The ban on headless XP-movement is not narrow syntactic: Evidence from emphatic doubling in Rioplatense Spanish[1]

Carlos Muñoz Pérez

Pontifical Catholic University of Chile

carlos.munozperez@uc.cl

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ABSTRACT

This paper argues that the ban on headless XP-movement should not be captured in narrow syntactic terms. That is, there is no constraint in the syntactic computation preventing remnant movement of a phrase from which the head has been extracted, i.e., so-called Takano's Generalization is wrong. This is demonstrated through a case study of the *emphatic doubling* construction in Rioplatense Spanish, which requires a derivation proceeding exactly along these lines. It is further argued that the relevant prohibition should be stated as a constraint on the surface representation of the sentence. A preliminary conjecture on the nature of this condition is also offered.

Keywords: Takano's generalization; verbal doubling; ambiguity; remnant movement; Spanish.

1. INTRODUCTION

Consider the following derivation. First, a head X^0 moves to Y^0 as in (1a). Then, the remnant XP moves to a position above Y^0, as in (1b). Under standard conditions of chain pronunciation, the outcome of this derivation is a representation in which a seemingly "headless" XP moves leaving behind its own head X^0.

(1)
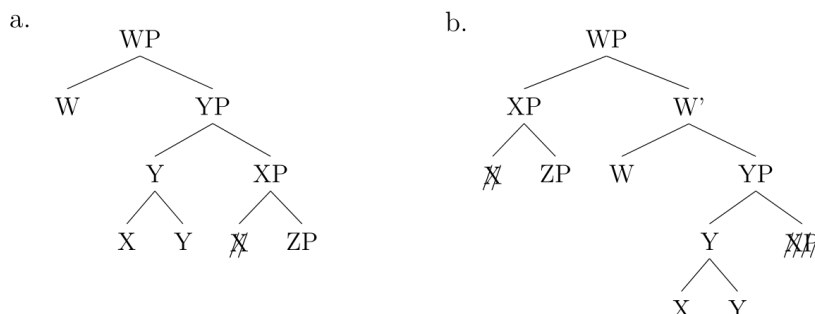
Takano (2000) noticed that sentences involving headless XP-movement are unacceptable in several languages. Similar observations have been made by Funakoshi (2012) and Arano (2018), among others. Takano formulated the relevant generalization as a condition on remnant movement.

(2)   *Takano's Generalization (Takano 2000:146)*
      Remnant movement of α is impossible if the head of α has moved out of α.

The implicit hypothesis in (2) is that there is some universal property of narrow syntactic computations preventing derivations such as (1). According to Takano (2000), the prohibition in (2) is an effect of derivational timing. He assumes that movement of an XP always targets the formal features of the head X^0; at the point in which XP should move in (1), X^0 has been already extracted from XP, so XP cannot move. This explanation, however, relies on the assumption that movement gaps are traces, i.e., syntactic objects that are distinct from the moved constituent itself; as Funakoshi (2012) points out, the status of this proposal is unclear under the copy theory of movement. In turn, Funakoshi argues that the restriction in (2) is a matter of locality and economy: in his view, once a head X^0 moves to a higher head Y^0, both X^0 and XP are equally accessible for a higher attracting probe W^0, but economy considerations dictate that only X^0 can move in this configuration.

In this paper, I contend that the effects associated to Takano's Generalization in (2) and, more generally, the prohibition of moving "headless" phrases should not be accounted for in terms of narrow syntactic restrictions. That is, given a configuration in which a copy of X^0 has been (internally) merged above XP, nothing prevents a copy of XP to be (internally) merged above X^0. I show this by discussing the properties of the *emphatic doubling* construction in Rioplatense Spanish, which has been analyzed by Saab (2008, 2011, 2017) as involving precisely this sort of derivation.

This is not to say that headless XP-movement is unconstrained. My claim is that the relevant constraint is not syntactic, but applies at PF. This follows from the analysis of the emphatic doubling phenomenon. That is, while the construction does require a derivation in the lines of (1), it does not exhibit headless XP-movement in the surface representation, as the head of the remnant phrase remains overt in its original position after being extracted, i.e., the construction involves multiple copy spell-out. Since the resulting pattern is acceptable in Rioplatense Spanish, the restriction arguably does not lie on the syntactic derivation underlying headless XP-movement, but on the overtness of the head of the moving XP.

The structure of the paper is as follows. Section 2 provides a case study of the emphatic doubling construction in Rioplatense Spanish; I revisit Saab's original arguments for a syntactic analysis based on remnant movement, and provide further support for his proposal. In section 3, I advance a very preliminary conjecture capturing the ban on headless XP-movement in non-derivational terms. Finally, section 4 contains the conclusions.

2. EMPHATIC DOUBLING IN RIOPLATENSE SPANISH

Emphatic doubling is a construction in which two instances of the same verb appear. It typically exhibits a V^1-XP-V^2 pattern, where V^1 and V^2 are identical items, e.g., (3a). There must be at least one constituent between V^1 and V^2, e.g., (3b).[2] Optionally, some element(s) may also precede V^1, e.g., (3c). The scheme in (3d) summarizes these possibilities.

