1. Introduction

Within Chomsky’s (1995) Copy-Theory-of-Movement (i.e. movement-as-copy-and-deletion) approach, a number of works have shown that in some cases, the requirement that the highest copy of a moved element be pronounced can be overridden if a condition of the Phonological Form (PF) component requires the pronunciation of a low copy (e.g. Pesetsky 1997, 1998; Franks 1998; Hiramatsu 2000; Bošković 2001; Bobaljik 2002; Lambova 2002, 2004; Nunes 2004; among others). Bošković (2002) convincingly shows that one such case can be found in Romanian, a quintessentially multiple-

\textit{wh}-fronting language, where all \textit{wh}-phrases are normally fronted, as shown in (1a). However, when the \textit{wh}-items are homophonous, the second \textit{wh}-phrase cannot appear preverbally, as shown by the ungrammaticality of (1b); instead, the second \textit{wh}-phrase has to surface postverbally (i.e. as if it did not undergo movement), as in (1c).

\begin{align}
\text{(1)} & \quad \text{a. Cine ce precede?} \\
& \quad \text{who what precedes} \\
& \quad \text{‘Who precedes what?’} \\
& \quad \text{b. *Ce ce precede?} \\
& \quad \text{what what precedes} \\
& \quad \text{‘What precedes what?’} \\
& \quad \text{c. Ce precede ce?} \\
& \quad \text{what precedes what} \\
& \quad \text{‘What precedes what?’}
\end{align}

Example (1b) can be ruled out by appealing to a contraint against contiguous homophonous forms. Example (1c), for its part, is an illustration of the intricate interplay between phonology and syntax, with the need to
satisfy a PF requirement taking precedence over the need to satisfy a syntactic requirement (Bošković and Nunes 2007). The Copy-Theory-of-Movement analysis, whereby all movement is overt, the choice of copy to pronounce being a PF decision, provides a straightforward solution to the problem posed by (1c): in Romanian examples like (1c), movement of all \textit{wh}-phrases takes place overtly, in compliance with the syntactic requirement that all \textit{wh}-phrases be fronted in this language. This is shown in (2), where copies of the relevant moved constituents have been included.

\begin{equation}
\begin{array}{cccc}
\text{ce}_1 & \text{ce}_2 & \text{precede} & \text{ce}_1 & \text{ce}_2 \\
\text{what} & \text{what} & \text{precedes} & \text{what} & \text{what}
\end{array}
\end{equation}

However, retention of the two highest copies of the moved elements in (2) would lead to a crash (cf. (1b)), since the resulting structure would not conform to the requirements of the PF component. This is precisely the context where it is possible favor a low copy in PF (Franks 1998). Thus, the low copy of the object is pronounced instead of the high one, satisfying the PF condition against adjacent homophonous forms and yielding (1c), as shown in (3).

\begin{equation}
\begin{array}{cccc}
\text{ce}_1 & \text{ee}_2 & \text{precede} & \text{ee}_1 & \text{ce}_2 \\
\text{what} & \text{what} & \text{precedes} & \text{what} & \text{what}
\end{array}
\end{equation}

(3) (cf. (1c))

In other words, the Romanian case provides evidence that on occasion, a low copy of a moved element can be phonetically realized if convergence so demands.

In this paper, I propose that a mechanism along these lines can be used to account for the well-known contrast between (4a) and (4b) in contemporary non-Caribbean Spanish.

a. ¿Qué dijo Juan?
   what said John
   ‘What did John say?’

b. *¿Qué Juan dijo?
   what John said
   [Escribano, 1991: 161]


¹ Although this phenomenon also exists in other languages, the focus of this paper is Spanish. Note that the analysis of the contrast between the sentences in (4) is in principle extendable to other languages where the same phenomenon occurs (e. g. Arabic).
has been the object of painstaking research and yet has resisted a principled account for decades.

The goal of this paper is not to provide an analysis of the recalcitrant subject-gap restriction in Spanish; rather, this paper argues that by adopting a Copy-Theory-of-Movement analysis of subjects in languages like Spanish (cf. Ortega-Santos 2006a,b), the contrast between the grammatical sentences where the subject is postverbal (cf. (4a)) and their ungrammatical counterparts where it intervenes between the wh-item and the verb (cf. (4b)) can be accounted for, a possibility already suggested by Buesa-García (2008). On the generally held assumption that the unmarked word order in Spanish is SV(O), I assume that the subject in Spanish moves to the canonical subject position (i.e. Spec,TP/AgrSP) from its base-generated position in the vP/VP. In the spirit of the Copy-Theory-of-Movement approach, movement of the subject leaves a copy, as (5) shows. Note that (5) contains only the highest and the lowest copies of the pertinent moved XPs; intermediates copies have been ignored for the sake of exposition.

