BASIC WORD ORDER IN BRAZILIAN PORTUGUESE: A HYBRID EXTENDED PROJECTION PRINCIPLE (EPP)

A ORDEM BÁSICA DE PALAVRAS NO PORTUGUÊS BRASILEIRO: UM PRINCÍPIO DA PROJEÇÃO ESTENDIDO (EPP) HÍBRIDO

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Abstract: This paper proposes a novel analysis of word order in Brazilian Portuguese (BP), based on a hybrid model of EPP satisfaction. It is proposed that the subject requirement or EPP is a [uD] feature on T which can be satisfied either by DP movement or by movement of an inflected verb bearing a [D] feature in BP. This, it is claimed, offers an explanatory account of basic word order patterns in BP. External argument DPs, merged above V, are closer to T than V, meaning that they must raise to satisfy the EPP, predicting SV(O) order with transitive and unergative predicates, including transitive psych-predicates. Internal arguments are merged below V, however, and so with unaccusatives, it is movement of the verb bearing a [uD] feature which satisfies the EPP, giving rise to VS order. With copular verbs which take small clause complements, a similar affect holds, as the copular verb can satisfy the EPP. Verb movement can also satisfy the EPP in impersonal contexts, hence the fact that BP lacks overt expletives.

Keywords: EPP, subject requirement, verb movement, basic word order

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Resumo: Este artigo propõe uma nova análise da ordem de palavras no Português Brasileiro (PB), baseada num modelo hibrido de satisfação do Princípio da Projeção Extendido (PPE). Propõe-se que o requisito de sujeito ou PPE é um rasgo [uD] no núcleo T, que se pode satisfazer ou por alçamento de um DP ou por movimento de um verbo flexionado com um traço [D] no PB. Esta abordagem oferece uma análise explanatória da ordem básica das palavras no PB. Os argumentos externos (dos verbos transitivos e inergativos) que originam acima do verbo, são mais perto de T, assim que devem mover para satisfazer o PPE, o que prediz corretamente a ordem SV(O) com estes verbos (incluso os predicados psicológicos transitivos). Os argumentos internos originam abaixo do verbo, assim que com os verbos inacusativos, e o verbo com um traço [D] que deve satisfazer o PPE, ocasionando a ordem VS. Com os verbos copulares com clausulas pequenas como complemento, observamos algo parecido porque a verbo copulativo também pode satisfazer o PPE. O alçamento do verbo também pode satisfazer o PPE em contextos impessoais, por isso a falta de expletivos no PB.

Palavras-chave: EPP, Requerimento do sujeito, movimento do verbo, ordem básica de palavras

1   WORD ORDER WITH UNERGATIVE/TRANSITIVE VERBS

With transitive and unergative verbs, BP requires SV(O) order and disallows VS except in instances of locative inversion (KATO & TARALLO, 1986; SILVA, 2001):

1) a. A Bia comprou um livro   aqui
      the Bia bought   a   book   here
      'Bia bought a book here.'
   b. *Comprou a Bia um livro aqui.
   c. *Comprou um livro a Bia.   (SILVA, 2001, p. 30)

2) a. O Ivo trabalha todo   dia
      the Ivo works   every day
      'Ivo works every day.'
   b. *Trabalha todo dia o Ivo.
   c. *Todo dia trabalha o Ivo.²   (SILVA, 2001, p. 30)

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² It is sometimes claimed that these verbs allow VS order with narrow focus on the subject, but this appears to be restricted to certain verbs (see SILVA, 2001; COSTA & FIGUEIREDO SILVA, 2006; RUAS, 2017). I return briefly to this issue in section 5. Suffice it to say for now that VS order with unergatives is much more restricted than inversion with unaccusative verbs.

Estudos
Linguísticos e literários

3) Nesse   edifício   trabalham   cerca   de   150   pessoas.
   in.this   building   work.3PL   close   of   150   people
   'In this building work close to 150 people.'   (SILVA, 2001, p. 97)

This makes BP look very similar to a language like English in which T has an EPP feature which must be satisfied by an XP. Let us formalise this by stating that T bears a [uD]* feature in both languages, meaning that T must agree with something of category D and then attract that goal to a local environment. In (1) - (2), the closest such target is the subject DP, just as it would be in the English translation, and so the T and DP enter into an Agree relation and the subject raises to spec TP. The same is predicted to happen wherever the subject is the closest potential goal to T, as in (4).

