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On richness of tense and verb movement in Brazilian Portuguese*

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I argue that morphological markings and richness of verbal tense paradigms might not be related to verb movement in the way proposed by Biberauer and Roberts (2010). I show that in Brazilian Portuguese there has been a partial loss of verb movement, although the language kept some synthetic forms. I assume Giorgi and Pianesi's (1997) proposal for tense-aspect structure. Some synthetic forms for tenses such as the pluperfect and future are absent in BP and were replaced by periphrastic forms. I show that the residual synthetic forms in Brazilian Portuguese don't convey their original tense meanings, indicating loss of verb movement to a higher functional head. In other words, residual synthetic forms have now only aspectual related features, and they do not move to a higher Tense head.

Keywords: verb movement; richness of tense; Brazilian Portuguese; Romance languages

1. Introduction

It has been proposed that a language has "rich agreement" when different forms of the verb, expressing person and number, are used. Rich agreement has been claimed (in the past) to be a necessary condition for both the presence of null subjects (Taraldsen 1979; Chomsky 1981; among others) and to the presence of V to T movement (Roberts 1985, 1993, 1999; Vikner 1997, 2001; Bobaljik & Thráinsson 1998, among others) in a particular language. Can we establish a

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relation between V-to-T movement and Null Subjects? No, we cannot, since we have non-null subject languages like French, in which V-to-T movement has been said to exist (Pollock 1989).[1]

In order to establish the role of rich agreement and the presence of V to T movement, Biberauer and Roberts (2010) (hereafter, B&R) propose that the latter is related to the richness of morphological Tense marking and not to the richness of agreement marking. In this way, Romance languages, as opposed to Germanic languages, would have verb-movement, because the former have synthetic tense paradigms with several forms, as can be seen in (1) and (2) (cf. B&R 2010: 266):

(1)   Romance languages

   – *French*: parle (present indicative/subjunctive), parlerai (future), parlerais (conditional), parlais (imperfect), [parlai (preterit), parlasse (past subjunctive)];

   – *Italian*: parlo (present), parlerò (future), parlerei (conditional), parlavo (imperfect), parlai (preterit), parli (present subjunctive), parlassi (past subjunctive);

   – *Spanish*: hablo (present), hablaré (future), hablaría (conditional), hablaba (imperfect), hablé (preterit), hable (present subjunctive), hablase (past subjunctive I), hablara (past subjunctive II).

(2)   Germanic languages:

   – *German*: spreche (present indicative/subjunctive), sprach (past), spräche (past subjunctive)

   – *English*: speak (present), spoke (past)

   – *Swedish*: snakker (present), snakket (past)

B&R propose a typology summarized in (3):

(3)   a.   Rich Tense, Rich Agreement: V-to-T, null subjects
                                          (cf. Italian, Greek, Spanish…)

      b.   Rich Tense, Poor Agreement: V-to-T no null subjects
                                          (cf. French, Middle English…)

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1.   Whether languages like Chinese that have poor morphology but still allow null subjects should count as relevant examples would depend on the kind of pro-drop phenomena they display. See Biberauer, Holmberg, Roberts and Sheehan 2010 for relevant discussion).

    c.   Poor Tense, Poor Agreement: no V-to-T, Modern English, Mainland
                        (Scandinavian…)

    d.   Poor Tense, Rich Agreement: no V-to-T, null subjects
                        (no clear examples)

B&R´s proposal makes some predictions regarding language change: in fact, the authors show how English changed from being a (3b) to being a (3c) language. Considering what is known about the history of French, we see that it is possible that a (3a) language change into a (3b) language as well.

In this paper, I will make an alternative proposal. I will argue that morphological markings and richness of synthetic tense paradigms may not be related to verb movement in the way proposed by B&R. In fact, I will argue that it might not be important how many morphological distinctions there are in a synthetic paradigm, but whether feature contents (tense-aspect meanings) are still expressed in the synthetic forms. These may also correlate with the loss/reduction of verb movement.

This paper is organized in the following way. In Section 2, I briefly describe B&R's proposal concerning verb movement and then, in Section 3, I present Brazilian Portuguese (henceforth, BP) facts. In Section 4, based on Giorgi and Pianesi (1997), I present my proposal for verb movement in Portuguese and, in Section 5; I present some evidence for the position of the verb in the language. Finally, I conclude with some considerations on the relationship of morphological markings and verb position.

2.   On verb movement

In minimalist terms, B&R consider that verb movement is an instance of an Agree relation between T and V. T has a valued T feature, and an unvalued V-feature (i.e. T is inherently verbal, but has no argument structure), and V has a valued V feature, and an unvalued T-feature (V bears tense morphology but has no temporal content). T is a Probe, V is a Goal (Chomsky 2000, 2001), and the unvalued features are valued by Agree and not by movement – in this case, Agree licenses V´s Tense morphology (English, Continental Germanic). Alternatively, both Agree and movement can value the unvalued features – T has an EPP-like feature triggering V movement (French, Italian, Spanish).

The difference between these processes of valuation is related to the richness of morphological marking for Tense in a language. If a language has "Rich Tense", it means that finite verbs are not categorially simple Vs - they are compound elements V+T, formed in the Numeration, in pre-syntactic word formation. As such, the only

way to satisfy the requirements of the compound [V+T] is to merge it both with a V-complement (VP) and with a T-complement (TP). [V+T] first merge in V and, then, [V+T] reprojects in T. The effect of this operation is that the verb has moved, but it is certain features of the compound element that determine the movement. There is no need for an EPP-feature on T for verb movement to occur.

On the other hand, "Poor Tense" will trigger no reprojection. However, as admitted by B&R (2010: 268), the line between richness and poverty of tense morphology is hard to draw. In this paper, I explore this observation.

3.   Brazilian Portuguese (BP)

It is a well-known fact that BP has lost rich (phi-) agreement (cf. Duarte 1995) and the possibility for null subjects (cf. Kato & Negrão 2000). However, apart from some sparse observations (cf. Costa & Galves 2000; Matos & Cyrino 2001), no study has addressed the loss of verb-movement and its relationship with analyticization, that is, with an impoverishment in terms of morphological markings for tense in the lexical verbs of the language.

Given the synthetic verbal paradigm in BP seen in (4) and B&R's criteria, BP could be considered a rich Tense language and it should have verb-movement:

(4)   *falar* 'to speak', 1person singular:
        falo (present indicative) – *falarei* (future) – *falei* (preterite) – *falava*
        (imperfect) – *falara* (pluperfect) – *falaria* (conditional) – *falasse*
        (past subjunctive)– *fale* (present subjunctive)

However, although present in written language, some synthetic forms are replaced by periphrases. In fact, several studies point to the widespread use of periphrastic forms in BP – cf. Longo (1998), Longo and Souza Campos (2002), Mendes (2005), Almeida (2009) Freitag (2007), Costa (2005), among others. Other forms are completely obsolete: Souza Campos and Rodrigues's (1993) study shows that the synthetic future is rare, and there is no synthetic pluperfect in contemporary Brazilian Portuguese.

As an illustration, consider the sentences in (5) and (6), which show the various possibilities for Tense markings in contemporary Brazilian Portuguese for *morar* 'to live', for absolute and relative tenses:

(5)   a.   *Eu morei   em Paris no   passado.* (absolute anterior tense)
                I   live.PAST-1s in   Paris in-the PAST
                'I have lived in Paris in the past.'

b. *Eu moro   em Paris hoje.*   (absolute concomitant tense)
  I   live.PRES-1s in Paris today
  'I live in Paris nowadays.'

c. **Eu morarei   em Paris em 2015.* (absolute subsequent tense)
   I   live.FUT-1s in Paris in 2015
  'I will live in Paris in 2015.'

(6) (i) Relative anterior tense

  a. *Eu tinha   morado em Paris antes de morar aqui.*
    I   have.IMPERF-1s lived   in Paris before of live   here
    'I had lived in Paris before living here'.

  b. *Eu morei   em Paris antes de morar aqui.*
    I   live.PAST-1s in Paris before of live   here
    'I had lived in Paris before living here.'

  c. *Eu morava   em Paris antes de morar aqui.*
    I   live.IMPERF-1s in Paris before of live   here
    'I used to live in Paris before living here.'

  d. **Eu tive   morado em Paris antes de morar aqui.*
     I   have.PAST-1s lived   in Paris before of live   here

  e. **Eu morara   em Paris antes de morar aqui.*
     I   live.PLUPERF-1s in Paris before of live   here

  (ii) Relative concomitant tense

  f. *Eu tenho   morado em Paris ultimamente.*
    I   have.PRES-1s lived   in Paris lately
    'I have lived in Paris lately.'

  g. *Eu estou morando em Paris ultimamente.*
    I   am   live.PROG in Paris lately
    'I have been living in Paris lately.'

  h. *Eu moro   em Paris ultimamente.*
    I   live.PRES-1s in Paris lately
    'I have lived in Paris lately.'

  (iii) Relative subsequent tense

  i. *Eu vou morar em Paris em 2015.*
    I   go live   in Paris in 2015
    'I am going to live in Paris in 2015.'

  j. *Eu terei   morado em Paris por 5 anos em 2020.*
    I   have.FUT-1s lived   in Paris for 5 years in 2020.
    'I will have lived in Paris for 5 years in 2020.'

We see in (5–6) that BP is similar to languages that have just one form for the three tenses (anterior, concomitant and subsequent) – absolute or relative readings depend on the context. For instance, the same present tense form, *moro* ('I live'), is compatible with both *hoje* ('today') (5b) and *ultimamente* ('lately') (6h).

The conclusion we have is twofold: (i) BP has lost some synthetic forms (pluperfect and future); (ii) the synthetic form marked for *past* cannot be replaced by a periphrastic form and, at the same time, does not necessarily convey past/preterite (see also below). We conclude that although showing morphological markings, the synthetic Tense paradigm is not rich in BP. According to B&R´s proposal seen above, BP should not have verb-movement.

However, such a claim is difficult to maintain in view of the fact that the verb leaves vP in the language, as has been argued, among others, by Costa (1996) and Costa and Galves (2002). The former shows that the adverb *bem* 'well' marks the edge of vP, so the verb in sentences in (7) from European Portuguese (hereafter, EP) has moved:

(7)   a.   *João tinha   visto bem as   condições   de pagamento*
           João have.PAST seen well the conditions of payment
           antes   de comprar um carro.
           before of buy   a   car
           'João had seen the payment conditions very well before buying a car.'

     b.   *João vê   bem as   condições   de pagamento antes   de*
           João see.PRES well the conditions of payment   before of

           comprar um carro.
           buy   a   car
           'João sees the payment conditions very well before buying a car.'

Sentences in (7) are grammatical in BP, so, if Costa (1996) is correct, the verb also leaves vP in the language. In order to account for the apparently contradictory facts concerning verb movement and morphological richness, I propose that BP has lost verb-movement to a higher functional projection, but kept it to a lower functional projection related to Aspect, which I will label T2 (see below).

4.   On verb movement in Portuguese

As seen above, B&R propose that verb movement is, in fact, reprojection of V in T once we assume that synthetic forms are compounds [V+T]. In their system, richness of tense inflection is broadly defined in terms of paradigmatic oppositions for tense, aspect, and mood seen in synthetic forms. It thus includes the marking of both mood

and aspect, as in the Romance subjunctive, futures, conditional and imperfect forms. It may very well be the case that the relevant features are associated with designated modal and aspectual heads, but crucially they are associated with a single inflection or set of inflections, with the finite verb moving consistently to the (higher) Tense node (Biberauer & Roberts 2010: 266).

However, I would like to point out two problems with respect to the richness of tense parameter. The first problem is that it is not entirely obvious why the number of paradigmatic oppositions, and not the type of morphology, is so crucial for the absence or presence of verb movement. Actually, in synthetic systems verb movement presents also a way to avoid a stranded affix. So, verb movement might be required also for morphological wellformedness conditions.

The second problem is that, as seen above, it is not a trivial matter to decide whether a language has rich tense inflection or not. Simply counting the number of paradigmatic oppositions does not provide a sufficient answer. Other factors such as morphological productivity and competition between different tense patterns may play a decisive role as well. In other words, B&R's theory is too restrictive because it connects verb movement simply to presence/absence of morphology.

I would like to follow a different path and relate verb movement to the presence of meaning in the morphology attached to synthetic forms. In other words, it is the meaning of a verb form rather than its morphological markings that determines the position to where the verb moves.

I will assume that T consists of two projections, a higher and a lower functional projection (see Giorgi & Pianesi 1997; Julien 2001). Verb movement to these projections may occur independently, depending on the language. The result is that morphological markings can be misleading in some cases.

Giorgi and Pianesi (1997: 27)(G&P) propose that the temporal syntactic structure of a verbal form consists of two distinct Tense heads, named T1 and T2 respectively. These heads are only realized when they express a temporal relation that is different from coincidence: e.g. T2 is projected in tenses that convey the notion of 'perfect' or of 'prospective'; T1 is projected in past tenses and in future tenses. When the temporal points coincide, no Tense head is projected; the interpretation is assigned by default at LF.

In G&P's view, the crucial difference between Portuguese (and Latin) and other Romance languages, e.g. Italian, is that perfect T2 is a verbal category, rather than an adjectival one. In Italian, for example, the participle (T2) can bear gender and number features since it can agree with a clitic, and this is not so in Portuguese. According to G&P, in Portuguese the Simple Past has the same structure as the Latin 'Perfect': it triggers the projection of T2 and no projection of T1. Essentially, G&P claim that the Portuguese Simple Past is a true Present Perfect.

The Present Perfect in English is different in distribution from the Simple Past, because it has the property of expressing a past situation with current relevance:

(8)   a.   now I have eaten enough
      b.   *now I ate enough
           'Now' distinguishes two past forms: the Present Perfect from the Simple Past.
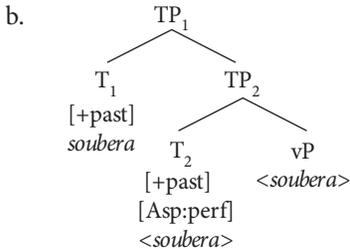
The Simple Past in Portuguese, however, is possible in a sentence as (9a) and the Compound Past has a different meaning:

(9)   a.   *agora comi o suficiente*
           'now I have eaten enough'

      b.   *agora tenho comido o suficiente*
           'now I have been eating enough'

G&P propose that the Portuguese synthetic Pluperfect is a T2 because: (i) it has a morphosyntactic structure analogous to the Latin Pluperfect form *laudaveram;* *(ii)* Pluperfect forms as *falara/soubera* 'spoke/knew' were formed by the Imperfect of the auxiliary *era* attached to the past theme; (iii) the Pluperfect is built on the past tense theme vowel: *soubera* vs. **sabera*, from *saber* 'to know'. Hence, the synthetic Pluperfect is really T1+T2.

With this in mind, I assume (10b) for the synthetic Pluperfect in Portuguese in (10a):

(10) a.   *João   soubera   a   resposta.*
           João   know.PLUPERF-3s   the   answer
           'João had known the answer', synthetic form in Portuguese

      b.

$$
\begin{array}{c}
\text{TP}_1\\
\diagup\quad\diagdown\\
\text{T}_1\qquad\text{TP}_2\\
\text{[+past]}\\
\textit{soubera}\quad\text{T}_2\qquad\text{vP}\\
\text{[+past]}\quad\textit{<soubera>}\\
\text{[Asp:perf]}\\
\textit{<soubera>}
\end{array}
$$

According to G&P (1997: 50), the desinence of the Pluperfect is the Imperfect of the auxiliary *ser* ('to be'), "which is attached to the past tense theme, exactly like in Latin". The suffix *–era* is the residue of a former auxiliary, and the Simple Past form *soube* is actually a T2, i.e. it is in the position where non-finite tenses (perfects) and the Simple Past in Portuguese occur, as shown by the existence of the strong form

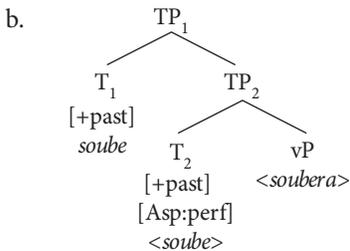*soube*ra, instead of *sabera*. The main verb, the compound [V+T1+T2], reprojects in the two T heads.[2]

As for the Simple Past in Portuguese, G&P (1997) propose it projects a T2 (corresponding to the Latin *laudavit*). However, the Imperfect projects T1. They argue that the Simple Past is not restricted to Past (cf. (11)) and that there is no Past Perfect in Portuguese with a [Past auxiliary+Participle]:

(11)   a.   *Agora   ja   comi   o   suficiente.*
            now   already eat.PAST-1s the enough
            'Now I have eaten enough.'

       b.   *Outro exame mais   e   terminaste   o   curso.*
            other exam   more and   finish.PAST-2s the   course
            'One more exam and you are done with the course.'

In other words, Portuguese, as opposed to other Romance languages, e.g. Spanish, does not have the form *tive falado* for the Past Perfect, with the Past of *ter* 'have' + participle. The Past Perfect is formed with the imperfect form of *ter* plus the participle, *tinha falado* 'had spoken' (T1+T2). Hence, past morphology competes with participle morphology for the same position. That is why the Past is actually a T2 in Portuguese, in G&P's proposal.

However, (11a) only shows that the Portuguese verbs inflected for Simple Past are compatible with Present Perfect meaning, that is, they *may* be compound forms [V+T2]. Verbs that have this form also behave as true simple pasts, [V+T1], cf. (12a) below. Therefore, I assume that in the cases where the Simple Past behaves as a Simple Past, there has been verb movement to T1 (12b):

(12)   a.   *João soube   a   resposta.*
            João know.PAST-3s the answer
            'João knew the answer'.

       b.

```
              TP₁
            /      \
         T₁        TP₂
       [+past]    /    \
        soube   T₂      vP
              [+past]  <soubera>
              [Asp:perf]
               <soube>
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2.   I assume the synthetic form came from a biclausal structure – as proposed by Roberts and Roussou (2002), for whom a former auxiliary in Future tenses in Romance becomes an affix. Here, the incorporated auxiliary is *era*, cf. also Latin *lauda-v-er-am*. For G&P (1997: 46), *-vi* is verbal, *eram* is an incorporated auxiliary, the imperfect (past) form of the verb *sum*, *esse* (be).

Here, the verb has an unvalued T1 and T2 feature, which leads it to reproject in these functional categories. In sentences as (11) the verb is a [V+T2] compound, and does not reproject to T1.

5.   Evidence for main verb in T2 in BP

In this paper, I argue that, differently from EP, the verb in BP moves only as high as T2. In order to show that, in this section, I compare BP to EP and make the case that the verb occupies different functional positions in these related languages.

5.1   Adverb position ('sempre') in EP vs. BP

In EP, the adverb *sempre* ('always') can have either a temporal/aspectual or a non-temporal (confirmation of state of affairs' meaning, 'indeed') meaning, depending on whether it occurs in postverbal or in preverbal position, respectively (cf. Brito 1999, 2001; Ambar, Gonzaga & Negrão 2004; Gonzaga 1997; Fiéis 2010):

(13)   a.   *O   João   estava   sempre   em   casa.   (todos os momentos)*
              the   João   be.IMPERF   always   at   home   (at all moments)
              'João was always at home.'
              Temporal reading,   [EP]

         b.   *O   João   sempre   estava   em   casa.   (afinal ele está em casa)*
              the   João   always   be.IMPERF   at   home   (after all he is at home)
              'João was at home, after all/indeed.'
              Confirmative reading,   [EP]

Brito (2001), working in a framework that includes AgrP in the clausal structure, proposes that there are two positions to which the adverb is adjoined. After arguing extensively for two positions for the adverb depending on its meaning and relating adverb position to verb movement, the author concludes: "if *sempre* is an adjunct to TP, the V moves to T (in a short movement) and the subject is in Spec AGRSP, we explain the order subject *sempre* verb. If *sempre* is an adjunct to VP, the Verb is in T and the subject is in Spec of T, we explain the order subject V *sempre*" (Brito 2001: 82). In the former situation we have the confirmative-only meaning, and in the latter, the temporal/aspectual meaning of the adverb.

Therefore, the adverb *sempre* 'always' with temporal/aspectual meaning is a low (tense, aspect) TP adverb. In the framework adopted in this paper, the temporal/aspectual *sempre* is adjoined to TP2. For the non-temporal meaning, the adverb *sempre* is a high, confirmation IP-related adverb, in which case it is above TP1 (cf. also Gonzaga 1997).

Interestingly, the contrast seen in (13) is true of all tenses in EP, except for the Simple Past. In this tense, the adverb can also have a temporal interpretation when it is in preverbal position provided the object is [-specific] (14a). When the object is [+specific], the confirmation reading of the adverb obtains (14b) (cf. Gonzaga 1997):

(14) a. *O   João   sempre   visitou   escolas.*
        the João   always   visit.PAST   schools
        'John has always visited schools.'
        ([−specific] object, temporal adverb)   [EP]

    b. *O   João   sempre   visitou   a   escola.*
        the João   always   visited   the   school
        'John visited the school after all'.
        ([+specific] object, confirmation adverb)   [EP]

Recall that in Section 4 above, examples (11) and (12), I assume the verb with simple past morphology moves to T2 in EP, but it can also move up to T1. The different positions (above TP1 or TP2) and interpretations (confirmation or temporal) of the adverb *sempre* give support to this proposal. Let us consider (14). If we look at the translations, we see that in (14a), in which we have a present perfect in the translation, the past morphology on the verb correlates to the temporal/aspectual meaning of adverb *sempre* (adjoined to TP2). I assume the verb moves to T2 in this case, as in (15a). In (14b), a true simple past meaning of the past morphology correlates to the confirmation meaning of the adverb *sempre* (here, adjoined to TP1, but it could be higher). I assume the verb moves to T1, as in (15b):

(15) a. [$_{TP2}$ sempre [$_{TP2}$ verb [$_{vP}$ <verb>…
        temporal/aspectual *sempre*, present perfect meaning of past
        morphology

    b. [sempre [$_{TP1}$ verb [$_{TP2}$ <verb> [vP <verb>…
        confirmative *sempre*, simple past meaning of past morphology

Hence, *sempre* as a confirmative adverb should be above TP1 (see also Brito 2001; Gonzaga 1997; Ambar, Gonzaga & Negrão 2004). Note also that sentences in (16) are possible with confirmative meaning of *sempre* in EP (see Brito 2001; Gonzaga 1997), but not with the temporal/aspectual meaning. Notice that negation is present. Given that sentence negation *não* is related to T1 in Portuguese (see Matos 2001), the structure for (16a,b) should be (17):

(16) a. *O   João   sempre   não   comprou   o   livro.*
        the João   always   not   buy.PAST the   book
        'João has not bought the book after all.'
        Confirmative *sempre* only,   [EP]

b. *A   professor sempre não chegou.*
   the   teacher   always not arrive.PAST
   'The teacher did not arrive after all.'
   Confirmative *sempre* only,   [EP]

(17)   [sempre [$_{NEGP}$ não [$_{TP1}$ verb [$_{TP2}$ <verb> [vP <verb>…
         Confirmative *sempre*,   [EP]

Things are different for the imperfect (and for other tenses), however. As seen above (13), with the imperfect, the confirmative meaning of *sempre* is only obtained when the adverb is in preverbal position. If the adverb *sempre* is in postverbal position, the temporal/aspectual meaning obtains. In order to represent these different interpretations, I propose the following structures, compatible with the fact the verb moves to T1 in the imperfect in EP (G&P 1997):

(18)   a. *O   João sempre comia   batatas   no almoço.*
          the João always eat.IMPERF potatoes in-the lunch
          'After all, João ate potatoes at lunch.'
          Confirmative *sempre*   [EP]
       b. [$_{TP1}$ sempre [$_{TP1}$ comia [$_{TP2}$ <comia> [$_{vP}$ <comia> …

(19)   a. *O   João comia   sempre batatas no   almoço.*
          the João eat.IMPERF always potatoes in-the lunch
          'Jão always used to eat potatoes at lunch.'
          Temporal/aspectual *sempre*   [EP]
       b. [$_{TP1}$ comia [$_{TP2}$ sempre [$_{TP2}$ <comia> [$_{vP}$ <comia> …

In BP, however, the only possible reading for the adverb *sempre* 'always' is the temporal reading, irrespective of its position in relation to the verb, or verb tense. This fact indicates that the adverb *sempre* is always adjoined to TP2, and I would like to argue that this provides evidence that the verb never raises to T1 in BP. In other words, regardless of verb tense morphology, the verb can move only as high as T2.

Since the confirmative reading does not exist in BP, we have the following structures for sentences in (14a,b) and (18) as (20a) and (20b) respectively. Here the verb raises only to T2. Note that (14b) is grammatical in BP with a temporal/aspectual reading for the adverb:

(20)   a. [$_{TP2}$ sempre [$_{T2}$ visitou [$_{vP}$ <visitou>]]]]
          (cf. (14a,b), temporal reading, BP)
       b. [$_{TP2}$ sempre [$_{T2}$ comia [$_{vP}$ <comia>]]]]
          (cf. (18), temporal reading, BP)

Another piece of evidence for this structure in BP comes from the fact that the occurrence of the negative marker is impossible with preverbal *sempre* (see also Fiéis 2010).

This fact also confirms that the adverb *sempre* never occurs adjoined to TP1 in BP. Compare sentences in (21) with their EP counterparts (16):

(21) a. *O João*   *sempre   não comprou o livro.*   [BP]
      b. *A professora sempre não chegou.*   [BP]

Additionally, negation after *sempre* is also impossible with the imperfect in BP:

(22)   *O   João sempre não   morava   aqui.*   [BP]
        the João always not   lived.IMPERF here

In this section, I have shown that the verb does not move to a higher position than T2 in BP. *Sempre* as a temporal adverb is related to TP2; if the verb moves higher, the adverb may appear postverbally, but this is only the case in EP.

5.2   vP ellipsis

Another syntactic piece of evidence that the verb occupy different projections in EP and in BP comes from vP ellipsis phenomena.

Matos and Cyrino (2001) show that vP ellipsis in Portuguese is licensed by the verb which has moved out of vP. As is usually the case, vP ellipsis will occur when there is identity in content between the antecedent and the elided vP. If we assume that vP ellipsis is licensed by a verbal element in a functional head (cf. Lobeck 1995), the position of the lexical verb can be crucial to explain the different interpretations of ellipsis we find in EP versus BP. I assume vP ellipsis is licensed by a c-commanding verb in T1 (see also Cyrino & Matos 2005). I assume the reason why (23c) is ungrammatical is that the participle, not being in T1, is unable to license the ellipsis:

(23)   (a) Jo read the book to the children and Sy did –- too.
       (b) Jo has read the book to the children and Sy has –- too
       (c) *Jo has read the book to the children and Sy has read –- too

In Portuguese, the adverb *também* 'too, also' focuses the elided sequence in vP ellipsis, and it may appear either in preverbal position (24a) or in post vP position (24b):

(24) a. *O   João leu   o   livro às   crianças e*
          the João read.PAST-3s the book to-the children and
          a   Maria também leu –-.
          the Maria also   read.PAST-3s
          'João read the book to the children and Maria did too.'
      b. *O   João leu   o   livro às   crianças e*
          the João read.PAST-3s the book to-the children and
          a   Maria   leu – também.
          the Maria   read.PAST-3s also
          'João read the book to the children and Maria did too.'

In periphrastic tenses, however, besides the preverbal and post vP position, BP has a third possibility, impossible in EP (25c):

(25) a.   *O   João   tinha   lido   o   livro   às   crianças e*
           the   João   have.ɪᴍᴘᴇʀꜰ-3s read   the book   to-the children and

           a   Maria   também   tinha lido --.   [✓ EP, ✓ BP]
           the   Maria   also   have.ɪᴍᴘᴇʀꜰ-3s read

           'João had read the book to the children and Maria had too´.

      b.   *O   João   tinha   lido   o   livro   às   crianças*
           the   João   have.ɪᴍᴘᴇʀꜰ-3s read   the book   to-the children

           e   a   Maria   tinha lido -- também.   [✓ EP, ✓ BP]
           and   the Maria   have.ɪᴍᴘᴇʀꜰ-3s   read also

           'João had read the book to the children and Maria had too.'

      c.   *O   João   tinha   lido   o   livro   às   crianças e*
           the   João   have.ɪᴍᴘᴇʀꜰ-3s read   the book   to-the children and

           a   Maria   tinha   também lido --. [%EP, ✓ BP]
           the   Maria   have.ɪᴍᴘᴇʀꜰ-3s also   read

           'João had read the book to the children and Maria had too.'

The % mark in (25c) means that the sentence in EP does not convey the reading of vP ellipsis as a first reading (see also Cyrino & Matos 2002), but the interpretation is that Maria had read (something or other), i.e. here we have the intransitive reading of 'read'. In other words, when the adverb *também* intervenes between T1 and T2 in EP, the contents of the ellipsis cannot be recovered. The verb *tinha* (imperfect) in T1 cannot license the ellipsis. (25a), however, has the adverb *também* focusing the verb *tinha* in T1, allowing the vP ellipsis reading. The same can be said about (25b), where the adverb follows the whole vP.

In BP, however, as opposed to EP and to (23c) in English, the verb in T2 (*lido* 'read') can license the vP ellipsis reading (cf. also Matos & Cyrino 2001; Cyrino & Matos 2005).

However, when the verb is a synthetic form, a simple past form may convey a present perfect meaning (ie, in T2, see (11a)) or a past meaning (ie, in T1, see (12a)). Now, if we have a synthetic form as in (26), vP ellipsis can be ambiguous in EP. In one of the interpretations, (i), Pedro has eaten (intransitive use of *comer* 'to eat'). The other interpretation, (ii), gets the vP ellipsis reading, where the antecedent vP is recovered:[3]

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3.   On the potential structural ambiguity between vP ellipsis and a null object, I follow Cyrino and Matos's (2002) proposal, where the presence of the same verb in both clauses point out to the former structure. See also Matos (1992) and Rouveret (2011).

(26)   *Agora o   João comeu   uma boa   feijoada*
       now   the João eat.PAST-3s a   good feijoada
       e   o   Pedro também comeu --.   [EP]
       and the Pedro also   eat.PAST-3s
       'Now João has eaten a good feijoada and Pedro has too'.

       (i)   *comeu --* = 'has eaten'

       (ii) *comeu --* = 'has eaten a good feijoada'

When the adverb *também* is in post vP position, cf. (27), the preferred interpretation is the vP ellipsis, as in (26)(ii):

(27)   *Agora o   João comeu   uma boa   feijoada.*
       now   the João eat.PAST-3s a   good feijoada
       e   o   Pedro comeu --   também.   [EP]
       and the Pedro eat.PAST-3s also
       'Now João has eaten a good feijoada and Pedro has too.'

As seen above, the verb marked for *pretérito perfeito* in EP can target T2 or T1. For ellipsis to occur in EP, I assume the verb must be in T1 (see also Cyrino & Matos 2005), and a parallel structure is necessary (cf. Fiengo & May 1994). Therefore, for ellipsis to occur, the verb must be in the same position, T1, in both the antecedent and in the ellipsis site.

The ambiguity found in (26) for EP can be explained if we assume the different positions of the verb in the antecedent and in the ellipsis clause. First, for the (i) interpretation, let us assume *também* may focus only the verb, *comeu* in the second clause, which would, in this case, be in T2. In that position, it cannot recover the vP contents of the antecedent clause, where the verb is in T1. In other words, the verb in the second conjunct, being in T2, cannot license vP ellipsis, since it cannot recover the antecedent in a parallel position. The interpretation can only be (i), with no ellipsis – we have the 'intransitive' reading of *comeu*.

However, in (26), the verb in the second clause may also be in T1, and the adverb *também* may focus the vP; in this case, the verb in T1 licenses the vP ellipsis in reading (ii). The same happens in in (25) (cf. (25b)).

In BP, the whole vP ellipsis is licensed in both (26) and (27), since, as I argue, the main verb is always in T2. That is why the verb can license vP ellipsis in (26) as the preferred reading, as opposed to EP.

5.3   Non-exclusive use of past morphology for past meaning

When we look at sentences in (5) and (6) in BP above, we can also notice that, for Anterior Tense, the form *morei*, which has Past morphology and is considered *pretérito perfeito* 'perfect preterite' in school grammars, can be used both for absolute

(sentence 5a) and for relative tenses (sentence 6b) – certain adverbs/context are necessary to mark temporal relations. At the same time, this form is the only one that cannot be replaced by a periphrastic form in the indicative. This leads to the conclusion that the form does not convey simple past exclusively.

Another important observation about BP is a special use of verbs bearing *pretérito perfeito* morphology (cf. *morei* 'lived', *falei* 'spoke', *dormi* 'slept'). In BP, the following sentences are possible:

(28) a. *Minha barriga está doendo pois   eu comi*
          my   belly   is   aching because I   eat.PAST
          muito   o dia todo.
          a lot the day   all
          'My stomach is aching because I have had a lot to eat during the whole day'.

      b. *Minha barriga está doendo pois   eu tenho*
          my   belly   is   aching because I   have.PRES
          comido muito   o   dia todo.
          eaten   a-lot the day all
          'My stomach is aching because I have had a lot to eat during the whole day.'

(29) a. *Eu estou feliz, porque eu vivi   muito bem*
          I   am   happy because I   live.PAST very   well
          todos estes   anos.
          all   these years
          'I am happy because I have lived very well all these years.'

      b. *Eu adorei   sua   blusa!*
          I   love.PAST your blouse
          'I love your blouse!'

In (28) the use of the synthetic form of the past conveys the same meaning as the periphrastic present perfect (cf. also Giorgi & Pianesi 1997). In (29), we see the morphological marking for past, but the meaning is not of a past tense. The past meaning that they may convey may come from the aspectual head T2.

It is interesting to note that sentences as (29) are possible in European Portuguese for all stative verbs. However, BP generalizes this possibility to all kinds of verbs:[4]

(30) *Só   falta   cerveja nesta   festa!*
      only lack.PRES beer   in-this party
      'Only beer is missing in this party!'

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4.   I thank Meghan Armstrong for pointing these sentences out to me.

In (30), in both BP and EP, the meaning is that there is still the possibility that some-one will buy beer. However, if the morphological marking is for past, see (31), there are differences between BP and EP. One of the meanings, possible for both varieties, is that the party is over, the speaker has accepted the situation, that there was no beer and that the situation didn't change. However, in BP, the sentence is also possible when the party is not over, the speaker has accepted the situation – that there is no beer and that the situation is not going to change.

(31) *Só   faltou   cerveja nesta   festa!*
      only lack.PAST beer   in-this party
      'Only beer was missing in this party!'   [BP, EP]
      'Only beer is missing in this party!'   [BP]

The same thing happens in sentences as (32):

(32) a. *Você vira   na   Rua 7,   e   chega   na*
          you turn.PRES in-the Street 7 and arrive.PRES in-the
          universidade   [✓EP,✓BP]
          'Turn on 7th Street and then you arrive at the university.'

      b. *Você virou   na   Rua 7,   e   chegou   na*
          you turn.PAST in-the Street 7 and arrive.PAST in-the
          universidade.   [*EP,✓BP]
          university
          'Turn on 7th Street and then you arrive at the university.'

5.4   Uses of 'imperfect' in EP vs. BP

In EP, the imperfect form of a verb can be used in a non-temporal reading. In those cases it has the value of a conditional and may express modality (cf. Mateus et al. 2003: 157; Oliveira 1986, 1998).

In BP, no such modality reading is possible:

(33) *Eu gostava   de ir ao   cinema.*
      I   like.IMPERF-1s of go to-the cinema
      'I would like to go to the cinema'.   [EP]
      'I used to like to go to the cinema'.   [BP]

This indicates once more that the verb in BP does not move as high as in EP.

6.   Conclusion

Lexical verbs in BP have now only T2 related features, and they do not reproject up in T1. Somehow, BP has lost some of its former richness of tense, if we are to relate verb movement with a rich tense paradigm. This can be related to the loss of some synthetic

forms. However, this cannot be the whole story, since a related language, EP, also has periphrastic forms for the pluperfect (although the synthetic form is still productive). Moreover, having periphrastic forms does not guarantee poorness of tense, since one can argue that the richness of tense could be coded in the auxiliary forms.

In fact, in this paper, I have argued that BP is a language that has a poor synthetic verbal paradigm but still has verb movement. BP has lost entirely the synthetic pluperfect and it is in the process of losing the synthetic future tense. There is no periphrastic form such that it could replace the synthetic form morphologically marked for past (*pretérito perfeito*). Nevertheless this form does not convey temporal, but aspectual reference. In spite of the presence of a number of paradigmatic oppositions, the Tense paradigm of BP turns out not to be rich.

If we assume Tense comprises of two functional categories as in G&P (1997), one of them related to aspect (T2), we begin to understand that loss of verb movement may mean loss of movement to the higher of these projections. In this case, the presence of morphology will not reflect the presence of verb movement.

This paper is an attempt to show this is the case in BP, where residual verb movement involves movement of the simple past synthetic form to the aspectual head T2 and no further. Looking at the ongoing analyticization process in BP in more abstract terms, we have, at the formal level, replacement of bound morphology by free morphology. At the semantic level, we see that a former syncretic tense-aspect form is reanalyzed as a purely aspectual form. Concretely in the case of the *pretérito perfeito*, an original feature specification [+past, +perfective aspect] is reduced to an [+perfective] aspectual form. This corresponds to a restriction of the movement space. For the *pretérito perfeito* T1 is no longer a possible landing site, but rather the lower T2 (Aspect) head.

The conclusion we arrive at is that morphological marking may be misleading, since it does not always indicate verb position. The fact that morphology does not necessarily convey temporal projections/verb position in fixed ways is not restricted to BP. Dahl (1985: 80) points out that in Modern Standard Arabic, the category variously called 'Perfect' or 'Perfective' normally has only past time reference, but in certain subordinate clauses, it may refer to the future, as in the translation of:

(34)   *ʔida: ʔit:asala elwaladu bilwa:li   sayaštari:*
        if   comes   the-boy   to-the money   he-will-buy

       hadiy:atan   lilbin.
       a present   for the girl

       'If the boy gets (Perfective) the money, he will buy (Future) a present for the girl.'

This example is reminiscent of the BP possible sentence in (35), where the usual past morphemes do not express time before speech time, but future:

(35)   *O   João   não sabe   como vai*
       the   João   not know.PRES-3s   how   go.PRES-3s

       agradar   a moça.
       please.INF the girl

       Mas conseguindo esse emprego, aí   pronto!
       but   getting   this job,   then ready!

       Comprou   um carro e   agradou ela!
       buy.PAST-3s a   car   and please.PAST-3s her

       'João doesn't know now to please his girlfriend. But if he gets this job, then, everything will be fine! He will buy a car and he will please her!'

Here we have one more example that, in BP, the simple past form has lost its temporal meaning, keeping its aspectual features (when João completes the purchase, he will have pleased the girl).

In the proposal of this paper, reduction of verb movement is related to the semantics contents of Aspect (T2)/Tense (T1) forms, and not only to richness of synthetic paradigms. When one synthetic form has temporal/aspectual meanings it moves/reprojects to the two functional heads so that these features are fully valued. Once the synthetic form loses the temporal meaning, the verb may have its movement reduced to check only aspectual features. In that case, temporal meanings may be derived from aspectual features. Thus, this paper aims to be a contribution to the debate on the role of (rich/poor) tense morphology and its relation with verb position.

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