VARIETIES OF VERBAL DOUBLING IN ROMANCE

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Abstract: Recent research on verbal doubling across languages (Nunes 2004, Martins 2007, Kandybowicz 2009, Biberauer 2009, among others) show that this phenomenon is a fruitful domain of inquiry, especially, regarding the nature of copying phenomena and the way in which such phenomena interact with syntax and morphology. In line with the aforementioned works, I focus on the empirical domain of verbal doubling in Spanish and European Portuguese and argue that not all verbal doubling structures must be derived as the result of syntactic copying. In particular, new evidence is discussed in order to show that predicate fronting in Spanish does not result from movement (pace Vicente 2007, 2009). Other varieties of verbal duplication, such as non-local doublings in Rioplatense Spanish and Italian, and local doublings in European Portuguese, are instead the direct result of verbal copy pronunciation arising from complex factors involving the structure of remnant movement and the general conditions that regulate copy pronunciation in syntax and morphology. These particular varieties of verbal duplications in Romance allow us to decide among different theories of copy realization in competition.

Key Words: verbal doubling, Rioplatense Spanish, European Portuguese, Copy, Ellipsis, I-Assignment

1. Introduction

Verbal doubling among languages (Vata, Koopman 1984; Nupe, Kandybowicz 2007, 2008; Afrikaans, Biberauer 2009, among others) has been taken as clear evidence in favor of the copy theory of movement (Chomsky 1993, 1995, and, especially, Nunes 1999, 2004 and the articles in Nunes & Corver 2007).

Within the Romance domain, verbal doubling is found in River Plate Spanish (Saab 2008), Italian (Gullì 2003) and European Portuguese (Martins 2007). As shown in (3B), European Portuguese (EP) also presents a type of local doubling not attested in Italian or Spanish:

Emphatic doubling

- (1) **Vino** Juan, **vino**. *Río de la Plata Spanish* came J. came
 - 'John came!'
- (2) a. **È andato** a Parigi, **è andato**. *Italian* is gone to Paris is gone
 - 'He really did go to Paris.' [Gullì 2003: 3]
 - b. Mangia la pizza, mangia.

eats the pizza eats

'He really is eating the pizza.' [Gullì 2003: 31]

Polarity Focus: European Portuguese

- (3) A O João não comprou carro, pois não? 0 the J. not bought the pois NEG car, 'John didn't buy the car, did he?'
 - B. Comprou, comprou.

bought, bought 'Yes, he DID.'

- (4) A: Ele não comprou o carro. he not bought the car 'He didn't buy the car.'
 - B: Ele **comprou** o carro, **comprou.** he bought the car, bought 'He did buy the car.'

[Martins 2007: 81]

Other type of verbal doubling, namely, v(P)-topicalization (also called *predicate-cleft*) has also been claimed to be the result of movement/copy (Brazilian Portuguese, Bastos 2001; Italian, Gullì 2003; Hebrew, Landau 2006; Spanish, Vicente 2007, 2009) although its status is still controversial (Cable 2004).

v(P)-Topicalization

Brazilian Portuguese

- (5) a. Emprestar, o Maria. João emprestou caneta para a a lend.INF the J. lent the pen for the M. 'As for lending, João lent the pen to Maria.'
 - b. Emprestar a caneta para Maria, o João emprestou, mas... lend.INF the M. J. lent but the pen for the 'As for lending the pen to Maria, João lent it, but...'

[Bastos 2001: 10-11]

Spanish

- (6) a. Comprar, compré un auto. buy.INF bought.1SG a car 'As for buying, I bought a car.'
 - b. Comprar el auto, lo compré este verano. buy.INF the car it bought. 1SG this summer 'As for buying the car, I bought the car this summer.'

As other syntactic doubling phenomena, verbal doubling raises, at least, the following questions:

- (Q1) On the basis of which empirical evidence can we tell whether or not a given doubling phenomenon is the result of copying the same syntactic object?
- (Q2) Under which conditions does copy pronunciation arise as a grammatical option?

Answering Q1 is largely an empirical matter. On the basis of Spanish data, I will show here that verbal doubling, but not vP-topicalization (pace Vicente 2007, 2009), is an instance of double copy realization. I will proceed contrasting and evaluating the putative evidence for verbal doubling in Rioplatense Spanish and for vP-topicalization in General Spanish discussed in Saab (2008, 2011) and Vicente (2007, 2009), respectively. As for Q2, I contend that there is a crucial distinction between head and phrasal copies. Whereas phrasal copies are deleted in the syntax, head copies are deleted at PF under the same conditions that apply for other post-syntactic phenomena, such as affix movement (Embick & Noyer 2001). These conditions are immediate locality and adjacency. Whenever these conditions are not met, copy pronunciation arises. Other cases of local doubling (3B) follow from a general restriction on ellipsis that prevents deletion of sub-words.

2. Two types of verbal doubling in Spanish

Both *vP*-topicalization and Rioplatense verbal doubling have been analyzed in terms of *movement*, as this term is understood under the umbrella of the copy theory of movement (Chomsky 1993, 1995), according to which regular displacement effects in natural language are obtained in two basic steps, namely: (i) copying a syntactic object and merging the new copy with another syntactic object in the working space of a given derivation, and (ii) deleting the lower copy (or copies) by ellipsis (as in Chomsky 1995) or by some mechanism of chain reduction (as in Nunes 1999, 2004). Just to grasp the idea at its most intuitive level, consider the example in (7a) and its associated basic analysis in (7b):

- (7) a. John was arrested.
 - b. [John [was [arrested John]]]

On this theory, there are (at least) two occurrences of the lexical item *John* as the result of syntactic copying. To know whether two superficially identical (or non-distinct) syntactic objects count as originating from the same lexical item or not is at the heart of the copy theory of movement (see Muñoz Pérez (in progress) for recent discussion). In cases like (7), in which we have the expected pattern, the issue is hard to evaluate. Deviations of such a general pattern are however attested in natural language as extensively discussed by Nunes' work. Instances of multiple copy realization (i.e., cases where ellipsis / chain reduction fails) are of special interest for the purposes of the ongoing discussion. Here are some well-known examples of wh-doubling:

Afrikaans:

- (8) Met wie het jy nou weer gesê met wie het Sarie gedog with who did you now again said with whom did Sarie thought met wie gaan Jan trou with who go Jan marry
 - 'Whom did you say (again) that Sarie thought Jan is going to marry?'

German:

(9) Wem glaubt Hans wem Jakob gesehen hat? whom thinks Hans whom Jakob seen has 'Who does Hans think Jakob saw?

Romani:

(10) **Kas** misline **kas** o Demiri dikhlâ? whom think.2sg whom the 'Who do you think Demir saw?'

Frisian:

(11) Wêr tinke jo wêr't Jan wennet? where think you where-that Jan lives 'Where do you think that Jan lives?'

English Child Grammar:

(12) **Who** do you think really **who**'s in the can?

[see Nunes 2004: 38 for the sources of the examples]

Taking for granted that these are true instances of multiple realizations of wh-copies we see that the lower copies in each example are strictly identical to their antecedent copy. At first glance it would seem that strict identity is a logical consequence of copying a constituent. However, depending on some assumption about word and phrasal formation, this conclusion

does not follow. Indeed, cases of partial wh-copying are attested in some languages. For instance, Barbiers $et\ al\ (2010)$ have discussed $partial\ wh$ -copying in different dialects of Dutch. As illustrated in (13)-(15), and unlike the examples in (8)-(12), the surface forms of each intermediate wh-copy is superficially non-identical to its antecedent copy.

(13) Neuter and non-neuter wh-pronouns (Overijssel)

Wat denk je wie ik ezien heb? what think you who I seen have 'Who do you think I saw?'

