Emphatic Verb reduplication in European Portuguese*

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▣ Abstract

European Portuguese manifests a doubling/reduplication phenomenon that affects finite verbs. This phenomenon is widespread in European Portuguese dialects and also found in the standard variety. European Portuguese sentences where the finite verb is reduplicated express emphatic affirmation in the context of denial (of a previous statement or expressed presupposition). The approach to European Portuguese emphatic verb reduplication developed in the paper views the two phonologically indistinguishable verb forms as copies of the same item, that is, as two links of a non trivial chain. This analysis strongly relies on the work of Nunes (2001, 2004) on chain linearization under the copy theory of movement (Chomsky 1995). In what concerns sentential polarity, the view that there is an overall parallel between affirmative and negative sentences is central in the paper, meaning that every clause includes the polarity encoding functional head Sigma (Σ), where aff/neg features are located (Gleitman 1966, Laka 1990).

Under the analysis offered in the paper the sentences with verb reduplication found in European Portuguese can only be derived in languages which have both verb movement to Σ and verb movement to Comp. In this way the contrast between European Portuguese and the Romance languages that cannot express emphatic affirmation by means of verb reduplication (Brazilian Portuguese included) is straightforwardly derived.

As far as the available range of verb movement is what determines whether emphatic verb reduplication is allowed or blocked, verb movement appears to be a unifying factor among European Portuguese dialects.

1 ▣ Introduction

This paper discusses European Portuguese sentences where a finite verb occurs twice. Such sentences express emphatic affirmation and are either elliptic structures produced as replies to a yes/no question presupposing a negative answer or full declaratives which contradict a preceding negative statement. EP emphatic declaratives with repetition of the verb were first observed and studied by Hagemeijer and Santos (2004). These authors analyze sentences like *Ele ofereceu-me um gato, ofereceu* (he offered me a cat, offered – 'he did give me a cat') as involving right adjunction of the final constituent (overtly expressed by a single verb). Under the analysis proposed by Hagemeijer and Santos (2004) the initial array feeding the derivation (i.e. Chomky's numeration) includes two distinct verbal items which happen to be associated with the same phonological content. The alternative approach taken in this paper views the two phonologically indistinguishable verb forms as copies of the same item from the numeration, that is, as two links of a non trivial chain. This other analysis strongly relies on the work of Nunes (2001, 2004) on

chain linearization under the copy theory of movement (Chomsky 1995). In particular I follow Nunes' idea that the phonetic realization of multiple links of a chain is permitted as far as linearization, understood as the application of the Linear Correspondence Axiom (LCA) of Kayne (1994), can still operate. This is what happens when morphological reanalysis makes some copy invisible to the LCA, in a sense to be made precise farther on.

The availability of emphatic verb reduplication appears to extend across all the varieties of European Portuguese (EP), being a case of convergence between the standard variety and the different dialects of the same language with respect to a structure displaying "syntactic doubling".[1] Evidence that emphatic verb reduplication is a common feature of EP dialects can be found in the corpus under development CORDIAL-SIN (*Syntax-oriented Corpus of Portuguese dialects* – http://www.clul.ul.pt). For the sake of simplicity and completeness of empirical coverage (including negative data), however, I will be discussing idealized data throughout the paper (as emphatic verb reduplication is part of my own grammar).

I use here the term *verb reduplication* to describe the overt manifestation of two copies of the verbal chain in a sentence. Thus *verb reduplication* stands in this paper for *syntactic verb reduplication*, which is distinct from *morphological verb reduplication* (see Harris & Halle 2005 and references therein). I prefer the term *reduplication* to the term *doubling* because the latter is used to describe syntactic structures where two elements share the same grammatical relation/function but are distinct items, not copies of a single item that underwent syntactic movement (e.g. *clitic doubling*). The term *reduplication*, on the other hand, has over the term *copying* the advantage of suggesting that no more than two copies of the relevant item get phonetically realized.[2]

The paper is organized in five sections. In section 2 the EP data are discussed in order to establish the mono-sentential nature of emphatic verb reduplication structures (which are to be distinguished from instances of sentence repetition). Then it is proposed that emphatic verb reduplication in EP results from the combination of verb movement to $\Sigma_{[+aff]}$ and (subsequent) verb movement to $C_{[+emph]}$, with those two verbal copies ending up phonetically realized. Section 2 also clarifies how morphological reanalysis works in order to allow both copies to be phonetically expressed. Section 3 offers some comparative evidence that supports the analysis introduced in section 2. The relevant observation is that the Romance languages that lack verb movement to C (like Brazilian Portuguese) or lack verb movement to Σ (like Spanish) do not allow emphatic affirmative sentences with verb reduplication. This is exactly what is predicted if verb reduplication is derived by verb movement to

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[1] I use here the term "syntactic doubling" as it identifies the topic of the workshop *Syntactic Doubling in European Dialects* organized by the *European Dialect Syntax (Edisyn) Project* in March 16-18, 2006 (Meertens Institute, Amsterdam). Nevertheless, I will rather use the term *reduplication* throughout the paper and will explain this choice.

[2] In fact EP verb reduplication structures do not allow that the verb be spelled-out but twice:
(i) [A] a. O João não vem almoçar.
        the J.   not   comes lunch-INF
        'John is not coming for lunch.'
  [B] b. O João vem almoçar, vem.
        the J.   comes lunch-INF comes
        'Of course John is coming for lunch.'
     c.* O João vem almoçar, vem, vem.
        the J.   comes lunch-INF comes comes.
        'Of course John is coming for lunch.'

Σ followed by verb movement to C. The alternative strategies to express emphatic affirmation displayed by Brazilian Portuguese and Spanish are briefly considered in order to show how they can be handled in a way coherent with the analysis proposed to account for the EP verb reduplication structures. In section 4, some morphological restrictions on the availability of verb reduplication in EP are identified. In view of the fact that it is a morphological operation (namely, *fusion* in the terms of Halle and Marantz 1993) that makes the realization of multiple copies of a chain possible, it is expected that constraints on such possibility are of a morphological nature (see Nunes 2001, 2004). The data presented in section 4 show that morphological complexity (brought up by compounding, future and conditional formation, or encliticization) hampers or eventually blocks emphatic verb reduplication.

2 ▣ Double realization of verbal copies in European Portuguese

This section includes a description of the EP emphatic verb reduplication structures (see 2.1), an analysis of such structures as a case of double realization of links of the verb chain (see 2.2), and some considerations on the nature of *fusion*, the morphological operation that allows that more than one link per chain be phonologically expressed (see 2.3).

2.1 ▣ Initial empirical observation

Emphatic affirmative answers to yes/no questions appear in the context of a tag question presupposing a negative answer. Emphatic affirmative declaratives, on the other hand, assert the untruth of a preceding negative statement. Both types of sentences are thus means to express disagreement through (reinforced) affirmative polarity (cf. Pope 1976). In European Portuguese, emphatic affirmation can be syntactically expressed through verb reduplication. This is illustrated by sentences (1b) and (2b) below, which contradict a negative presupposition and a negative statement respectively. Sentences (1a) and (2a) establish the relevant discourse context for (1b) and (2b).

(1) [A]   a. O João não comprou   o carro,   pois   não?
              the J.   not   bought   the car   POIS [= CONFIRMATIVE WORD]   NEG
              'John didn't buy the car, did he?'

   [B]   b. Comprou, comprou.
              bought   bought
              'Yes, he DID.'

(2) [A]   a. O João não comprou   o   carro.
              the J.   not   bought   the   car
              'John did not buy the car.'

   [B]   b. O João comprou   o   carro,   comprou.
              the J.   bought   the   car   bought
              'John did buy the car.'

The prosodic pattern exhibited by the (phonetic) sequences in (1b) and (2b) shows that we are not dealing with bi-sentential structures, that is, with instances of sentence repetition (in a reiterative manner). While sentence repetition would usually imply a prosodic break separating the two sentences and a falling intonation at the end of each sentence, in (1b) and (2b) there is no prosodic break (the comma being a conventional orthographic artifice) and the sequences are associated with an overall rising intonation. The inexistence of a prosodic break before the repeated verb in emphatic affirmative sentences can be tested on the basis of the behaviour of the

dental fricative /s/ in EP. In EP the dental fricative /s/ is phonologically realized as [ʃ], [ʒ] or [z] when it occurs in coda positions. The voiceless palatal [ʃ] appears word-internally before a voiceless consonant and in word-final position before a pause (e.g. *cestas* [seʃtɐʃ] 'baskets'). The voiced palatal [ʒ] emerges before a voiced consonant, both word-internally or in word-final position sentence-internally, showing that the voice-assimilation process that turns [ʃ] into [ʒ] takes place across word boundaries as far as there is no prosodic break intervening between the two words (e.g. *osgas grandes* [ɔʒgɐʒgrɐdiʃ], geckos big, 'big geckos'). The voiced dental realization [z] shows up when the fricative coda is followed by a word-initial vowel and no pause breaks the fricative+vowel sequence (e.g. *três amigos* [trezɐmiguʃ] 'three friends'). (See Mateus and Andrade 2000). The phonological realization of the dental fricative in coda position thus gives us the means to test whether there is a prosodic break before the second occurrence of the verb in the EP verb reduplication structures or not. As the emphatic affirmative sentence in (3) below shows the fricative coda is realized as [z] before the word initial vowel of the repeated verb. This clearly shows that there is no prosodic break there. If a pause would intervene at the relevant position, a voiceless palatal realization of the fricative would emerge, as exemplified by the bi-sentential sequence in (4) below.[3] Note that it is not impossible that repetitions of short (discrete) sentences are produced without the typical intonational phrase breaks associated with separate utterances, in which case the contrast we are describing will be bleached. But the crucial point here is that verb reduplication sentences like (3b) are necessarily mapped into one single intonational phrase. Hence the ungrammaticality of (5b) below, where the palatal realization of the coda fricative in V1 signals the existence of a break separating it from V2. (Sentence (5b) is to be contrasted with (4b)).

(3) [A]   a. Eu   não   ando a fazer nada   de mal.
           I   not   go   to do   nothing of wrong
           'I'm not doing anything wrong.'

   [B]   b. Anda[z] anda[ʃ]. [with overall rising intonation]
           go   go
           'Of course you are.'

(4) [A]   a. Eu   não   ando a fazer nada   de mal.
           I   not   go   to do   nothing of wrong
           'I'm not doing anything wrong.'

   [B]   b. Anda[ʃ].Anda[ʃ] sim.
           go.   go   SIM [= AFFIRMATIVE WORD]
           'You are. Of course you are.'

(5) [A]   a. Eu   não   ando a fazer nada   de mal.
           I   not   go   to do   nothing of wrong
           'I'm not doing anything wrong.'

   [B]   b.*Anda[ʃ] anda[ʃ]. [with overall rising intonation]
           go   go
           'Of course you are.'

Another clear indication that emphatic verb reduplication in European Portuguese must be separated from sentence repetition is the fact that the latter does not convey

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[3] Parallel examples can be constructed to illustrate the alternation between [ʒ] in emphatic verb reduplication structures and [ʃ] in reiterative bi-sentential sequences.

emphatic affirmative disagreement. It would thus be excluded from the discourse contexts set by (1a) and (2a) above. Accordingly, it may express agreement, as in (6) below, which is not compatible with emphatic verb reduplication.