(3) a. Compré   el   auto,   compré.
          bought.1SG the   car   bought.1SG
          'I bought the car!'
     b. *Llueve,   llueve.
          rains.3SG rains.3SG
          'It rains!'
     c. Eliana compró   el   auto,   compró.
          Eliana bought.3SG the   car   bought.3SG
          'Eliana bought the car!'
     d. (arguments/adjuncts) ... V^1 ... arguments/adjuncts ... V^2

At the discourse level, emphatic doubling sentences function as sentential exclamatives. It is not clear to me whether the doubling verb could be considered an exclamative marker of sorts, so for now I take these sentences to be secondary exclamatives in Bosque's (2017) terminology, i.e., exclamatives in which only intonation and proper interpretation of their illocutionary force allow to classify them as such. This accounts for the mirative-like interpretation of these examples, and also for some otherwise arbitrary restrictions. First, emphatic doubling is unacceptable together with certain modal expressions, just as exclamative sentences are, e.g., (4) vs. (5). Second, emphatic doubling is impossible in questions, e.g., (6).

(4) a. *¡Estás   equivocado   tal vez!
           are.2sg   wrong   maybe
          'Maybe you are wrong!'
     b. *Voy   tal vez, voy.
           go.1SG   maybe go.1SG
          'Maybe I'll go!'

(5) a. ¡Estás   equivocado   seguro!
          are.2SG   wrong   sure
          'You are wrong for sure!'

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[2] This is a property that distinguishes emphatic doubling from similar phenomena in other Romance varieties, e.g., emphatic affirmation in European Portuguese (Martins 2007). See Saab (2008, 2011, 2017) for discussion.

    b. Voy   seguro,   voy.
        go.1SG sure   go.1SG
   'I'll go for sure!'

(6)   *¿Compraste   el   auto, compraste?
       bought.2SG   the   car   bought.2SG
       'Did you buy the car?'

In the following subsections, I introduce Saab's (2008, 2011, 2017) derivation for emphatic doubling, and discuss a number of properties of the construction that show that his account is on the right track.

2.1. Saab's derivation

Saab (2008, 2011, 2017) advances an analysis of emphatic doubling in terms of remnant movement. These derivations have two key components: (i) movement of a constituent α from a domain β, and (ii) movement of β to a position above α. As for the former, Saab proposes that the lexical verb moves to C^0 passing through Σ^0 (Laka 1990), T^0 and v^0, i.e., V-v-T-Σ-C movement. The result is represented in (7).

(7)
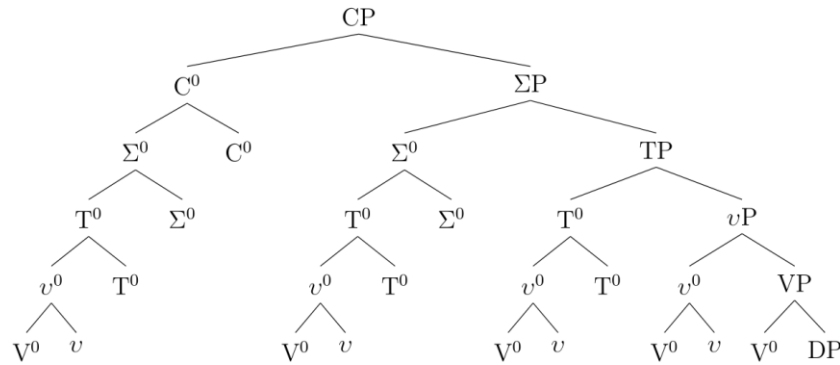
As a second step, ΣP undergoes remnant movement to Spec,C. Notice that the head of Σ^0 has been already extracted from this constituent, so the proposed derivation violates Takano's Generalization in (2).[3]

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[3] As noticed by an anonymous reviewer, this step violates *anti-locality* (Abels 2003), i.e., the movement operation depicted in (8) is "too short" to be licit. To avoid this issue, it is possible to assume a richer left periphery (e.g., Rizzi 1997), in which Σ^0 moves to a certain head F, and then ΣP moves to the specifier of the category immediately above F. For simplicity, I stick to Saab's (2017) categories of analysis (i.e., Σ and C) throughout the paper.

(8)

```
                                          CP
                   _____
                  ΣP                                          C′
          _____                            _____
         Σ⁰              TP                            C⁰            ΣP
       _____      _____              _____
      T⁰    Σ⁰     T⁰           vP            Σ⁰          C⁰
     ____         ____      _____      _____
    v⁰   T⁰      v⁰  T⁰    v⁰        VP    T⁰     Σ⁰
   ____         ____      ____     _____  ____
  V⁰  v⁰       V⁰  v⁰    V⁰  v⁰   V⁰  DP  v⁰  T⁰
                                         ____
                                        V⁰  v⁰
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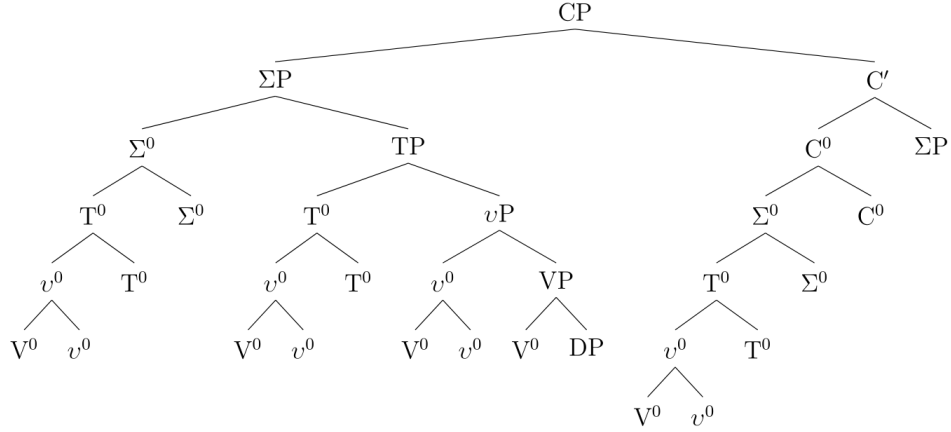
Under standard assumptions, only the verb in C^0 should be spelled-out. According to Saab, the construction involves multiple copy pronunciation, i.e., both Σ^0 and C^0 receive phonological representation. This produces a verbal doubling pattern: Σ^0 is the leftmost verb V^1 and C^0 is the rightmost verb V^2. The schematic representation in (9) corresponds to the example in (3a).[4]

(9)