(5) qué Juan dijo Juan qué
  what John said John what

At the point in the derivation illustrated in (5), the PF component would normally choose the highest copies of the moved constituents (i.e. the highest occurrences of qué and Juan in (5)). This is exactly what happens with the interrogative word qué ‘what’. However, retaining the highest copy of the subject Juan would incur a PF violation (see below), as indicated by the ungrammaticality of (4b). Therefore, the low copy of the subject is favored in this case in order to prevent a crash; deletion of the upper copy of Juan thus yields (4a), whose simplified derivation is furnished in (6).

(6) qué Juan dijo Juan qué (cf. (4c))
  what John said John what

Thus, the Spanish contrast in (4) can be accounted for in parallel fashion to the Romanian contrast in (1b-c). The account pursued here has the additional advantage of being compatible with different types of analysis of the subject-gap phenomenon. In other words, the current analysis can be applied independently of whether the subject-gap restriction results from a phonological condition requiring adjacency between the wh-item and the verb, or whether it results from a locality-of-movement violation (since under the Salvation-by-PF-Deletion analysis of the rescuing effect of ellipsis/deletion on locality violations dating back to Ross 1969, the ultimate violations are determined in the PF representation).

The paper is organized as follows: Section 2 revisits the subject-gap restriction in Spanish; Section 3 outlines the Copy-Theory-of-Movement account of preverbal and postverbal subjects in Spanish; Section 4 presents the analysis of the contrast illustrated in (4) above and some of its consequences; Section 5 concludes the paper.
2. On obligatory subject-verb inversion in Spanish

The subject-gap restriction in Spanish has received a great deal of attention in the transformational generative paradigm since the seminal work of Torrego (1984). The basic paradigm is given in (4), repeated here again in (7a-b), with (7c-d) showing that the restriction also applies in embedded contexts.

(7) a. ¿Qué dijo Juan?  
what said John  
‘What did John say?’

b. *¿Qué Juan dijo?  
what John said  
[Escibano, 1991: 161]

c. No me dijo qué compró Juan  
not cl. said what bought John  
‘He or she didn’t tell me what John bought’

d. *No me dijo qué Juan compró  
not cl. said what John bought

Although Torrego’s original claim was that obligatory inversion only affects arguments, it soon became apparent that non-arguments are also subject to this restriction, as shown in (8).

(8) a. ¿A qué hora/cuándo llamó Juan?  
at what time/when called John  
‘What time/when did John call?’

b. *¿A qué hora/cuándo llamó Juan?  
at what time/when called John

Regarding the account of the subject-gap restriction in Spanish-style Romance languages, different proposals have been advanced in the literature, including (morpho-)syntactic accounts of the phenomenon (Torrego 1984, Rizzi and Roberts 1989, Canac-Marquis 1991, Goodall 1991, Fontana 1993, Raposo 1994, Rizzi 1996, Ordóñez 1997, Ausín and Martí 1999, Uriagereka 1999, Barbosa 2001, *inter alia*) and processing accounts (Goodall 2004). Recently, Buesa-García (2008) has proposed an analysis of (4) that relies on affix hopping, on the assumption that certain Cs in Spanish are phonologically null affixes that need to be attached to the verb under PF adjacency, the presence of the subject between the wh-word and the verb in the PF component blocking adjacency thus inducing a PF crash, since the stranded PF affix is an illegitimate object in PF. Zubizarreta (2012), for her part, claims that the ungrammaticality of (4b) is due to phonological reasons.

The analysis of the subject-gap restriction in Spanish is further complicated by the existence of certain cases where inversion does not seem to be obligatory, as (9) illustrates.
One analysis of sentences like (9a) relies on the complexity of the wh-word, only non-complex wh-words requiring inversion (7a) (Ordóñez 1997). Another account hypothesizes that non-inverting sentences like (9b), inspired by Contreras (1991), have a rhetorical interpretation (i.e. they are not wh-questions per se), as argued by Gallego (2007). Further, it has been proposed that the relevant factor is the D-linked (cf. (9c)) vs. non-D-linked (cf. (7b)) nature of the wh-word, with only the latter triggering inversion (Ausín and Martí 1999, Buesa-García 2008).

