# Emphatic doubling in Rioplatense Spanish goes against Takano's Generalization

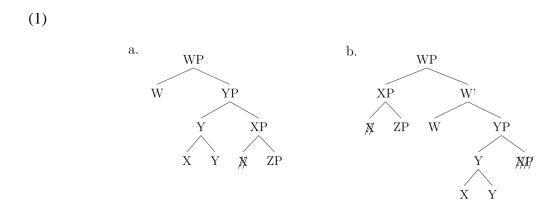
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#### ABSTRACT

This paper argues that *Takano's Generalization* is wrong, i.e., I contend that there is no narrow syntactic ban on movement of phrases from which the head has been extracted. This is demonstrated through a case study of the *emphatic doubling* construction in Rioplatense Spanish, which requires a derivation proceeding exactly along these lines. A conjecture aiming to account for the data motivating Takano's Generalization is also offered.

#### 1. Introduction

Consider the following derivation. First, a head  $X^{\circ}$  moves to  $Y^{\circ}$  as in (1a). Then, the remnant XP moves to a position above  $Y^{\circ}$ , as in (1b). Since  $X^{\circ}$  was already extracted from XP at this point, XP contains no overt occurrence of its own head. This instance of remnant movement is usually referred to as *Headless XP-movement*.



Takano (2000) observed 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  $\alpha$  is impossible if the head of  $\alpha$  has moved out of  $\alpha$ .

The implicit hypothesis in (2) is that there is some universal property of syntactic computations that prevents derivations such as (1). In this paper, I contend that this point of view is wrong: narrow syntax is able to generate these structures. I show this by discussing the properties of the *emphatic doubling* construction in Rioplatense Spanish, which has been analysed by Saab (2008, 2011, 2017) as involving the sort of derivation depicted in (1).

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 preliminary conjecture explaining 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). Optionally, some element(s) may also precede  $V^1$ , e.g., (3c). The scheme in (3d) summarises 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!'

- 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

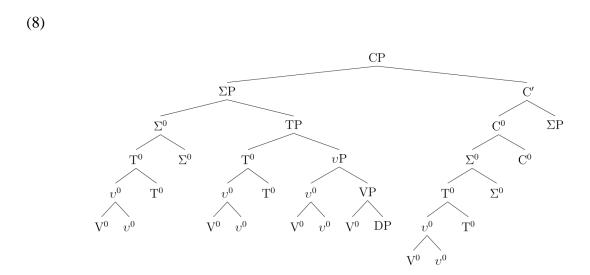
  'Did you buy the car?'

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 correct.

# 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 X from a domain YP, and (ii) movement of YP to a position above X. As for the former, Saab proposes that the lexical verb moves to  $C^0$  passing through  $\Sigma^0$  (Laka 1990),  $T^0$  and  $v^0$ , i.e., V-v-T- $\Sigma$ -C movement. The result is represented in (7).

As a second step,  $\Sigma P$  undergoes remnant movement to Spec,C. Notice that the head of  $\Sigma P$  has been already extracted from this constituent, so the derivation involves Headless XP-movement, just as sketched in (1).

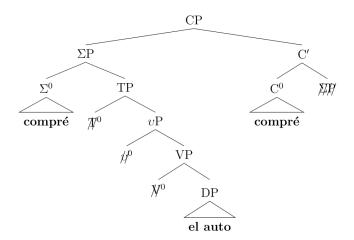


Under standard assumptions, only the verb in  $C^0$  should be spelled-out. According to Saab, the construction involves multiple copy pronunciation, i.e., both  $\Sigma^0$  and  $C^0$  receive phonological representation, which produces the doubling pattern:  $\Sigma^0$  is the leftmost verb  $V^1$  and  $C^0$  is the rightmost verb  $V^2$ . The schematic representation in (9) corresponds to the example in (3a).

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<sup>&</sup>lt;sup>1</sup> See Saab (2008, 2011, 2017) for details on how and why  $\Sigma^0$  is pronounced. The precise mechanism through which the doubling pattern is obtained is not important for the sake of this paper.

(9)



While the derivation proposed by Saab (2008) violates Takano's Generalization in (2), there is abundant evidence showing that emphatic doubling constructions in Rioplantense do have this underlying syntactic structure.

# 2.2. $V^1$ and $V^2$ 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  $V^1$ , it must also appear together with  $V^2$ , 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.