```
                              CP
            _____
           ΣP                                 C′
      _____                      _____
     Σ⁰          TP                    C⁰          ΣP̸
    /△\    _____              /△\
   compré  T̸⁰         vP            compré
          /△\    _____
               H̸⁰        VP
              /△\   _____
                   V̸⁰        DP
                  /△\       /△\
                           el auto
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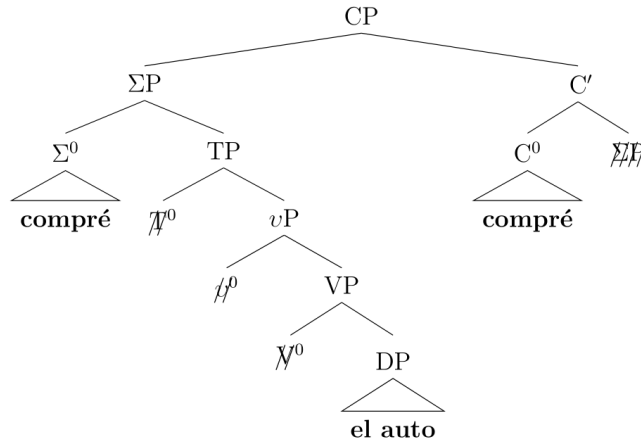
Thus, while the derivation proposed by Saab is analogous to (1) and goes against Takano's Generalization in (2), it does not truly involve movement of a "headless" phrase, i.e., the head of ΣP is overt. I will come back to the dissociation between Takano's Generalization and headless XP-movement in section 3. In what follows, I review evidence supporting this analysis; the arguments in 2.2, 2.3 and 2.7 have been addressed before in Saab's work.

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[4] See Saab (2008, 2011, 2017) for details on how and why Σ^0 is pronounced; other theoretical explanations for multiple copy pronunciation may also be adopted, e.g., morphological reanalysis à la Nunes (2004). The precise mechanism through which the doubling pattern is obtained is not important for the sake of this paper.

2.2. V¹ and V² are copies

The verbs in the construction seem to be transformationally related copies, as they must be morphologically identical.

(10) a. Compré   el   auto,   compré.
        bought.1SG the   car   bought.1SG
        'I bought the car!'
    b. *Compré   el   auto,   comprar.
          bought.1SG the   car   to.buy
        'I bought the car!'
    c. *¡Comprá   el auto, comprás!
          buy.2SG.IMP the car   buy.2SG.DECL
        'Buy the car!'

The identity requirement in the emphatic doubling construction also extends to clitics. If a clitic-like element is associated to V¹, it must also appear together with V², and vice versa. This follows straightforwardly from Saab's derivation under the assumption that clitics are incorporated to verbs (e.g., Roberts 2010).

(11) a. Se   lo   compré   a Juan, se   lo   compré.
        he.DAT   it.ACC bought.1SG   to Juan he.DAT   it.ACC bought.1sg
        'I bought it for Juan!'
    b. *Compré   el   auto, lo   compré.
          bought.1SG   the   car   it.ACC bought.1SG
        'I bought the car!'
    c. *Se   lo   compré   a Juan, lo   compré.
          he.DAT   it.ACC bought.1SG   to Juan it.ACC   bought.1SG
        'I bought it for Juan!'

Given that both verbs are complex heads containing copies of Σ^0, a negative sentence is predicted to mark negation in both positions. This is borne out, as shown in (12).

(12) a. ¡No vas   a la fiesta, no   vas!
          not go.2SG to the party not   go.2SG
        'You are not going to the party!'
    b. *¡No vas   a la   fiesta, vas!
          not go.2SG to the   party go.2SG

c. *¡Vas   a   la   fiesta, no   vas!
   go.2SG   to   the   party   not go.2SG

2.3. No XPs around V²

The rightmost verb V² cannot be accompanied by non-clitic arguments nor adjuncts; all non-clitic constituents must be organized around the leftmost verb V¹.

(13) a.   Compré   el   auto,   compré.
           bought.1SG the   car   bought.1SG
           'I bought the car!'
     b.   *Compré   el   auto,   compré   el   auto.
           bought.1SG the   car   bought.1SG the   car
           'I bought the car!'
     c.   *Compré   el   auto,   compré   ayer.
           bought.1SG the   car   bought.1SG yesterday
           'I bought the car yesterday!'