(6) [A]   a. Felizmente,   correu   tudo bem.
fortunately   ran   all   well
'Fortunately, everything went jus fine.'

   [B]   b. Correu. (Pois)   correu.
ran   POIS [= CONFIRMATIVE WORD]   ran
'It did. In fact it did.'

      c.#Correu, correu. [with rising intonation]
ran   ran
'It DID.'

Emphatic affirmative sentences with verb reduplication cannot include evidential adverbs such as *realmente* 'really', *certamente* 'certainly', *efectivamente* 'efectively', *obviamente* 'obviously' or the adverbial expression *de facto* 'in fact' (see example (7) below). To the contrary, reiterative sentence repetition appears totally in harmony with such adverbs (see example (8) below). Evidential adverbs reinforce the polarity value of the sentence where they occur and may express agreement with a previous statement or not. In any case, they are not allowed to coexist with emphatic verb reduplication within the same sentence. When assertive evidential adverbs express agreement (associated with affirmation), a semantic clash with verb reduplication arises (because the latter expresses disagreement). When evidential adverbs convey disagreement, semantic redundancy and possibly syntactic incompatibility with emphatic verb reduplication (see next section) exclude sentences like (7b) below.

(7) [A]   a. O João gosta de ler. / O João não   gosta de ler.
the J.   likes of read / the J.   not   likes of read
'John likes reading.' / 'John doesn't like reading.'

   [B]   b.*O João realmente   gosta de ler,   gosta.⁴ [with rising intonation]
the J.   really   likes of read-INFIN likes
'John does like reading.'

(8) [A]   a. O João gosta de ler.
the J.   likes of read
'John likes reading.'

   [B]   b. O João (realmente)   gosta de ler.   (Realmente)   gosta.
the J.   really   likes of read   really   likes
'John (really) likes reading. He really does.'

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⁴ The sentence is ungrammatical irrespective of the evidential adverb position, as shown below:
(i) [A]a. O João não   gosta de ler.
the J. not   likes of read
   'John doesn't like reading.'

   [B]a.*O   João   realmente gosta de ler,   gosta.
the J. really   likes   of read-INFIN   likes

   b.*Realmente   o João gosta de ler,   gosta.
really   the J. likes of read-INFIN   likes

   c.*O João gosta realmente de ler,   gosta.
the J.   likes really   of read-INFIN   likes

   d.*O João gosta de ler   realmente gosta.
the J.   likes of read-INFIN   really   likes
   'John does like reading.'

The distinction between mono-sentential verb reduplication and bi-sentential reiterative repetition can be further tested by observing their contrastive behaviour with respect to sequences of a finite verb plus a non finite verb, be the finite verb an auxiliary (e.g. *ser* 'be') or a raising/control verb (e.g. *ir* 'go'). While syntactic reduplication cannot target but the finite verb (see (9b) vs. (9c) and (10b) vs. (10c)), the whole verbal sequence can be reiteratively repeated (see (9c) vs. (9d) and (10c) vs. (10d)).

(9) [A] a. Eu   não fui   avisada.
I   not   was   warned
'I wasn't warned.'

   [B] b. Tu   foste avisada, foste.　　　　　[verb reduplication (rising intonation)]
you   were   warned   were
'Of course you were warned.'

       c.*Tu   foste avisada, foste avisada. [verb reduplication (rising intonation)]
you   were   warned   were   warned
'Of course you were warned.'

       d. Tu   foste avisada. Foste avisada. Não finjas   que   não. [sentence
You   were warned   were warned. not pretend that   not   repetition]
'You were warned. I'm sure you were warned. Don't pretend you were not.'

(10) [A] a. O João não   vai   vir.
the J.   not   goes come-INF
'John is not coming.'

   [B] b. O João vai   vir,   vai.　　[verb reduplication (rising intonation)]
the J.   goes come-INF goes
'Of course John is coming.'

       c.*O João vai   vir,   vai   vir.[verb reduplication (rising intonation)]
the J.   goes come-INF goes come-INF
'Of course John is coming.'

       d. Tem calma.   O João vai   vir.   Vai   vir. [sentence repetition]
has calm   the J.   goes come-INF goes come-INF
'Calm down. John will come. He probably/certainly will.'

Finally, it must be pointed out that emphatic verb reduplication is incompatible with negation. EP verb reduplication is a grammatical strategy to express emphatic disagreement in affirmative sentences only. Negative sentences are ungrammatical with reduplication of the verb by itself (see (11b) below) or associated with the predicative negation marker (see (11c) below). Because verb reduplication is distinct from sentence repetition, there is no constraint against repeating reiteratively (in a bi-sentential structure) the sequence negation marker plus verb (see (11d) below).

(11) [A] a. O João ganhou a lotaria.
the J.   won   the lottery
'John won the lottery.'

   [B] b.*O João não   ganhou a lotaria, ganhou.
the J.   not   won   the lottery   won
[no interpretation available]

       c.*O João não   ganhou a lotaria, não   ganhou. [with rising intonation]
the J.   not   won   the lottery   not   won
'John did NOT win the lottery.'

d. O João não ganhou a lotaria. Não ganhou (infelizmente).
   the J.   not   won   the lottery   not   won   regrettably
   'John didn't win the lottery. Regrettably, he didn't.' [5]

2.2 ▣ V-TO-T-TO-Σ-TO-C MOVEMENT IN EP EMPHATIC VERB REDUPLICATION

Having established that European Portuguese emphatic verb reduplication represents mono-sentential structures, I will now propose an analysis for such structures. But before I go into it, I must say that I will be adopting the view that the distinction between strong and weak functional heads has place in grammar (departing from Chomsky 2000, 2001). Following Costa and Martins (2003, 2004) I assume that the distinctive property of strong functional heads is the fact that they require visibility at PF. Thus a strong functional head is licensed if and only if it is given phonological content, or in the terms of Costa and Martins (2003, 2004) if it is lexicalized. Lexicalization may arise under syntactic merger, under head or XP-movement, or under morphological merger.

Looking now at emphatic affirmative answers to yes/no questions like (12b) below, verb reduplication is to be seen as an instance of phonetic realization of the two higher links of the verbal chain, as represented in (12c).

(12)[A] 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] b. Comprou, comprou.
         bought   bought
         'Yes, he DID.'

        c. [$_{CP}$ [$_{C'}$ [$_C$ comprou$_i$] [$_{ΣP}$ [$_{Σ'}$ comprou$_i$ [$_{TP}$ [$_{T'}$ ~~comprou~~$_i$
           bought   bought   bought
           [$_{VP}$ *NULL*: ~~(O João comprou   o carro)~~]]]]]]]
                      the J.   bought   a car

Emphatic answers in EP activate the domains of Σ and C. In affirmative emphatic answers C encodes emphatic features while Σ encodes [+aff] polarity features. Both functional heads are strong and need to be visible at PF. The verb reduplication pattern is derived in EP with verb movement to Σ, followed by verb movement to C. As the verb copies in Σ and in C are both phonetically realized, the visibility requirement of the two strong functional heads is satisfied. The double phonetic realization of V is possible because the higher copy undergoes morphological reanalysis with C (resulting in a C^0 category) and so becomes invisible to the LCA (see below for details). Verb movement to Σ generally licenses VP deletion in EP, as far as the appropriate discourse antecedent for VP deletion is available (cf. Martins 1994, Holmberg (forthcoming)). The null VP in (13b) contains the subject, which

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[5] Emphatic negative sentences are illustrated by (i) below, where only apparently the negative word *não* is repeated. See on this matter footnote (25) in section 2.2.
(i) [A]a. O João ganhou   a lotaria.
        the J.   won   the lottery
        'John won the lottery.'
   [B]b. O João não   ganhou   a lotaria,   não.
        the J.   not   won   the lottery   no
        'John did NOT win the lottery.'

does not move to Spec,TP because T is not necessarily associated with an EPP feature in EP (see Costa 2003, Costa and Martins 2003, 2004).[6]

In turn, EP emphatic affirmative declaratives with verb reduplication have the structure represented in (13c).

(13) [A] 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   bough
          'He did buy the car.'

      c. [$_{CP}$ [ele comprou$_i$ o carro]$_k$ [$_{C'}$ [$_C$ comprou$_i$] [$_{ΣP}$ ~~ele$_j$~~[$_{Σ'}$ ~~comprou$_i$~~
          he bought   the car   bought   he   bought
          [$_{TP}$ [$_{T'}$ ~~comprou$_i$~~ [$_{VP}$ ~~ele$_j$ comprou$_i$ o carro~~]]]]]$_k$]]
          bought   he   bought   the car

Emphatic declaratives, like emphatic answers, activate the domains of Σ and C in EP. But in emphatic declaratives the clausal constituent is a Topic in the CP space. Sentences like (13) above are derived in EP with movement of V-to-T-to-Σ-to-C, followed by movement of the remnant ΣP to Spec, CP (or to the specifier position of a Top head). Again, the double phonetic realization of the verb is possible because there is morphological reanalysis in C. (For the details on how deletion of lower copies and linearization proceed, so that (13c) is spelled out as (13b), see Nunes (2004) and Bošković and Nunes (2005)).[7]

The proposed analysis of EP emphatic verb reduplication is in tune with the properties associated with such structures described in section 2.1 above. The intonation pattern of verb reduplication sentences signals their mono-sentential nature. The incompatibility between emphatic verb reduplication and evidential adverbs can be understood admitting with Cinque (1999) that such adverbs belong in the "COMP space". According to the analysis proposed herein, this is where the verb moves to in emphatic verb reduplication structures. So evidential adverbs and a COMP-moved verb may well compete for the same grammatical role, being alternative licensors for the emphatic features of C$_{[+emph]}$. As for the exclusion of negation from emphatic verb reduplication structures, it is also expected under the approach taken in this paper. Because the negative head *não* ('not') has [+neg] features, it cannot be merged with a [+aff] Σ-head. If on the other hand *não* is merged with Σ$_{[+neg]}$, the strong property of the functional head is satisfied (as Σ is lexicalized through syntactic merger); therefore, verb movement to Σ is blocked. Verb movement to C, skipping the Σ position, is also excluded as it would violate the Head Movement Constraint. (If the negative marker and the verb would form a complex head through incorporation and subsequently move to C, morphological reanalysis with C would not be permitted – see section 4 below). Finally, the fact that verb sequences cannot be reduplicated (as a whole) also finds a straightforward explanation under the

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[6] EP preverbal subjects occupy Spec, ΣP and are interpreted as unmarked topics (cf. Martins 1994:182).

[7] Note that if morphological reanalysis had not taken place, the verbal copy in Σ would be deleted (as it is c-commanded by the verbal copy in C). Hence the constituent moved to Spec, CP would not include the verb. Nunes (2004:50-55) offers a representational approach to chain reduction that adequately deals with the linearization of chains created by remnant movement. Bošković and Nunes (2005) alternatively propose a derivational approach to chain reduction which is also unproblematic with respect to remnant movement structures.

current analysis. Recall that in emphatic verb reduplication structures only the finite verb can surface twice, as illustrated by (14) and (15) below. Both the reduplication of the entire verbal sequence and the reduplication of the non-finite verb lead to ungrammaticality:

(14) [A] a. Eu   não   estava   cantando.
         I   not   was   singing
         'I wasn't singing.'