Note also that it is not only wh-items but also preverbal foci that require inversion, as shown by the different grammaticality status of (10a) and (10b):

(10) a. A MI PADRE invitó Juan (,no a mi madre)
    my father invited John not my mother
    ‘It was my father, and not my mother, that John invited.’

b. *A MI PADRE Juan invitó (,no a mi madre)
    my father John invited not my mother

The debate surrounding obligatory inversion in Spanish has also concerned itself with the empirical observation that subjects (especially, pronominal subjects) and other left-peripheral material can intervene between the wh-word and the verb in Caribbean varieties of Spanish (Toribio 1994, 2000; Ticio 2004; Ordóñez and Olarrea 2005; Gutiérrez-Bravo 2008; among others).

As noted in the introduction, I do not intend to account for the subject-gap restriction here. In what follows, however, I will propose that the contrast between (4a) and (4b) (see also (10a) and (10b)) can be captured successfully by assuming an analysis of subjects in Spanish that relies on the Copy Theory of Movement. I argue that the account of the contrast to be proposed is fully compatible with the aforementioned syntactic and phonological accounts of the phenomenon of obligatory inversion.

3. Subjects in Spanish and the Copy Theory of Movement

Ortega-Santos (2006a,b) extends Stjepanović’s (1999) Copy-Theory-of-Movement analysis of subjects in Serbo-Croatian to Spanish, arguing that the
Copy Theory, in conjunction with Sentence Stress Assignment conditions (Chomsky 1971, Cinque 1993, Jackendoff 1972, and Zubizarreta 1998, among others), give us a clearer picture of the properties of subjects in Spanish. As is well known, overt subjects can occupy different positions in Spanish depending on factors such as information structure:

(11) a. El rector nos dio un ultimátum ayer
    the president cl. gave a ultimatum yesterday
    ‘The president gave us an ultimatum yesterday.’

b. Ayer nos dio el rector un ultimátum
    yesterday cl. gave the president a ultimatum

c. Ayer nos dio un ultimátum el rector
    yesterday cl. gave a ultimatum the president

Crucially, each of the sentences in (11) is an appropriate answer to the each of the questions in (12), which indicates that new-information focus consistently comes last in Spanish and bears sentence stress.

(12) a. ¿Qué pasó? (neutral word order; SVO)
    what happened
    [cf. (11a)]
    ‘What happened?’

b. ¿Qué nos dio el rector ayer? (object: new info. + stress)
    what cl. gave the president yesterday
    [cf. (11b)]

c. ¿Quién nos dio un ultimátum ayer? (subject: new info. + stress)
    who cl. gave a ultimatum yesterday
    [cf. (11c)]

Pursuing the correlation between new information and sentence final stress in languages like Spanish (Zubizarreta 1998), Ortega-Santos (2006a,b) argues that whereas in neutral cases (cf. (11a)) the retention of the highest copy of a moved element is preferred, in cases where the last element constitutes new-information focus (cf. (11b,c)), PF chooses the lowest copy of the moved constituent in order to satisfy the PF requirement that focused elements bear sentence stress in sentence final position, higher copies of the relevant constituent being deleted instead. To illustrate how the proposal works for Spanish, consider a sentence such as (11a), which displays the neutral word order. Although I will not be concerned here about the exact positions occupied by the subject, I will follow Ortega-Santos and many others in assuming that SpecTP, SpecAgrSP, and Spec,vP are subject positions. Focusing on subjects, in (11a), the subject moves to the highest position available for the subject, namely SpecTP, as shown by the simplified derivation in (13).²

² The reader is referred to Ortega-Santos (2006a,b) for a number of arguments in support of the claim that all elements vacate the VP in Spanish, which is crucial for the Copy-Theory-of-Movement account to work.
Under normal circumstances (i.e., when the word order is neutral), the highest copies of all moved elements are pronounced, as shown in (14), yielding (11a).

Nevertheless, the pronounce-the-highest-copy requirement can be overriden if a conflicting PF requirement so demands. In cases like (11b) and (11c), the focused elements that constitute new-information focus need to appear last in the sentence, since they have to bear sentence stress in final position. Since a null element (i.e., a deleted copy of a moved element) evidently cannot bear sentence stress, the PF component favors the pronunciation of the lowest copy as a way of satisfying the requirement that focused elements in final position carry the main stress of the sentence. Thus, a sentence like (11b), where the object un ultimátum constitutes new information focus, receives the analysis in (15).

In analogous fashion, a sentence like (11c), where the subject el rector is interpreted as new-information focus, is analyzed as in (16).

Ortega-Santos’ approach to overt subjects in Spanish makes a number of predictions, a matter to which I turn in the following subsection.

