

We have identified above an interesting difference between a postverbal object and a postverbal subject in Spanish. Unlike a postverbal object, a postverbal subject must be focused (or part of the focus). More precisely, in a VOS structure, the object located between the verb and the subject is topic (while the subject is focused). On the other hand, in a VSO structure, the subject located between the verb and the object may not be topic. It may either be the focused constituent of the sentence if it bears the phrasal accent (in which case the object is emargined), or it is part of the focused constituent if the object bears the phrasal accent. Let us review why this is so, according to the analysis provided above.

In a VOS structure the [-F] object has moved to Spec of AspP. The subject is then the most embedded item in the structure and it must be identified as [+F] (i.e. the locus of the phrasal accent). If the subject were [-F], then it would have to move. Suppose it dislocates to the right. An illformed output is created because the most deeply embedded node would be the object in Spec of Asp, which is [-F] and cannot therefore be the locus of the phrasal accent. The subject in a VOS form is therefore necessarily focused.

Consider next VSO. We have seen that there are two possibilities.

Option 1: If the object (which is the DE) is identified as [-F], it may right-dislocate leaving the subject as the most deeply embedded element. If the subject is identified as [+F], it will be the locus of the phrasal accent. If it is identified as [-F], it will not be able to remain in postverbal position (i.e. in post T position). Suppose the subject were to move to Spec of Asp (outside the scope of Aspect), it will still be the most deeply embedded item, but given its [-F] status it will not be a possible locus for the phrasal accent. The resulting structure is therefore illformed (unless the subject left-dislocates and/or right-dislocates).

Option 2: If the object (which is the DE) is identified as [+F], the focus must propagate to include the subject in Spec of VP due to the principle in (3) (which interprets an NP within the scope of Asp as focused). Recall that the subject may not move to Spec of Asp because of the Principle of Procrastination. In the configuration under discussion, the subject is not the DE; therefore its movement cannot be motivated by phono-syntactic reason (namely, the requirement that the DE of the structure must be the locus of the phrasal accent). The only motivation for moving the subject in such a configuration would be the Case Filter, a morpho-syntactic requirement. This situation would arise if NOM Case is assigned to Spec of T and not to Spec of VP, in which case the subject would end up in Spec of T, a preverbal position. We thus see that the basic difference between postverbal subjects and objects with respect to the topic/focus distinction follows from the fact that the
object is in the base configuration the most deeply embedded node and the potential locus of phrasal accent in the first place. This property, in conjunction with the Principle of Procrastination, provides the basis for an understanding of the observed facts.

**Structures with preverbal subject:**

2.5. **Structures with focal accent on the subject.**

In Spanish and Italian a preverbal subject cannot function as a presentational focus. On the other hand, in English and French the preverbal subject may function as a presentational focus. The option of marking the preverbal subject [+F] is presumably a marked option (given that it is not the most embedded node in S).

(50)  Q: Who ate the cake?  
      A: JOHN ate the cake.

(51)  Q: Qui a mangé la tarte?  
      A: JEAN a mangé la tarte.

Recall that Principle (3) requires that a focused NP be within the scope of Aspect at LF. This entails that a focused preverbal subject must be "reconstructed" at LF: the preverbal subject must be "lowered" back to Spec of VP. 20 More precisely, the predicted LF structure is one in which the object (which is topic) is outside the scope of Aspect (in Spec of Asp) while the subject (which is focus) is within the scope of Asp (i.e. in Spec of VP). The (answer) in (50) and in (51) would then have a structure comparable to (41) at LF (after "reconstruction"). 21 This analysis makes a straightforward prediction: the object should be able to bind the subject, but not vice versa. The prediction is borne out, as illustrated below. The accent falls on the subject and the rest of the sentence (marked with brackets) may be deaccented and deleted at PF. Cf. Chomsky (1992), Tancredi (1992).

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20. Alternatively, if movement is copying plus deletion as suggested in Chomsky (1992), we would say that while at PF the copy of the raised subject in Spec of VP is deleted, at LF it is the lexical material in Spec of TP which is deleted. In any case, the examples in this section prove that reconstruction is not restricted to quantificational structures. Rather, it is the Principle in (3) that guides reconstruction: at LF focused NPs must be within the scope of Aspect.

21. The possibility of raising the object to Spec of Asp at LF in the English (and French) cases under discussion raises the question of why this is not an option for the subject in the Spanish (VSQ) structures. Ultimately, this must be related to the fact that subject AGR in Spanish is a strong feature. The position in which the subject checks its features at PF must also be its position at LF. If that position is Spec of VP, then no raising out of that position is possible at LF. If that position is Spec of IP, then no "lowering" from that position is possible at LF. This might explain why Spanish and Italian do not have the marked option of having presentational focused preverbal subjects (unlike English and French). This would entail "reconstruction" at LF, which is not possible given the "strong" status of the Spanish and Italian Subj AGR feature.
(52) Q: I would like to know WHO will accompany each child.  
A: *HIS MOTHER [will accompany each child].