    [B] b. Tu   estavas   cantando,   estavas.
         you   were   singing   were
         'Of course you were singing.'

        c.*Tu   estavas   cantando,   estavas   cantando.
         you   were   singing   were   singing
         'Of course you were singing.'

        d.*Tu   estavas   cantando,   cantando.
         you   were   singing   singing
         'Of course you were singing.'

(15) [A] a. Ele   não   pode sair   de casa.
         he   not   can   leave-INF   of house
         'He can't go out.'

    [B] b. Ele   pode sair   de casa, pode.
         he   can   leave-INF   of house can
         'Of course he can go out.'

        c.*Ele   pode sair   de casa, pode   sair.
         he   can   leave of house can   leave
         'Of course he can go out.'

        d.*Ele   pode sair   de casa, sair.
         he   can   leave-INF   of house leave-INF
         'Of course he can go out.'

There are two types of analyses for verb sequences integrating a non-finite verb: either the two verbal heads are taken to occupy disjoint structural positions throughout the derivation (see for example Wurmbrand 2001) or they are taken to form a verbal complex through incorporation (see for example Roberts 1997). Under the former type of approach, the ungrammaticality of the (c) and (d) sentences above, in contrast to the (a) sentences, is expected because locality conditions prevent movement of the lower verbal head to C (in violation of the Head Movement Constraint); besides, once the higher verbal head moves to C, the strong property of the functional head (requiring that C be lexicalized) is satisfied, so further movement to C is blocked under general economy principles. Under the second type of approach, the morphological complexity of the head integrating the two verbs would not allow morphological reanalysis in C, thus preventing verb reduplication. The incompatibility between morphological complexity and morphological reanalysis will be the topic of section 4 below. It should be noted, however, that under the incorporation approach the contrast between the (b) sentences and the (c)-(d) sentences in (14)-(15) above can only be explained if the (b) sentences are derived with excorporation of the finite verb that moves to C.

A further property of emphatic verb reduplication, which was not mentioned in section 2.1, is its root nature. As a matter of fact, because the derivation of both emphatic affirmative answers and emphatic affirmative declaratives involves verb movement to C, we expect it to be blocked in (finite) subordinate clauses where

either the complementizer *que* 'that' is merged with C or C is lexicalized in some other way. The ungrammatical sentence (16c), to be contrasted with the well-formed (16b), shows that emphatic verb reduplication is actually restricted to root domains.

(16) [A] a. Ele não ouve bem.
          he   not   hears well
          'He doesn't hear well.'
[B] b. Ele ouve bem, ouve.
          he   hears well   hears
          'He does hears well.'
        c.*Eu sei que eleouve bem, ouve.
           I   know that he hears well hears
           'I know that he does hear well.'

Hence, in complex sentences the matrix verb can display reduplication (see (14b) below) while the embedded verb cannot (compare (17b) with (17c) below).

(17) [A] a. Não sei   se   elevem à   festa.
          not know-1SG whether he comes to-the party
          'I don't know whether he is coming to the party.'
[B] b. Sabes   se/   que elevem à   festa, sabes.
          know-2SG whether/ that he comes to-the party know-2SG
          'You do know whether/that he is coming to the party'
        c.*Sabes   que elevem à   festa, vem.
          know-2SG that he comes to-the party comes
          'You know that he WILL come to the party.'

This root/subordinate contrast is reminiscent of the root/subordinate asymmetry found in (asymmetric) V2 languages and can be accounted in a similar way, crucially invoking verb movement to C (which subordinate clauses typically make unavailable).[8]

Before we proceed to the next section, it will be considered whether independent evidence can be offered to support the central claims of the proposed analysis, namely: (i) in EP emphatic verb reduplication sentences the verb moves to Σ and further moves to C; (ii) morphological reanalysis takes place in C (not in Σ).

Castro and Costa (2001) show that in European Portuguese certain adverbs are heads, not maximal projections, and identify among them the temporal/aspectual *já* ('already'). The interesting observation about *já* in relation to emphatic verb reduplication structures is that the presence of preverbal *já* in such structures actually blocks verb reduplication, as shown in (18) and (19) below. It is a matter of consensus that EP has V-to-I movement, so the verb generally moves to T.[9] This much being granted, the ungrammaticality of (18c) and (19c) can be thoroughly explained. In such sentences the adverbial head *já* blocks verb movement beyond T; thus the verb cannot reach the higher functional heads Σ and C, then undergo

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[8] As for infinitival subordinate clauses, either they are not CPs (having a more reduced structure) or they presumably have a deficient 'Comp-spectrum' which cannot encode emphatic polarity.
[9] I am assuming with Costa (2003) and Costa & Martins (2003, 2004) that V-to-I movement in EP is in general verb movement to T (not beyond). In minimal verbal answers to yes/no questions and in the type of emphatic affirmative sentences discussed in this paper, however, I take verb-movement to Σ to arise because in such cases Σ is the locus of 'polarity-focus' (cf. Holmberg (forthcoming)). Crucially, I am not assuming that verb movement to Σ is just a consequence of cyclic movement to C. If this were the case, Spanish would allow emphatic verb reduplication, against the facts (cf. section 3).

morphological reanalysis with C and be spelled-out twice.[10] The availability of sentences like (18d) and (19d), where the adverb *já* is repeated, suggests that *já* can lexicalize C$_{[+emph]}$ and undergo morphological reanalysis with C. Given the Head Movement Constraint, this becomes the only available option whenever the head *já* is closer to C than the verb.

(18) [A] a. O João ainda não   saiu, pois não?
          the J.   yet   not   left   POIS NEG
          'John hasn't left yet, has he?'

    [B] b. Saiu, saiu.
          left   left
          'Yes, he HAS.'

      c.*Já   saiu, saiu.
          already left   left
          'Yes, he HAS.'

      d. Já   saiu, já.
          already left   already
          'Yes, he HAS.'

(19) [A] a. A Maria   ainda não se   penteou.
          the M.   yet   not herself   combed
          'Mary hasn't combed herself yet, has she?'

    [B] b. A Maria   já   penteou-se,   penteou.
          the M.   already   combed herself combed
          'Of course Mary has combed herself already.'

      c.*A Maria   já   se   penteou,   penteou.
          the M.   already   herself   combed   combed
          'Of course Mary has combed herself already.'

      d. A Maria   já   se   penteou,   já.
          the M.   already   herself   combed   already
          'Of course Mary has combed herself already.'

Because in the current work I will not go into establishing what the exact position of the adverb *já* is in the functional structure of the clause, it remains undecided

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[10] Naturally preverbal adverbs that are not heads do not block verb movement beyond T and are so compatible with emphatic verb reduplication (see (ib) and (iib)). Concomitantly, phrasal adverbs cannot be reduplicated in order to convey emphatic disagreement (see (ic) and (iic)).

(i) [A] a. O João nem sempre   apoiou   a Maria.
        the J.   NEG always   supported the M.
        'John hasn't always supported Mary.'

  [B] b. O João sempre   apoiou a Maria, apoiou.
        the J.   always   supported Mary supported
        'Of course John has always supported Mary.'

    c.* O João sempre   apoiou a Maria, sempre.
        the J.   always   supported Mary always
        'Of course John has always supported Mary.'

(ii) [A] a. O João não   perdeu   logo   a paciência com   a Maria.
        the J.   not   lost   shortly the patience   with   the M.
        'John didn't lose his patience with Mary shortly.'

  [B] b. O João cedo   perdeu   a paciência com   a Maria, perdeu.
        the J   early   lost   the patience   with   the M.   lost
        'John did soon lose his patience with Mary.'

    c.* O João cedo   perdeu   a paciência com   a Maria, cedo.
        the J.   early   lost   the patience   with   the M.   early
        'John did soon lose his patience with Mary.'

whether the adverbial head *já* precisely blocks verb movement to Σ or verb movement to C. In turn, the unavailability of verb reduplication in negative sentences can be seen as a by-product of the unavailability of verb movement to C in negative sentences as the negative head *não* ('not') merged in Σ blocks it.

Some indirect evidence for verb movement to C in emphatic verb reduplication sentences is also worth being discussed. Comparative evidence obtained by contrasting European Portuguese with Brazilian Portuguese will be presented in section 3 below. A second type of indirect evidence can be offered by comparing different strategies to syntactically express emphatic affirmation in European Portuguese. Besides verb reduplication sentences, we find in EP emphatic affirmative sentences where the affirmative word *sim* or the confirmative word *pois* appear to be the correlate of the rightward verbal copy in verb reduplication sentences, as illustrated in (20):

(20) [A] a. O João não comprou   um   carro.
             the J.   not   bought   a   car
             'John didn't buy a car.'

      [B] b. O João comprou   um   carro,   comprou.
             the J.   bought   a   car   bought
             'John did buy a car.'

           c. O João comprou   um   carro,   sim.
             the J.   bought   a   car   AFFIRMATIVE WORD
             'John did buy a car.'

           d. O João comprou   um   carro,   pois.
             the J.   bought   a   car   CONFIRMATIVE WORD
             'John did buy a car.'

It seems sensible to analyse the different structures that syntactically express emphatic affirmation in a uniform way in what concerns the role played by the functional heads Σ and C. Under this perspective, variation between EP emphatic affirmative structures (as illustrated in (20)) essentially reduces to how each one of the heads Σ and C satisfies its PF visibility requirement (this ultimately being a consequence of what Numeration is chosen). Martins (forthcoming) shows that the EP affirmative word *sim* is a (phrasal) adverb and adjoins to ΣP (see also footnote 21). Let us admit that the confirmative word *pois* is also an adjunct to ΣP. Under the stated premises, we expect that in emphatic affirmative sentences the verb surfaces to the left of *sim* or *pois* as movement to the C space will be necessary in order for C$_{[+emph]}$ to be lexicalized (cf. section 3 below), whereas in non-emphatic affirmative sentences the verb appears to the right of the relevant adverbial words. This prediction is born out as attested by the data in (21) to (24) below. Example (21) shows that when a neutral affirmative answer to a yes/no question includes the affirmative word *sim* and the verb, the verb follows the affirmative word. In contrast, an emphatic affirmative answer displays the inverse order, with the verb preceding the affirmative word (see (22) below).

In a parallel manner, when the confirmative word *pois* is included in a sentence that expresses agreement with a preceding assertion, the verb follows the confirmative word (see (23) below); but when a sentence with *pois* conveys emphatic disagreement, the verb surfaces before *pois* (see (24) below).[11]

(21) [A] a. O João comprou um carro?
             the J.   bought   a   car
             'Did John buy a car?'

     [B] b. Comprou.
             Bought
             'Yes.'

          c. Sim, comprou.
             AFF   bought
             'Yes.'

(22) [A] a. O João não comprou um carro, pois não?
             the J.   not bought   a   car   CONF(IRMATIVE WORD) NEG
             'John didn't buy a car, did he?'

     [B] b. Comprou sim.
             bought   AFF
             'Yes, he DID.'

(23) [A] a. O João comprou um carro./O João não comprou um carro.
             the J.   bought   a   car / the J.   not bought   a car
             'John bought a car.' / 'John didn't buy a car.'

     [B] b. Pois comprou./ Pois não comprou.
             CONF bought./   CONF not   bought
             'In fact he did.' / 'In fact he didn't.'