4) Transitives/unergatives – DP is closer than V_D
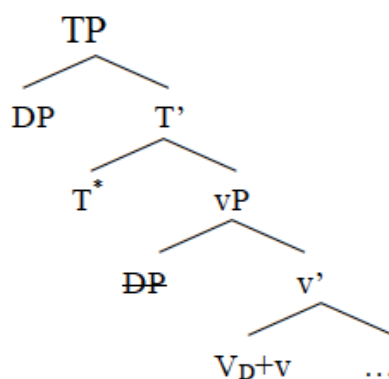
Example (3) shows that a PP topic can also function as the structural subject, raising to spec TP to satisfy the EPP. Silva (2001) gives evidence that BP is like English in this respect, from word order in raising contexts. In (5a), the topic PP raises into the matrix clause, leaving the subject in its base position. In (5b), the subject raises to the matrix spec TP. What is not permitted, however, is (5c), where the topic PP raises to the matrix spec TP and the subject to the embedded spec TP. This follows if the topic PP and the subject compete for the same (subject) position, as Bresnan (1993) argued for English:

5) a. Neste quarto$_j$ parecem [t$_j$ ter   dormido as crianças$_i$].
   In.this bedroom seem.3pl   have   slept   the children
   'In this room seem to have slept the children.'
   b. As crianças$_i$ parecem [t$_i$ ter dormido t$_i$ neste quarto].
   c. *Neste quarto$_j$ parecem [as criancas ter dormido t$_i$ t$_j$]. (SILVA, 2001, p. 99)

In all these cases, then BP behaves like English, a non-null subject language. In order to accommodate locative inversion, it is necessary to assume that topic PPs can be merged in a position at the edge of vP and that they bear a D feature, by virtue of being topics. This means that they will be closer to T when the latter probes for a goal and hence will be forced to satisfy the EPP. As PPs, however, they will not be able to satisfy the phi-features on T and so T will also agree in phi-features with the post-verbal subject.

In some respects, then, BP patterns like English in terms of its word order. In other contexts, however, their behaviours diverge, as we shall see in the following sections.

2 UNACCUSATIVE AND COPULAR VERBS

It is a well-known fact that BP permits VS order with unaccusative and copular verbs, however, and that unlike in English, these postverbal subjects show no definiteness restriction (see KATO & RAPOSO, 1996; KATO, 2000a, 2000b, BERLINCK, 2000, SILVA, 2001):

6) a. A Ana chegou às   dez horas.
   the Ana arrived at.the ten hours
   'Ana arrives at 10 o'clock.'
   b. Chegou às dez horas a Ana.
   c. ?Chegou a ANA às dez horas. (OK with narrow focus on Ana)

(SILVA, 2001, p. 30)

7) a. Os   meninos são   impossíveis.
   the   boys   are   impossible.PL
   'The boys are impossible.'
   b. São impossíveis os meninos.
   c. *São os meninos impossíveis.[3]   (SILVA, 2001, p. 30)

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[3] As Silva (2001, p. 192, fn 15) notes, this example is grammatical on the irrelevant reading 'here are the impossible boys', where impossible is simply an attributive adjective insider the

These data pose a potential challenge for the claim that BP has an English-style EPP. But this would only be the case if the grammars of these two languages were also identical in all other respects, which they are clearly not. Although BP is generally classified as a partial pro-drop language (DUARTE, 1995; FIGUEIREDO SILVA, 2000; MODESTO, 2000; RODRIGUES, 2004; BARBOSA, KATO & DUARTE, 2005, HOLMBERG, NAYUDU & SHEEHAN, 2009), it still has much richer verbal inflection than English. Now if null subject languages are characterised by the presence of a D feature on V (see ALEXIADOU & ANAGNOSTOPOULOU, 1998), then it is possible that BP also retains this feature. This seems plausible when we consider that while BP has undergone a simplification in its pronominal paradigm (DUARTE, 1995), it retains rich verbal inflection with 1SG, and for some speakers 1PL, as well as a stable SG/PL distinction in 2nd and 3rd person:

8) *cantar* 'to sing'

|	1st person	2nd person	3rd person
singular	eu canto	você canta	ele/ela canta
plural	nós cantamos/a gente canta	vocês cantam	eles/elas cantam

Let us assume, then, that BP retains a D feature on v, but that the actual phi-features realised in its verbal morphology are not enough to license pro-drop in out of the blue contexts (for one approach to partial pro-drop see HOLMBERG, NAYUDU & SHEEHAN, 2009). Essentially, this equates to saying that inflected verbs can function as expletives in BP (as in null subject languages) but not in English.

Alexiadou & Anagnostopoulou (1998) posit a D feature on V in conjunction with a parameterised model of EPP-checking in order to account for the behaviour of null subject languages such as Greek and Spanish. They claim that in these languages, the EPP is always satisfied via verb movement to T, whereas in English-type languages, the EPP is always satisfied by XP movement:

DP 'os meninos impossíveis'. It is not possible, however, on the intended reading where impossible functions as a predicative adjective.

9) Parameterised mode of EPP-checking: Move/merge XP vs. move/merge X^0. (A&A, 1998) [4]

10) EPP satisfied by V-to-T movement[5]
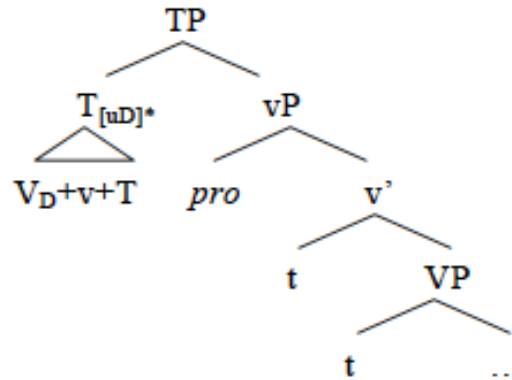
As evidence for this view, they claim that, in Greek, all preverbal subjects occupy an A-bar position, which follows if there is no trigger for A-movement of a DP to spec TP.