  CL.3SG.DAT it.CL bought.1SG to Juan CL.3SG.DAT it.CL bought.1sg

  'I bought it for Juan!'
  - b. \*Compré el auto, lo compré.

    bought.1sG the car it.CL bought.1sG

    'I bought the car!'
  - c. \*Se lo compré a Juan, lo compré.

    CL.3SG.DAT it.CL bought.1SG to Juan it.CL bought.1SG

    'I bought it for Juan!'

Given that both verbs are complex heads containing copies of  $\Sigma^0$ , 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 V<sup>2</sup>

The rightmost verb  $V^2$  cannot be accompanied by non-clitic arguments nor adjuncts; all non-clitic constituents must be organized around the leftmost verb  $V^1$ .

```
Compré
                                    compré.
(13) a.
                      el
                             auto,
          bought.1sg the
                                    bought.1sG
                             car
          'I bought the car!'
          *Compré
     b.
                       el
                                    compré
                                                   el
                             auto,
                                                          auto.
           bought.1sG the
                                    bought.1sG
                             car
                                                   the
                                                          car
          'I bought the car!'
          *Compré
      c.
                       el
                             auto,
                                    compré
                                                   ayer.
           bought.1sG the
                                    bought.1sG
                                                   yesterday
                             car
          'I bought the car yesterday!'
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These facts follow straightforwardly if the rightmost verb is a stranded head left behind after remnant movement of the clause  $\Sigma P$ .

# 2.4. Only main verbs can be doubled

As discussed, Saab's derivation involves (i) head-movement of  $\Sigma^0$  to matrix  $C^0$ , and (ii) remnant movement of  $\Sigma P$  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-DAT.3SG that have.1SG dream tell.2SG-DAT.3SG 'Tell her/him that I'm sleepy!'

b. 
$$*[CP [\Sigma P Deci-le]$$
 que tengo sueño], tengo]. tell.2SG-DAT.3SG 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).

'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-DAT.3SG 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<sup>1</sup>. 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 a María, le compré. auto CL.3SG.DAT bought.1SG to María CL.3SG.DAT bought.1SG the car 'I bought the car for María!' ??Le b. compré a María el auto. le compré. CL.3SG.DAT bought.1SG to María the car CL.3SG.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. <sup>??</sup>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.CL bought.3SG Juan it.CL 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 CL.3SG.DAT bought.3SG the car CL.3SG.DAT bought.3SG 
  'María bought the car for Juan!'
  - b. A Juan, María le compró el auto, le compró.
     to Juan María CL.3SG.DAT bought.3SG the car CL.3SG.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 CL.3SG.DAT it.CL bought.3SG to Juan CL.3SG.DAT it.CL bought.3SG

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

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).

(23) 
$$[CP [\Sigma P V^1 ... [VP DO ... IO]] [C^V \Sigma ]$$

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  $\Sigma P$ . 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.<sup>2</sup>

(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!'

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- $\Sigma$ -C movement;  $\Sigma$ P 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) 
$$\left[ CP \left[ \Sigma P T + \Sigma \dots \left[ vP v + V \dots \right] \right] \left[ C' T + \Sigma + C \Sigma P \right] \right]$$

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.

(i) He comprado el auto, he <sup>??</sup>(comprado).

had.1SG bought the car had.1SG bought

'I had bought the car!'

<sup>&</sup>lt;sup>2</sup> 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 syntactic representation needs to be pronounced as a support unit.

(26) 
$$[XP AUX ... [YP [VP V ...] ... [Y' AUX ... ]]]$$

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) 
$$[XP V ... [YP [VP \rightarrow DP] ... [Y, V ... \rightarrow P]]]$$

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 Headless XP-movement 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  $\Sigma P$  must be mapped into an intonation phrase, and (ii) the rightmost verb must form its own prosodic domain.