(24) [A] a. O João não comprou um carro.
             the J.   not bought   a   car
             'John didn't buy a car.'

     [B] b. Comprou pois.
             bought   CONF
             'John did buy a car.'

Under the analysis put forth in this paper, verb reduplication in emphatic affirmative sentences is an effect of morphological reanalysis. It was also proposed that morphological reanalysis takes place in C. The reader may wonder at this point why C and not Σ. Comparing emphatic with neutral verbal answers in EP may be illuminating in this respect. I assume with Laka (1990) that in the Romance languages the single word that surfaces in minimal neutral answers to yes/no questions gives lexical content to Σ (cf. footnote 12 above and section 3 below). If this is so, the fact that verb reduplication is not allowed in neutral affirmative answers to yes/no questions, as illustrated in (25) below, offers fair evidence that Σ is not a locus of morphological reanalysis.

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[11] I take the word *pois* to be a confirmative not an affirmative word because it is compatible with negation (see (22b) above) and cannot constitute an affirmative answer to a yes/no question, in contrast with *sim*:

(i) [A] a. O João comprou um carro?
          the J.   bought   a   car
          'Did John buy a car?'
   [B] b.* Pois. / Sim.
          'yes.'

(25) [A] a. O que é que te aconteceu?! Caíste outra vez?
      the what is that you-DAT happened   fell-down-2SG other time
      'What happened to you?! Did you fall down again?'
   [B] b. Caí.
      fell-1SG
      'Yes.'
      c. *Caí, caí.   [with rising intonation]
      fell-1SG fell-1SG
      'Yes.'

Farther on, in section 3, it will be shown that comparative evidence points in the same direction, because the unavailability of emphatic verb reduplication structures in Brazilian Portuguese, in contrast to European Portuguese, can be thoroughly accounted as the effect of BP lacking verb-movement to C while permitting verb-movement to Σ.

2.3 ▣ FUSION

Before proceeding to the next section some clarification on what is meant by *morphological reanalysis* and how it permits the phonetic realization of multiple copies of a chain is in order.

Nunes (2001, 2004) shows that linearization, the operation that converts the hierarchical structure received from Syntax into a string (of linearly ordered units) at Morphology, cannot apply if copies created by movement are not appropriately dealt with. The LCA (Kayne 1994) derives precedence relations from asymmetric c-command. The problem with a structure that includes several copies of the same item of the initial array that feeds a derivation is that such copies are non-distinct elements for the purposes of linearization (see Chomsky 1995). If the LCA applies on a structure with all copies of moved items preserved, linearization will not be achieved. The reason for such failure is that when one item is represented by several nondistinct instantiations scattered over the syntactic tree (i.e. the links of a non-trivial chain), the LCA derives the contradictory requirement that such item precedes and is preceded by itself (as it c-commands and is c-commanded by itself). In order to avoid such dead end, an operation of copy deletion applies in an optimal way (according to economy considerations; see Nunes 2001, 2004) so as to leave a single link of a non-trivial chain visible for linearization according to the LCA.[12] The operation of copy deletion conceived by Nunes is Chain Reduction: "Delete the minimal number of constituents of a nontrivial chain CH that suffices for CH to be mapped into a linear order in accordance with the LCA" (Nunes 2004: 27).

Although Chain Reduction in the default case deletes all but one link of the chain, morphological reanalysis may exempt a (former) constituent of a nontrivial chain from Chain Reduction and the LCA, with the consequence that more than one copy of a moved item will end up phonologically realized.

Nunes (2001, 2004) takes morphological reanalysis to be specifically *fusion* as defined by Halle and Marantz (1993), i.e. an operation that takes two sister terminal heads under a single category node and fuses them into a single terminal node. Within the Distributed Morphology (DM) model of grammar, fusion takes place before linearization, which is imposed by Vocabulary Insertion (a late operation according to DM assumptions). Therefore fusion applies at a point in a derivation

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[12] The undeleted link is usually the head of the chain, but other possibilities exist under particular circumstances (see Nunes 2004, Bošković and Nunes (2005)).

when the hierarchical structure inherited from syntax is still preserved. Being an operation of the morphological component, however, fusion derives a syntactically opaque object. Syntactic opacity means that the subconstituents of the fused head are no longer accessible to syntax nor to operations rooted on syntactic structure such as the LCA.

In the emphatic verb reduplication structures of EP, after fusion turns the C/Σ/T/V-complex-head into a syntactically opaque C^0, the verb within C^0 is in a sense no more a constituent of the verbal chain because a chain is a purely syntactic object.

Two related open questions about fusion will remain untouched in this paper: (i) what motivates fusion (when it does not have a clear impact on Vocabulary Insertion)? (ii) why is fusion often optional (as suggested by many of the cases of multiple phonetic realization of copies discussed in the literature)? The data analysed in this paper only strengthen the empirical evidence for these apparent flaws of fusion (from a theoretical standpoint) without offering cues to start answering the above questions.

3 ▣ Comparative support for the analysis: contrasting EP with Spanish and Brazilian Portuguese

In this section it will be shown that languages lacking V movement to Σ or V movement to C disallow emphatic verb reduplication and resort to alternative strategies to express emphatic affirmation. I take this as evidence supporting the analysis put forward in section 2.2 above in order to account for the EP data. I will first consider Spanish; then, Brazilian Portuguese.

Differently from EP, Spanish does not allow verbal affirmative answers to yes/no questions, as illustrated by (26b). Spanish necessarily resorts to the affirmative word *sí* to express a minimal positive answer in the relevant context. A similar strategy can be used in EP, as (26c) shows, although it is not, in general, the preferred option.

(26) [A]   a.   ¿Fue a Roma   Juan? (Spanish) /   O João foi   a Roma? (EP)
              went to Rome   J.   *the J.   went   to Rome*
              'Did John go to Rome?'

     [B]   b.*Fue. (Spanish) / Foi. (EP)
              went-3SG
              'Yes.'

           c.   Sí (Spanish) / Sim (EP)
                AFF   *AFF*
                'Yes.'

If we take the single word that surfaces in minimal answers to yes/no questions to give phonological content to the polarity encoding head Σ, the contrast between Spanish and Portuguese can be interpreted as evidence that Portuguese has verb movement to Σ but Spanish does not (cf. Laka 1990; Martins 1994).[13] Now, under the assumption that verb movement to Σ is unavailable in Spanish, the analysis of the EP verb reduplication structures given above correctly predicts that such structures are blocked in Spanish:

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[13] In Martins (1994) some empirical contrasts between European Portuguese and Spanish are derived from the availability/unavailability of verb movement to Σ in these languages. The issues in point are clitic placement in finite clauses and VP-ellipsis.

(27) [A] a. Juan no fue   a Roma.
             J.   not went to Rome
             'John didn't go to Rome.'

      [B] b.*Juan fue   a Roma,   fue. (Spanish)
             J.   went to Rome   went
             'John did go to Rome.'

           c. O João foi   a Roma, foi. (EP)
             the J.   went to Rome   went
             'John did go to Rome.'

In order to syntactically express emphatic affirmation Spanish displays the *sí (que)* ('AFF-that') strategy exemplified in (28) below. The Spanish data fall right into place if we take Spanish and EP to be similar in activating the strong functional heads Σ and C in order to express emphatic affirmation. Because the verb cannot move into Σ in Spanish, it is the affirmative word *sí* that merges with Σ, giving it phonological content. The head Σ, incorporating *sí*, moves then to C. As for C, which encodes emphatic features, it has the option of being phonologically null (in which case sentences like (28b) are derived) or to be phonologically realized (originating sentences like (28c)).[14] That *sí* in Spanish and the verb in EP play a similar role in expressing emphatic affirmation is made clear by Spanish sentences like (28d). Although slightly marginal, a pattern with *sí* reduplication parallels the EP verb reduplication structures (personal communication of Ricardo Etxeparre whom I am thankful to).[15]

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[14] The fact that C is given independent phonological content appears to be the effect of *sí* having a clitic nature. So when C is not realized by *que* (that), *sí* presumably cliticizes to the verb. Empirical evidence supporting this hypothesis is given in (i) below: while in the sentences where *que* is absent, *sí* needs to be strictly adjacent to the verb (compare (ia) with (ib)), this is not the case when *sí* left-adjoins to *que* (compare (ia) with (ic)).

(i) a.* Sí   los jueves   cena   aqui.
        AFF   the Thursdays dines here
        'He does dine here on Thursdays.'
    b. Sí   cena   los jueves   aqui.
        AFF   dines the Thursdays here
        'He does dine here on Thursdays.'
    c. Sí   que   los jueves   cena   aqui.
        AFF   that   the Thursdays dines here
        'He does dine here on Thursdays.'

[15] The *sí (que)* strategy is not allowed in EP because in EP the affirmative word *sim* is not a head, thus it cannot merge with Σ. This is shown by the fact that EP *sim* cannot constitute an affirmative answer to a negative question (see example (i)) in contrast to Spanish *sí* (see example (ii)). Moreover, in Portuguese the affirmative word *sim* cannot be used to positively answer to an embedded question, again differently from Spanish (compare example (iii) with example (iv)). In minimal affirmative answers to yes/no questions, EP *sim* is presumably adjoined to ΣP and licenses a null IP whose content is recovered from the preceding yes/no question – cf. Holmberg (forthcoming), Martins (forthcoming).

Portuguese: (i) a. O João hoje   não   vai   ao   cinema?
                   the J   today not   goes   to-the movies
                   'Does J. happen not to go to the movies today?'
               b.* Sim. (AFF)
                   'Yes, he is going to the movies.'
               c. Vai. (goes)
                   'Yes, he is going to the movies.'
Spanish: (ii) a. No va a ir   al   cine   hoy   Juan?
                   not go to go   to-the movies today J.
                   'Does J. happen not to go to the movies today?'

(28) [A] a. Juan no fue   a Roma.
          J.   not went to Rome
          'John didn't go to Rome.'

     [B] b. Juan sí   fue   a Roma. (Spanish)
          J.   AFF   went to Rome
          'John did go to Rome.'

          c. Juan sí   que fue   a Roma. (Spanish)
          J.   AFF   that went to Rome
          'John did go to Rome.'

          d. ?Juan sí   que sí   fue   a Roma. (Spanish)
          J.   AFF   that AFF   went to Rome
          'John did go to Rome.'

We will now look at Brazilian Portuguese (BP) which like Spanish does not permit the emphatic verb reduplication structures. Nevertheless, BP displays like EP non-emphatic verbal answers to yes/no questions. So the data in (29) and (30) show that the availability of verbal (minimal) answers to yes/no questions does not necessarily correlate with the availability of the verb reduplication strategy. BP allows the former (see (29)) but disallows the latter (see (30)).

(29) [A] a. O João comprou   um   carro?
          the J. bought   a   car
          'Did John buy a car?'

     [B] b. Comprou. (BP and EP)
          bought
          'Yes.'

(30) [A] a. O João não   comprou   um   carro.
          the J. not bought   a   car
          'John didn't buy a car.'