(14) Non-neuter and (non-neuter) relative pronouns (North-Holland) Wie denk je die ik gezien heb?

who think yo REL.pron I seen have

'Who do you think I saw?'

(15) Neuter and (non-neuter) relative pronouns (Overijssel)

Wat denk je die ik gezien heb? what think you REL pron I seen have

'Who do you think I saw?'

Barbiers *et al* claim that the *wh*-elements involved in these examples phonetically realize different layers of the DP structure, with *wat* realizing the lower NP layer and *die* the higher DP layer.

DP structure

(16) [DP D+definite [PhiP Phi+gender [QP Q]]]

Phonetic realization of wh-constituents:

(17) a. wat = indefinite numeral (QP)

b. $wie = wat + \varphi$ -features (PhiP)

c. die = wie + definiteness (DP)

Partial identity effects in these Dutch paradigms can be now derived as cases of regular *wh*-copying. Take the sentence in (15) as illustration. The surface result is obtained if the system just makes a copy out of the lower DP layer of the intermediate copy and merges the result in the matrix CP. As by-product of this partial copying, and assuming the analysis in (17), the right result is obtained (see Barbiers *et al* 2016 and Muñoz Pérez in progress for detailed discussion):

(18)
$$[QP Q]^i$$
 ... $[DP D+definite [PhiP Phi+gender [QP Q]^i]]$ wat die

The neat prediction of this approach is that the higher *wh*-copy cannot be overspecified with respect the intermediate one. This is borne out:

- (19) *Wie denk je wat ik gezien heb? who think you what I seen have 'Who do you think I saw?'
- (20) *Die denk je wie ik gezien heb?

 REL.pron think you who I seen have

 'Who do you think I saw?'
- (21) *Die denk je wat ik gezien heb?

rel.pron think you what I seen have 'Who do you think I saw?'

Therefore, we have robust evidence from the *wh*-domain for full and partial copying. With this background in mind, let us come back to the Spanish facts introduced above and see whether a similar strategy could account for the paradigms at hand. Verbal doubling in Rioplatense Spanish has a similarity with the *wh*-doubling examples in (8)-(12), namely, the lower visible copy must be strictly identical to the high one. Superficially, the construction at hand responds to the pattern we see in (22c), where the two verbs involved in the sentence have to be strictly identical and anti-adjacent, a property to be discussed a length in section 4:

(22) a. Vino Juan, vino.
came J. came
'John came!'
b. *Juan vino vino.
c. V₁ XP, V₂.

Two additional properties discussed in Saab (2008, 2011) provides further evidence in favor of the idea that the phenomenon underlying verbal doubling in (22) is indeed the result of copy pronunciation. Suppose V_1 is a transitive verb whose direct object is definite (e.g., compré el auto, 'I bought the car', limpié la casa 'I cleaned the house', etc). Under this circumstance if V_2 was an instance of a different verb occurring in a different sentence, we would predict pronominalization by an accusative clitic within the putative second sentence. However, this is strongly ungrammatical: V_2 does not tolerate accusative pronominalization:

(23)a. Compré el (*lo) compré. auto. bought.1SG the CL.ACC.3MASC.SG bought.1SG car 'I bought the car!' b. Limpié (*la) limpié. la casa, cleaned.1SG the house CL.ACC.3FEM.SG cleaned.1SG 'I cleaned the house!'

Spanish, as is well-known, doesn't allow definite null objects (Campos 1986, 1999 and the references therein) and does not have V-stranding VP-ellipsis (Goldberg 2005), as it lacks VP-ellipsis in the first place:

(24)A: ¿Compraste las manzanas? bought.2SG the apples 'Did you buy the apples?' B: *Sí. compré. yes bought.1SG 'Yes, I did.' ¿Limpiaste (25)A: la casa? cleaned.2sg the house 'Did you clean your house?' *Sí. limpié. B: yes, cleaned.1SG

'Yes, I did.'

Given that Rioplatense Spanish also lacks definite null objects and VP-ellipsis, the biclausal hypothesis cannot be on the right track. Put differently, V_1 and V_2 must form a (head) chain in a single sentence.

A second reason leading to the same conclusion is connected with clitic realization. Concretely, if a clitic is attached to V_1 , an identical clitic must also be attached to V_2 :

'You washed your face!'

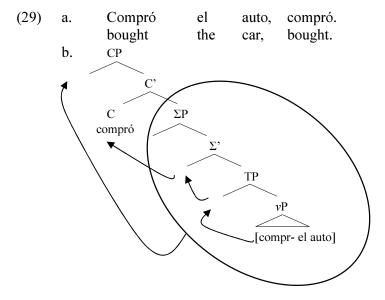
[asitalmundobotija.blogspot.com/2006/12/la-esencia-del-yorugua.ht]

The same with clitic clusters:

Pedro gave it to me!

Yet, a full direct object (or whatever other complements) occurring with V_1 cannot be replicated in the V_2 domain:

In sum, these and other properties to be discussed below point in favor of an analysis in terms of head copy realization. Let us assume that the verb moves cyclically from its base position to some high position in the C-domain. Remnant movement of the phrase excluding the high copy of the verb (by assumption, ΣP) would partially account for the surface ordering. As a first approximation to the proper analysis of (29a), consider the tree in (29b):



On this analysis, two properties of verbal doubling follow automatically, namely, absence of pronominalization and the ban of replicating full complements in the V_2 domain. The first fact is explained by the absence of any clitic pronoun within ΣP as shown in (29b). The second fact, in turn, reduces to the head nature of verbal doubling in this dialect (see section 4 for details). As for the requirement of clitic repetition, we can assume that the verb pied-pipes the clitics inside ΣP in its way to the C head. Put differently, V_2 can be a complex head, but not a phrase. We will present further evidence for this particular analysis in section 4

Now, let's see whether or not there are arguments in favor of an analysis in terms of copy/movement for *vP*-topicalization. Recall the data in (6b):¹

(30) **Comprar** el auto, lo **compré** este verano. buy.INF the car it bought. 1SG this summer 'As for buying the car, I bought the car this summer.'

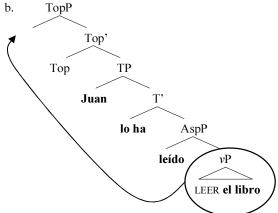
In (31b), Vicente's (2007) analysis is schematized. Notice that this approach is similar to the analysis for partial wh-doubling briefly discussed above, the main difference being in the category affected by movement (vP, in this case):

¹ I leave aside cases of *v*-topicalization (see (i)), which are also analyzed as Vicente (2007, 2009) as the result of verbal copy duplication. As far as I can tell, an analysis in terms of long-head movement along the lines of Vicente's proposal or my own proposal in section 5 for Vata and European Portuguese could account for some of the particular properties of this construction.

(i) **Comprar**, **compré** un auto. (6 cf.) buy.INF bought.1SG a car 'As for buying, I bought a car.'

7

(31)el libro. a. [Leer libro] Juan leído el ha read.INF the book J. has read the book



Putative evidence for movement comes from islands effects (32)-(34) and the (in)compatibility with *genus-species* readings (35) (Cable 2004, Landau 2006 and Vicente 2007, 2009):

Island effects:

Bridge verb

- (32)Comprar el libro, Juan dijo que lo compró. buy.INF the book J. said that bought it 'As for buying the book, Juan said that he bought it.' Relative island
- (33)*Comprar el libro, conozco la persona que lo a buy.INF the book know.1sg the person that it to compró. bought Adjunct island
- (34)*Comprar el libro, Juan enojó porque se upset because buy. INF book J. the SE Pedro lo compró. P. it bought

Genus-species reading:

(35) %Comer pescado, solo como salmón. eat.INF fish only eat.1SG salmon 'As for eating fish, I only eat salmon.'

Island effects are not conclusive, though; what they show is that there is A'-extraction from the position in which the topic is interpreted. Following Iatridou's (1995) analysis of Clitic Left Dislocation, Cable (2004) argues that a ν P-topic can be generated in the left periphery of the source sentence:

<u>vP base-generation</u>:

(36) $[_{CP} \dots [_{CP} \nu P\text{-topic}] TP \dots$

Now, it follows that A'-extraction from the most embedded CP is illegitimate whenever it crosses certain types of islands.

As for the ban of *genus-species* reading, it would immediately follow if the fronted predicate is a syntactic copy of the lower predicate, under the crucial assumption that no semantic dependency can be established between sub-constituents of a given non-trivial chain. In this case, moreover, there is an absolute lack of syntactic identity between the sub-constituents at hand (the direct objects *pescado* and *salmón*). Yet, it should be noted that the *genus-species* reading is not ungrammatical for some speakers. On the face of this, Vicente proposes a base-generation analysis for those speakers that accept the *genus-species* reading and a movement analysis for those speakers that do not. This is an undesirable conclusion in view of the fact that the *genus-species* reading is the only putative argument for diagnosing movement. A semantic alternative for the *genus-species* effect is developed in Cable's (2004). I refer the reader to his work for details.² In the remaining of this section, I present three arguments against a movement analysis for *v*P-topicalization.

Argument #1: pronominalization effects. The analysis in terms of movement for vP-topicalization predicts exactly the same absence of clitic replacement that we observe in verbal doubling in Rioplatense Spanish. This prediction, however, is not borne out. Indeed, what we find is the same pattern of pronominalization that must apply across sentences in General Spanish. In this respect, compare the following sentences:

- (37) Comprar el auto, *(lo) compré ayer. buy.INF the car CL.ACC.3MASC.SG bought.1SG yesterday 'Buying the car, I bought the car yesterday.'
- (38) Compré el auto. *(Lo) compré el viernes. bought.1sg the car (it) bought.1sg the Friday 'I bought the car. I bought it on Friday.'

Vicente notes this problem and claims: *I must leave the trigger of clitic doubling as an unsolved problem* (Vicente 2009, footnote 23, 183). But notice that this is not clitic doubling but just the result of accusative clitic replacement, an obligatory operation in most Spanish dialects whenever the antecedent DP in a given previous clause is definite. Consider again examples like (24):

(39)A: ¿Compraste las manzanas? bought.2SG the apples 'Did you buy the apples?' B: Sí, *(las) compré. yes CL.ACC.3FEM.PL bought.1SG

In contradistinction, indefinite object drop is allowed in General Spanish (Campos 1986):

(40) A: ¿Compraste manzanas? bought.2sG apples

'Yes, I did.'

-

(i) %En cuanto a comer pescado, solo como salmón. as-for eating fish only eat.1SG salmon

² Notice that the *genus-species* reading is even odd (for some speakers) in hanging topic contexts, a construction for which a movement analysis is not tenable:

'Did you buy the apples?'

B: Sí, compré.

yes bought.1sg

'Yes, I did.'

Therefore, it is predicted that the same pattern of indefinite object omission should be found in *v*P-topicalization environments. This is correct.

(41) Comprar manzanas, compré ayer. buy.INF apples bought.1SG yesterday 'As for buying apples, I bought apples yesterday.'

One property of indefinite object drop is that it allows for adjective or quantifier modification:

(42) A: Preferís cerveza holandesa o alemana? prefer.2sg beer Dutch or German

'Do you prefer Dutch or German beer?'

B: Prefiero holandesa. prefer.1sg Dutch

'I prefer Duch beer.'

(43) A: Comés pescado? eat. 2SG fish

'Do you eat fish?'

B: Como poco. eat1SG little

'I eat a little.'

As expected, we find exactly the same pattern in ν P-topicalization environments:

(44) a. [Comer pescado], como [poco $\mathcal{O}_{[-def]}$]. eat.INF fish eat.1SG little

b. [Tomar cerveza], solo tomo [$\emptyset_{[-def]}$ holandesa]. drink.INF beer only drink.1SG Dutch

This lack of syntactic identity between the vP-topic and the vP in the lower part of the clause cannot be derived under a movement analysis. In order to maintain the movement analysis, we should give up with the assumption mentioned above that there cannot be semantic dependencies between sub-constituents of chain links. Recall that such an assumption was crucial for ruling out the *genus-species* readings in examples like (35).

Argument #2: strong pronouns, epithets and full DPs. Consider now the following paradigm:

María, hablé viernes. (45)Hablar María el a. con con talk.INF with talked.1sG M. the Friday M. with 'As for talking to María, I talked to María on Friday.'

b. Hablar con María, hablé con esa idiota el talk.INF with M. talked.1SG with that idiot the viernes.

Friday

'As for talking to María, I talked to that idiot on Friday.'

Hablar María, hablé con viernes con el c. talked.1sG talk.INF with M. with her the Friday. 'As for talking to María, I talked to her on Friday.'

Examples (45b-c) reinforce the idea that there is no (special) clitic doubling in vP-topicalization contexts, but pronominal replacement: by a clitic (37), an epithet (45b) or a strong pronoun (45c). The sentence in (45a) presents a different problem for the analysis in terms of movement. Concretely, why is the lower occurrence of *con María* not deleted when the vP is fronted?

(46)
$$[T_{opP}]_{\nu P}$$
 hablar con María $[T_{opP}]_{\mu P}$ hable $[T_{\nu P}]_{\nu P}$ hablar con María $[T_{opP}]_{\nu P}$

Movement of the PP out the lower vP is the only alternative to deal with this problem. However, there is no independent evidence for such an alternative.

Argument #3: Low applicatives. Finally, consider the following sentence:

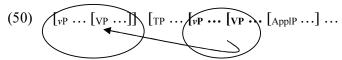
(47) Construir una casa, le construí una casa build.INF house CL.DAT.3SG built.1sg a house hija. a mi daughter my 'As for building a house, I built a house to my daughter.'

In this sentence, the lower vP has a low applicative phrase that is not present in the fronted vP. Assuming the structure for low applicatives in (48) (Pylkkänen 2002), the analysis in terms of movement predicts that if a low applicative is added in the vP structure, then the

copied vP should include the ApplP (49).

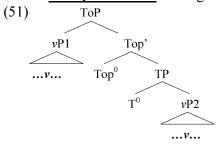
(48)
$$[TP \dots [vP \dots [VP \dots [ApplP \dots [VP \dots [VP \dots [ApplP \dots [VP \dots [VP \dots [ApplP]]]]]]]$$
 $[TP \dots [vP \dots [VP \dots [ApplP \dots [VP \dots [VP \dots [ApplP \dots [VP \dots [$

As (47) shows, this prediction is not borne out. In order for (47) to be derived as movement we must assume that partial copy not only can affect constituents but also non-constituents.



For the adduced reasons, I conclude that vP-fronting cannot be the result of partial predicate fronting. I therefore subscribe an analysis along the lines of Cable's proposal, according to which the fronted predicated is base-generated in a topic position within the source clause and does not form a movement chain with the lower vP (numbers indicate different syntactic objects):

*v***P-topicalization:** base-generation



In summary, in this section, I have provided an answer to the first question raised in the introduction:

(Q1) On the basis of which empirical evidence can we tell whether or not a given doubling phenomenon is the result of copying the same syntactic object?