$$(28) \underbrace{ \begin{bmatrix} \text{CP} \left[ \text{SP} \ \Sigma^0 \right] \left[ \text{TP} \ \mathbb{F}^0 \right] \left[ \text{vP} \ \text{$\theta^0$} \right] \left[ \text{VP} \ \mathbb{F}^0 \ DP \right] \end{bmatrix} \right]}_{f} \left[ \text{C}^{,} \ \text{C}^0 \ \mathbb{F}^{\text{P}} \right] \\ intonation \ phrase}$$

The immediate consequence of this prosodic structure is that the nuclear accent must be realised on the rightmost word within  $\Sigma P$ . 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.

As shown in figures 1 and 2, respectively, these predictions are borne out. In both cases, the rightmost word within  $\Sigma P$  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.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> 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.

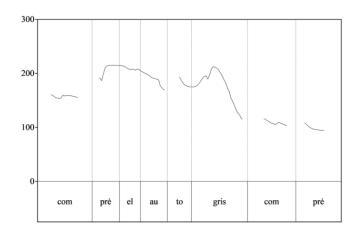


FIGURE 1: F0 trace for Compré el auto gris, compré 'I bought the grey car!'

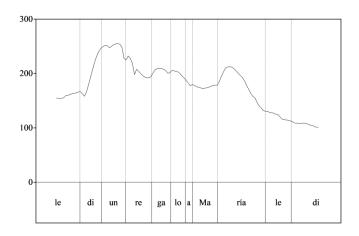


FIGURE 2: F0 trace for Le di un regalo a María, le di 'I gave a present to María!'

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]<sub>F</sub>

b. Eliana [compró un AUTO]<sub>F</sub>

c. [Eliana compró un AUTO]<sub>F</sub>

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.

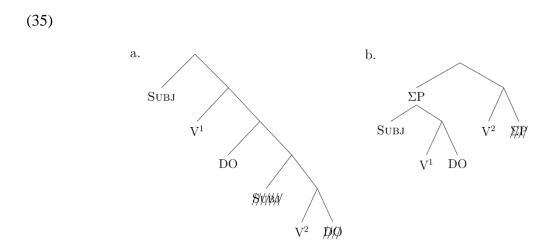
Eliana bought.3sG a car bought.3sG

'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]<sub>F</sub>, compró
  - b. Eliana [compro´ un AUTO]<sub>F</sub>, compró
  - c. [Eliana compro´ un AUTO]<sub>F</sub>, 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 analysed 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  $\Sigma P$  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.



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

## 4. A conjecture on why languages do not allow Headless XP-movement

As discussed in the introduction, 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 exploits the type of derivation in (1) 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.

There is a rather obvious observation that I have not made so far: while emphatic doubling requires the derivation depicted in (1), the construction does not really involve *headless* XP-movement since the remnant  $\Sigma P$  overtly realizes its head  $\Sigma^0$ .

$$(36) \quad \left[ \operatorname{CP} \left[ \sum_{P} \sum_{0}^{0} \left[ \operatorname{TP} \mathbf{F}^{0} \left[ v_{P} \mathbf{F}^{0} \left[ V_{P} \mathbf{F}^{0} \right] \right] \right] \right] \left[ \operatorname{C}^{*} C^{0} \underbrace{\Sigma_{P}} \right] \right]$$

Since this representation is grammatical in Rioplatense Spanish, perhaps what is troublesome here 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. I informally summarize this intuition in (37).<sup>4</sup>

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

<sup>4</sup> 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.

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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  $X^0$  YP] looks just like movement of YP.

In Rioplatense Spanish, the emphatic doubling derivation would create a similar sort of ambiguity if the head  $\Sigma^0$  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. 
$$[CP [\SigmaP \text{ compr\'e} ... [DP el auto]] [C' \text{ compr\'e} \frac{\Sigma P}{}]]$$
  
b.  $[CP [DP el auto] [C' C^0 [TP \text{ compr\'e} ... \frac{DP}{}]]$ 

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.

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  $\Sigma P$  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  $\Sigma P$ , which coincides with the interpretation that (40) would receive as a product of focus fronting.

This ambiguity is avoided by assigning phonological representation to  $\Sigma^0$  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.<sup>5</sup>

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.

<sup>&</sup>lt;sup>5</sup> 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  $\Sigma^0$  in emphatic doubling. That is, while spell-out of  $\Sigma^0$  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.

- 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.<sup>6</sup>

- (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.

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

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<sup>&</sup>lt;sup>6</sup> While the sentences in (41d) and (42c) illustrate cases of local ambiguity, the representations in (39) are globally ambiguous.

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  $\Sigma^0$ .