     [B] b.*O João comprou   um   carro,   comprou. (BP)
          the J. bought   a   car   bought
          'John did buy a car.'

          c. O João comprou   um   carro,   comprou. (EP)
          the J. bought   a   car   bought
          'John did buy a car'

Among Brazilian linguists, it is consensually assumed that BP lacks verb movement to C (Kato and Roberts (1996), Kato (2004), among others). Since

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          b. Sí. (AFF)
          'Yes, he is going to the movies.'
Portuguese: (iii)a. Sabes   se o João foi   à   festa?
          know-2SG if the J.   went to-the party
          'Do you know if J. went to the party?'
          b. Sim. (AFF)
          'Yes, I know.'   [Unavailable interpretation: * 'Yes, he did.']
          c. Foi. (went)
          'Yes, he did.'
Spanish: (iv)a. Sabes   si Juan fue   a la fiesta?
          know-2SG if J.   went   to the party
          Do you know if J. went to the party?'
          b. Sí. (AFF)
          'Yes, I know.' / 'Yes, he did.'

according to our analysis verb movement to C is a crucial step in the derivation of the EP verb reduplication structures, the unavailability of such structures in BP is correctly predicted. Putting together the Spanish and the BP facts, the proposed analysis is neatly supported: Spanish which has verb movement to C (see Torrego (1984), among others) but not verb movement to Σ fails to derive the EP type verb reduplication sentences. BP which has verb movement to Σ (cf. (29)) but not verb movement to C fails to do it as well. Therefore the central role of the two functional heads Σ and C in making available the syntactic expression of emphatic affirmation through verb reduplication receives confirmation.

The absence of verb movement to C in BP is the source for the word order facts illustrated by (31) to (34) below. In contrast with EP, BP systematically disallows subject-verb inversion when the order VS is the outcome of verb movement to C. This is the case of root interrogatives (see (31) and cf. Ambar 1992, Kato 2004), of gerund clauses (see (32) and cf. Ambar 1992, Britto 1998, Lobo 2003), of root conditional or futures interrogatives with a *wonder* interpretation (see (33) and cf. Ambar 1992), and of root subjunctives like (34), which are just unattested in BP.

(31) a. Quem disse a Maria que telefonou?   EP: OK / BP: *
    who   said the M.   that called
    'Who did Mary tell that called?'

  b. Quem a Maria disse que telefonou?   EP: * / BP: OK
    who   the M.   said   that called
    'Who did Mary tell that called?'

(32) a. Telefonando a Maria, saímos para jantar.   EP: OK / BP: *
    calling   the M.   leave-1PL for dinner
    'As soon as Mary calls, we will go out for dinner.'

  b. A Maria   telefonando, saímos para jantar.   EP: * / BP: OK
    the M.   calling   leave-1PL for dinner
    'As soon as Mary calls, we will go out for dinner.'

(33) a. Teria/   terá   o João encontrado as chaves?   EP: OK; BP: *
    would-have/ will-have the J. found   the keys
    'I wonder whether J. could find his keys.'

  b. O João teria/   terá   encontrado as chaves?   EP: OK; BP: OK
    the J. would-have/ will-have found   the keys
    'I wonder whether J. could find his keys.'

(34) Soubesse   o rato as intenções do gato   EP: OK; BP:*
    know-IMPERF-SUBJ-3SG the mouse the intentions of the cat
    e   teria   escapado.
    and would-have   escaped
    'If the mouse knew the intentions of the cat, it would have escaped.'

The loss of verb movement to C in BP is one of the diachronic episodes that set BP and EP in divergent paths. Having lost verb movement to C, BP lost concomitantly the kind of VS order attested in (31) to (34) above and the option for emphatic verb reduplication. Hence BP resorts to a different strategy in order to create structures expressing emphatic affirmation. Sentence (35) below illustrates the V-*sim* (V-AFF) pattern of emphatic affirmation which is found in BP. Sentence (35) is also a grammatical option in EP (cf. example (20) above).

(35) [A] a. Ele   não   comprou   o carro,   pois não? (EP)/comprou? (BP)[16]
         he   not   bought   the car   POIS NEG   bought
         'He didn't buy the car, did he?'
    [B] b. Comprou   sim. (EP and BP)
         bought   AFF
         'Yes, he DID'

Emphatic affirmative answers and emphatic declaratives with the affirmative word *sim* as the rightmost constituent are found in EP and BP as well. So the fact that Brazilian Portuguese lacks verb movement to C does not prevent this type of sentences from being successfully derived. Emphatic declaratives, like emphatic answers, activate the domains of Σ and C. Sentences like (36b) below are derived with verb movement to Σ followed by movement of ΣP to Spec, CP, thus satisfying the requirement of making the strong C head visible.[17] *Sim* is merged in the ΣP domain as an adjunct to ΣP. Σ merges with C post-syntactically.[18] Sentences like (36b) below have the same structure in EP and BP as they do not involve verb movement to C (cf. (36c)).[19]

(36) [A] a. Ele   não   comprou   o carro.
         he   not   bought   the car
         'He didn't buy the car.'

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[16] The tag part of a negative tag question is constituted by *pois não* (confirmative word + negative marker) in EP but not in BP, which displays instead a bare verb tag.

[17] The visibility requirement of emphatic C either is satisfied by head movement (i.e. V-to-T-to-Σ-to-C) or by XP movement (i.e. movement of ΣP to Spec, CP).

[18] I take this operation to be necessary because in emphatic affirmation structures the polarity features of Σ and the emphatic features of C need to be paired under C.

[19] Emphatic negative sentences like (ib) below display a parallel structure (except for verb movement to Σ, since in negative sentences the negation marker *não* is merged in Σ):

(i) [A] a. O João   comprou   um carro.
        the J.   bought   a car
        'John bought a car.'
   [B] b. O João   não   comprou   um carro, não.
        the J.   not   bought   a car   no
        'John did NOT buy a car.'

        c. [$_{CP}$ [o João não comprou$_i$ um carro]$_K$ [$_{C'}$ [$_{ΣP}$ não [$_{ΣP}$ ~~o João$_j$~~ [$_{Σ'}$ ~~não~~ [$_{TP}$ [$_{T'}$ ~~comprou$_i$~~
           the J.   not   bought   a car   no   the J.   not   bought
           [$_{VP}$ ~~o João$_j$ comprou$_i$ um carro~~]]]]]$_K$]]
              the J.   bought   a car

Sentence (i), which is grammatical in EP and BP, only apparently involves repetition of the same negation marker. In fact, Portuguese (both EP and BP) has two homophonous words *não*, one of them can occur in isolation while the other is strictly preverbal (only clitics being allowed to disrupt its adjacency with the verb). These two *não* co-occur in non-minimal negative answers to yes/no questions, as illustrated in (iic):

(ii) [A] a. O João   comprou   um carro?
        the J.   bought   a car
        'Did J. buy a car?'
   [B] b. Não.
        no
        c. Não,   não   comprou.
        no   not   bought
        'No, he didn't.'

Because the derivation of sentences like (ib) above does not involve verb movement to C, they are a grammatical option in BP.

[B] b. Ele   comprou   o carro,   sim. (EP and BP)
       he   *bought*   *the car*   *AFF*
       'He did buy the car.'
   c. [CP [ele comprou~i~ o carro]~K~ [C' [ΣP sim [ΣP ~~ele~j~~ ~~[Σ' comprou~i~~~
       he bought   *the car*   *AFF*   *he*   *bought*
    ~~[TP [T' comprou~i~~~ ~~[VP ele~j~ comprou~i~ o carro~~]]]]]~K~]]²⁰
    bought   *he*   *bought*   *the car*

Affirmative emphatic answers with the 'V-*sim*' pattern, like (35b) above, are presumably derived just in the same way as emphatic declaratives, but the clausal constituent integrates a null subject and a null VP and so only the verb ends up spelled out (within the clausal constituent).[21]

In the next section we are going to see that the EP emphatic verb reduplication sentences are subject to some morphological restrictions. This is not surprising because morphological reanalysis (i.e. fusion) is sensitive to morphological complexity (see Nunes 2001, 2004). Since the derivation of the V-*sim* sentences does not involve morphological reanalysis it is expected that these sentences contrast with the verb reduplication ones by being immune to the effects of morphological complexity. The contrasts to be witnessed strengthen the case for the perspective that fusion is what sets the stage for the phonological expression of multiple copies of a chain.

4 ▣ Restrictions to the verb reduplication pattern in European Portuguese

In this section I will take as a diagnosis test to identify the operation of fusion the existence of morphological restrictions on the structures it contributes to. I will be following the insights of Nunes (2004) who shows that morphological reanalysis (interpreted as *fusion* in the terms of Halle and Marantz (1993)) may be blocked when complex heads are involved. This 'blocking effect' is gradual: the more complex the heads the more constrained the availability of morphological reanalysis. If the analysis proposed for verb reduplication structures in EP is on the right track, we expect to find restrictions on the grammaticality of such structures in EP. This is in fact the case as compounds, future/conditional forms of the verb and verb-clitic sequences witness. I will leave at an intuitive level the notion of 'morphological complexity' and will not have any insight to offer on why morphological complexity hampers and eventually blocks fusion.

4.1 ▣ Compound verbs and verbs with stressed prefixes

Compound verbs like *fotocopiar* 'photocopy', *radiografar* 'radiograph', *manuscrever* 'handwrite', *maniatar* "hand-tie", *bendizer* "well-say", *maldizer* "bad-say", *maltratar* "bad-treat", and verbs derived with stressed prefixes such as *contra* (e.g. *contra-atacar* 'counter-attack'), *super* (e.g. *super-enfatizar* "super-emphasize"), *pré* (e.g. *pré-inscrever* 'pre-register'), *pós* (e.g. *pós-graduar* 'post-graduate'), make verb reduplication awkward. Both the adverb-like constituent present in the relevant compounds and the stressed prefixes are modifiers that left-adjoin to a word (not to the verbal root),

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[20] I take the polarity projection ΣP to be the topmost category of the IP space. A similar view can be found in Holmberg (forthcoming).

[21] Note that in BP (like in EP) both VP-ellipsis and null subjects are licensed in answers to yes/no questions. On the restricted availability of null subjects in BP, see Kato and Negrão (2000) among others.

giving rise to a complex prosodic word, i.e. a word with two word stress domains.[22] Adjunct modifiers are non-category changing entities as they do not project category features. (See Villalva 2000, Vigário 2003, Newell 2004).

Examples (37) to (40) below show that verbs with stressed prefixes and compound verbs make morphological reanalysis less smooth although still possible.[23] Sentences (37b) and (39b) illustrate verb reduplication with the 'simple' verbs *copiar* 'copy' and *atacar* 'attack'. Contrasting with the sentences with 'simple' verbs, sentences (38b) and (40b) show how the complex verbs *fotocopiar* 'photocopy' and *contra-atacar* 'counter-attack' make verb reduplication marginal. So adding an adjunct modifier to a 'simple' verbal form increases morphological complexity in as much as hampering fusion.

(37) [A] a. Ele   não   copiou   o livro   sem   autorização,   pois   não?
          he   not   copied   the book   without   permission   CONF NEG
          'He didn't copy the book without your permission, did he'?

     [B] b. Copiou, copiou.
          copied,   copied
          'Yes, he DID.'

(38) [A] a. Ele   não   fotocopiou   o livro   sem   autorização,   pois   não?
          he   not   photocopied   the book   without   permission   CONF NEG
          'He didn't copy the book without your permission, did he?'