(53) Q: I would like to know WHO will accompany his child?  
A: *EACH MOTHER [will accompany his child].

(54) Q: Je me demande qui accompagnera chaque enfant?  
A: SA MERE [accompagnera chaque enfant].

(55) Q: Je me demande QUI accompagnera son fils?  
A: *CHAQUE MERE [accompagnera son fils].

Principle (3) can readily explain the data above. At S-S the preverbal subject is in Spec of TP. Principle (3) forces the subject to "reconstruct" to Spec of VP at LF and it forces the object to move to Spec of Asp at LF, thus explaining the resulting binding facts. 22

To conclude, the facts presented above provide striking confirmation of Principle (3): focused NPs must be within the scope of Aspect at LF, and it is this principle that guides "reconstruction" at LF. Thus, we expect that dislocated phrases that are topic will not undergo reconstruction at LF, 23 or at least not to a position within the scope of Aspect. The binding facts in (35b-c) support this conclusion. We return to these and related facts in the following section.

3. Left-dislocation vs. Focalization.

Cinque's work on Italian (Cinque (1977), (1990)) and Dolci's (1986) on Spanish distinguished two types of constructions that involve fronting: Left dislocation (introduced in section 2.1.2) and Focalization.

(56) a. A María, (creo que) la invitó PEDRO. (Left-Disl.)
"Maria ((I) believe that) her-invited PEDRO."

b. A MARÍA, (creo que) invitó Pedro. (Focal.)
"MARÍA ((I) believe that) invited Pedro."

The focalization construction of Spanish and Italian is comparable to the cleft-

22. Note that the binding facts just discussed shows that the mechanism that identifies the subject as the presential focus of the sentence in English and French cannot be a discourse level rule (as suggested by Cinque). Although marked, it must be a sentence level rule. It has an impact on the LF structure of such sentences.

23. Kural (1992) reaches the same conclusion on the basis of Turkish data. Unfortunately, his work came to our attention too late for us to give it the propert space in the present article. But we hope to include it in future work.
construction (except that the fronted focused constituent is contrastive). As the cleft-construction, we may assume that this is a case of "constructional focus". In such constructions the [+F] feature is assigned to a particular position rather than to the DE of the structure. Let us assume that in the case of focalization via fronting the Spec of Comp is labelled [+F], thus overriding rule (20.2). The focal accent will therefore be assigned to the NP that moves to such a position (e.g. the direct object A MARIA in the example (56b)).

Some of the properties that distinguish Left Dislocation and Focalization (via fronting) are the following: 25

(57) I. Left-Dislocation:
   (a) the fronted phrase is a topic. 26
   (b) if the fronted phrase is an object, it must be doubled by a clitic in the clause from where the extraction takes place.
   (c) there appears to be no WCO effects (but see below for qualification of this property).

II. Focalization (via fronting):
   (a) the dislocated phrase is focus.
   (b) if the fronted phrase is an object, it is not doubled by a clitic.
   (c) there are WCO effects.

We will suggest here that property (b) is intimately related to property (a) due to the conjoined effects of Principle (3) and the MCL Principle (as stated in (32)). We will see furthermore that property (c) is derivable from property (b); i.e. the presence/absence of the clitic (following insights initially due to Mahajan (1990b), (1991)).

What is the basic difference between a fronted topic and a fronted focus? According to Principle (3), they are distinguished at LF. At LF, a focused phrase is within the scope of Aspect, while a topic phrase is outside the scope of Aspect. In section 2.1.2, we suggested that the obligatory presence of the clitic when a topic object is left-dislocated could be attributed to the MCL Principle (see (32)). According to this principle, in order to minimize the links within a chain, every potentially available position between the head and the tail of the chain has to be incorporated into the chain. Suppose the MCL Principle applies at LF. Since the focalized fronted object must be reconstructed at LF to a position within the scope of Asp (namely, its D-S position), the MCL Principle does not apply. In the reconstructed structure, the chain consists of one single position: [NP,VP] (the head

24. Preposed focalized phrases has properties comparable to wh-phrases. As in the case of non-D-linked wh-phrases, verb preposing is preferred.

25. Another property that distinguish the two constructions are weak islands. While both obey strong islands, focalization (like wh-movement of non-discourse linked wh-phrases), but not left-dislocation, obey weak islands. We will not discuss this difference here. But see Szabolcsi & Zwarts (1991) for an alternative to Cinque's analysis.