3.1. Predictions of the Copy-Theory-of-Movement analysis of subjects in Spanish

Zubizarreta (1998: 243) claims that the SVO, VSO, and VOS word orders do not differ from each other with respect to scope. Ortega-Santos (2006a,b) shows that this state of affairs comes as no surprise under the Copy-Theory-of-Movement approach, where binding possibilities are determined by the configuration in (17), where the subject c-commands the object (or objects) and the object c-commands the subject, regardless of which copy is ultimately pronounced.
Zubizarreta (1998) and Ortega-Santos (2006a,b) provide the following binding data, which are predicted under the Copy Theory of Movement, since there should be no asymmetries between the SVO, VSO, and VOS orders. Note that (18a) and (18b) involve contrastive focus and (18c) involves new-information focus (though see Ortega-Santos 2006a: fn. 11, for some potential complication regarding (18)):³

(18) a. El primer día de clase, su MADRE deberá acompañar [a cada hijo] the first day of school his mother should accompany each son

b. El primer día de clase, deberá acompañar su MADRE [a cada hijo] the first day of school should accompany his mother each son

c. El primer día de clase, deberá acompañar [a cada hijo] su MADRE the first day of school should accompany each son his mother ‘The first day of school, his mother should accompany every son’ [bound reading: ✔]

In Villa-García (2010), I provide acquisitional evidence that can be taken to support the Copy-Theory-of-Movement approach to subjecthood in Spanish. Using longitudinal data from five Spanish-acquiring children, I show that preverbal and postverbal subjects emerge in the speech of Spanish-speaking children at the same time. To the extent that the Copy-Theory-of-Movement analysis is a unified account of overt subjects, in the sense that the subject is the same in all word orders, the choice of copy being a PF matter, the fact that children acquiring Spanish begin to use preverbal and postverbal subjects concurrently can be interpreted as an argument in its favor (see also Villa-García and Todorović 2010 for additional acquisitional evidence for the Copy Theory of Movement from Serbo-Croatian).⁴

In the next section, I show how the Copy Theory of Movement straightforwardly captures the basic contrast in (4), irrespective of what the actual account of the subject-gap restriction in Spanish turns out to be, which can in turn be taken to lend further credence to the Copy-Theory-of-Movement account.

4. Accounting for the contrast

Recall that the goal is to account for the contrast between (4a) and (4b), repeated here as (19a) and (19b).

³ See also Ortega-Santos (2006a: 198) for evidence that the subject can also bind into the object(s), as predicted under the analysis adopted here.

⁴ The reader is referred to Ortega-Santos (2006a,b) for discussion of how to handle some of the potentially problematic asymmetries displayed by preverbal and postverbal subjects in Spanish under the current analysis. For additional discussion, see Villa-García 2010.
Recall that under the Copy Theory of Movement account, the subject moves overtly to the preverbal position (e.g., it moves to the canonical subject position), yielding the neutral word order (SVO). Now, the contrast between the grammatical (19a), with a postverbal subject, and the ungrammatical (19b), with an intervening preverbal subject, reduces to a PF matter, the low copy of the subject being pronounced in order to avoid a violation caused by the subject intervening between qué and the verb, as shown in (20).

There are actually two ways to go that are compatible with the analysis adopted here. Each possibility depends on the particular analysis of the violation induced by the subject intervening between the wb-word and the verb. The first possibility is that the lack of adjacency between the wb-word and the verb in PF causes the violation, and the second possibility is that the subject-gap restriction is due to some kind of locality-of-movement violation. In what follows, I show that whatever the right account of the phenomenon turns out to be, the contrast between (19a) and (19b) can successfully be accounted for under Copy Theory of Movement.

4.1. The subject-gap restriction as a PF-adjacency violation

Let us suppose that obligatory inversion in Spanish results from a PF-adjacency violation (i.e., the subject cannot intervene between the wb-word and the verb, since it disrupts PF adjacency between the two). Buesa-García (2008) pursues precisely this kind of analysis, assuming the operation of Affix Hopping (Chomsky 1957, Halle and Marantz 1993, Lasnik 1995, Bobaljik 1994, and Bošković 2001. Buesa-García argues that in questions (cf. (19)) and focus constructions (cf. (10)) in Spanish, the relevant C is a phonologically null affix that needs to merge with a verb under PF adjacency. The requirement is met in (19a), but not in (19b). This is illustrated in (21).
Under an approach to obligatory inversion along these lines, the Copy Theory of Movement circumvents the PF violation by pronouncing a lower copy of the subject, the choice of copy being in fact a PF decision:

I now turn to another potential analysis of the subject-gap restriction which is still wholly compatible with the Copy-Theory analysis of the contrast in (4).