     [B] b. ??fotocopiou,   fotocopiou.
          photocopied   photocopied
          'Yes, he DID.'

(39) [A] a. Ele   não   atacou   o candidato,   pois   não?
          he   not   attacked   the candidate   CONF NEG
          'He didn't attack the candidate, did he?'

     [B] b. Atacou, atacou.
          attacked   attacked
          'Yes, he DID.'

(40) [A] a. O candidato   não   contra-atacou,   pois   não?
          the candidate   not   counter-attacked   CONF NEG
          'The candidate didn't counter-attack, did he?'

     [B] b. ??Contra-atacou, contra-atacou.
          counter-attacked   counter-attacked
          'Yes, he DID.'

That the uneasiness of fusion with compound or compound-like verbs is what is causing the marginality of the emphatic answers with verb reduplication is made clear when we compare them with a different type of emphatic answers (without verb

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[22] Stressed prefixes can be coordinated (e.g. *Os contra e os anti-terroristas* "the contra and the anti-terrorists") and can appear in isolation (e.g. – *São contra-terroristas ou anti-terroristas?* – *Contra* – Are they contra-terrorists or anti-terrorists? – "[They are] contra.").

[23] Note that verbs with four syllables (e.g. comemorar 'commemorate', considerar 'consider', contaminar 'contaminate', incentivar 'encourage', incrementar 'develop') which are neither compounds nor prefixed forms (thus not complex prosodic words either) do not have the same effect:

(i) [A] a. Os pesticidas   não   contaminaram   a água.
          the pesticides   not   contaminated   the water
          'The pesticides did not contaminate the water.'

    [B] b. Contaminaram,   contaminaram.
          contaminated   contaminated
          'Of course they did.'

reduplication). Remember that EP has the option to syntactically express emphatic affirmation by resorting to the V-*sim* (V-AFF) strategy (cf. sections 2.2 and 3 above). Differently from the verb reduplication sentences, the V-*sim* sentences do not involve fusion (so only one copy of the verb surfaces). Thus, as expected under the hypothesis we are adopting, the V-*sim* emphatic declaratives in (41b) and (42b) are perfectly grammatical, in contrast to (41c) and (42c) which are a by-product of fusion.

(41) [A] a. Ele   não   fotocopiou o livro sem   a.tua autorização, pois não?
            he   not   photocopied thebook without your permission   CONF NEG
            'He didn't photocopy the book without your permission, did he?'

      [B] b. Fotocopiou   sim.
            photocopied   AFF
            'Yes, he DID.'

          c.??Fotocopiou, fotocopiou.
            photocopied   photocopied
            'Yes, he DID.'

(42) [A] a. O candidato não   contra-atacou,   pois não?
            thecandidate   not   counter-attacked CONF NEG
            'The candidate didn't counter-attack, did he?'

      [B] b. Contra-atacou   sim.
            contra-attacked   AFF
            'Yes, he DID.'

          c.??Contra-atacou, contra-atacou.
            contra-attacked   counter-attacked
            'Yes, he DID.'

4.2 ◻ FUTURES AND CONDITIONALS

Future and conditional forms have a similar effect on verb reduplication sentences as compound and compound-like verbs. EP futures and conditionals are the only verbal forms that allow mesoclisis, which indicates that futures and conditionals have a particular morphological structure among verbal forms.[24] As illustrated in (43a) and (43c) clitics are in general enclitics in matrix clauses in EP, surfacing adjacent to the right edge of the verbal form, that is, right-adjacent to the agreement morphemes. When a future or conditional form of the verb occurs in a matrix clause, however, the clitic surfaces preceding the sequence formed by the tense morpheme (present or past) plus the agreement morpheme (see (43b) and (43d)).

(43) 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.'

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[24] Vigário (2003) shows that verbal units that host a mesoclitic pronoun are complex prosodic words (with two word stress domains) like compound verbs and verbs with stressed prefixes.

   d. Ele atacá-lo-ia   se pudesse.
    he attack-him-will/[T(past)+Agr morphemes] if could
    'He would attack him if he could.'

Having in mind the availability of mesoclisis in EP, Roberts (1992) and Roberts and Roussou (2002, 2003) analyse the EP futures and conditionals as verbal strings made of the infinitival form of a main verb plus a present or past form of the auxiliary *haver* 'have'. The unusual order displayed by the verbal string, with the main verb preceding the auxiliary, is attributed to the clitic nature of the auxiliary (which induces verb movement in order to allow the clitic-auxiliary to encliticize). An analysis in the same vein is proposed by Duarte and Matos (2000), who take the finite form of *have* to be an affix-auxiliary instead of a clitic-auxiliary. A different approach to the morphology of future and conditional forms of the verb is offered by Arregi (2000) and Oltra-Massuet and Arregi (2005). According to their analysis, what makes future and conditional forms of the verb special is the fact that they (morphosyntactically) express a sequence of tenses, not a simple tense. Thus, the derivation of futures and conditionals implies an independent functional head FUT(ure) which combines in the course of the derivation with the T head. If T is [+present], a future form of the verb will be derived; if T is [+past] the conditional will emerge. Although Arregi (2000) and Oltra-Massuet and Arregi (2005) deal with Spanish, their analysis could be extended to Portuguese.[25] I will leave undecided what analysis is to be preferred to account for EP futures and conditionals. For my purposes in the present context, it is enough to have shown that any of the available analyses describe future and conditional forms of the verbs as morphologically more complex than the other inflected verbal forms.[26]

 The sentences in (44) to (47) below show that future and conditional forms of the verb are not unproblematic in emphatic verb reduplication structure (see (44b) and (45b)) in contrast to the other forms of the verb (as exemplified with the present tense in (46b)). Sentence (47b) illustrates how emphatic declaratives without verb reduplication, that is, V-*sim* (V-AFF) declaratives, are totally grammatical with futures and conditionals. The contrast between the reduplicative structure and the V-*sim* structure is expected because the marginality of the former (with futures and conditionals) is induced by fusion which does not operate in the derivation of the latter.

(44) [A] a. Ele não atacará o candidato, pois não?
     he not attack-will the candidate CONF NEG
     'He will not attack the candidate, will he?

---

[25] Note that the fact that Spanish does not display mesoclisis is irrelevant because mesoclisis is just a variant of enclisis and Spanish does not allow enclisis in matrix clauses. Under the sequence of tenses analysis of futures and conditionals, what makes futures and conditionals peculiar with respect to clitics is that by integrating two tense nodes they make available an extra position for cliticization. Under this perspective, the difference between standard EP, which has mesoclisis with futures and conditionals, and the non-standard varieties of EP that have enclisis with future and conditional forms of the verb would be quite superficial. In standard EP a clitic would be able to intervene between the FUT and T(present/past) morphemes while the non-standard varieties require strict adjacency between FUT and T(present/past). As for BP, which does not allow mesoclisis, it is like Spanish in the sense that it also excludes enclisis from matrix clauses.

[26] I will have to note however that the clitic-auxiliary analysis seems to be at odds with the empirical evidence to be discussed in the remainder of this section. In fact, while EP verb reduplication structures involving futures and conditionals displays a grammatical marginality similar to the marginality induced by compound and compound-like verbs, the presence of clitic pronouns in EP verb reduplicication structures induces sharp ungrammaticality.

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

(45) [A] a. Ele não atacaria   o candidato, pois não?
he   not attack-would the candidate   CONF NEG
'He would not attack the candidate, would he?'

[B] b.??Atacaria, atacaria
attack-would/[T+Agr morphemes] attack-would/[T+Agr morphemes]
'Yes, he WOULD'

(46) [A] a. Ele   amanhã não ataca o candidato, pois não?
he   tomorrow not   attack the candidate   CONF NEG
'He will not attack the candidate tomorrow, will he?'

[B] b. Ataca, ataca
attack-PRESENT-INDICATIVE   attack-PRESENT-INDICATIVE
'Yes, he WILL.'

(47) [A] a. Ele não atacará   o candidato, pois não?
he   not attack-will the candidate   CONF NEG
'He will not attack the candidate, will he?'

[B] b Atacará sim
attack-will/[T+Agr morphemes]   AFF
'Yes, he WILL'

Nunes (2004) shows that grammatical marginality increases in a gradual way as morphological complexity grows. Nunes' observation is confirmed by the data we are discussing. As a matter of fact, when a compound or a compound-like verb displays future or conditional morphology, a cumulative effect arises with the result that the verb reduplication structure becomes ungrammatical. This is exemplified with the prefixed verb *contra-atacar* 'counter-attack' in (48), and with the compound verb *fotocopiar* 'photocopy' in (49). Sentences (48c) and (49c) show once more that the emphatic V-*sim* (V-AFF) sentences, which do not involve fusion, are exempt from morphological restrictions

(48) [A] a. O candidato não   contra-atacará, pois não?
the candidate   not   contra-attack-will CONF NÃO
'The candidate will not contra-attack, will he?'

[B] b.*Contra-atacará, contra-atacará.
contra-attack-will/[T+Agr morphemes] contra-attack-will/[T+Agr]
'Yes, he WILL.'

c. Contra-atacará sim.
contra-attack-will/[T+Agr morphemes]   AFF
'Yes, he WILL.'

(49) [A] a. Ele   não fotocopiaria   o livro sem   a.tua autorização,
he   not photocopy-would   the book without your permission,
pois não?
CONF NEG
'He wouldn't photocopy the book without your permission, would he?'

[B] b.*Fotocopiaria, fotocopiaria.
photocopy-would/[T+Agr morphemes] photocopy-would/[T+Agr]
'Yes, he WOULD.'

c. Fotocopiaria   sim.
   photocopy-would/[T+Agr morphemes] AFF
   'Yes, he WOULD.'

4.3 □ Verb plus clitic sentences

Romance clitics have long been the object of debate, but no consensual results have been achieved on the grammatical mechanisms behind their placement or on their categorial nature. As we will see to conclude this section, the sequences of verb plus enclitic are not allowed in the EP emphatic verb reduplication structure. The strong ungrammaticality brought by clitics to verb reduplication sentences contrasts with the grammatical marginality induced by compound and compound-like verbs as well as by the future and conditional forms of the verb. It strongly suggests then that clitics are better characterized as minimal/maximal word-like entities (cf. Chomsky 1995) than as affix-like entities.[27]

The examples in (50) and (51) show that the presence of a single clitic or of a clitic cluster in emphatic sentences with verb reduplication makes the sentences ungrammatical. The grammatical sentences without clitics in (50b) and (51b) are to be contrasted with the ungrammatical ones in (50c) and (51c)-(51d), which include clitics. Example (50) illustrates emphatic declaratives; example (51) shows emphatic answers to yes/no questions.

(50) [A] a. Não lhe trouxeste o livro que elete   pediu.
            not him brought   thebook that he you-DAT asked
            'You didn't bring him the book that he asked you.'

     [B] b. Eu trouxe-lhe o livro que eleme   pediu,   trouxe.
            I bought-him thebook that he me   asked   bought
            'Yes, I did bring him the book.'

         c.*Eu trouxe-lhe o livro que eleme   pediu,   trouxe-lhe.
            I bought-him thebook that he me   asked   bought-him
            'Yes, I did bring him the book.'