Now consider what the predictions are for a language in which the verb retains a D feature but the parameter in (9) remains open so that either head or phrasal movement can satisfy the EPP. If we assume that both Agree and movement are subject to locality, then it follows that $V_{[D]}$ and DP will compete as EPP-satisfiers in such a language, with whichever is closest to T winning. In the cases discussed in section 1, the subject or PP is closest to the probe. Where the subject is externally merged as the complement of V, however, as with unaccusative verbs, the verb itself will be closer to T, and so VS order is predicted:

11) a. [TP T [vP DP   v [vP V[D] (DP)]]]   transitive/unergative verbs
     b. [TP T [vP   v [vP V[D] DP]]]   unaccusative verbs

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[4] A&A actually argue that (9) is a parameter associated with AgrP, rather than TP, with a separate parameter determining the availability of spec TP as a subject position. I simplify matters somewhat here for ease of exposition.

[5] See, for slightly different versions of this, Borer (1986), Barbosa (1995, 2009, 2013), Alexiadou & Anagnostopoulou (1998), Alexiadou (2006), Ordóñez (1997), Ordóñez & Treviño (l999), Manzini & Savoia (1997), Manzini & Roussou (2001), Ticio (2004).

Estudos
Linguísticos e literários

In (11b), T probes for anything bearing D and the closest goal it finds is $V_{[D]}$ and so $V_{[D]}$ must raise to T via head movement to satisfy the EPP. Note that, in these terms, the EPP is simply a requirement to attract a goal bearing D. If the goal is an XP, this will lead to T having a specifier. If the goal is a head, then it will lead to head movement.[6] This is, I propose, the system we find in BP. Whichever D-bearing element, head or phrase, is closest to T moves to satisfy the subject requirement. This is the beginning of an explanation for the availability of VS in (6b). There are two remaining issues, however. The first is why SV order is also possible with these verbs. The second is why (7c) is ungrammatical.

On the issue of why SV order is also possible, there are several possibilities. It could be that SV order has a different information structure status from VS order, with preverbal subjects being topics and not possible in out-of-the-blue contexts. With animate indefinite DPs both SV and VS orders are possible in out-of-the-blue contexts (see Silva 2010):

12) [O   que   aconteceu?]
    the   what   happened
    'What happened?'
    a. Um menino entrou/ apareceu   (na   reunião).
       a   boy   entered/ appeared   in.the meeting
    b. Entrou/ Apareceu um menino (na   reunião).
       entered/ appeared a   boy   (in.the meeting)
       'A boy entered/showed up to the meeting.'   (SILVA, 2010, p. 125)

However, where the DP is a definite DP, only SV order is permitted, according to Silva (2010, p. 124). Moreover, as Ruas (2017, p. 126) notes, inanimate indefinites strongly favour VS order:

13) a. ??Umas   encomendas chegaram.
        some parcels   arrived.3PL
    b. Chegaram   umas encomendas.
       arrived.3PL   some parcels
       'Some parcels arrived.'   (RUAS, 2017, p. 126)

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6   I thank an anonymous reviewer for asking me to clarify this issue.

There do appear to be information structural differences between the two orders then, which merit closer attention. However, it does not seem to be true that all preverbal subjects of unaccusatives are topics.

The alternative is that the optionality in word order can be attributed to competing grammars. On this hypothesis, the D feature on V is unstable, leading to the optional status of V as an EPP-satisfier. While an anonymous reviewer worries that this is circular, we review further evidence in the next section that the manner of EPP satisfaction is changing in BP, making a competing grammars approach worth considering.

The proposed analysis also accounts for the VS order found with copular verbs in BP, assuming a small clause analysis. In these cases, the copular light verb is closer to T than the DP subject, and so it raises to satisfy the EPP.

14)   [TP T [vP V[D] [SC AP DP]]]   copular verbs

A potential problem for this proposal arises from the positon of other VP-internal material. While (15b) is fully grammatical, (15c) is not, and this is a general pattern. This seems to suggest that the VS word order with copular verbs is generated not by verb movement alone:

15) a. A   comida está na   mesa.
       the food   is   on.the   table
       'The food is on the table.'
    b. Está na mesa a comida.
    c. *Está a comida na mesa.   (SILVA, 2001, p. 30-31)

But whether verb movement is enough to derive the word order in (15b) depends on what the basic word order is in BP small clauses. If we consider the word order in selected small clauses, then the data in (15) are potentially problematic. In such cases, the subject is very natural in initial position, though inversion is also possible (KATO, 2007):

16) a. Considero   [os meninos inocentes].
       consider.1S   the boys   innocent.PL
       'I consider the boys innocent.'
    b. Considero [inocentes os meninos].   (KATO, 2007, p. 86-87)

17) a. Eu como [as cenouras   cruas].
      I   eat   the   carrots   raw.PL
      'I eat carrots raw.'
   b. Eu como [cruas as cenouras].   (KATO, 2007, p. 86, 87)

The problem is that if the basic order in small clauses can also be subject > predicate, then movement of the copular verb should be able to preserve this order, yielding the order in (15c). When we consider unselected small clauses, however, we see that only the subject-final order is permitted, suggesting that this might actually be the basic word order in BP small clauses (KATO, 2007):

18) a. Muito   competente   esse seu   secretario!
      very   competente   that your   secretary
      'Very competente your secretary!'
   b. *Esse seu secretário muito competente! (KATO, 2007, p. 86, 88)

19) a. Bonita a tua casa!
      Pretty the your house
      'Very pretty your house!'
   b. *A tua casa bonita!   (KATO, 2007, p. 86, 88)

If this is, in fact, the basic word order for small clauses then the ungrammaticality of (15c) follows very naturally. The subject originates in a position to the right of the small clause, and movement of the copular verb cannot alter this order (20a). In ECM contexts where the argument in a small clause becomes an object, it can undergo optional object movement (20c) or remain in situ (20b), so that either SV or VS order is possible. This explains the word order in copular clauses with VS order:

20) a. [TP está[D]+T [vP t   [SC [PP na mesa] [DP a comida]]]]
   b. Considero   [SC [AP inocentes][DP os meninos]]
   c. Considero   [DP os meninos]i   [SC [AP inocentes] ti]

If we assume a hybrid approach to the EPP in BP, then, so that it can be satisfied either by XP movement or by head movement, then its basic word order

patterns are exactly as predicted. In English, where the verb lacks a D feature the subject is the only potential EPP-satisfier regardless of verb type. In BP, however, where the verb retains a D feature, either the verb or the subject can satisfy the EPP, depending on which is the closer of the two. In the next section, we consider impersonal verbs before raising the question of how BP differs from null subject languages and then concluding.

3 IMPERSONAL VERBS

It is well known that BP can lack overt subjects in existential constructions (DUARTE, 1995; KATO, 2000a, 2000b):

21) a. Chove.
      rains
      'It rains.'
   b. Tem um gato embaixo da mesa.
      has a cat under of.the table
      'There is a cat under the table'
   c. Parece que o Pedro está com fome.
      seems that the Pedro is with hunger
      'It seems that Pedro's hungry.' (KATO, 2000b, p. 121)
   d. Tinha chegado muitas cartas.
      had.3S arrived many letters
      'There had arrived many letters.' (KATO ,2000a, p. 232)

It is also well known, however, that in many cases there is nonetheless a preference to create a subject for these impersonal verbs, by promising a locative or possessor (see KATO & DUARTE, 2014, for recent discussion):

22) Esta cidade tem gatos abandonados. (KATO, 2000a, p. 236)
    This town has cats abandoned.PL
23) a. Está entrando água por essas janelas.
       is entering water through those windows
   'There's water getting in through those windows.'
    b. Essas janelas$_i$ estão entrando água [t]$_i$.
       those windows are entering water (KATO & DUARTE, 2014, p. 10)

24) a. Chove   muito   nessas   florestas.
      rains   much   in.those forests
      'It rains a lot in those forests.'

   b. Essas   florestas   chovem   muito.
      Those   forests   rain.PL   much   (KATO & DUARTE, 2014, p. 12)

Under the approach taken here we can offer a new perspective on these facts. To account for the facts in (21), we need only say that impersonal verbs also bear a D feature so that they too can satisfy the EPP when they raise to T. Note that this idea also removes the need to posit a null expletive purely in order to satisfy the EPP in impersonal contexts, as per Alexiadou & Anagnostopoulou's (1998) original proposal: wherever there is no subject, by hypothesis, a verb bearing D satisfies the EPP and no specifier of TP is projected.[7]

25) EPP satisfaction by V
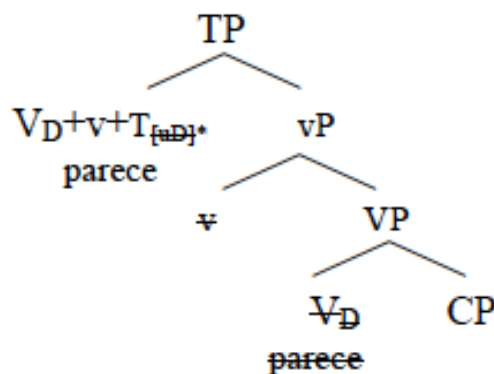
But what about the increasing preference to avoid subjectless sentences discussed by Kato & Duarte (2014)? This can be captured under the present analysis in the same as the SV/VS alternations with unaccusative verbs. The D feature on these verbs is unstable so that there is an increasing preference for the EPP to be satisfied by an XP. Either way, it is likely that the two kinds of variation can find a unified analysis.

An anonymous reviewer raises the following hyperraising example, which also appears to be problematic for the present proposal:

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[7]   An anonymous reviewer notes that Alexiadou & Anagnostopoulou (2001) have a different approach to word order. They retain the core idea, however, that a verb bearing D can satisfy the EPP in null subject languages and this is what is of relevance here.

26) O   Pedro parece que   está com fome.
    the Pedro seems that   is   with hunger
    'Pedro seems to be hungry.'

Again, such examples, which are optional and alternate with examples like (21c) would arise in contexts where V lacks D.

4   PSYCH-PREDICATES

Now consider the word order observed with BP psych-predicates. Following Cançado (1996), who builds on Belletti & Rizzi (1988) amongst others, I assume that there are four classes of psych-verbs in BP. The first class is the subject experiencer class:

27) Subject experiencer class[8]
    José teme o   cachorro pelo   seu tamanho.
    José fears the dog   for.the his size
    'José is afraid of the dog because of its size.'   (CANÇADO, 1996, p. 95)

These verbs behave like transitive verbs containing an external argument as shown by the fact that permit arbitrary *pro* and can undergo causativisation with *fazer* 'make' as well as passivisation (CANÇADO, 1996):

28) a. O   amigo faz   José temer o   cachorro.
       the friend makes José fear   the dog
       'His friend makes José afraid of the dog.'
    b. O   cachorro é temido por José.
       the dog   is feared by   José
       'The dog is feared by José.'
    c. Temem o   cachorro pelo   seu tamanho.
       fear.3PL the dog   for.the his   size
       'People are scared of the dog because of its size.'

                                                        (CANÇADO, 1996, p. 95)

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8   Other verbs in this class (CANÇADO, 1996, p. 96): *abominar, admirar, adorar, amar, cobiçar, desejar, detestar, estimar, estranhar, hostilizar, invejar, menosprezar, odiar, recear, respeitar, subestimar, sublimar, venerar.*

Estudos
Linguísticos e literários

As predicted by our analysis, these verbs have SVO word order in BP, just like other transitive verbs.

There are two other classes of transitive psych-predicates identified by Cançado (1996). I call these agentive object-experiencer and ambiguous object-experiencer verbs here for ease of reference. The main difference between these two classes is that the agentive class always requires the external argument to be animate and agentive, whereas the ambiguous class allows agents, causers or instruments as external arguments:

29) Agentive psych-predicates[9]

A   polícia acalma   a   multidão com seus cassetetes.
the police   pacifies the crowd   with their truncheons
'The police pacify the crowd with their truncheons.'

(CANÇADO, 1996, p. 97)

30) Ambiguous psych-predicates[10]
   a. Maria animou   José com seus argumentos.
      Maria cheered.up José with her   arguments
      'Maria cheered José up with her arguments.'
   b. Maria animou   José com sua beleza.
      Maria cheered.up José with her   beauty
      'Maria cheered José up with her beauty.'
   c. Um chá animou   Maria.
      a   tea cheered.up Maria
      'A tea cheered Maria up.'   (CANÇADO, 1996, p. 99, 107)

As Cançado shows, both classes behave like transitive verbs where they take an agentive subject, permitting arbitrary *pro*, causativisation with *fazer* 'make' and passivisation:

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[9] Other verbs in this class (CANÇADO, 1996, p. 98): *abrandar, aplacar, conquistar, derrotar, desenganar, embromar, honrar, humilhar, martirizar, pacificar, provocar, reconfortar, serenar, suavizar, tranqüilizar.*

[10] Other verbs in this class (CANÇADO, 1996, p. 99): *alarmar, apavorar, atormentar, consolar, desiludir, embaraçar, entusiasmar, fascinar, fortalecer, importunar, influenciar, intimidar, motivar, purificar, reanimar*

31) a. Acalmaram   a multidão   com aquelas ameaças.
       pacified   the crowd   with those   threats
       'They pacified the crowd with those threats.'
    b. O   coronel fez   a   polícia acalmar a   multidão.
       the coronel made the police   pacify   the crowd
    c. A   multidão foi   acalmada pela   polícia.
       The   crowd   was pacified   by.the police
       'The crowd was pacified by the police.' (CANÇADO, 1996, p. 97-98)

32) a. Animaram   José com aqueles argumentos.
       Cheered.up José with those   arguments
       'They cheered José up with those arguments.'
    b. João fez   Maria animar José com seus argumentos.
       João made Maria cheer.up José with her   arguments
       'João made Maria cheer José up with her arguments.'
    c. José foi   animado   por Maria.
       José was   cheered.up by   Maria
       'José was cheered up by Maria.'   (CANÇADO, 1996, p. 99)

Again, as predicted, then, we see that these verbs surface with SVO word order, because the agent is an external argument merged in spec vP. Matters are more complex for causative readings of the ambiguous object-experiencer verbs however. In these instances ambiguous verbs seem to behave like the causative object-experiencer *preoccupare* class.

The causative object-experiencer *preoccupare* class, as described by Belletti and Rizzi (1988) for Italian is also attested in BP. With these verbs, the causer functions as the external argument and the experiencer is again a direct object:

33) *Preoccupare* object-experiencer class[11]
    Rosa preocupa a   mãe   com sua arrogância.
    Rosa worries   the mother with her   arrogance
    'Rosa worries her mother because of her arrogance.'

                                         (CANÇADO, 1996, p. 96)

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[11] Other verbs in this class (CANÇADO, 1996, p. 97): *abalar, aborrecer, acabrunhar, afligir, alucinar, azucrinar, baratinar, chatear, comover, decepcionar, deprimir, encantar, enfezar, escandalizar, grilar, horrorizar, inquietar, magoar, revitalizar, traumatizar.*

Estudos
Linguísticos e literários

These verbs have mixed properties, as is the case in other languages (see Pesetsky 1995). Although the subject behaves semantically like a causer, it can also contain an anaphor bound by the experiencer:

34) Estórias sobre si mesma_j agradam muito Maria_j
    Stories   about herself   please   much Maria
    'Storied about herself really please Maria.'   (CANÇADO, 1996 p. 92)

However, as Cancado shows, this property is actually shared by the agentive object-experiencer verbs and even by other non-psych-verbs, suggesting that it should not be attributed to the thematic status or external merge position of these arguments:[12]

35) A   insegurança em si mesmo levou   João à   falência.
    the insecurity   in   himself   carried João to.the bankruptcy
    'A lack of confidence in himself took João to bankruptcy.'
                                                        (CANÇADO, 1996, p. 110)

These verbs also fail the three transitivity tests discussed above, however, calling into question the status of the subject as an external argument. They disallow verbal passives, causativisation with *fazer* 'make' and arbitrary *pro*. However, as Cancado notes, arbitrary *pro* is limited to +animate argument positions, and causativisation with *fazer* is limited to contexts where the causee has control over the caused event (see also STROZER, 1976; FOLLI & HARLEY, 2007). These two tests are really tests for animacy/intention, then, rather than external argumenthood. The fact that verbal passives are not permitted with these verbs remains unexplained, but note that adjectival passives are possible whereas the external argument is interpreted as a causer.

36) a. A mãe ficava preocupada com a arrogância de Rosa.
        The mother got worried with the arrogance of Rosa
        'Her mother got worried about Rosa's arrogance.'
    b.*A mãe foi preocupada por Rosa.
        The mother was worried by Rosa
        'Her mother was worried by Rosa.'   (CANÇADO, 1997, p. 96)

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[12] This is also the case in English, as can be seen from the translation of (34).

With these verbs too, then, we can tentatively assume that the causer is an external argument merged in spec vP, and that this is the reason that we get SVO word order.

Interestingly, Cançado (1996) argues explicitly that BP lacks unaccusative psych-predicates of the *piacere* type (BELLETTI & RIZZI, 1988; PESETSKY, 1995). This might be due to the loss of dative case in BP. The *piacere* class has been claimed to involve two internal arguments. In languages like Spanish, the basic word order with these verbs has the dative in initial subject position (CUERVO, 1999, 2010; GUTIÉRREZ-BRAVO, 2007; MASULLO 1992)

37) A   todos   les   gustan   los gatos
    DAT everybody 3PL.DAT=like.PL   the cats
    'Everybody likes cats'   (CUERVO, 2010, p. 26)

That the dative functions as the structural subject here is also supported by evidence from raising and quantifier scope (see CUERVO, 2010, for a summary). We turn to why this might be the case in section 5.2, when we briefly discuss the nature of the EPP in null subject languages. In BP, however, it appears that there are no unaccusative psych-predicates so that all psych-predicates have SVO word order with the external argument (i.e. either the subject experiencer or the agent/cause/instrument) being initial.

5   REMAINING ISSUES

5.1   Verb movement in BP

It is crucial for the analysis put forth here that the verb must raise to T in BP. Although it is clear that the verb raises to a lower position in BP than in many other Romance languages, it seems clear that it raises out of vP, as it must precede adverbs such as *bem* 'well' and *completamente* 'completely' (SCHIFANO, 2018; CYRINO, 2013; TESCARI NETO, 2013)

38) a. O   Pedro {canta} bem {*canta}.
       The Pedro sings   well sings
       'Pedro sings well.'

b. O   Pedro {termina} completamente {*termina} suas tarefas
the Pedro finishes   completely   finishes   his   tasks
antes   de começar   novas.
before of start.INF   new.PL
'Pedro completely finishes his tasks before starting new ones.'

<div align="right">(SCHIFANO, 2018, p. 71)</div>

In a Cartographic approach, like that argued for by Schifano (2018), the analysis proposed here would need to be stated in a more nuanced way, with the EPP being a property of the lowest head in the IP-domain. This would allow verb movement to this low position and argument movement to or through this low position to satisfy the EPP. The essentials of the proposal would be unaffected.

A potential weakness with the present proposal, however, is that verb movement is not limited to unaccusative/copular verbs. In fact, the examples in (38) show very clearly that verb movement is obligatory also with unergative and transitive verbs, exactly the cases where XP-movement is expected to satisfy the EPP. It must be the case, then, that the EPP is not the *only* trigger for verb movement. The verb (V+v) complex must raise to T for other morphological reasons (again, see SCHIFANO, 2018, for one such account and also BIBERAUER & ROBERTS, 2010), but that this movement can also serve to satisfy the EPP in the right circumstances.

5.2   How does BP differ from null subject languages such as Greek or Spanish?

Thus far, we have argued that a hybrid model of EPP-satisfaction provides an elegant account of word order patterns with impersonal, intransitive and transitive verbs in BP (including psych-predicates). The crucial difference between English and BP, it has been claimed, is that, in BP, the verb bears a D feature, meaning that it functions like an expletive pronoun. Because of this fact, T's EPP feature can be satisfied either by DP movement to spec TP or by verb movement to T. Which route is taken is decided largely by locality but with some evidence that there is optionality in the system, suggesting a potential grammatical change in progress.

But if the EPP can be satisfied by head-movement, then how does BP differ from null subject languages? It is not often discussed but under A+A's analysis, the D feature on V has the status of an expletive pronoun also in null

subject languages as it can satisfy the EPP but it cannot be assigned a theta-role. A+A stop short of positing a version of their theory whereby the verbal morphology would also function as a referential pronoun, absorbing the subject theta-role and eliminating the need also for argumental *pro*. Recall that in (10) repeated here as (39), there is still a *pro* in spec vP on their proposal analysis:

39)   EPP satisfied by V-to-T movement
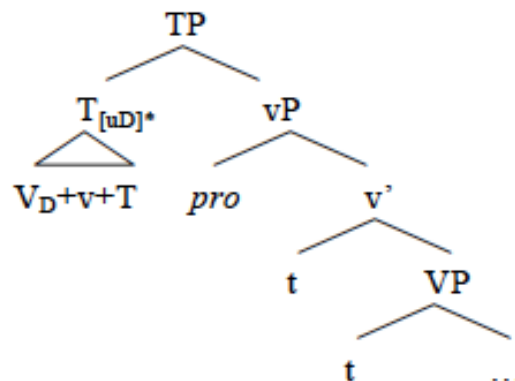
Given this fact, we can say that the difference between BP and null subject languages can be attributed to the way in which *pro* is licensed or in deletion-based accounts, how subject pronouns are deleted (see DUGUINE, 2013, 2014; HOLMBERG & SHEEHAN, 2010; ROBERTS, 2010; SAAB 2009).

But what about the basic word order in Romance null subject languages? How similar is this to BP word order? The basic word order in out-of-the-blue contexts in Italian is certainly SV(O) with transitive/unergative predicates (see BELLETTI & SHLONSKY, 1995).

40) a. Cos' è   successo?   [Italian]
       what is   happened
       'What happened?'
   b. Gianni ha dato   un libro a Maria
       Gianni has given a   book to Maria
       'Gianni gave a book to Maria.'
   c. *Ha dato   Gianni un libro   a Maria
       has given Gianni a   book to Maria
       'Gianni gave a book to Maria.'
   d. #Ha dato   un libro a   Maria Gianni
       has given a   book to Maria Gianni
       'Gianni gave a book to Maria.'

In Spanish, too, in out-of-the-blue contexts SVO is a basic word order (CORR 2012, 2016), though VSO is also permitted (ZUBIZARRETA, 1998), but only (usually) if some other XP topic surfaces in initial position (ORDÓÑEZ, 2000; GUTIÉRREZ-BRAVO, 2002, 2003, 2007):

41) a. Qué   pasó   ayer?
       what happened yesterday
    b. Ayer,   Juan ganó la   lotería.
       Yesterday Juan won the lottery
    c. Ayer ganó Juan la lotería.   (ZUBIZARRETA, 1998, p. 125)
    d. #Ganó Juan la lotería.   (ORDÓÑEZ, 2000, p. 60)

In Spanish, most unergatives require SV order in out-of-the-blue contexts (CORR, 2012).

42) a. Qué   pasa?
       what   happens
    b. #está bailando Juan
       is   dancing Juan
    c. #lloró/ gritó   María.
       cried/   shouted María   (CORR, 2012, p. 16)

Amongst the unergative verbs she tested, Corr (2012) finds only *llamar* and *contribuir* to permit VS order in out-of-the-blue contexts in Iberian, Rioplatense and Mexican Spanish (based on survey data and informant work).

43) a. Qué ha   pasado?
       what has   happened
    b. ha   llamado/ contribuido Juan
       has   called/   contributed Juan
       'John has called/made a contribution.'   (based on CORR, 2012, p. 42)

In Italian too, most unergatives require SV order, with a few exceptions (PINTO, 1997).

44) a . Che cosa è successo? [Italian]

what thing is happened

b. Ha telefonato Gianni.

has called Gianni

c. #Ha pianto Gianni

has cried Gianni

In both Italian and Spanish, then, most unergatives also require SV order in out-of-the-blue contexts. In Italian non-narrowly focused subjects in transitives require SVO order. In Spanish both SVO and XPVSO orders are possible. The patterns attested in out of the blue contexts are therefore not all that different from those that we have seen for BP.

Likewise, as in BP, many unaccusative verbs in Spanish/Italian permit VS order in wide focus contexts (BURZIO, 1986; RIZZI, 1982; PINTO, 1997):

45) a Che cosa è successo? [Italian]

what thing is happened

b È entrata Beatrice.

Is entered Beatrice

c È affondata la Attilio Regolo.

is sunk the Attilio Regolo

d È morto Fellini.

is died Fellini

e Si è sciolta la neve.

SI is melted the snow (PINTO, 1997, p. 20)

Matters are more complex than this, of course, and a discussion of these issues goes beyond the scope of this paper (but see Sheehan 2016). Nonetheless, there are again deep similarities between these languages and BP when it comes to basic word order in out-of-the-blue contexts. If this is the case, then it seems that we may not need to parameterise the mode of EPP-satisfaction after all. In both BP and null subject languages, word order patterns suggest that either XPs or heads can satisfy the subject condition, subject to locality. Recall also the facts from psych-predicates mentioned in section 4. For datives to behave like subjects, they must also be EPP-satisfiers. This would follow in a model in which the closest element bearing [D] satisfies the EPP. Under a widespread model of unaccusative psych-verbs, the dative is base generated above the

theme, and so is closer to T than both the theme and V, hence is expected to be T's goal:

46) [$_{TP}$ T [$_{vP}$ v [$_{ApplP}$ $\boxed{DP_{DAT}}$ Appl [$_{vP}$ V$_{[D]}$ DP]]]]

It follows that datives can function as subjects in Spanish, if the EPP simply targets the closest goal bearing D.

A big difference between BP and null subject languages, however, is what happens in instances of narrow subject focus (see KATO, 2000a). In both Spanish and Italian, V(O)S is the order associated with narrow subject focus with all kinds of verbs, though this word order is probably derived differently in the two languages (BELLETTI, 2004; ORDÓÑEZ, 2000; PARAFITA COUTO, 2005; SHEEHAN, 2010, 2016; GALLEGO, 2013; ORTEGA SANTOS, 2016).[13] So how can we account for this free inversion under the current approach? One possibility is to assume that narrowly focused subjects are DPs selected by a null focus particle Foc, projecting to a FocP (see CINQUE, 1999, p. 31, on overt instantiations). The presence of this particle stops any DP subject from c-commanding the lexical verb and makes the two equidistant from T.

47)   EPP satisfaction with Focused subjects
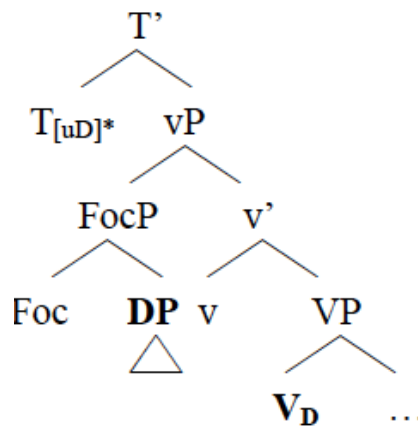
Assuming that DP cannot be extracted from FocP because these languages lack preposition stranding, V$_D$ movement will always satisfy the EPP in such contexts, obviating the need for a specifier of TP. This captures the apparent fact that narrowly focused subjects remain low in Spanish and Italian with all verb types, though further movements are required to make sure the object precedes

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[13] VS order is, however, reported to be possible with unergative verbs for some speakers (see KATO, 2000b).

the subject.[14] The difference between BP and Romance NSLs would therefore reduce to the lack of a Foc shell in BP. In order to have free inversion, then, a language would need to have both a D feature on V and a Foc shell. It does not follow, however, that every language with a D feature on V needs to permit Foc shells and hence free inversion. It might be then, that the EPP is also hybrid in Romance null subject languages, with further word order differences arising due to additional parametric differences.

6   CONCLUSIONS

It has been argued that adopting a hybrid approach to the EPP in BP, whereby it can be satisfied by either XP movement or verb movement, offers an explanatory account of basic word order patterns in this language. The analysis works particularly well for BP but initial data suggest that it might also be applicable in some form to Romance null subject languages, with an additional parametric differences (the possibility of a Foc shell) giving rise to free inversion in contexts of narrow subject focus in these languages. The optionality of word order with unaccusative verbs and the increasing preference to create subjects for impersonals both suggest that this area of BP grammar may be in the process of changing. Under the current approach, that can be modelled if the D feature on V is unstable so that grammars with an without D on V are in competition. This would also account for the existence of hyperraising as a strategy to satisfy the EPP where V lacks D.

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[14] Evidence from Spanish shows that this order is derived via object scrambling past a low subject, whereas in Italian, it seems like VP movement is involved (ORDÓÑEZ, 2000; BELLETTI, 2004; GALLEGO, 2013).

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