26. Thus, if an indefinite is cl-left dislocated, it is interpreted as specific. E.g: A una niña la invitó Pedro 'A girl ACC Cl-invited Pedro'.
and the tail of the chain are undistinguishable). 27

Let us turn next to the binding properties of left-dislocation and focalization constructions. In section 2.1.2, we noticed that a pronoun in a left-dislocated object cannot be bound to a QP postverbal subject. Cf. (36b), which we repeat below as (58a). This sentence contrasts with (58b), where the binder is a preverbal subject. 28

(58) a. * A su hijo, lo acompañará CADA MADRE (el primer día de escuela).
     "His child (O) him-will accompany EACH MOTHER (S) (the first day of school)."

b. A su hijo, cada madre lo acompañará EL PRIMER DÍA DE ESCUELA.
     "His child (O), each mother (S) him-will accompany THE FIRST DAY OF SCHOOL."

As we have seen in section 2, the difference between a preverbal and a postverbal subject is that the former is topic while the latter is focus; the latter is within the scope of Asp while the former is outside the scope of Asp at LF. A dislocated topic object cannot be "reconstructed" to its D-S at LF, because a topic must be outside the scope of Asp (Principle (3)). Consequently, (58a) is illformed due to lack of c-command; it contrasts minimally with (45a), repeated below as (59) (where the object occupies its D-S position; it is the locus of phrasal accent and focus is propagated to the entire sentence):

(59) El primer día de escuela acompañará cada madre a su HIJO.
     "The first day of school will accompany each mother (S) his CHILD (O)"

Consider next (58b). The dislocated topic object may be "reconstructed" to the Spec of CIP, a position outside the scope of Asp but within the scope of Spec of TP, the position occupied by the QP binder. Principle (3), in conjunction with the clausal structure postulated in (22), thus provides a straightforward account for the contrast

27. Further evidence for the LF distinction between left-dislocation (which involves the fronting of a topic) and focalization (which involves fronting of a focused phrase) is provided by ne cliticization in Italian: (The facts are from Cinque (1990), pp. 69-70):

(a) [Quattro e1], credo che (*ne1) siano andate smarritte (non distrutte).
    "Four, I think that *(of them) have gone lost (not destroyed)."

(b) [QUATTRO e1], pare che *(ne) siano arrivate, non DIECI.
    "FOUR, it appears that have *(of them) have arrived, not TEN."

These facts show that Spec of TP is part of the chain in the case of left-dislocation, but not in the case of focalization.

28. Examples like (58b) were noticed by Cinque (1983),(1990), which he took to exemplify the "binding connectivity" property of CL-left dislocation. But the illformedness of (58a) had gone unnoticed until now.
in (58).

(58a) contrasts with (60), a focalization construction. In this case, the fronted object is in Spec of Comp (which is marked \ [+F]), the verb is in Comp, and the subject is in Spec of TP and it is topic. The fronted object, since it is focused, must "reconstruct" at LF to its D-S position in order to find itself within the scope of Asp (as required by Principle (3)). As a result, it also finds itself within the scope of the subject. Therefore, the object may be bound by the subject.

(60) A SU HIJO acompañará cada madre el primer día de escuela.
"HIS CHILD (O) will accompany each mother (S) the first day of school"

Finally, let us examine the behavior of dislocated topic QP objects in both types of constructions. We see that a left-dislocated topic QP does not give rise to WCO (cf. (61a)), while a focalized QP does (cf. (61b)):

(61) a. Cada casa, deberá pintarla SU PROPIO DUEÑO.
"Each house, must paint it HIS OWN OWNER."

b. * CADA CASA, deberá pintar su propio dueño.
"EVERY HOUSE, must paint his own owner."

It would be a mistake to conclude from the above contrast that the left dislocated QP in (61a) does not involve a quantifier-variable structure. In effect, a left-dislocated topic QP does give rise to WCO effects with respect to a matrix pronoun:

(62) * Cada casa, dijo su dueño que la pintará MAÑANA.
"Each house, says his owner that it-will paint TOMORROW."

The difference between (61a) and (62) arises from the fact that in (61a) the pronoun is not locally bound by the dislocated QP. The local binder is the trace of the dislocated QP in Spec of CILP; therefore, there is no Bijection Principle violation. On the other hand, in (62) the local binder of the pronoun is the dislocated QP; a violation of the Bijection Principle therefore arises. Consider next (61b). Its ungrammaticality is due to lack of c-command at LF between binder and bindee. In effect, the fronted focalized object must reconstruct at LF to its D-S position to find itself within the scope of Asp; from this position it does not c-command the pronoun contained within the subject.

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29. The contrast in (58) shows that "reconstruction" cannot be formulated in terms of chains, as suggested by Barss (1986).
4. Conclusion.

In this article we have explored the relation between focus, syntactic structure, and binding. On the one hand, we have argued that movement out of the VP may be due to phono-syntactic reasons (the unmarked focus position, identified as the most embedded node in the VP, must bear the most prominent accent). On the other hand, we have shown that the topic/focus distinction (related but not reducible to the discourse distinction "new"/"old" information) guides the "reconstruction" process at LF. This is due to the LF Principle that requires that presentational focused DPs be within the scope of Asp and that topic DPs be outside the scope of Asp.
References:


