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 analyse 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. Chomsky’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). The facts discussed in the paper show that the copy theory of movement has an impact on the PF side as it allows for the realization of more than one copy of a chain, in particular circumstances. What are these particular circumstances and why are they made available in a restricted way cross-linguistically are open questions in current debate. The next sections are intended to be a contribution to such debate.

Before I present the general architecture of the paper, a few theoretical assumptions I will be making should be clarified. As I said, I adopt the proposals of Nunes (2001, 2004) on the linearization of chains. 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.

As I will be dealing with sentences expressing emphatic affirmation, I must say that I take the view that there is an overall parallel between affirmative and negative sentences, meaning that every clause includes a polarity encoding functional head, say Σ or Pol (the former label is adopted here), where aff/neg features are located (cf. Laka 1990, Zanuttini 1994, 1997). Furthermore I take this functional head to display a different behaviour across languages in relation to verb movement (see Martins 1994).

I will propose in this paper that the sentences with verb reduplication found in...
European Portuguese (EP) can only be derived in languages which have both verb movement to $\Sigma$ and verb movement to C. In this way the contrast between EP and the Romance languages that cannot express emphatic affirmation by means of verb reduplication is straightforwardly derived. Why there is crosslinguistic variation with respect to verb movement (in relation to the different positions within the functional space) is an unsettled matter. I will adopt here 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.

The paper is organized in five sections. In section 2 I introduce the EP data to be discussed and put forth an analysis for them. I will propose that verb reduplication in EP emphatic affirmation results from the combination of verb movement to $\Sigma$ and (subsequent) verb movement to C, with those two verbal copies ending up phonetically realized. In section 2 I will also clarify how morphological reanalysis works in order to allow both copies to be phonetically expressed. Specifically, I will concentrate my attention on fusion, the morphological operation that turns two syntactic terminal nodes into one only terminal, as established by Halle and Marantz (1993). Section 3 offers some comparative evidence that supports the analysis introduced in section 2. I will show that the Romance languages that lack verb movement to C (like Brazilian Portuguese) or lack verb movement to $\Sigma$ (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 $\Sigma$ followed by verb movement to C. The alternative strategies to express emphatic affirmation displayed by Brazilian Portuguese and Spanish will be 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 will be identified. In view of the fact that it is a morphological operation (namely, fusion) 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 enclitization) hampers or eventually blocks verb reduplication. Section 5 concludes the paper.

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. 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.’
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.\(^4\) 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?’

   bought, bought
   ‘Yes, he DID.’

\(^4\) The availability of emphatic verb reduplication in European Portuguese is not constrained by verb typology or by dialectal or idiolectal variation (as far as I am aware of). In order to clarify methodology and answer a question by one of the reviewers, I shall acknowledge that the European Portuguese data in this paper are self-constructed and judgments on the data are my own. Examples of emphatic verb reduplication with a ditransitive verb (dar ‘give’), an unaccusative verb (chegar ‘arrive’), an inergative verb (sorrir ‘smile’), a restructuring control verb (querer ‘want’), a non-restructuring control verb (ousar ‘dare’), an existential verb (haver ‘be’), and a copular verb (ser ‘be’) are given below. The discourse context for each of the examples will not be set, so as to keep this footnote at a reasonable length.

(i) Eu dei ontem esse livro ao João, dei.
   I gave yesterday that book to John gave
   ‘I did give John that book yesterday.’

(ii) O mau-tempo chegou (cá), chegou.
    the bad-weather arrived here arrived
    ‘The bad weather did arrive (here).’

(iii) Tu sorriste, sorriste.
    you smiled, smiled
    ‘You did smile.’

(iv) Ela quer-te beijar, quer.
    she wants you-ACC kiss-INF wants
    ‘She does want to kiss you.’

(v) Ela ousou beijar-te, ousou.
    she dared kiss-INF-you-ACC dared
    ‘She did dare to kiss you.’

(vi) Há demasiadas pessoas nesta sala, há.
    is too-many people in-this room is
    ‘Of course there are too many people in this room.’

(vi) Dormir 8 horas é saudável, é.
    sleep-INF 8 hours is healthy is
    ‘Of course to sleep 8 hours is healthy.’
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 [ˈsɛstɐ] ‘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. ogas grandes [ˈɔʒəz ˈɡɾɐ̃dʒi], 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 [ˈtɾeʒɐmɐˈɡiʃ] ‘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.\(^5\) 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.’

\(^5\) Parallel examples can be constructed to illustrate the alternation between [ʒ] in emphatic verb reduplication structures and [ʃ] in reiterative bi-sentential sequences.
(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[
   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[
   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 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 just fine.’

   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 ‘effectively’, 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.

   the J. likes of read / the J. not likes of read
   ‘John likes reading.’ / ‘John doesn’t 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)).

(i)  

(9)  

(10)  

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6 The sentence is ungrammatical irrespective of the evidential adverb position, as shown below:

(a)  

(b)  

(c)  

(d)  

(e)  

(f)  

(g)  

(h)  

(i)  

(j)  

(k)  

(l)  

(m)  

(n)  

(o)  

(p)  

(q)  

(r)  

(s)  

(t)  

(u)  

(v)  

(w)  

(x)  

(y)  

(z)  

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)  
   the J. won the lottery
   ‘John won the lottery.’

   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.’

   the J. not won the lottery. not won regretfully
   ‘John didn’t win the lottery. Regrettably, he didn’t.’

2.2. V-to-T-to-\(\Sigma\)-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. Starting with 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?’

   bought, bought
   ‘Yes, he DID.’

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7 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)  
   the J. won the lottery
   ‘John won the lottery.’

[B] b. O João não ganhou a lotaria, \(não\).
   the J. not won the lottery \(não\)
   ‘John did NOT win the lottery.’
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 (thus lexicalized) at PF (cf. section 1 above). 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 C0 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 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).

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, bought
   ‘He did buy the car.’

c. \[CP [ele comprou, o carro]k [C \[C comprou,]
   he bought the car bought he bought
   [\[TP NULL: (O João comprou o carro)] ] ] ] ]
   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

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9 The two reviewers ask whether there is evidence for remnant movement to Spec, CP other than deriving the correct word order for emphatic declaratives with verb reduplication. I cannot offer clear independent evidence for such movement. However, the derivation proposed may account for the ungrammatical sentence (ib) below – to be contrasted with (ic) and (id) – which displays topicalization inside the larger constituent topicalized by remnant movement. Topicalization of ΣP in emphatic declaratives can be understood as a scope-out-of-focus strategy in order to leave in final position the constituent that expresses ‘reply/polarity focus’, in the terms of Holmberg (forthcoming). As for the relation between word order and informational focus assignment in EP, see Costa (1998).

(i) [A] a. O bilhete do cinema, o João não pagou.
   the ticket of-the cinema the J. not paid
   ‘The cinema ticket, John didn’t pay.’

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 (in this volume)).

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\(^{[+\text{emph}]}\). 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\(^{[+\text{neg}]}\), 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 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:

   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

10 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 (in this volume)
alternatively propose a derivational approach to chain reduction which is also unproblematic with respect
to remnant movement structures.
‘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.

     he not hears well
     ‘He doesn’t hear well.’

     he hears well hears
     ‘He does hear well.’
     c. *Eu sei que ele ouve 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)  

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 ele vem 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 ele vem 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).11

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.12 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 morphological reanalysis with C and be spelled-out twice.13 The availability of sentences like (18d) and (19d), where

11 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.

12 A reviewer asks whether I am departing from Costa (2003) and Costa & Martins (2003, 2004) who propose that the verb ends up in T in EP. In fact I am assuming that this is the general case. 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).

13 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)  

the J. NEG always supported M.  
‘John hasn’t always supported Mary.’

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.
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.14

\[\text{(18)}\] [A] a. O João ainda não saiu, pois não?
  ‘John hasn’t left yet, has he?’
  ‘Yes, he HAS.’
  c. *Já saiu, saiu.
  ‘Yes, he HAS.’
  d. Já saiu, já.
  ‘Yes, he HAS.’

\[\text{(19)}\] [A] a. A Maria ainda não se penteou.
  ‘Mary hasn’t combed herself yet, has she?’
  [B] b. A Maria penteou-se, penteou.
  ‘Of course Mary has combed herself already.’
  c. *A Maria já se penteou, penteou.
  ‘Of course Mary has combed herself already.’
  d. A Maria já se penteou, já.
  ‘Of course Mary has combed herself already.’

  ‘John hasn’t left yet.’
  ‘Of course John has left already.’
  c. *O João já saiu, já saiu. [with rising intonation]
  ‘Of course John has left already.’

14 A reviewer notes that a sentence like (ic) below with both the adverb já and the verb repeated is ungrammatical. The ungrammaticality of (ic) is to be accounted for in the same way as the ungrammaticality of emphatic sentences with reduplication of (a whole) verbal sequence, as discussed earlier on in this section. My thanks to the reviewer for calling my attention to this fact.
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 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. 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 CONFFIRMATIVE 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).15 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

15 A reviewer asks: “Given that merging is more economical and oftentimes “preferred” over moving (…), and given that Σ and C host independently merged vocabulary items such as complementizers and polarity words like sim ‘yes’), why does the grammar go to great lengths to both move the verb into the peripheral positions and spell-out multiple chain links when it could have simply met the PF visibility requirements by two applications of Merge”? The point is well taken but we must bear in mind that sentences built from different Numerations are not comparable on the grounds of economy principles. Moreover, it is not obvious that any “word” that can be merged with, say, C is compatible with the particular feature matrix of C in emphatic affirmative sentences.
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).

(21) [A] a. O João comprou um carro?
the J. bought a car
‘Did John buy a car?’
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 CONFIRMATIVE WORD NEG
‘John didn’t buy a car, did he?’
bought AFF
‘Yes, he DID.’

the J. bought a car / the J. not bought a car
‘John bought a car.’ / ‘John didn’t buy a car.’
CONF bought. / CONF not bought.
‘In fact he did.’ / ‘In fact he didn’t.’

the J. not bought a car
‘John didn’t buy a car.’
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

16 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?’
‘yes.’
word that surfaces in minimal neutral answers to yes/no questions gives lexical content to $\Sigma$ (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 $\Sigma$ is not a locus of morphological reanalysis.\footnote{I am especially thankful to one of the reviewers for making me aware of this argument. By the same token, the hypothesis that morphological reanalysis might occur in some other lower position is also excluded.}

(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. 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 $\Sigma$.

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.\footnote{The undeleted link is usually the head of the chain, but other possibilities exist under particular circumstances (see Nunes 2004, Bošković and Nunes (in this volume)).} 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 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 C⁰, the verb within C⁰ 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 \( \Sigma \), the contrast between Spanish and Portuguese can be interpreted as evidence that Portuguese has verb movement to \( \Sigma \) but Spanish does not (cf. Laka 1990; Martins 1994). Now, under the assumption that verb movement to \( \Sigma \) is unavailable in Spanish, the analysis of the EP verb reduplication structures given above correctly predicts that such structures are blocked in Spanish:

(27)  
  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 \( \text{sí (que)} \) (‘\( \text{AFF-that} \)’) 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 \( \Sigma \) and \( \text{C} \) in order to express emphatic affirmation. Because the verb cannot move into \( \Sigma \) in Spanish, it is the affirmative word \( \text{sí} \) that merges with \( \Sigma \), giving it phonological content. The head \( \Sigma \), incorporating \( \text{sí} \), moves then to \( \text{C} \). As for \( \text{C} \), 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)). That \( \text{sí} \) in Spanish and the verb in EP play a similar role in expressing emphatic affirmation is made clear by Spanish sentences like (28d).

A reviewer asks “why would \( \text{sí} \) raise to \( \text{C} \) when \( \text{que} \) is overtly realized”. The reason is presumably that \( \text{que} \) (‘that’) is unable to ‘satisfy’ the emphatic feature of \( \text{C} \).

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

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

(i)  
  AFF the Thursdays dines here  
  ‘He does dine here on Thursdays.’

b. Sí cena los jueves aquí.  
  AFF dines the Thursdays here  
  ‘He does dine here on Thursdays.’

c. Sí que los jueves cena aquí.  
  AFF that the Thursdays dines here  
  ‘He does dine here on Thursdays.’

A reviewer asks “why would \( \text{sí} \) raise to \( \text{C} \) when \( \text{que} \) is overtly realized”. The reason is presumably that \( \text{que} \) (‘that’) is unable to ‘satisfy’ the emphatic feature of \( \text{C} \).