The evidence has to be constructed on the basis of particular properties of the languages under consideration. As for General Spanish, different syntactic and semantic diagnostics lead to the conclusion that *v*P-fronting cannot be derived as variety of syntactic copying (concretely, partial copying). Yet, there are attested cases of verbal copying in the particular case of Rioplatense Spanish, where there *is* robust evidence pointing out to the conclusion that the two verbs involved in the construction *are* phonetic realizations of particular links in a head chain. This, in turn, leads us to the second main question:

(Q2) Under which conditions does copy pronunciation arise as a grammatical option?

I give an explicit general answer in the next section, before turning to the particular domain of verbal copy pronunciation in Río de La Plata Spanish.

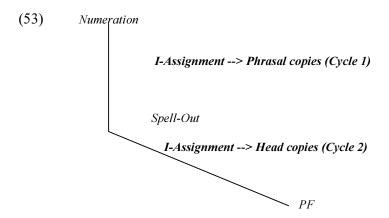
3. THEORETICAL BACKGROUND: I-ASSIGNMENT

In Saab (2008), it is proposed that the grammatical *silences* are the result of a morphosyntactic operation, *I-Assignment*. This operation is the responsible to regulate the "how and when" of (non)-pronunciation of the objects that syntax produces. *I-*Assignment can only affect phrases or heads under formal identity (Saab 2008 for an extensive discussion). In (52), I schematize these two options for any merged objects Y and X, with X as a label.

(52) a.
$$\{X^{[I]} \{X, Y\}\}\$$

b. $\{X \{X^{[I]}, Y\}\}\$

What differentiates phrasal *I*-Assignment and head *I*-Assignment is the component of the grammar in which it takes place. Whereas phrases are *I*-Assigned at syntax under syntactic conditions, such as *c-command* or *E-selection* (Merchant 2001), heads are *I*-assigned at PF under morphological conditions, such as *immediate locality* or *adjacency*. Such conditions for *I*-Assignment define what I call *I-Assignment cycles*. Any syntactic object affected by *I*-Assignment in a given cycle would result in a *silent* object at PF. Three empirical domains are explored in detail in Saab's (2008), namely, copy deletion, null subjects and different varieties of elliptical phenomena. Here, I only focus on how copy deletion and copy realization is explained under the *I*-Assignment system. Copy deletion, as other elliptical objects, is implemented entirely in the syntax or at PF, depending on the phrasal status of the syntactic object at hand:



Let's start with phrasal copies. I assume that the conditions in (54) trigger one *I*-Assignment cycle in the syntax:

(54) *Phrasal I-Assignment in the syntax*:

A copy C is *I*-assigned if and only if there is an antecedent A for C, such that:

- (i) A and C are identical, and
- (ii) A c-commands C.

I will not discuss how *identity* must be defined, as the point is orthogonal to our main discussion (see Muñoz Pérez in progress for a detailed recent discussion). I just suppose that chain links satisfy *some* sort of identity, which in the ideal case it is the same sort of identity condition that applies other to other elliptical dependencies (ellipsis, null arguments and so on). Put differently, by assumption, the computational system has a unique identity condition applying all the way. The c-command condition deserves more elaboration, as it at the heart of the phrasal and head division as far as the *I-Assignment* system is concerned. I adopt Chomsky's (2000) definition of c-command:

C-command:

(55) α c-commands β if α is a sister of K that contains β .

[Chomsky 2000: 116]

For any two-link chain, where the two conditions in (54) are met, *I*-Assignment applies and add a [I(dentity)] feature to the label of the relevant phrasal link:

(56) a. [John was [punished
$$John^{[I]}$$
]] b. { $D^{[+I]}$ {D, John}}

The PF effect of *I*-Assignment must be understood in the framework of a realizational approach to grammar, in which phonological information is lately supplied for abstract terminal nodes in the PF branch of the grammar (Distributed Morphology, Halle & Marantz 1993 and much subsequent work). Phonological information is added through a PF operation called *Vocabulary Insertion*, which inserts Vocabulary Items (VI) pertaining to a list of PF primitives. In (57), I illustrate the general form of a VI with the regular past for English (see Embick 2015 for detailed discussion on the VI mechanics):

(57) $T[past] \leftrightarrow -ed$

Thus, a given VI contains instructions for its insertion in a given syntactic terminal node. In the case at hand, the exponent -ed is inserted as the default form of the past tense node by rules like the following one:

(58)
$$T[past] \rightarrow T[past, -ed]$$

Saab proposes that the direct PF effect of *I*-Assignment is blocking rules like (58). VI blocking is defined as follows (modified from Saab 2008):

VI-Blocking (VIB):

Vocabulary Insertion does not apply in the domain of X^0 , X^0 a MW, if X^0 , or some projection of X^0 , is specified with a [I] feature.

Associated definitions:

- (i) The domain of X^0 , X^0 a MWd, is the set of terminal nodes reflexively contained in X^0 . *Morphosyntactic word*
- (ii) At the input to Morphology, a node X⁰ is (by definition) a *morphosyntactic word* (MWd) iff X⁰ is the highest segment of an X⁰ not contained in another X⁰.
- (iii) A node X⁰ is a *subword* (SWd) if X⁰ is a terminal node and not an MWd.

 [(i) and (ii) from Embick & Noyer 2001: 574]

This definition of VIB implicitly leads to what I call the Sub-Word Deletion Corollary:

Sub-Word Deletion Corollary:

(60) The [I] feature is inert below the MWd level.

So, suppose that a SWd bears a [I] feature acquired at some point in the course of a derivation.

$$(61) \qquad X^0 \qquad X^{[1]} \qquad X$$

By the VIB definition, the *I*-assigned SWd in (61), Y, is subjected to VI as if it were not *I*-marked. The inertness of the [I] feature expressed in the *SWd Deletion Corollary* can be represented as in (62):

(62)
$$Y[+\alpha, I] \rightarrow Y[+\alpha, /x/, I] / [x^0[YY]]$$

Thus, the *I-Assignment* provides an explicit answer to at least some types of phonetic realization of copies. Let us see the effects of the *SWd Deletion Corollary* with the aforementioned cases of *wh*-copying and compare the analysis with Nunes' (2004) original proposal. Here are some of the relevant examples:

German:

(63) **Wem** glaub Hans **wem** Jakob gesehen hat? whom thinks Hans whom Jakob seen has 'Who does Hans think Jakob saw?

Romani:

(64) Kas misline kas o Demiri dikhlâ?

whom you-think whom Demir saw 'Who do you think Demir saw?'

[Nunes 2004: 38 and the references there-in]

In Nunes' approach, the operation copy creates contradictory linearization statements in connection with Kayne's (1994) *Linear Correspondence Axiom*, LCA.³ Given a simple two-link chain like (65), we can see the conflict between the LCA and the effects of copying:

(65) [Johnⁱ was [punished Johnⁱ]]

Taking for granted that the links of a given chain count as the same element, the verb *punish* asymmetrically c-commands the lower copy of *John*, but crucially it is c-commanded by the higher copy of the same constituent. By the LCA, then *John* precedes *punish* and *punish* precedes *John* violating asymmetry and irreflexivity (Nunes 2004: 24). The system avoids the problem through the following operation:

Chain Reduction:

(66) Delete the minimal number of constituents of a nontrivial chain CH that suffice for CH to be mapped into a liner order in accordance with LCA. (Nunes 2004: 27)

Thus, Chain Reduction applies in (65) and produces a convergent output:

(67) [Johnⁱ was [punished Johnⁱ]]

If (63) and (64) are generated by cyclically copying the *wh*-constituent that end in matrix CP, as Nunes indeed assumes, the question is why the matrix and intermediate copies do no introduce any linearization conflict. Nunes' account proceeds in two steps:

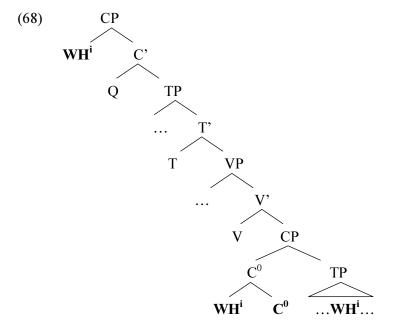
...successive-cyclic *wh*-movement in these languages may proceed by adjunction to an intermediate C^0 [...] and Morphology in these languages may convert the adjunction structure $\begin{bmatrix} c^0 & WH \end{bmatrix} \begin{bmatrix} c^0 & C^0 \end{bmatrix}$ [...] into a single terminal element.

[Nunes 2004: 40]

Under the first assumption, the intermediate copy in the embedded CP adjoins to the intermediate C head, as illustrated in (68):

Let X, Y be nonterminals and x, y terminals such that X dominates x and Y dominates y. Then if X asymmetrically c-commands Y, x precedes y. (Kayne 1994:34)

Linear Correspondence Axiom:



At PF, the intermediate *wh*-copy fuses with the C head forming a unique terminal node:

(69) Morphological Reanalysis (Nunes 2004:41):
$$[CP WH^{i}]_{C^{p}} Q [TP T]_{VP} V [CP]_{C^{0}} #WH^{i} C^{0} #] [TP]_{VP}...WH^{i}...$$

The neat result of this process of fusion is making the intermediate copy distinct in such way that the system does not recognize it as a link chain; consequently, Chain Reduction does not apply. As evidence in favor of his fusion analysis, Nunes adduces the impossibility of phonetic realization of complex *wh*-copies:

German:

(70) *Wessen Buch glaubst du wessen Buch Hans liest? whose book think you whose book Hans reads 'Whose book do you think Hans is reading?'

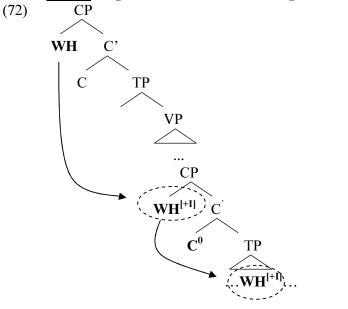
Romani:

(71) *Save chave mislinea save chave o Demiri dikhlâ? which boy you-think which boy 'Who do you think Demir saw?'

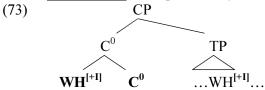
[McDaniel 1986 apud Nunes 2004: 18-9]

Compare now the *I*-Assignment system with Nunes' approach. The first thing to be noticed is that the second assumption in Nunes is an unnecessary step in my approach, as the intermediate copies in (63) and (64) are incorporated in a head, a MWd, which is not *I*-assigned. By the *Sub-Word Deletion Corollary*, then the intermediate copy *must* be phonetically realized regardless of being *I*-assigned. At first glance, given that our analysis makes use of fewer assumptions (one assumption less), it seems to be theoretically superior to Nunes'. Notice, moreover, that the same prediction arises if *wh*-movement proceeds as standardly assumed for cyclic *wh*-movement (72) and the intermediate *wh*-copy is incorporated onto C by some morphological process (Lowering or Local Dislocation; see Embick & Noyer 2001):

Syntax: Regular wh-movement + I-Assignment under c-command



Morphology: Incorporation of the intermediate WH by M-merger



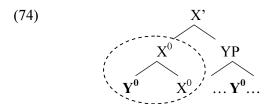
If the relevant operation were Fusion we will obtain the same result as Nunes, assuming that the *wh*-copy fuses on C and not the other way around; otherwise, the [I] feature would project at the MWd level rendering such a feature visible for VIB.

This is an important difference between both systems. As Nunes observes, the Fusion assumption is not a trivial one:

[...] I am not assuming that every head adjunction leads to morphological reanalysis; otherwise standard verb movement to T, for example, would necessarily involve verb duplication.

[Nunes 2004: 169, nota al pie 40]

Does the *I*-Assignment system predict multiple realizations of head copies because of standard V movement to T? The answer is no. Let's see why. Assume first that head movement proceeds by head adjunction:



In this configuration, lower Y⁰ cannot be *I*-assigned because of a failure of the c-command condition in (54ii). Saab (2008) proposes that head chains are *I*-assigned at PF in another cycle of *I*-Assignment (see 53). Now, in the best case the conditions for morphological *I*-Assignment are not stipulated but follow from independent factors. I contend,

then, that these conditions are indeed the same that apply for post-syntactic displacement, namely, immediate locality and adjacency, as defined in Embick & Noyer (2001) for accounting for different varieties of morphological displacements. Put differently, movement and *deletion* at PF obey the same locality conditions, a welcome result, if correct. Here is the relevant definition for Morphological *I*-Assignment:

Morphological *I*-Assignment (Head Ellipsis):

Given a Morphosyntactic Word (MWd) Y^0 , assign a [I] feature to Y^0 if and only if there is a node X^0 identical to Y^0 contained in a MWd *adjacent* or *immediately local* to Y^0 .

(where the notion of containment is reflexive)

Immediate locality is the relation between a head and the head of its complement. It is the structural condition that applies for affix hopping in English, where the relation between the affix and the verbal base can be interrupted by adverbs:

(76) John [$_{TP} t$ [$_{\nu P}$ completely destroy-ed the opposition...

[adapted from Embick & Noyer 2001: 585]

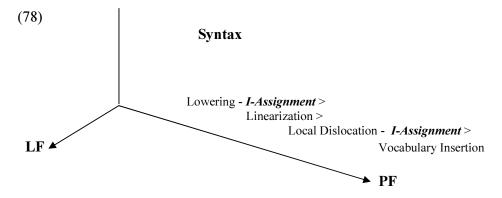
Other cases of affixation at PF require adjacency between the targets of the movement:

(77) a. Mary is the mo-st amazingly smart person . . .

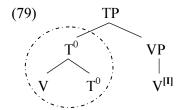
b. *Mary is the t amazingly smart-est person . . .

[Embick & Noyer 2001: 565]

The difference between these two kinds of affixation processes can be accounted for if post-syntactic operations can take place before or after the introduction linearization statements. Once a linearization statement is introduced in the structure, adjacency becomes a relevant condition for displacement. We arrive thus at the following ordering of PF operations.



We can see now that standard head movement feeds morphological *I*-Assignment for head copies at PF once identity is satisfied, which we assume it is:



The system sketched here predicts that multiple copy realization can be the result of different factors. First, with reference to heads, it predicts that a head copy is realized whenever the conditions in (75) are not met. Second, it also predicts that copy pronunciation should arise as a result of the *Sub-Word Deletion Corollary*. As we will see, these two factors underly different varieties of verbal doublings in Spanish and Portuguese. In the next section, I will restrict my attention to the aforementioned fact, namely, that Rioplatense verbal doubling requires anti-adjacency between the two verbal copies under relation: Recall (22), repeated below:

(80) a. Vino Juan, vino.
came J. came
b. *Juan vino vino.
c. V₁ XP, V₂.

Any theory of copy pronunciation must have the tools for accounting for these type of effects. As argued in section 4, the *I*-Assignment system has already the answer to antiadjacency in verbal doubling. I will also demonstrate that Fusion cannot be the cause behind head pronunciation. Yet, the theory could not be complete if not able to account for the opposite pattern, namely, verbal duplication under adjacency. Consider again the example in (3) from European Portuguese:

Polarity Focus (81) A João pois não? O não comprou carro, J. not bought the pois NEG the car, 'John didn't buy the car, did he?' В. Comprou, comprou. bought, bought 'Yes, he DID.'

Again, the *I*-Assignment system handles this type of local doubling without altering the essential analysis already proposed in Martins (2007). I handle this issue in section 5.

4. DERIVING ANTI-ADJACENCY EFFECTS IN RIOPLATENSE SPANISH VERBAL DOUBLING

Let's start this section with more examples illustrating anti-adjacency in Rioplatense Spanish verbal doubling (examples from Saab 2011) and comparing them with regular bi-sentential structures involving two adjacent verbs. ⁴ As expected two different verbs in two different sentences should not produce anti-adjacency effects:

Adjacency *
(82) A: ¿Quién corre esta tarde?
who runs this afternoon
'Who runs this afternoon?'
B: Corre Juan, corre.

⁴ This requirement also applies in Italian, as the following examples from Gullì (2003) show:

(i) Mangia la pizza, mangia. eats the pizza eats 'He really is eating the pizza.'

(ii) *Mangia, mangia.

[Gullì 2003: 31]

runs Juan runs
B': *Juan corre, corre.
Juan runs runs
'John runs!'

(83) A: ¿Quién vino?

who came

'Who came?'

B: Vino Juan, vino.

came Juan came

B': *Juan vino, vino.

Juan came came

'John came!'

(84) A: ¿Qué saco?

what take.out:1sg

'What do I take out?'

B: Sacá la basura, sacá. take.out the rubbish take.out

B': *La basura, sacá, sacá. the rubbish take.out take.out

'Take the rubbish out!'

Bi-clausal structures: Adjacency OK

(85) A: ¿Hiciste el trabajo hoy? did.2SG the work today

'Did you do the work today?'

B: Hoy no, no lo=hice. Lo=hice

today no not ACC.3SG.M=did:1SG ACC.3SG.M=did:1SG

ayer.

yesterday

'I did not do it today. I did it yesterday.'

(86) A: ¿Vino Juan?

came Juan

'Did Juan come?

B: Sí, Juan vino. Vino hace una hora. yes Juan came came does one hour

'Yes, he did. He came one hour ago.'

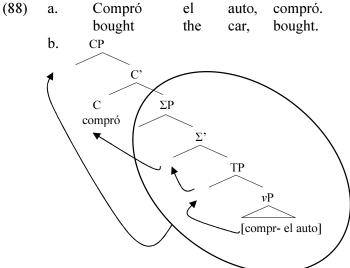
(87) A: ¿Estaba Juan en la fiesta?

was Juan in the party

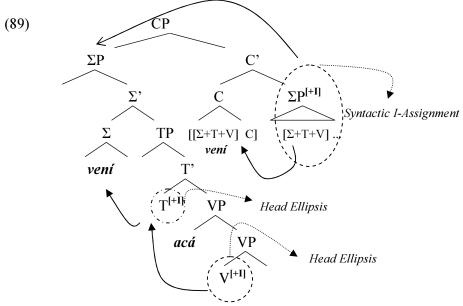
'Was Juan at the party?'
B: Sí, Juan estaba. Estaba junto con María.
yes Juan was was together with María

'Yes, Juan was. He was together with María.'

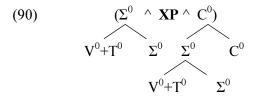
Under the *I*-Assignment framework, the analysis suggested in (29), and repeated below, should be enough to account for these anti-adjacency effects:



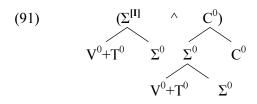
Let's now further elaborate on the details. Adapting Martins's (2007) analysis for verbal doubling in European Portuguese (see section 5), I assume that verbal duplication requires an instance of remnant movement plus verb movement to some position in the left periphery (see 89). Verbal movement is T-to- Σ -to-C and the remnant that moves (by hypothesis to Spec,CP) is Σ P. Given that this movement is phrasal, it triggers an instance of *I*-Assignment under c-command. Cyclic verbal movement, instead, triggers different instances of morphological *I*-Assignment under immediate locality. Consider the tree for a sentence like *Vení acá, vení* Lit: 'come here, come':



As extensively argued in Saab (2008, 2011), the lower verbal head in C cannot be deleted neither under immediate locality, because it is not in the head of the complement of the higher copy, or adjacency, because in this particular case the locative $ac\acute{a}$ intervenes. The abstract structure for a case of anti-adjacent verbal doubling after linearization of MWds is as follows:



Evidently, the presence of an intervening X(P) is crucial, as its absence would make V_1 and V_2 adjacent. Under this scenario, one of the two verbs would be *I*-assigned. This explains why all the versions of verbal doubling with adjacent verbs are strongly ungrammatical: The system just does not generate these sentences. In order to decide which of two verbs is indeed *deleted* we should take a look at the details of some possible adjacent counter-part of (90):



If our basic syntactic and morphological derivation for verbal doubling in Rio de La Plata Spanish is correct, then it has to be the case that *I*-Assignment only targets the left copy of the Σ^0 complex head, because it is the only of the two that complies with the requirements of Head Ellipsis under adjacency:

Morphological *I*-Assignment (Head Ellipsis):

(92) Given a Morphosyntactic Word (MWd) Y⁰, assign a [+I] feature to Y⁰ if and only if there is a node X⁰ identical to Y⁰ contained in a MWd *adjacent* or *immediately local* to Y⁰.

(where the notion of contained is reflexive)

The analysis I am defending for head copy pronunciation in Río de La Plata Spanish has at least two obvious advantages when compared with Nunes' system. First, it has an account for anti-adjacency effects, a fact pending of an explanation in Nunes' approach. Second, it dispenses with the Fusion assumption as a pre-requisite of copy pronunciation. This is not only a theoretical advantage, but it seems to have also interesting empirical consequences. Recall that verbal doubling in the dialect under consideration also requires clitic duplication whenever the verb on the left is associated with a clitic or a clitic cluster:

- (93) a. Lo atamos con alambre, CL.ACC.3.MASC.SG tie.1PL with wire *(lo) atamos.

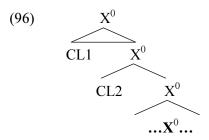
 CL.ACC.3.MASC.SG tie.1PL

 'We tie it with wire!'
- (94) Me lo dio Pedro, me lo CL.DAT.1SG CL.ACC.3.MASC.SG gave P. CL.DAT.1SG CL.ACC.3.MASC.SG dio. gave.

'Pedro gave it to me!'

As already explained in section 2, clitic duplication occurs because once the clitic is attached to the verbal complex head, it is swept away by this head in its way to C^0 .

For my system to work in this and related cases, we must assume that clitic clusters are part of the complex head containing the verb to be duplicated. So, we suppose that the tree in (96) is the correct abstract structure underlying both CL-verb complexes in cases like (95):



If this structure underlies verbal duplications of the relevant kind, then Nunes' account in terms of Fusion looks a bit *suspicious*. Evidence for Fusion in cases with proclisis seems hard to maintain given that insertion proceeds in a transparent way for every terminal node provided by the syntax. Positing Fusion requires strong empirical support as, for instance, morpho-phonological opacity effects, which is not the case here. In the next section, this argument will be further elaborated in connection with Martins's (2007) approach to local doubling in Portuguese.

Yet, in face of the many analyses available for clitic clusters in the literature, one may object that the structure in (96) is in the need of some independent motivation. Fortunately, there is such evidence.

A fact that convincingly shows that the two duplicated verbs are indeed complex heads is the behavior of the intensifier prefix re in Rio de La Plata Spanish. Leaving aside some details, this intensifier re can combine with any type of grammatical category (e.g., re-lindo 're-nice', un re-auto 'a re-car', re-canté 're-sang.1sG', re-lejos 're-far', etc.). The meaning of the whole structure will depend precisely on the relevant category (e.g., re lindo 're-nice' means very nice, but ve-canté 're-sang' means ve ve-sang ve-san

Kornfeld & Kuguel observe that many of the key properties of the intensifier *re* would be accounted for if *re* is analyzed as a phrasal clitic, which only attaches to maximal categories (i.e., *re-XP*).