(51) [A] a. Não me   devolveste   o livro que eu te   emprestei, pois
            not me   returned-2SG the book that I you-DAT lent,   CONF
            não?
            NEG
            'You haven't returned me the book I lent you, did you?'

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[27] The degree of ungrammaticality displayed by verb reduplication sentences with clitics is similar to the degree of ungrammaticality noticed in sections 2.1 and 2.2 above with regard to verb reduplication sentences including verb sequences.

I am assuming the Distributed Morphology definition of morphosyntactic word: "At the input to Morphology, a node X^0 is (by definition) a morphosyntactic word (MWd) iff X^0 is the highest segment of an X^0 not contained in another X^0. (…) A node X^0 is a subword (SWd) if X^0 is a terminal node and not a MWd" (Embick and Noyer (forthcoming)). Given the minimal/maximal nature of clitics (in the terms of Chomsky 1995), syntactic cliticization may give rise to a phrasal constituent. There is a broad consensus about the fact that EP enclitics manifest a tighter relation with the verbal host than proclitics. So enclitics would actually form with the verb a morphological unit. This seems to go against the evidence we are discussing with respect to the interaction between clitics and verb reduplication sentences (since in these sentences clitics are necessarily enclitics). However, if we adopt an analysis of EP enclisis which derives it from proclisis configurations at a late stage in the Morphology component of grammar, everything falls into place. Such an analysis is proposed by Costa and Martins (2003, 2004), who view enclisis as the outcome of a morphological operation applying after linearization, that is, Local Dislocation merger with inversion (see Embick and Noyer 2001). This late operation naturally does not interact with fusion, which applies before linearization.

[B] b Devolvi,devolvi.
    returned returned
    'Yes, I DID.'

c.*Devolvi-te,devolvi-te.
    returned-youreturned-you
    'Yes, I DID.'

d.*Devolvi-to,   devolvi-to.
    returned-you.it returned-you.it
    'Yes, I DID.'

The presence of clitics in V-*sim* (V-AFF) emphatic sentences does not induce ungrammaticality as expected, having in mind that fusion does not play a role in this case:

(52)[A] a. Não me devolveste o livro que eu te emprestei, pois
    not me returned-2SG thebook that I you-DAT lent, CONF
    não?
    NEG
    'You haven't returned me the book I lent you, did you?'

[B] b. Devolvi-to sim.
    returned-you.it AFF
    'Yes, I DID.'

It is also relevant noticing that clitics are not excluded from non-emphatic answers to yes/no questions. Although answering with a bare verb, like in (53b), is more natural in EP than answering with a verb+clitic sequence, like in (53c), the two options are grammatical. This is again an expected result because the incompatibility between clitics and the kind of morphological reanalysis we are discussing is not at stake here. Neutral answers to yes/no questions are derived with verb movement to Σ, without further movement to C. With respect to the structures studied in this paper, the functional head Σ is not the place where fusion operates.[28]

(53)[A] a. Devolveste-me o livro que te emprestei?
    returned-2SG-me thebook that you-DAT lent-1SG
    'Did you return me the book I lent you?'

[B] b. Devolvi.
    returned
    'Yes.'

c. Devolvi-to.
    returned-you-it
    'Yes.'

5 ▣ Conclusion

This paper deals with sentences with verb reduplication that express emphatic affirmation. It was shown that the bulk of properties associated with such structures can be thoroughly understood if verb reduplication is interpreted as a case of double phonetic realization of copies of a chain. As far as the proposed analysis proves to be on the right track, it brings support to the copy theory of movement (see Chomsky

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[28] Notice that if fusion in Σ were an available option, the emphatic verb reduplication sentences would be allowed in BP (with the copies of the verb in Σ and T phonologically realized). As discussed in section 3 above, the verb reduplication structure is not part of BP grammar.

1995) and in particular to the insights on copy deletion and linearization (of non-trivial chains) offered by Nunes (2001, 2004).

The multiple-copy analysis of EP emphatic verb reduplication sentences appears to be more satisfactory than the right-adjunction analysis offered by Hagemeijer and Santos (2004) in different ways: (i) it matches better certain prosodic features of the relevant sentences, their root nature, and their incompatibility with verb sequences (see section 2); (ii) it can explain why the Romance languages without verb movement to C or without verb movement to the polarity encoding head Σ do not allow the syntactic expression of emphatic affirmation through verb reduplication (see section 3); (iii) it correctly predicts the existence of morphological restrictions to the availability of the verb reduplication structure (see section 4). According to the multiple-copy analysis, EP verb reduplication is a root phenomenon because it involves verb movement to C. Because EP sentences are derived with verb movement to Σ followed by verb movement to C, such sentences are not available in Brazilian Portuguese (which lacks verb movement to C) and Spanish (which disallows verb movement to Σ). The morphological restrictions on verb reduplication (observed with compound-verbs, future/conditional forms of the verb, and verb+clitic sequences) are a consequence of the uneasiness of fusion in dealing with morphological complexity. Fusion in C is what allows the double realization of verb copies. Since verb movement to C is an instance of head movement, the Head Movement Constraint derives the fact that in sentences with verb sequences, only the higher verbal head is allowed to move to C. (If verb sequences are instead analysed in terms of incorporation, the fact that verbal complexes cannot undergo emphatic reduplication is to be seen as the effect of morphological complexity, which blocks fusion). Last but not least, the inexistence of a prosodic break isolating the rightmost constituent (that is, the second phonological manifestation of the verb) is consistent with the contention that it is not a right adjunct.[29]

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[29] A further empirical argument against the right-adjunction analysis is offered by Galician. Under Hagemeijer and Santos (2004) approach, emphatic sentences with verb reduplication and V-*sim* (V-AFF) emphatic sentences have the same structure. Galician verbal answers (to yes/no questions) including the affirmative word *sim* are illuminating in showing that right adjunction does not translate into an emphatic interpretation. As is exemplified in (i) below Galician cumulates the strategies found in European Portuguese to express emphatic affirmation with the strategy displayed by Spanish.

(i) [A]a. Xuan no sabe   destes assuntos.
          J.   not knows of-these matters
          'John doesn't know about these matters.'

    [B]b. Xuan sabe   destes assuntos sabe.   Verb-reduplication pattern
          John knows of-these matters   knows
          'John does know about these matters.'

       c. Xuan sabe   destes assuntos si.   V-AFF pattern
          John knows of-these matters   AFF
          'John does know about these matters.'

       d. Xuan si   sabe   destes assuntos.   'sí (que)' pattern (without *que*)
          John AFF   knows of-these matters
          'John does know about these matters.'

       e. Xuan si   que   sabe   destes assuntos.   'sí (que)' pattern (with *que*)
          John AFF   that   knows of-these matters
          'John does know about these matters.'

Galician *si* can be adverbial, like Portuguese *sim*, or a polarity-head, like Spanish *sí*, and thus adjoin to ΣP or merge with Σ. Moreover, Galician adverbial *si* can be a left-adjunct or a right-adjunct. In both cases it will be separated from the verb by a prosodic break and, crucially, will be associated with neutral answers to yes/no questions (contrast (ii) below with the sentences in (iii) where no pause intervenes between the verb and the affirmative word). The fact that when right-adjoined Galician *si* expresses neutral affirmation (not emphatic affirmation) gives empirical evidence against a right-

From the approach developed in this paper it does not follow that cross-linguistically the languages with verb movement to C allow emphatic verb reduplication nor does it follow that in the languages were verb reduplication is found the verb moves to C. Firstly, different languages may resort to different functional categories to syntactically encode emphatic polarity. Kandybowicz (2004), for example, derives emphatic verb reduplication in Nupe (a Niger-Congo language) from the workings of a 'low' functional head, Emph, which immediately dominates vP. Secondly, verb movement to C is not driven by some 'across-the-board force'. The motivation for verb movement to C may vary across languages and across language-internal constructions. Hence, morphological reanalysis is not expected to be necessarily associated with verb movement to C. In the case under discussion, it is dependent on C having a certain featural content, encoding emphasis. Therefore, there is no reason to think, that V2 languages or VSO languages would necessarily display emphatic verb reduplication. Recall that even Spanish which has verb movement to C and resorts to C to codify emphatic polarity does not allow emphatic verb reduplication (see section 3 above). Under the proposal put forth in this paper, only languages that display bare-verb affirmative answers to yes/no questions (which Spanish does not) permit emphatic verb reduplication. Bare-verb answers are taken to be an indicator that the language has verb movement to Σ independently motivated, not as a mere result of cyclic verb movement to C.[30] As some VSO languages actually display bare-verb answers to yes/no questions, we may wonder whether the type of verb reduplication discussed in this paper appears in such languages. Welsh may well be a case in point:

(54) [A] a. dw   I ddim yn   ddigon da.
          am   I neg   pred enough good
          'I'm not good enough.'

     [B] b. wyt, wyt ti 'n   ddigon da.
          are   are you pred enough good
          'Yes, you're good enough.'

(Example taken from Jones 1999: 125)

Lastly, emphatic verb reduplication may be *morphological* reduplication, not *syntactic* reduplication. In such cases it is expected to be dissociated from verb movement to the 'high' functional field. English is the kind of language we may want to look at. As a matter of fact, English permits sentences like (55a-b) below, although

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adjunction analysis of the EP emphatic affirmation structures (i.e. the verb reduplication structure and the V-AFF structure). Thanks to Rosario Álvarez for a thorough discussion of the Galician facts. (Cf. Álvarez and Xove (2002)).

(ii) a. ¿E ti vasir   ó   enterro?
        and you go to-go to-the funeral
        'Are you going to the funeral?'

| b. | Si,   vou. / | Vou,   si. | NEUTRAL ANSWERS |

        AFF [pause] go-1SG /   go-1SG [pause]   AFF
        'Yes, I am going.'

(iii) a. ¿E ti no vasir   ó   enterro, no?
        and you not go to-go to-the funeral   no
        'You are not going to the funeral, are you?'

| b. | Si vou. / | Vou si. | EMPHATIC ANSWERS |

        AFF go-1SG / go-1SGAFF
        'Of course I am going.'

[30] Presumably, in these languages verbal morphology includes phonologically unrealized polarity features. That's why the verb competes with affirmative words in the answering system.

English lexical verbs do not overtly move to the Infl space (nor beyond). Also non-finite verbal forms can be reduplicated (see (55c-e)).

(55) a. I can't say I LIKE-like Mary.
(Ghomeshi, Jackendoff, Rosen and Russell 2004: 326; thereinafter abbreviated as GJRR 2004)
b. You mean CRIED-cried, or cried because something heavy fell on you?
(GJRR 2004: 323)
c. Are you LEAVING-leaving? (GJRR 2004: 312)
d. No, I'm not LEAVING-leaving. (GJRR 2004: 323)
e. But is hasn't actually HAPPENED-happened yet … actually
(GJRR 2004: 323)

Ghomeshi, Jackendoff, Rosen and Russell (2004) show that the reduplicated constituent in English does not have to be the verb (see (56) below) nor does it have to be a head. In fact some heads cannot be reduplicated (see (57) below). It can be a compound (see (58)) or a phrase, namely an idiom (OUT-OF_HER_MIND-out-of-her-mind) or a combination of verb plus object pronoun(s) of variable complexity (see (59)). Besides, there is always adjacency between the two instances of the relevant constituent. These features of the English (contrastive focus) reduplication construction indicate that we are not dealing with an instance of fusion (thus morphological complexity is allowed), resulting in the phonetic realization of two copies of a chain (hence this type of reduplication cannot escape adjacency).