21 The \( \text{sí (que)} \) strategy is not allowed in EP because in EP the affirmative word \( \text{sim} \) is not a head, thus it cannot merge with \( \Sigma \). This is shown by the fact that EP \( \text{sim} \) cannot constitute an affirmative answer to a negative question (see example (i)) in contrast to Spanish \( \text{sí} \) (see example (ii)). Moreover, in Portuguese the affirmative word \( \text{sim} \) 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
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.’

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?’

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.’
Among Brazilian linguists, it is consensually assumed that BP lacks verb movement to C (Kato and Roberts (1996), Kato (2004), among others). Since 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.’ |
| 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.’ |
| the J. would-have/will-have found the keys | ‘I wonder whether J. could find his keys.’ |
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).

He didn’t buy the car POIS NEG bought  
‘He didn’t buy the car, did he?’

‘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.\(^\text{23}\) *Sim* is merged in the ΣP domain as an adjunct to ΣP. Σ merges with Σ post-syntactically.\(^\text{24}\) Sentences like (36b) below have the same structure in EP and BP as they do not involve verb movement to C (cf. (36c)).\(^\text{25}\)

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\(^{22}\) 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.

\(^{23}\) 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).

\(^{24}\) 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.

\(^{25}\) 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.’

the J. not bought a car no  
‘John did NOT buy a car.’

c. [CP [o João não comprou, um carro] \kappa [c: [CP [não [CP o joão] \kappa [não [CP comprou, a carro] \kappa [CP o joão, comprou, um carro] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ] \kappa ]]  
the J. not bought a car no the J. not bought  
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
(36)  

he not bought the car  
‘He didn’t buy the car.’

he bought the car AFF  
‘He did buy the car.’

c. \[c_p [ele \text{ comprou; o carro}]_k \[c_p [sp sim [sp ele \text{ comprou; o carro}]]_k]\]  
he bought the car AFF he bought 
\[c_p [ele \text{ comprou; o carro}]_k \[c_p [sp sim [sp ele \text{ comprou; o carro}]]_k]\]  
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).\(^{27}\)

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 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

with the verb). These two \(não\) co-occur in non-minimal negative answers to yes/no questions, as illustrated in (iiic):

(ii)  

[A] a. O João comprou um carro?  
the J. bought a car  
‘Did J. buy a car?’

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.\(^{26}\)

\(^{26}\) I take the polarity projection \(\Sigma P\) to be the topmost category of the IP space. A similar view can be found in Holmberg (forthcoming).

\(^{27}\) 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.
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), giving rise to a complex prosodic word, i.e. a word with two word stress domains.28 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.29 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’?

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.’

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28 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.”).

29 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.’

contaminated contaminated  
‘Of course they 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 reduplication). Remember that EP has the option to syntactically express emphatic affirmation by resorting to the V-\textit{sim} (V-AFF) strategy (cf. sections 2.2 and 3 above). Differently from the verb reduplication sentences, the V-\textit{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-\textit{sim} emphatic declaratives in (41b) and (42b) are perfectly grammatical, in contrast to (41c) and (42c) which are a by-product of fusion.

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 mesocinesis, which indicates that futures and conditionals have a
particular morphological structure among verbal forms. 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.’

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 mesoclitics 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 Arregui (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 Arregui (2005) deal with Spanish, their analysis could be extended to Portuguese. 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

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30 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.

31 Note that the fact that Spanish does not display mesoclitics is irrelevant because mesoclitics 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 mesoclitics 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 mesoclitics, it is like Spanish in the sense that it also excludes enclisis from matrix clauses.
any of the available analyses describe future and conditional forms of the verbs as morphologically more complex than the other inflected verbal forms.\(^{32}\)

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-\textit{sim} (V-AFF) declaratives, are totally grammatical with futures and conditionals. The contrast between the reduplicative structure and the V-\textit{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?’

[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 \textit{contra-atacar} ‘counter-attack’ in (48), and with the compound verb \textit{fotocopiador}

\(^{32}\) 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 reduplication structures induces sharp ungrammaticality.
‘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?’

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, pois não?
he not photocopy-would the book without your permission, CONF NEG
‘He wouldn’t photocopy the book without your permission, would he?’