These facts follow straightforwardly if the rightmost verb is a stranded head left behind after remnant movement of the clause ΣP.

2.4. Only main verbs can be doubled

As discussed, Saab's derivation involves (i) head-movement of Σ^0 to matrix C^0, and (ii) remnant movement of ΣP to matrix Spec,CP. This predicts that the doubling pattern cannot be attested with embedded verbs, as they are not able to undergo successive head-movement to matrix C^0. This is borne out, as shown in (14).

(14) a.   [$_{CP}$ [$_{\Sigma P}$ Deci-le   que tengo   sueño], deci-le].
                   tell.2SG-3SG.DAT that have.1SG dream   tell.2SG-3SG.DAT
           'Tell her/him that I'm sleepy!'
     b.   *[$_{CP}$ [$_{\Sigma P}$ Deci-le   que tengo   sueño], tengo].
                   tell.2SG-3SG.DAT that have.1SG dream   have.1SG

There remains to explain why the string in (14b) cannot be alternatively obtained through movement within the embedded clause, i.e., by forming the acceptable emphatic doubling sentence in (15a), and then embedding it in the bigger sentence in (15b).

(15) a. [$_{CP}$ [$_{\Sigma P}$ tengo   sueño], tengo]
         have.1SG   dream   have.1SG
     'I'm sleepy!'

  b. *Deci-le   que [$_{CP}$ [$_{\Sigma P}$ tengo   sueño], tengo].
     tell.2SG-3SG.DAT that   have.1SG   dream   have.1SG
     'Tell her/him that I'm sleepy!'

This can be accounted for under the assumption that the movements generating the emphatic doubling pattern are triggered by the features of an exclamative complementizer head. Since exclamative sentences are (mostly) restricted to matrix contexts, the unacceptability of (15b) follows. In other words, (15b) is ill-formed for the same reason that embedded exclamatives such as (16) are.

(16) *Deci-le   que [$_{EXCLAMATIVE}$ ¡tengo   sueño!].
     tell.2SG-3SG.DAT that   have.1SG   dream
     'Tell her/him that: I'm sleepy!'

2.5. Ordering restrictions

As already discussed, all non-clitic constituents must appear "around" the leftmost verb V[1]. There is a further restriction depending on whether these elements are postverbal or preverbal. Postverbal constituents must surface in their basic unmarked order. Thus, for instance, direct objects must precede indirect objects.

(17) a. Le   compré   el   auto   a María, le   compré.
        she.DAT   bought.1SG   the   car   to María she.DAT   bought.1SG
        'I bought the car for María!'

  b. ??Le   compré   a María el   auto,   le   compré.
        she.DAT   bought.1SG   to María the   car   she.DAT   bought.1SG

The same restriction applies to postverbal subjects. They are acceptable only with intransitive verbs, or in case other constituents within the VP moved to the left periphery; these are also the contexts in which postverbal subjects are not required to receive a marked prosodic pattern.

(18) a. Vino   Ernesto,   vino.
        came.3SG   Ernesto   came.1SG
            'Ernesto came!'

    b. [??]Compró   Juan el   auto,   compró.
         bought.3SG Juan the   car   bought.3SG
         'Juan bought the car!'

    c. El auto   lo   compró   Juan, lo   compro´.
       the car   it.ACC   bought.3SG Juan it.ACC bought.3SG
       'Juan bought the car!'

On the other hand, constituents that precede the verb V^1 can surface in any order: a subject may precede an indirect object, and vice versa, e.g., (19); a subject may precede a direct object, and vice versa, e.g., (20); a direct object may precede an indirect object, and vice versa, e.g., (21).

(19) a. María, a Juan le   compró   el   auto, le   compró.
        María to Juan he.DAT   bought.3SG   the   car   he.DAT   bought.3SG
        'María bought the car for Juan!'

    b. A Juan, María le   compró   el   auto, le   compró.
       to Juan María he.DAT   bought.3SG   the   car   he.DAT   bought.3SG
       'María bought the car for Juan!'

(20) a. María, el auto se   lo   compró   a Juan, se   lo   compró.
        María the car he.DAT it.ACC   bought.3SG to Juan he.DAT it.ACC bought.3SG
        'María bought the car for Juan!'

    b. El auto, María se   lo   compró   a Juan, se   lo   compró.
       the car   María he.DAT   it.CL bought.3SG to Juan he.DAT it.ACC bought.3SG
       'María bought the car for Juan!'

(21) a. El auto, a Juan se   lo   compró   María, se   lo   compró.
        the car to Juan he.DAT it.ACC bought.3SG María   he.DAT it.CL   bought.3SG
        'María bought the car for Juan!'

    b. A Juan, el auto se   lo   compró   María, se   lo compró.
       to Juan thecar   he.DAT it.ACC bought.3SG María   he.DAT it bought.3SG
           'María bought the car for Juan!'

The fact that postverbal phrases need to appear in their unmarked order would be difficult to capture under an analysis of emphatic doubling in which the verb and its arguments/adjuncts do not form a constituent. That is, suppose an alternative account of emphatic doubling constructions in which

both verbs are copies, but there is no remnant movement of a phrase containing all predicate-internal elements; instead, all these constituents move independently and are scattered along the clausal spine. Under this approach, there is no *a priori* reason to prefer one order over the other, e.g., the direct object could either precede or follow the indirect object as the result would in any case be a marked structure obtained by extracting phrases from within the VP/vP.

(22) a. V^1 … [$_{XP}$ DO … [$_{YP}$ IO … [V^2 … [$_{VP}$ ~~DO~~ … ~~IO~~]]]
    b. V^1 … [$_{XP}$ IO … [$_{YP}$ DO … [V^2 … [$_{VP}$ ~~DO~~ … ~~IO~~]]]

On the contrary, if the arguments/adjuncts do still form a constituent together with the verb V^1, it is relatively unsurprising that they surface in their unmarked order. This is exactly what the remnant movement analysis of emphatic doubling predicts, e.g., (23).[5]

(23) [$_{CP}$ [$_{ΣP}$ V^1 … [$_{VP}$ DO … IO]] [$_{C'}$ V^2 ~~ΣP~~]]

I take that the asymmetry between preverbal and postverbal constituents regarding order flexibility follows from the former being dislocated in the left periphery of the sentence, in positions above ΣP. As is well-known, the order of left-dislocated topics is free in Romance languages.

2.6. Auxiliary verbs

Emphatic doubling is also attested with auxiliary verbs, as the examples in (24) show.[6]

(24) a. Había   comprado   el   auto, había.
        had.3SG   bought   the   car   had.3SG
        'He had bought the car!'
    b. Fueron   premiados,   fueron.
        were.3PL   awarded   were.3PL
        'They were awarded!'

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[5] As an anonymous reviewer points out, this analysis seems to require two non-trivial assumptions: (i) that there is no "short" movement of the arguments within the VP/vP, and (ii) that extraction from within ΣP is possible after this element moves to Spec,C. Perhaps alternative theoretical assumptions could derive similar results, e.g., through a base-generation analysis of left dislocated constituents.

[6] The acceptability of these patterns seems to be constrained by phonological weight. If the rightmost auxiliary verb is "too light" (in a sense that requires explicit definition), the non-finite verb following it in the underlying syntactic representation needs to be pronounced as a support unit.

    (i)   He   comprado   el   auto, he $^{??}$(comprado).
        had.1SG bought   the car   had.1SG   bought
        'I had bought the car!'

These patterns are easily captured under Saab's derivation: the non-finite verbs are formed via V^0 to v^0 movement, while the auxiliary is merged in T^0 and undergoes T-Σ-C movement; ΣP moves to Spec,C as usual. Thus, the only relevant difference with previous examples is that in these cases the lexical verb does not move to T^0, which is a standard assumption for non-finite forms.

(25) $[_{CP} [_{ΣP} T+Σ \ ... \ [_{vP} v+V \ ...]] [_{C'} T+Σ+C \ \sout{ΣP}]]$

I do not see a way in which the sentences in (24) and previous examples can be accounted for in a uniform fashion without appealing to a derivation like (1). For instance, one could try to argue that the examples in (24) involve VP movement to a position within both auxiliaries.

(26) $[_{XP} AUX \ ... \ [_{YP} [_{VP} V \ ...] \ ... \ [_{Y'} AUX \ ... \ \sout{VP}]]]$

However, when applied to examples in which the lexical verb is doubled, e.g., (3a), this analysis requires to assume that what moves is a headless VP.

(27) $[_{XP} V \ ... \ [_{YP} [_{VP} \sout{V} DP] \ ... \ [_{Y'} V \ ... \ \sout{VP}]]]$

Other analytical alternatives can be explored for (24), but they are deemed to rely on rules accounting for the position of the verb between the auxiliaries. These rules will be of no use when considering other instances of emphatic doubling, e.g., (3a). Thus, if no derivation in the lines of (1) is accepted, one is forced to posit two totally distinct derivations for two versions of the same construction.

2.7. Intonation

Spanish is a language in which nuclear accent has a rather fixed position: it almost always falls on the rightmost lexical word within the intonation phrase, e.g., Sosa (1991), Zubizarreta (1998), Hualde (2005), among many others. Under the assumption that intonation phrases in prosodic structure match syntactic clauses that typically occupy the complement position of C^0 (Selkirk 2011), Saab's derivation predicts that (i) the dislocated ΣP must be mapped into an intonation phrase, and (ii) the rightmost verb must form its own prosodic domain.

(28) $[_{CP} [_{ΣP} Σ^0 [_{TP} \sout{T}^0 [_{vP} \sout{v}^0 [_{VP} \sout{V}^0 DP]]]] [_{C'} C^0 \sout{ΣP}]]$

intonation phrase

The immediate consequence of this prosodic structure is that the nuclear accent must be realized on the rightmost word within ΣP. For instance, the nuclear accent in a sentence like (29a) must fall on the adjective *gris* 'grey'; the same applies for (29b): the noun *María* must receive the nuclear accent.

(29) a. [$_{ΣP}$ Compré   el   auto   GRIS], [$_{C'}$ compré]
            bought.1SG   the   car   grey   bought.1sg
        'I bought the grey car!'
      b. [$_{ΣP}$ Le   di   un regalo a MARÍA], [$_{C'}$ le   di]
            she.DAT   gave.1SG   a   gift   to María   she.DAT gave.1SG
        'I gave a present to María!'