4.2. Salvation by PF deletion

The analysis of the contrast between (4a)/(19a) and (4b)/(19b) proposed in this paper does not rely on the subject-gap restriction being due to phonological factors, although it is fully compatible with such an analysis, as shown in the previous section.

It may well be the case that obligatory inversion arises as a result of a locality problem, as has been argued in different works in the literature. Even if obligatory inversion in Spanish is due to a locality violation (however the actual locality effect is implemented), under the rescue-by-PF-deletion account of the amelioration effect of ellipsis/deletion on locality-of-movement violations, it is possible to retain the Copy-Theory-of-Movement analysis of the contrast between (4a) and (4b).

Ross (1969) observes that ellipsis ameliorates the effect of island violations, as shown by the contrast between (23a), where extraction of *who* causes a problem, and (23b), where extraction of *who* is licit, since the troublemaker (i.e. the syntactic island) has been elided.

(23) a. *That he will hire someone is possible, but I will not divulge who that he will hire is possible
b. That he will hire someone is possible, but I will not divulge who he will hire is possible
Chomsky’s (1972) account of the mitigating effect of ellipsis on island violations states that when a movement operation crosses an island, the island in question is marked with a * (or #, in Chomsky’s original formulation). At surface structure, ellipsis can salvage an island by deleting the *-marked category, but if the *-marked troublemaker survives in the final structure, a violation ensues, resulting in an ungrammatical output.\(^5\) Recent proposals have revived this approach, with the update that the relevant ellipsis operation takes place in PF (Merchant 1999 et seq.; Lasnik 2001; Fox and Lasnik 2003; Hornstein et al. 2003; Boeckx and Lasnik 2006; Bošković 2011; Villa-García 2012; among many others). Under this account, movement out of an island is theoretically possible, provided that a rescue operation—a repair strategy—takes place to save a structure which otherwise would not comply with the requirements at the PF interface, since the presence of a * in the final PF representation causes a violation. Note also that this approach is partly derivational (*-marking takes place derivationally) and partly representational (the ultimate violations are determined representationally, i. e., in PF).

Bošković (2011) argues that once we allow the rescuing effect to arise not only through ellipsis but also through deletion of regular copies and other offending elements marked with a *, a number of longstanding problems can be resolved. One such case is the experiencer blocking effect in Italian. Consider the following data from Italian, taken from Boeckx (2009) and Bošković (2011):

\[(24)\]

\[
\begin{align*}
\text{a. } & \text{*Gianni\textsubscript{i} sembra a Maria } \text{[t\textsubscript{i} essere stanco]} \\
& \text{Gianni seems to Mary be tired} \\
& \text{‘Gianni seems to Mary to be tired.’} \\

\text{b. } & \text{A Maria\textsubscript{j} Gianni\textsubscript{j} sembra t\textsubscript{j} [t\textsubscript{i} essere stanco]} \\
& \text{to Mary Gianni seems be tired} \\
& \text{‘To Mary, Gianni seems to be tired.’} \\

\text{c. } & \text{A chi\textsubscript{j} Gianni\textsubscript{j} sembra t\textsubscript{j} [t\textsubscript{i} essere stanco]} \\
& \text{to who Gianni seems be tired} \\
& \text{‘To whom does Gianni seem to be tired?’}
\end{align*}
\]

In (24a), the experiencer \textit{a Maria} blocks movement of the subject \textit{Gianni}. More specifically, \textit{Gianni} undergoes A(rgumental)-movement through an A-specifier, \textit{a Maria}, yielding a Relativized Minimality violation. It is of note that (24b) and (24c), where the experiencer has moved, are acceptable. Bošković (2011) shows that the contrast between (24a) and (24b) is amenable to a rescue-by-PF-deletion analysis. In (24a) and (24b), the intervener looks the same syntactically; however, there is a difference between the two

\(^5\) *-marking an island in the course of the derivation poses a problem in light of the Inclusiveness Condition of Chomsky (2001). However, see Lasnik (2001) for a way of circumventing this issue.
sentences in PF -the intervener (i. e. the troublemaker) *\( a \) Maria* is deleted in (24b), but not in (24a). This is illustrated in (25a) and (25b), which are equivalent to (24a) and (24b), the difference being that copies have been used instead of traces:

\[
\text{(25) a. Gianni sembra } a \text{ Maria} [\text{Gianni essere stanco}] \text{ (=(24a))} \\
\text{Gianni seems to Mary Gianni be tired}
\]

\[
\text{b. A Maria, Gianni sembra } a \text{ Maria} [\text{Gianni essere stanco}] \text{ (=(24b))} \\
to Mary Gianni seems to Mary Gianni be tired}
\]