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 sequences
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.33

33 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.
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)  
not him brought the book that he you-DAT asked  
‘You didn’t bring him the book that he asked you.’

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

c. *Eu trouxe-lhe o livro que ele me pediu, trouxe-lhe.  
I bought-him the book 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 não?  
not me returned-2SG the book that I you-DAT lent, CONF NEG  
‘You haven’t returned me the book I lent you, did you?’

returned, returned  
‘Yes, I DID.’

returned-you, returned-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 não?  
not me returned-2SG the book that I you-DAT lent, CONF NEG  
‘You haven’t returned me the book I lent you, did you?’

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 $\Sigma$ is not the place where fusion operates. 

(53)  

[A] a. Devolveste-me o livro que te emprestei?  
     returned-2SG-me the book that you-DAT lent-1SG  
     ‘Did you return me the book I lent you?’

     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 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 $\Sigma$ 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 $\Sigma$ 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 $\Sigma$). The morphological restrictions on verb reduplication (observed with compound-verbs, future/conditional forms of the verb, and verb+clitic sequences) are a consequence of

34 A reviewer asks “why wouldn’t it be just V-to-C without fusion”. If this were the case, we would expect that neutral answers to yes/no questions could optionally display verb reduplication. This is not so as was shown in section 2.2 above (see example (25)). Moreover the inverse word order displayed by neutral affirmative answers vs. emphatic affirmative answers with sim (i.e. AFF-V vs. V-AFF) would remain unexplained (see examples (21)-(22) in section 2.2 above). As far as fusion is an optional operation, however, the analysis discussed in this paper predicts that bare verb emphatic answers to yes/no questions should be allowed in EP. Such sentences would be derived precisely with verb movement to C but no morphological reanalysis, therefore all but one link of the verb chain would be deleted. I believe that this type of derivation is in fact available in EP, with the result that the verb moved into emphatic C is necessarily associated with prosodic stress. The visibility requirement on the two strong heads C and $\Sigma$ is not violated because V-movement to C implies that $\Sigma$ incorporates in C forming with it a complex head. Prosodic stress appears to identify precisely this complex head (which associates emphatic and affirmative features) whenever $\Sigma$ is not independently given phonological content.

35 Notice that if fusion in $\Sigma$ were an available option, the emphatic verb reduplication sentences would be allowed in BP (with the copies of the verb in $\Sigma$ and T phonologically realized). As discussed in section 3 above, the verb reduplication structure is not part of BP grammar.
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.36

From the approach developed in this paper 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 (this volume), for example, derives emphatic verb reduplication in Nupe (a Niger-Congo language) from the workings of a ‘low’

36 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.
   ‘John doesn’t know about these matters.’

   [B] b. Xuan sabe destes assuntos sabe.
   John knows of-these matters knows
   ‘John does know about these matters.’

c. Xuan sabe destes assuntos si.
   John knows of-these matters AFF
   ‘John does know about these matters.’

d. Xuan si sabe destes assuntos.
   John AFF knows of-these matters
   ‘John does know about these matters.’

e. Xuan si que sabe destes assuntos.
   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 Σ 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-adjointed Galician si expresses neutral affirmation (not emphatic affirmation) gives empirical evidence against a right-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 vas ir ó enterro?
   ‘Are you going to the funeral?’

   and you go to-go to-the funeral
   ‘You are going to the funeral?’

   b. Si, vou. / Vou, si.
      AFF [pause] go-1SG / go-1SG [pause] AFF
      ‘Yes, I am going.’

   NEUTRAL ANSWERS

(iii) a. ¿E ti no vas ir ó enterro, no?
   ‘You are not going to the funeral, are you?’

   and you not go to-go to-the funeral, no?

   b. Si vou. / Vou si.
      AFF go-1SG / go-1SG AFF
      ‘Of course I am going.’

   EMPATHIC ANSWERS
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. 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.’
    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 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

37 Presumably, in these languages verbal morphology includes phonologically unrealized polarity features. That’s why the verb competes with affirmative words in the answering system.
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)
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


Kandybowicz, Jason (this volume) “Verbal repetition and the phonetic realization of multiple chain links”. Ms. University of California at Los Angeles.


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