As shown in figures 1 and 2, respectively, these predictions are borne out. In both cases, the rightmost word within ΣP exhibits a tritonal accent L + H* + L, followed by an abrupt pitch fall. For explicitness, I take this pitch fall to signal a low boundary tone (L%) at the right edge of the intonation phrase.[7]
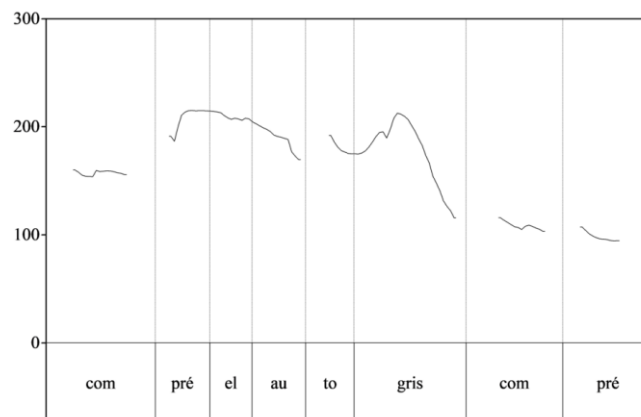

FIGURE 1: F0 trace for *Compré el auto gris, compré* 'I bought the grey car!'

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[7] This pitch fall could be alternatively taken to reflect post-focal deaccentuation within a single intonation phrase. The problem with this approach is that it does not seem to correlate either with a descriptively adequate syntactic account of emphatic doubling, or with an independently motivated theory of nuclear accent assignment. The complexities in providing an analysis for this prosodic pattern are reminiscent of those attested with right dislocation constructions in Romance; see Astruc (2004) and Poletto & Bocci (2016) for discussion.
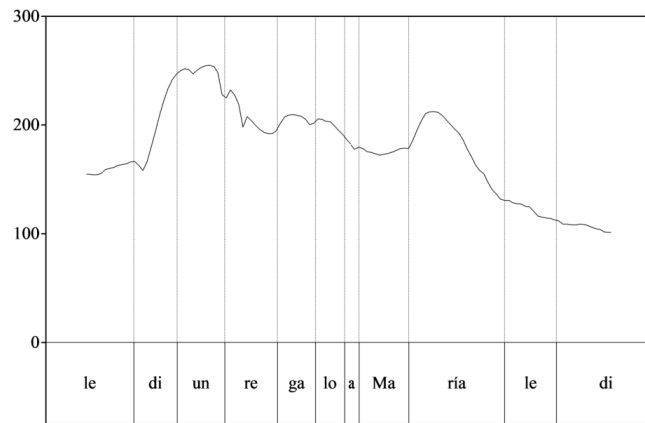
FIGURE 2: F0 trace for *Le di un regalo a María, le di* 'I gave a present to María!'

Gabriel et al. (2010) report the tritonal accent $L + H^* + L$ to be found in other two contexts in Rioplatense Spanish. First, it as characteristic for exclamative statements; this further supports the observation that emphatic doubling sentences are exclamatives. Second, constituents functioning as narrow focus also display it. I will briefly come back to the intonational similarity between these constructions later.

2.8. Focus projection

The default prosody of a declarative sentence in Spanish (and other languages) is ambiguous regarding the "size" of its focus; this phenomenon is referred to as *focus projection*. For instance, the sentence in (30a) can be a felicitous answer to questions requiring either narrow focus on the direct object, predicate focus, or broad focus.

(30)   *What did Eliana buy? / What did Eliana do? / What happened?*

    a.   Eliana compró   un   AUTO.

         Eliana bought.3SG a   car

         'Eliana bought a car.'

As illustrated in (31), the key requirement to successfully interpret a constituent as the focus of the utterance is that it must contain the element carrying the nuclear accent. Under this condition, focus is able to project from the smallest constituent containing the main accent, e.g., the DP *un auto* 'a car', to broader projections dominating it, e.g., the VP *compró un auto* 'bought the car', or the whole sentence.

(31)   a.   Eliana compró [un AUTO]$_F$

      b.   Eliana [compró un AUTO]$_F$

      c.   [Eliana compró un AUTO]$_F$

However, there seem to be some additional constraints on focus projection. While focus on an *in situ* direct object is able to project to the whole sentence, focused subjects do not allow for this. As the example in (32a) demonstrates, if the preverbal subject carries the nuclear accent, the utterance cannot be interpreted as expressing broad focus. Moreover, focus fronted direct objects also disallow focus projection, as shown in (32b).

(32) *What happened?*

     a. #ELIANA   compró   un auto

         Eliana   bought.3SG   a car

         'Eliana bought a car.'

     b. #UN AUTO compró   Eliana

         a   car   bought.3SG   Eliana

         'A CAR Eliana bought.'

This sort of restriction has led to the widely extended hypothesis that focus projects cyclically from complement positions. In Selkirk's (1995) influential proposal, for instance, accented words must carry a focus feature *F*. There are two conditions to transmit this feature: (i) a phrase counts as F-marked if its head is F-marked, and (ii) a head is F-marked if its complement phrase is F-marked. Thus, an F-feature on a direct object is able to "climb" to license a focal interpretation on bigger constituents, e.g., by F-marking the verb and then the whole VP. On the contrary, narrow focus on a specifier position cannot project outside its own phrase, which explains the unacceptability of (32a) and (32b).