Pursuing the rescue-by-PF-deletion analysis, in both (25a) and (25b) Gianni crosses the intervener *\( a \) Maria*, which results in *\( a \) Maria* being *-marked:

\[
\text{(26) a. Gianni sembra } a \text{ Maria}^* [\text{Gianni essere stanco}] \text{ (=(24a))} \\
\text{Gianni seems to Mary Gianni be tired}
\]

\[
\text{b. A Maria, Gianni sembra } a \text{ Maria}^* [\text{Gianni essere stanco}] \text{ (=(24b))} \\
to Mary Gianni seems to Mary Gianni be tired}
\]

Under repair by PF deletion, the presence of a * in the final PF representation is fatal, causing a crash. On the contrary, if the *-marked element is deleted in PF, the violation is circumvented, much like in Ross's original examples where ellipsis improves island violations (cf. (23b)). This is precisely what Bošković argues happens in (24a)/(26a) and (24b)/(26b). The *-marked copy of *\( a \) Maria* is not deleted in PF in (26a), but it does get deleted in (26b):

\[
\text{(27) a. Gianni sembra } a \text{ Maria}^* [\text{Gianni essere stanco}] \text{ (=(24a))} \\
\text{Gianni seems to Mary Gianni be tired}
\]

\[
\text{b. A Maria, Gianni sembra } a \text{ Maria}^* [\text{Gianni essere stanco}] \text{ (=(24b))} \\
to Mary Gianni seems to Mary Gianni be tired}
\]

Put differently, in (24a), the * remains in PF, as shown in (27a), which yields a violation. In (24b), on the other hand, the troublemaker is deleted in PF (cf. (27b)), and the sentence survives. Thus, the rescue-by-PF-deletion analysis provides an account of the contrast in (24a) and (24b).

Let us now return to the Spanish data in (4), repeated here as (28), and see how the repair-by-PF-deletion account can also account for the contrast therein.

\[
\text{(28) a. } ¿\text{Qué dijo Juan?} \\
\text{what said John} \\
\text{‘What did John say?’}
\]

\[
\text{b. } *¿\text{Qué dijo John?} \\
\text{what John said} \\
\text{[Escribano, 1991: 161]}
\]
Assume that the subject-gap restriction in (28) is the result of a locality violation (however the violation is ultimately implemented). On this view, movement of the *-word *qué across the intervening subject results in the subject being *-marked, as shown in (29).

(29) ¿Qué *Juan* dijo *Juan* qué?
   what *John* said *John* what
   ‘What did *John* say?’

If the higher copy of *Juan* is pronounced, the * remains in PF, resulting in a crash, since the presence of a * in the PF component induces a violation (cf. (28b)):

(30) ¿Qué *Juan* dijo *Juan* qué?
   what *John* said *John* what
   ‘What did *John* say?’

However, if the *-marked element is deleted in PF, the derivation survives, giving us the grammatical (28a), as shown in (31). Recall that, under the salvation-by-PF-deletion analysis, locality violations are incurred in PF, hence can be salvaged by PF deletion.

(31) ¿Qué *Juan* dijo *Juan* qué?
   what *John* said *John* what
   ‘What did *John* say?’

Note that (31) assumes pronunciation of the low copy of *Juan*, which in this case can be analyzed as being the result of PF choosing to pronounce a low copy in order to avoid a violation. Notice also that the analysis in (31) is slightly different than that outlined for Italian above. In the Italian case, a high copy of the *-marked intervener is pronounced. In the Spanish case, it is a low copy that gets pronounced instead. As far as I can see, both possibilities are consistent with the Copy Theory of Movement. It is still possible, however, to claim that, in Spanish, further movement of the troublemaker solves the problem. Consider (32), which is perfectly acceptable in Spanish.

(32) *Juan*, ¿qué dijo?
   *John* what said
   ‘As for *John*, what did he say?’

It would be far from unreasonable to pursue an analysis similar to that adopted for the Italian case above. On this view, the subject *Juan* would undergo movement to the left periphery of the sentence. The relevant intervening copy of *Juan*, *-marked as a result of *qué moving across it, would be PF-deleted, saving the derivation (cf. (33)).
Albeit appealing, this possibility runs into some problems. For instance, López (2009) (see also Villa-García 2012) has shown that left-dislocated subjects fail to display reconstruction effects, which suggests that they are base-generated (i.e. directly merged) in their surface position in the left periphery (i.e. there is no movement at all of dislocated subjects). Whatever the case may be, I will leave this issue open here, noting that irrespective of what the ultimate analysis of the relevant facts is, the Copy Theory of Movement and Salvation by PF Deletion make possible an analysis of the contrast in (4)/(28).