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 Headless XP-movement should be possible if there is an additional mechanism disambiguating the representations it produces.

# **5.** 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  $\Sigma^0$  is extracted from  $\Sigma P$ , and then (ii)  $\Sigma P$  moves to a position above  $\Sigma^0$ . 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  $\Sigma^0$  within the fronted  $\Sigma P$  suggests that Headless XP-movement is constrained in natural languages due to a different type of restriction. 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.

#### References

Arano, Akihiko. 2018. On the distribution of headless vP/VP-movement. *University of Pennsylvania Working Papers in Linguistics* 24(1). 11–19.

Astruc, Lluïsa. 2004. Right-dislocations: Influence of information structure on prosodic phrasing and intonation. *Cambridge Occasional Papers in Linguistics* 1. 1–14.

Bever, Thomas G. 1970. The cognitive basis for linguistic structures. In John R. Hayes (ed.), *Cognition and language development*, 279–362. New York: Wiley and Sons.

- Bever, Thomas G. & D. Terence Langendoen. 1971. A dynamic model of the evolution of language. *Linguistic Inquiry* 2(4). 433–463.
- Bildhauer, Felix & Philippa Cook. 2010. German multiple fronting and expected topic-hood. In Stefan Müller (ed.), *Proceedings of the 17th international conference on head-driven phrase structure grammar*. 68–79. Stanford, CA: CSLI Publications. http://cslipublications.stanford.edu/HPSG/2010/.
- Bosque, Ignacio. 2017. Spanish exclamatives in perspective: A survey of properties, classes, and current theoretical issues. In Ignacio Bosque (ed.), *Advances in the analysis of Spanish exclamatives*, 1–52. Columbus: The Ohio State University Press.
- Frazier, Lyn. 1985. Syntactic complexity. In David R. Dowty, Lauri Karttunen & Arnold M. Zwicky (eds.), *Natural language parsing. Psychological, computational, and theoretical perspectives*, 129–189. Cambridge: Cambridge University Press.
- Funakoshi, Kenshi. 2012. On headless XP-movement/ellipsis. *Linguistic Inquiry* 43(4). 519–562. doi: 10.1162/ling a 00105.
- Gabriel, Christoph, Ingo Feldhausen, Andrea Pesková, Laura Colantoni, Su-Ar Lee, Valeria Arana & Leopoldo Labastía. 2010. Argentinian Spanish intonation. In Pilar Prieto & Paolo Roseano (eds.), *Transcription of intonation of the Spanish language*, 285–317. München: LINCOM Publishers.
- Hankamer, Jorge. 1973. Unacceptable ambiguity. Linguistic Inquiry 4(1). 17–68.
- Hualde, José Ignacio. 2005. The sounds of Spanish. Cambridge: Cambridge University Press.
- Laka, Itziar. 1990. *Negation in syntax. on the nature of functional categories and projections.* Cambridge, MA: MIT dissertation.
- Langacker, Ronald W. 1974. Movement rules in functional perspective. *Language* 50(4). 630–664.
- Poletto, Cecilia & Giuliano Bocci. 2016. Syntactic and prosodic effects of information structure in Romance. In Caroline Féry & Shinichiro Ishihara (eds.), *The Oxford handbook of information structure*, 642–662. Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780199642670.013.14.
- Roberts, Ian. 2010. *Agreement and head movement: clitics, incorporation, and defective goals.* Cambridge, MA: The MIT Press.
- Saab, Andrés. 2008. *Hacia una teoría de la identidad parcial en la elipsis*. Buenos Aires: Universidad de Buenos Aires dissertation.
- Saab, Andrés. 2011. On verbal duplication in River Plate Spanish. In Janine Berns, Haike Jacobs & Tobias Scheer (eds.), *Romance languages and linguistic theory*, 305–322. Leiden: John Benjamins Publishing Company. doi:10.1075/rllt.3.18saa.
- Saab, Andrés. 2017. Varieties of verbal doubling in Romance. *Isogloss. A journal on variation of Romance and Iberian languages* 3(1). 1. doi:10.5565/rev/isogloss.43.
- Selkirk, Elisabeth. 1995. Sentence prosody: Intonation, stress, and phrasing. In John A. Goldsmith (ed.), *The handbook of phonological phrasing*, 550–569. London: Blackwell.
- Selkirk, Elisabeth. 2011. The syntax-phonology interface. In John Goldsmith, Jason Riggle & Alan Yu (eds.), *The handbook of phonological theory*, vol. 2, 435–483. Oxford: Wiley-Blackwell Malden.
- Sosa, Juan Manuel. 1991. *Fonética y fonología de la entonación del Español Hispanomericano*. Amherst: University of Massachussets dissertation.
- Takano, Yuji. 2000. Illicit remnant movement: An argument for feature-driven movement. Linguistic Inquiry 31(1). 141–156. doi:10.1162/002438900554325.
- Temperley, David. 2003. Ambiguity avoidance in English relative clauses. *Language* 79(3). 464–484. doi:10.1353/lan.2003.0189.
- Zubizarreta, María Luisa. 1998. Prosody, focus and word order. Cambridge, MA: MIT Press.