     Just as plain declarative utterances, emphatic doubling sentences are also ambiguous regarding the "size" of their focus. That is, (33a) can answer questions requiring either narrow focus on the direct object, predicate focus, or broad focus.

(33) *What did Eliana buy? / What did Eliana do? / What happened?*

     a. Eliana compró   un   AUTO, compró.

         Eliana bought.3SG   a   car   bought.3SG

         'Eliana bought a car!'

For this to happen, focus on the word carrying the nuclear accent must be able to project to both the VP and the whole clause, as roughly sketched in (34).

(34) a. Eliana compró [un AUTO]$_F$, compró

     b. Eliana [compró un AUTO]$_F$, compró

     c. [Eliana compró un AUTO]$_F$, compró

An account of emphatic doubling under which the clause does not form a single constituent does not predict this. If the construction was to be analyzed as involving independently dislocated elements scattered along the clausal spine, e.g., (35a), the direct object DP *un auto* 'a car' would be a specifier, and therefore would not be able to allow focus projection. On the contrary, if what moves is the whole clause, i.e., a ΣP as sketched in (35b), focus projection of the direct object is free to apply within this domain, making available both predicate and broad focus interpretations.

(35)
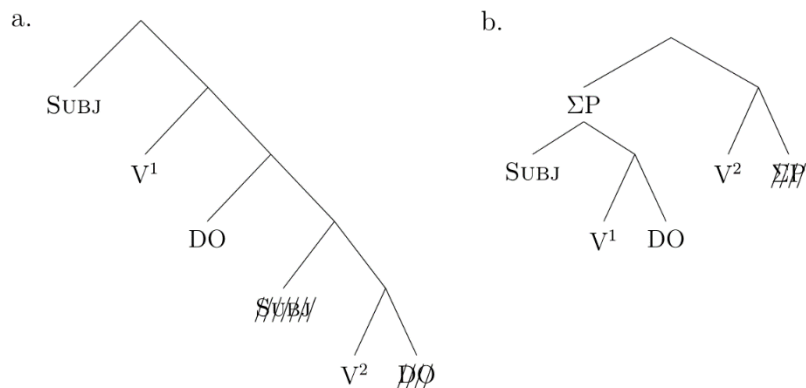
In sum, focus projection facts further support Saab's syntactic derivation for emphatic doubling.

3. A CONJECTURE ON WHY LANGUAGES DO NOT ALLOW HEADLESS XP-MOVEMENT

As discussed in the introduction, the ban on headless XP-movement has been linked to a narrow syntactic restriction, i.e., Takano's Generalization in (2). The fact that emphatic doubling in Rioplatense Spanish involves (i) extraction of Σ^0 out of ΣP and (ii) remnant movement of ΣP strongly suggests that the generalization is wrong. However, rejecting Takano's Generalization leaves us with no general explanation for the unacceptability of headless XP-movement in several languages.

As mentioned in 2.1, the emphatic doubling construction allows to dissociate the type of derivation described by Takano's Generalization from the prohibition of headless XP-movement: while emphatic doubling requires the derivation depicted in (1), the construction does not really involve *headless* XP-movement since the remnant ΣP overtly realizes its head Σ^0.

(36) $[_{CP} [_{\Sigma P} \ \Sigma^0 \ [_{TP} T^0 \ [_{vP} v^0 \ [_{VP} V^0 \ DP]]]] \ [_{C'} \ C^0 \ \Sigma P]]$

$\qquad\qquad\quad \downarrow \qquad\qquad\qquad\qquad\qquad\qquad\quad\ \downarrow$

$\qquad\qquad\quad V^1 \qquad\qquad\qquad\qquad\qquad\qquad\quad V^2$

Since this representation is grammatical in Rioplatense Spanish, perhaps what is troublesome is not the syntactic derivation in (1) *per se*, but the fact that it systematically generates PF representations containing a fronted constituent with no overt head.[8] I informally summarize this intuition as in (37).[9]

(37) Headless XP-movement creates a problem for the output representation. Pronouncing the head of XP solves the problem.

I would like to advance an explanatory conjecture in the line of (37): that languages disallow headless XP-movement because it consistently leads to ambiguous surface representations. To illustrate the idea, consider the examples in (38). The representation in (38a) is obtained by (i) extracting the head X^0 from XP and (ii) moving the remnant XP to the left; (38b) merely involves fronting of YP. Despite of having distinct derivations, both structures generate the same string, i.e., *ZP-WP-X*. In other words, movement of a headless phrase [$_{XP}$ X̶^{0} YP] looks just like movement of YP.

(38) a. [$_{XP}$ X̶^{0} YP] ... WP ... X^0 ... X̶P̶
      b. YP ... WP ... X^0 ... Y̶P̶

In Rioplatense Spanish, the emphatic doubling derivation would create a similar sort of ambiguity if the head Σ^0 did not receive pronunciation. To show this, consider the structures in (39). (39a) is a headless version of the emphatic doubling sentence in (3a), while (39b) involves focus fronting of the object DP *el auto* 'the car'.

(39) a. [$_{CP}$ [$_\Sigma$P c̶o̶m̶p̶r̶é̶ ... [$_{DP}$ el auto]] [$_{C'}$ compré Σ̶P̶]]

      b. [$_{CP}$ [$_{DP}$ el auto] [$_{C'}$ C^0 [$_{TP}$ compré ... D̶P̶]]]

Both structures lead to the same surface output: a sentence headed by an object DP that receives the nuclear accent. In other words, without multiple copy pronunciation, the emphatic doubling derivation is expected to generate a PF representation that is ambiguous with a focus fronting construction.