I conclude this section by emphasizing that whatever analysis of the recalcitrant obligatory-inversion facts in languages like Spanish turns out to be, the Copy Theory of Movement account successfully captures the contrast in (4); the analysis pursued here is therefore compatible with both phonological and syntactic accounts of the phenomenon.6

4.2.1. A note on null subjects

As is well known, Spanish is a prototypical null-subject language. The use of a null subject leads to grammatical outputs in obligatory-inversion contexts. We therefore add (34) to the paradigm in (4):

(34) ¿Qué dijo?
    what said
    ‘What did he or she say?’

If we assume pro as an empty category (by assumption, a preverbal element), the rescue-by-PF-deletion system outlined in Bošković (2011) can be maintained. Pro would receive a * when crossed by qué, thus:

(35) ¿Qué pro* dijo?
    what* said
    ‘What did he or she say?’

---

6 A question arises as to whether other intervening elements that also cause a problem (e.g. adverbs) can be analyzed in the same way. Relevant examples include (i):

(i) *¿Qué siempre compras? (cf. ¿Qué compras siempre?)
    what always buy
    ‘What do you always buy?’

Under a movement analysis of adverbs, the contrast between preverbal and postverbal adverbs in obligatory inversion cases is straightforwardly accounted for, since retention of the highest copy of the adverb causes a problem, hence the PF component pronounces the low copy instead. However, this analysis would not be possible if adverbs do not move, in which case they would have to be base-generated in a lower projection for the sentence to be grammatical. I will not explore this issue further here.
What did he or she say?

Since *pro* is a null element, no problem arises, given that non-overt elements can bear stars, unlike overt elements. An advantage of such an approach is that we could retain *pro* as the null subject in Spanish: *pro* and the preverbal subject alike are crossed by the *wb*-item and get a * as a result. The difference between the two elements is that the presence of *pro*, being phonological null, does not pose a problem in PF. Hence, it would be possible to maintain *pro*, and the apparent asymmetry between preverbal subjects (which cannot intervene between the *wb*-item and the verb) and *pro* (which can) noted by Ordóñez and Treviño (1999) would reduce to the innerness of non-overt *-marked elements in PF. As Bošković notes, however, the suggestion that non-overt elements can be *-marked in the final PF representation predicts that intervention effects should be voided with all null arguments, which is likely to over-generate. I will leave this issue open for future research. Note, nevertheless, that the analysis of the contrast in (4) advocated in this paper does not require us to assume the existence of *pro* as an empty category; the account work even if it turns out that no null category exists in Spanish-style null-subject languages (e.g. under analyses where the canonical subject position is not projected in null-subject contexts in languages like Spanish).

4.3. Predictions

The system adopted in this paper makes a prediction. Recall that under the Copy-Theory-of-Movement analysis of subjects in languages like Serbo-Croatian and Spanish (Stjepanović 1999 and Ortega-Santos 2006a,b), postverbal subjects constitute new-information focus. In this system, a low copy of the moved subject is pronounced in order to satisfy the requirement that new-information foci bear sentence stress in final position. The account of the contrast between (4a) and (4b) proposed here predicts that the choice of a low copy of the subject in subject-gap cases should not reduce to the focus-last requirement. If postverbal subjects in subject-gap cases like (4) were instances of new information focus, it would be difficult to argue that a low copy is being pronounced in order to prevent a violation, since a low copy may be chosen in order to satisfy the focus-last restriction (i.e. it would be impossible to show that in some cases, the choice of low copy is due to reasons other than the focus-last requirement).

However, far from constituting new information focus, postverbal subjects in constituent-questions such as (4a) are part of the presupposed material, as (36) indicates.

(36) ¿[Qué]Focus [dijo Juan]Presupposition?
    what said John
    ‘What did John say?’

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Thus, the prediction that postverbal subjects should not necessarily constitute new-information focus made by the analysis currently pursued is borne out: in subject-gap cases, a low copy of the subject is chosen in order to avoid a violation by meeting a PF requirement (PF adjacency or removal of a *-marked element, depending on the account of the subject-gap restriction); crucially, however, in such cases the choice of low copy pronunciation is not motivated by the need to satisfy the focus-last requirement. Furthermore, the analysis adopted in this paper predicts that in subject-gap contexts, the postverbal subject need not to be last in the sentence (i.e. it is not the case that the lowest copy of the subject needs to be pronounced), since it does not constitute new information. As shown by the data in (37), this prediction is correct:

(37) a. ¿Qué le dijo a María Juan?
   what cl. said to Mary John

b. ¿Qué le dijo Juan a María?
   what cl. said John to Mary
   ‘What did John say to Mary?’
   (Cf. *¿Qué Juan le dijo a María?)