If our claim that V2 in a verbal doubling construction in Rioplatense Spanish is on the right track, we predict that the intensifier *re* cannot be duplicated in any of the two verbs. This is borne out:

(99) a. Voy al cine, voy.
go.1sG to.the cinema go.1sG
'I go to the cinema!'
b. *Re-voy al cine, re-voy.
RE-go.1sG to.the cinema RE-go.1sG

Even more interestingly, this contrasts with the head prefix *re* in cases like *rehacer* 're-do', where reduplication is allowed:

(100)	a.	Rehice	el	trabajo,	rehice.
		rewrote	the	work	rewrote
	b.	*Re-hice	el	trabajo,	re-hice.
		RE-did	the	work	RE-did

It seems then that we have a robust indication for the head status of the lower verbal copy. This is not a minor point given that that remnant movement all alone cannot be the cause behind duplication. In fact, the *I*-Assignment system predicts a difference between heads and phrases when it comes to evaluate different copy realization scenarios. Concretely, if a phrasal copy vacates a remnant constituent then the copy in the constituent that moves as remnant must not be pronounced under normal circumstances. This is so, because of the command condition of *I*-Assignment, which is operative in the case of phrasal copies (cf. condition 54ii):

This abstract scenario is factually observed in standard cases of remnant movement:

$$\begin{array}{lll} \text{(102)} & \text{a. ...and elected John was.} & [\text{Nunes 2004: 52}] \\ & \text{b. } \left[_{\text{CP}} \left[_{\text{VP}} \text{ elected John}^{[I]}\right] \left[_{\text{TP}} \text{ John was } \left[_{\text{VP}} \text{ elected John}^{[I]}\right]^{[I]}\right]] \end{array}$$

In turn, remnant movement with a head in place of XP should in principle show copy pronunciation of the left head copy, given that: (i) there is no *I*-Assignment in the syntax for the copies at hand and (ii) remnant movement bleeds the contexts for morphological *I*-Assignment under immediate locality. As we have seen in this section, this is exactly the pattern observed in Río de La Plata Spanish, but future inquiry is required in order to sustain this observation.

5. LOCAL AND NON-LOCAL DOUBLING IN ROMANCE: THE CASE OF PORTUGUESE

Let us address now the problem of *local* vs. *non-local* doubling in Romance. Recall the basic contrast:

Río de la Plata Spanish

(103) Vino Juan, vino.

came J. came

'John came!'

European Portuguese

- (104) A. O João não comprou o carro, pois não? the J. not bought the car, pois NEG 'John didn't buy the car, did he?'
 - B. Comprou, comprou. bought, bought 'Yes, he DID.'

[Martins 2007: 81]

Martins proposes that (104B) derives via V-to-T-to- Σ -to-C movement plus VP-ellipsis (a typical property of this language). Σ encodes an affirmative feature and C an emphasis feature. In turn, morphological Fusion of the verb in C is the responsible for the verbal doubling (see 105). Thus, Martins adopts Nunes' (2004) claim that multiple copy realization is the result of morphological Fusion:

(105)
$$[CP [C | C comprou_i]] [SP | S comprou_i] [TP | T comprou_i]$$
 bought bought bought
$$[VP | NULL:] (O | João | comprou | o | carro)]]]]]]]]$$
 the J. bought a car
$$[Martins 2007: 86]$$

Putative evidence in favor of Fusion comes from the incompatibility of local doubling with complex tenses and clitics:

Future:

- (106) A. Ele não atacará o candidato, pois não? he not attack-will the candidate POIS NEG
 - 'He will not attack the candidate, will he?

B. ??Atacará, atacará attack-will/[T+Agr morphemes], 'Yes, he WILL.'

Conditional:

(107) A. Ele não atacaria o candidato, pois não? He not attack-would the candidate *POIS* NEG

'He would not attack the candidate, would he?

B. ??Atacaria, atacaria

attack-would/[T+Agr morphemes], attack-would/[T+Agr morphemes] 'Yes, he WOULD'

Clitics:

(108) A. Não me devolveste o livro que eu not me returned.2SG the book that I

[Martins 2007: 108]

emprestei, pois não? te lent, POIS NEG you-DAT 'You haven't returned me the book I lent you, did you?' В. Devolvi. devolvi. returned. returned 'Yes, I DID.' Β'. *Devolvi-te. devolvi-te. returned-you, returned-you 'Yes, I DID.'

B": *Devolvi-to, devolvi-to. returned-you.it, returned-you.it

'Yes, I DID.'

[Martins 2007: 110]

There are some shortcomings with this analysis, though. First, the incompatibility with complex tenses cannot be taken as evidence for Fusion. There is no reason why complex tenses cannot be subject to Fusion and, in fact, an analysis in terms of Fusion has been proposed for the future in Spanish by well-motivated reasons (Oltra-Massuet & Arregi 2005). Second, the distribution of clitics cannot be taken as evidence for Fusion either. Recall that in Spanish clitics must occur with V_2 whenever they occur with V_1 :

(109) a. Lo atamos con alambre, CL.ACC.3.MASC.SG tie.1PL with wire *(lo) atamos.

CL.ACC.3.MASC.SG tie.1PL

'We tie it with wire!'

Third, the analysis in terms of Fusion cannot account for the anti-adjacency effects typically attested in Spanish and Italian:

(110) **Vino** Juan, **vino**. Río de la Plata Spanish came J. came 'John came!'

(111) a. **È andato** a Parigi, **è andato**. *Italian* is gone to Paris is gone
'He really did go to Paris.' [Gullì 2003: 3]

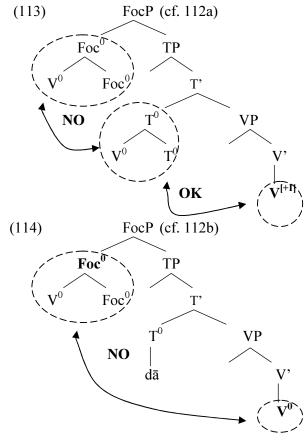
b. Mangia la pizza, mangia. eats the pizza eats 'He really is eating the pizza.'

[Gullì 2003: 31]

Therefore, we have to explore an alternative. Concretely, an analysis as the suggested by Nunes (2004) for similar cases of verbal duplication in Vata (see 112) could raise some interesting consequences if extended to European Portuguese. Regarding Vata, Nunes proposes that there is verb movement to a focus position and then Fusion between these categories. In Saab (2008), this paradigm is reinterpreted in terms of the *I*-Assignment system. Specifically, the movement of the verb to Foc⁰ is enough to account for the basic cases without assuming Fusion. Consider briefly how this analysis proceeds:

Vata:

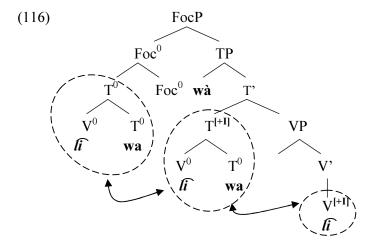
The associated structures for each of these two examples are, respectively, the following:



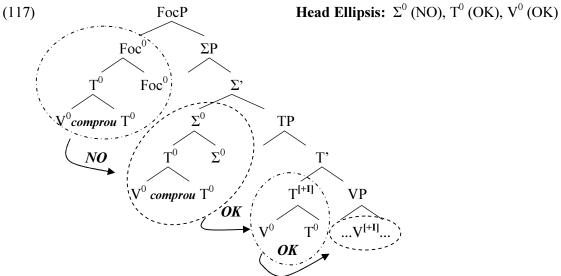
The structure in (113) expresses the impossibility of I-Assignment to the head immediately dominated by Foc^0 , whereas (114) expresses that the requirement of immediate locality is not met between the two verbal copies involved in the structure. The key for understanding (113) is excorporation of V in T. As discussed in Nunes, excorporation allows us to explain why neither the negation nor temporal particles can occur in these contexts:

[Koopman 1984 apud Nunes 2004: 48]

If the verb moved together with T in its way to Foc, then *I*-Assignment would apply to every head below Foc⁰ preventing duplication:



This approach can be extended to verbal duplication in European Portuguese. The difference would be in the fact that in European Portuguese Foc^0 attracts the T^0 head and every categories that it contains, leaving Σ^0 in situ. That is to say, once T^0 moves to Foc^0 , the context for applying Head Ellipsis is not met and, as a consequence, Vocabulary Insertion applies both to Foc^0 and Σ^0 . In turns, the lower heads obtain correctly their [I] feature *via* immediate locality with their antecedent heads. The following tree illustrates this analysis for a simple case like *comprou*, *comprou* Lit: bought, bought':



This structure correctly predicts why there are no anti-adjacency effects in European Portuguese. Head Ellipsis cannot take place between Σ^0 and Foc⁰ because the two Ts are SWds:

Sub-Word Deletion Corollary:

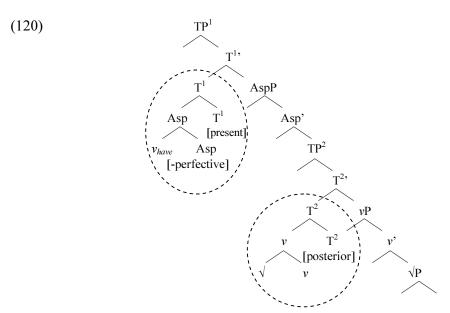
(118) The [I] feature is inert below the MWd level.

A first empirical argument in favour of excorporation comes precisely from the incompatibility of complex tenses in verbal doubling contexts introduced in (106) and (107).

It is well known that both synthetic forms of the future and the conditional both in Spanish and Portuguese derive from an analytical form which included the form of the infinitive plus the auxiliary *haber* 'to have'.

(119) amar+é, as, emos, etc... Spanish love.INF + have.1SG, have.2SG, have.1PL, etc...

Therefore, let us assume the following syntax for the future (the same for the conditional), where the feature [posterior] in the lower tense node (T^2) indicates the way in which the event must be interpreted with respect to the temporal anchor that the higher tense node introduces (T^1). In the case of the future, the main event is then read as posterior to the present and as posterior to the past in the conditional (not illustrated here). In both cases, the feature posterior is realized as -r at the point of VI:



In both modern Spanish and European Portuguese, the form of *have* incorporated onto T¹ lowers to T² (Kornfeld 2005 and Saab 2008) whenever T² encodes [posterior] (that is, the conditional and the future):⁵

⁵ Mesoclisis in Portuguese provides further evidence for a morphological analysis (see also Kornfeld 2005 for old Spanish):

Mesoclisis:

(i) a. Ele ataca-o se puder.

he attack- present-indicative-him if can

'He will attack him if he can.'

b. Ele atacá-lo-á se puder.

he attack-him-will/[T(present)+Agr morphemes] if can

'He will attack him if he can.'

c. Ele atacava-o se pudesse.

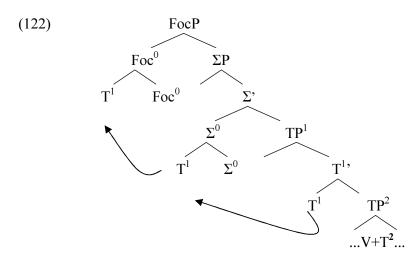
he attack- imperfect-indicative-him if could

'He would attack him if he could.'

d. Ele atacá -lo-ia se pudesse. he attack-him-will/[T(past)+Agr morphemes] if could

(121)
$$\frac{\textbf{Lowering rule:}}{\begin{bmatrix} T^1 & T^1 \end{bmatrix} + \begin{bmatrix} T^2 & T^2 \end{bmatrix}} \rightarrow \begin{bmatrix} T^2 & T^2 \end{bmatrix} + \begin{bmatrix} T^1 & T^1 \end{bmatrix} / T^2_{\text{[posterior]}}$$

With this in mind, the marginality in (106B) and (105B) is accounted for under the excorporation analysis. Concretely, if T^1 excorporates the structure in (122) is obtained:



This configuration does not produce verbal doubling in the first place. The only possible output should be as in (123), an ungrammatical option, because of the stranded affix *a*:

(123) *-a atacará has attack.has

Consider, finally, the distribution of clitics in contexts of verbal doubling in European Portuguese:

(124) A. Não devolveste livro me 0 que eu not returned.2SG the book that I me não? emprestei, pois te you-DAT lent, **POIS** NEG

'You haven't returned me the book I lent you, did you?'

- B. Devolvi, devolvi. returned, returned 'Yes, I DID.'
- B'. *Devolvi-te, devolvi-te. returned-you, returned-you 'Yes, I DID.'
- B": *Devolvi-to, devolvi-to. returned-you.it, returned-you.it 'Yes, I DID.'

[Martins 2007: 110]

'He would attack him if he could.'

[Martins 2007: 106]

A way to account for the different distribution of clitics in verbal doubling for Río de La Plata Spanish and European Portuguese is to assume that verbal movement in European Portuguese reaches a higher position than in Spanish (Martins 1994). Verbal movement is then followed by ellipsis of the remnant constituent in Portuguese:

(125) Devolvi, [devolvi [XP ...CL ...

This analysis maintains the essential assumptions of Martins'. The only difference is how high verb movement goes. Notice that an advantage of both analyses is that they can explain why neither Spanish nor Italian has local doubling: both languages lack V-stranding ellipsis (Goldberg 2005), an option largely attested in Portuguese.

6. CONCLUSIONS

I have given an answer to the questions that have guided this paper:

- (Q1) On the basis of which empirical evidence can we tell whether or not a given doubling phenomenon is the result of copying the same syntactic object?
- (Q2) Under which conditions does copy pronunciation arise as a grammatical option?

As for Q1, the evidence presented here allows us to conclude that verbal doubling in Río de La Plata Spanish is a clear instance of verbal duplication, whereas *v*P-topicalization is a case of base-generation (in consonance with Cable 2004 and *pace* Vicente 2007, 2009).

Then, I have provided a remnant movement analysis for verbal doubling in Spanish along the lines proposed in Martins (2007) and related works. However, I have shown that morphological Fusion is not the responsible for copy pronunciation. Anti-adjacency effects in River Plate Spanish (and Italian) show that adjacency is one of the causes of head deletion at PF. Given that adjacency is not found in verbal doubling environments, one of the lower copies of the verbal chain must be pronounced. This gives us an answer to Q2. Cases of verbal doubling under adjacency (European Portuguese) follow from the *Sub-Word Deletion Corollary*.

Two important theoretical consequences are worth-mention before closing. First, as mentioned, the *I*-Assignment system looks for a unification of different elliptical phenomena (ellipsis, null subjects and copy deletion) under the same underlying mechanism. The differences among these varieties of ellipsis follow from the architecture of the grammar I have adopted (Distributed Morphology). If the conditions for morphological *I*-Assignment discussed here are empirically adequate, then *movement* and *deletion* after syntax can also be unified under an integral theory of the syntax-morphology interface (Embick & Noyer 2001). Second, the varieties of verbal doubling explored in this paper may also shed light for the theory of linguistic variation. If I am on track, what verbal doubling across Romance illustrates is the need of taking seriously the microparametric approach defended in Kayne (2005), according to which movement and silence are the only possible causes of variation within and across languages.

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