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[8] For this to follow from the analysis of emphatic doubling, it is necessary to assume that chain pronunciation is not computed in narrow syntax, but at PF, e.g., Bošković (2002), Nunes (2004), Landau (2006), among many others; as far as I can tell, this is a standard assumption nowadays.

[9] Arano (2018) advances an account of the ban on headless XP-movement in the line of (37). According to him, headless VP fronting in VO languages creates an ordering contradiction in the sense of Fox & Pesetsky (2005). That is, the verb precedes the object in the first phase, but this ordering is not respected at the CP level. According to him, this violation can be overcome if verb doubling applies as a repair operation. While this proposal could in principle be applied to emphatic doubling, it fails at accounting for the examples in (24), in which no ordering contradiction arises throughout the derivation.

(40) EL AUTO,   compré.
     the car   bought.1SG

Further properties of emphatic doubling and focus fronting would make this output even more ambiguous. As already discussed, the tritonal accent $L+H*+L$ found in the rightmost constituent within ΣP in emphatic doubling constructions is the same one that surfaces with focus fronted phrases in Rioplatense (Gabriel et al. 2010). Moreover, the discourse contexts in which both constructions can be employed overlap: as mentioned regarding (33), emphatic doubling can express narrow focus on the rightmost constituent within ΣP, which coincides with the interpretation that (40) would receive as a product of focus fronting.

This ambiguity is avoided by assigning phonological representation to Σ^0 in (39a). In other words, whatever grammatical factor is responsible for the doubling pattern in the construction, it has the side-effect of acting as an ambiguity avoidance mechanism.[10]

This observation assimilates multiple copy spell-out in emphatic doubling to cases in which a certain constituent receives phonological manifestation to prevent ambiguous surface representations (Bever 1970, Bever & Langendoen 1971, Hankamer 1973, Temperley 2003). To illustrate, take the sentences in (41). As is known, the relative pronoun *who* can be omitted in object relatives, but not in subject relatives. According to Bever (1970), this pattern can be explained by observing that omission of *who* in subject relatives would create a *garden path*, i.e., it would wrongly allow to parse the embedded verb as the matrix verb.

(41) a.   The man who I hired was very tall.
      b.   The man ~~who~~ I hired was very tall.
      c.   The man who hired me was very tall.
      d.   *The man ~~who~~ hired me was very tall.

Langacker (1974) offers a similar motivation for the contrast in (42): pronouncing the complementizer in contexts of CP fronting is obligatory because the surface representation would otherwise lead to a garden path.[11]

(42) a.   We all know (that) Cosmo is an idiot.
      b.   That Cosmo is an idiot we all know.
      c.   *~~That~~ Cosmo is an idiot we all know.

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[10] Notice that I am not arguing that multiple copy spell-out is triggered as part of an ambiguity avoidance mechanism. The main problem with such a functional approach (as it is the case with many functional explanations of syntactic phenomena) is that there is no evidence for an unequivocal causal relation between ambiguity and pronunciation of Σ^0 in emphatic doubling. That is, while spell-out of Σ^0 in (39a) does seem to prevent what would otherwise be an ambiguous output, there is no way to demonstrate that this grammatical operation has the function and purpose of avoiding ambiguity.

[11] While the sentences in (41d) and (42c) illustrate cases of local ambiguity, the representations in (39) are globally ambiguous.

Since derivations like (1) are expected to generate ambiguous outputs, e.g., (38), perhaps the ban on headless XP-movement can be accounted for by appealing to a constraint on the type of grammatical mechanisms that may be incorporated into particular grammars.

(43)   *Impermissible Ambiguity Constraint (Frazier 1985: 137)*
       Languages prohibit constructions containing a clause that is misanalysed the same way every time it occurs regardless of the particular words contained in the clause.

According to this, there is no narrow syntactic restriction that prohibits moving constituents from which the head has been extracted. Instead, this type of derivation is excluded from particular grammars because it consistently leads to ambiguous PF outputs, i.e., it creates representations that are rather unusable. Rioplatense Spanish admits these derivations in emphatic doubling constructions because the result is unambiguous due to pronunciation of the complex head Σ^0.

This is a preliminary conjecture based on the behavior of emphatic doubling. It requires further elaboration and testing. For now, it only makes the rough prediction that narrow syntactic derivations in the lines of (1) should be possible if there is an additional and independent mechanism disambiguating representations at the surface level.

4. CONCLUDING REMARKS

The properties of emphatic doubling constructions in Rioplatense Spanish receive a straightforward and unified account under a derivation in which (i) a head Σ^0 is extracted from ΣP, and then (ii) ΣP moves to a position above Σ^0. This seems to demonstrate that narrow syntax is able to generate these structures, and that any condition forbidding these derivations, e.g., Takano's Generalization, must be wrong. The fact that emphatic doubling makes use of multiple copy spell-out to pronounce the occurrence of Σ^0 within the fronted ΣP suggests that headless XP-movement is constrained in natural languages due to a restriction applying at PF. I have advanced the conjecture that these derivations produce ambiguous outputs, so they are generally avoided as part of particular grammars. Further research will show whether this preliminary hypothesis is on the right track.

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