The facts just reviewed can be taken as an argument in favor of the proposal put forth in this paper.

4.4. Potential extensions

The analysis of the contrast in (4) put forward here may be extendable to other constructions. For instance, obligatory *wh*-in-situ cases in Spanish may be amenable to a similar analysis.

Reglero and Ticio (2008) show that in some cases, due to locality restrictions within the DP, certain *wh*-items must remain in situ (cf. (38b) and (38c)). In (38b), the presence of a possessor blocks agent extraction; in (38c), where the *wh*-agent has not moved to the left periphery, no blocking effect is observed and the sentence is grammatical. The examples in (38) have been adapted from Reglero and Ticio (2008).

(38) a. Has leído varios libros [de Cervantes]Agent [de Juan]Poss, have read various books of Cervantes of John
   ‘You have read several books of John’s by Cervantes.’

b. *¿De quién has leído varios libros [t]Agent [de Juan]? of whom have read various books of John
   ‘By whom have you read several books of Juan?’

c. ¿Has leído varios libros [de Juan]Possessor [de quién]Agent?
   have read various books of John of whom
   ‘By whom have you read several books of Juan?’
Interestingly, Reglero and Ticio (2008) show that wb-in-situ cases like (38c) are subject to the requirement that focus be last in the sentence (i.e. wb-in-situ elements obey the Sentence Final Requirement, to borrow Reglero and Ticio’s terminology). This is shown by the ungrammatical sentence in (39), which contrasts sharply with (38c).

(39) ¿Has leído varios libros [de quién]Agent [de Juan]Possessor?
    have read various books of whom of John
    ‘By whom have you read several books of Juan?’

Under the analysis pursued in this paper, the contrast between (38b) and (38c) can be explained as follows: on the plausible assumption that wb-in-situ involves movement in order to achieve the interrogative interpretation of the sentence, the agent de quién moves to its target position in the left periphery of the sentence. However, a problem arises if the high copy of the agent is pronounced, since overt extraction of agents is illicit in the presence of possessors in the DP domain. Therefore, the PF component selects the lowest copy, which in addition complies with the Sentence Final Requirement, saving the derivation (cf. (40)).

(40) De quién has leído varios libros [de Juan]Poss, [de quién]Agent...
       of whom have read various books of John of whom
       ‘By whom have you read several books of Juan?’

This analysis, if correct, has the welcome result that (38b) and (38c) would be treated in the same way syntactically, (38c) involving an additional step of PF choice of the lowest copy of the agent in order to circumvent a violation, as illustrated in (40). The contrast discussed in this sub-section would be very similar to the previous cases where pronunciation of a low copy saves a structure which would otherwise not comply with the requirements of the PF component.

Although I will not explore the non-trivial issue of wb-in-situ further here, the contrast between (38b) and (38c) is in principle amenable to the overall analysis adopted here.

**5. Conclusion**

In this paper, I have explored the hypothesis that the contrast between ungrammatical sentences displaying a subject that intervenes between the wb-item and the verb and their grammatical counterparts with the subject occurring postverbally can be explained by adopting an analysis to overt subjects in Spanish-style languages that relies on the overarching Copy Theory of Movement of Chomsky (1995).

The upshot of the analysis pursued here is that in subject-gap contexts, a problem arises in PF if the high copy of the subject is retained; therefore, the
PF component chooses a low copy instead, which circumvents the violation that would ensue if the highest copy were favored in PF. I have argued that this analysis does not require us to commit to a particular account of the long-standing issue of obligatory inversion in languages like Spanish (the analysis is compatible with both phonological and syntactic accounts of the phenomenon). I have shown that a number of predictions made by this analysis are borne out. I have also made the suggestion that the analysis adopted here may be extendable to other constructions such as obligatory \textit{wh}-in-situ in Spanish DPs.

The fact that the contrast between grammatical and ungrammatical sentences in subject-gap contexts in Spanish can be explained under the Copy Theory of Movement adds to the repertoire of phenomena now uniformly accounted for under the Copy Theory, which should be taken as a strong argument in its favor.

References


——— «Rescue by PF deletion, traces as (non-)interveners, and the \textit{that}-trace effect», \textit{Linguistic Inquiry}, n.º 42, 2011, pp. 1-44.


RIES,JULIO VILLA-GARCÍA –406–


—— and Neda Todorović, «What will the Serbo-Croatian-acquiring child use first, SV or VS?», Unpublished manuscript, University of Connecticut, Storrs, 2010.