(56) a. Felix: Tim! I'd be careful. That's instant glue you're using.
Tim: It's not like INSTANT-instant. (GJRR 2004: 336)
b. We are not one of those COUPLE-couples. (GJRR 2004: 322)
c. Lily: You have to get up
Rick: I am up.
Lily: I mean UP-up. (GJRR 2004: 312)

(57) * Are you sick, or ARE-are you sick? (GJRR 2004: 313)

(58) a. You mean a BOYFRIEND-boyfriend? (GJRR 2004: 324)
b. We have a FIREPLACE-fireplace in the living room. (GJRR 2004: 324)
c. Oh, that's BEACON-STREET-Beacon-Street. (GJRR 2004: 324)
d. AIR-CANADA-Air-Canada or Canadian-Air Canada?
(GJRR 2004: 324)

(60) a. … you mean though-about-it considered it or just CONSIDERED-IT-considered-it (GJRR 2004: 321)
b. Do I LIKE-YOU-like-you? No. You're a little too neurotic for that.
(GJRR 2004: 325)
c. I mean, I know-him, but I don't KNOW-HIM-know-him.
(GJRR 2004: 325)
d. I didn't SLEEP-WITH-HER-sleep-with-her. (GJRR 2004: 326)
e. Did you TALK-ABOUT-IT-talk-about-it, or did you just mention it?
(GJRR 2004: 326)
f. Well, he didn't GIVE_IT_TO_ME-give-it-to-me (he only lent it to me).
(GJRR 2004: 326)

The English reduplication sentences exemplified above seem to be better analysed along the lines of Harris and Halle (2005), whose approach to reduplication is set within the Distributed Morphology framework:

"Reduplication is a process of word formation whereby a designated contiguous subsequence of elements in a base form is repeated – that is, appears twice – in its entirety ("full reduplication") or in part ("partial reduplication") in a derived form. The process of repetition is triggered by some condition or set of conditions outside the reduplicated phonological sequence, as is the demarcation of this phonological substring. We present below an extended view of reduplication: **not only phonological segments but syntactic and morphological elements as well can be both triggers and targets of reduplication**. The abstract derivation in (4) displays the most elementary device in our formal apparatus – the only device needed for full reduplication – and its notation.

(4)   ABCDE   underlying phonological string
        A[BCD]E   [X] = reduplicating subsequence
        A-BCD-BCD-E   result of reduplication

The subsequence to be reduplicated is delimited by a pair of junctures represented in (4) by paired square brackets. By its very nature, this notation guarantees that only contiguous elements are reduplicated: discontinuous sequences cannot be represented in this notation. In the overwhelming majority of cases, these brackets do no appear in the underlying phonological string itself but rather are supplied in accordance with readjustment rules that specify the relevant morphological condition(s). These brackets are unpronounceable and thus must be eliminated at some point from the phonological representation. We propose that they are automatically erased upon execution of the operation they notate since they are not referred to by any subsequent operation". (Harris and Halle 2005: 198. Emphasis mine, A.M.M.)

In opposition to what appears to be the English scenario with respect to contrastive focus reduplication (that is, *morphological reduplication*), EP emphatic affirmative sentences where the verb appears twice are instances of *syntactic reduplication*, meant as the phonetic realization of two chain links (a possibility anticipated by the copy-theory of movement).

References

Álvarez, Rosario & Xosé Xove (2002). *Gramática da Lingua Galega*. Vigo: Galaxia.

Ambar, Manuela (1992). *Para uma Sintaxe da Inversão Sujeito-Verbo em Português*. Lisboa: Colibri.

Arregi, Karlos (2000). "How the Spanish verb works". Paper delivered at the *30th Linguistic Symposium on Romance Languages*, University of Florida, Gainesville. [handout available at: http://www.uiuc.edu/~karlos]

Britto, Helena (1998). Deslocamento à Esquerda, Resumptivo-Sujeito, Ordem SV e a Codificação Sintática de Juízos Categórico e Tético no Português do Brasil. Ph.D. dissertation. Universidade Estadual de Campinas – UNICAMP.

Boškovi and Nunes (2005). "The Copy Theory of Movement: A view from PF". Ms. University of Connecticut and University of Maryland.

Castro, Ana and João Costa (2002). "Possessivos e advérbios: formas fracas como X^0". *Actas do XIX Encontro Nacional da Associação Portuguesa de Linguística*, org. by C. Nunes Correia and A. Gonçalves. Lisboa: AssociaçãoPortuguesa de Linguística. 101-111.

Chomsky, Noam (1995). *The Minimalist Program*. Cambridge and London: The MIT Press.

—— (2000). "Minimalist Inquiries: The Framework". Martin, R., D. Michaels and J. Uriagereka, eds. *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge and London: The MIT Press.

—— (2001). "Derivation by Phase". *Ken Hale: A Life in Language*, ed. by M.

Kenstowicz. Cambridge and London: MIT Press.

Cinque, Guglielmo (1999). *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. Oxford and New York: Oxford University Press.

Costa, João (1998). *Word Order Variation: A Constraint-Based Approach*. The Hague: Holland Academic Graphics.

—— (2003). Null vs. Overt Spec,TP in European Portuguese. In J. Quer et alii (eds.) *Romance Languages and Linguistic Theory 2001: Selected papers from 'Going Romance'*. John Benjamins, Amsterdam, 31-47

Costa, João and A. M. Martins (2003). "Clitic placement across grammar components". Paper delivered at *Going Romance 2003 (Seventeenth Conference on Romance Linguistics*. Nijmegen.

—— (2004). "What is a strong functional head?". Paper delivered at *Lisbon Workshop on Alternative Views on the Functional Domain*. Lisbon.

Duarte, Inês and Gabriela Matos (2000). "Romance Clitics and the Minimalist Program". *Portuguese Syntax: New Comparative Studies*, ed. by João Costa. Oxford and New York: Oxford University Press. 116-142.

Embick, David and Rolf Noyer (2001). "Movement Operations after Syntax". *Linguistic Inquiry* 32: 555-595.

Embick, David and Rolf Noyer (forthcoming). "Distributed Morphology and the Syntax/Morphology Interface". *The Oxford Handbook of Linguistic Interfaces*, ed. by G. Ramchand and C. Reiss. Oxford University Press. [Available at: http://www.ling.upenn.edu/~embick/interface.pdf].

Gleitman, Lila (1966). "Coordinating conjunctions in English". *Language* 41: 260-293. [Reprinted in D. Reibel and S. Schane, eds. 1969. *Modern Studies in English*. New York: Prentice-Hall.]

Ghomeshi, Jila, Ray Jackendoff, Nicole Rosen and Kevin Russell (2004). "Contrastive Focus Reduplication in English (The Salad-Salad Paper)". *Natural Language and Linguistic Theory* 22: 307-357.

Hagemeijer, Tjerk and A. L. Santos (2004). "Elementos polares na periferia direita". *Actas do XIX Encontro Nacional da Associação Portuguesa de Linguística*, org. by C. Nunes Correia and A. Gonçalves. Lisboa: AssociaçãoPortuguesa de Linguística. 465-476.

Halle, Morris (1997). "Distributed Morphology: Impoverishement and Fission". *MIT Working Papers in Linguistics* 30: *PF – Papers at the Interface*. 111-176.

Halle, Morris and A. Marantz (1993). "Distributed Morphology and the Pieces of Inflection". *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed. by K. Hale and S. J. Keyser. 111-176.

Harris, James and Morris Halle (2005). "Unexpected Plural Inflections in Spanish: Reduplication and Metathesis". *Linguistic Inquiry* 36: 195-222.

Jones, Bob Morris (1999). *The Welsh Answering System*. Berlin and New York: Mouton de Gruyter.

Holmberg, Anders (forthcoming). "Null Subjects and Polarity Focus". [Proceedings of *NELS 35*, University of Connecticut].

Kato, Mary A. (2004) "Dislocated and *in-situ* wh- questions in Brazilian Portuguese (BP)". Paper delivered at *Spring Linguistic Symposium*. University of Santa Barbara.

Kato, Mary and Ian Roberts, eds. (1996). *Português Brasileiro: Uma Viagem Diacrônica*. Campinas, São Paulo: Editora da UNICAMP.

Kayne, Richard (1994). *The Antisymmetry of Syntax*. Cambridge and London: MIT Press.

Kandybowicz, Jason (2004) "Verbal repetition and the phonetic realization of multiple chain links". Paper presented at the workshop *The Copy Theory of Movement on the PF Side* (Utrecht, December 2004).

Laka, Itziar (1990). Negation in Syntax: On the Nature of Functional Categories and Projections. Ph. D. dissertation. M.I.T.

Lobo, Maria (2003). *Aspectos da Sintaxe das Orações Subordinadas Adverbiais do Português*. Ph.D. dissertation. Lisbon: Universidade Nova de Lisboa.

Martins, Ana Maria (1994). "Enclisis, VP-deletion and the nature of Sigma". *Probus* 6: 173-205.

—— (forthcoming). "Emphatic affirmation and polarity: contrasting European Portuguese with Brazilian Portuguese, Spanish, Catalan and Galician". [Selected Papers from *Going Romance 2004*, Leiden], ed. by J. Doetjes and P. Gonzalez. John Benjamins.

Mateus, Maria Helena and Ernesto d'Andrade (2000). *The Phonology of Portuguese*. Oxford and New York: Oxford University Press.

Newell, Heather (2004). "A late adjunction solution to bracketing paradoxes". Poster delivered at *NELS 35*, University of Connecticut.

Nunes, Jairo (2001). "Sideward Movement". *Linguistic Inquiry* 32: 303-344.

—— (2004). *Linearization of Chains and Sideward Movement*. Cambridge and London: The MIT Press.

Oltra-Massuet, Isabel and Karlos Arregi (2005). "Stress-by-Structure in Spanish". *Linguistic Inquiry* 36: 43-84.

Pope, Emily Norwood (1976). *Questions and Answers in English*. The Hague and Paris: Mouton.

Roberts, Ian (1992). "A formal account of grammaticalization in the history of Romance futures". *Folia Linguistica Historica* XIII/1-2: 219-258.

—— (1997). "Restructuring, Head Movement, and Locality". *Linguistic Inquiry* 28: 423-460.

Roberts, Ian and Anna Roussou (2002). "The History of the Future". *Syntactic Effects of Morphological Change*, ed. by David W. Lightfoot. Oxford and New York: Oxford University Press.23-56

—— (2003). *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge: Cambridge University Press.

Torrego, Esther (1984). "On Inversion in Spanish and some of its Effects". *Linguistic Inquiry* 15: 103-129.

Vigário, Marina (2003). *The Prosodic Word in European Portuguese*. Berlin and New York: Mouton de Gruyter.

Villalva, Alina (2000). *Estruturas Morfológicas: Unidades e Hierarquias nas Palavras do Português*. Lisboa: Fundação Calouste Gulbenkian e Ministério da Ciência e Tecnologia.

Wurmbrand, Susanne (2001). *Infinitives: Restructuring and Clause Structure*. Berlin and New York: Mouton de Gruyter.