NUMP AND POSSP IN DIALECTAL BRAZILIAN PORTUGUESE

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ABSTRACT

In standard Brazilian Portuguese (BP), as well as in other Romance languages, possessives have uninterpretable number features, which are valued via nominal agreement. However, dialects of BP, especially the one spoken in Minas Gerais, have shown that 2nd person possessives, in postnominal position, do not have number agreement with the noun. In order to account for these facts, I will argue that, in this grammar, number features on 2nd person possessives are reanalyzed as being: (i) associated with the person (rather than the noun) and (ii) valued. From the first postulation, ‘seu’ is expected to be the possessive for 2nd person singular, and ‘seus’ for 2nd person plural. From the second postulation, no number concord is expected to be triggered on the possessive. In addition, based on Danon (2011) and Norris (2014), I will argue that cardinals divide BP DPs into two domains in that phrases located above NumP are marked with the plural morpheme, while phrases below it are unmarked. In this sense, because prenominal possessives precede cardinals (NumP), they must be marked with the plural morpheme for nominal agreement; whereas postnominal possessives, which follow NumP, must be unmarked. Free from the plural marking associated with nominal agreement, postnominal 2nd person possessives favor the reanalysis of the morpheme ‘-s’ as indicating the number associated with person features.

KEYWORDS: 2nd person possessives; φ-features; NumP; cardinals; plural morpheme

RESUMO

Em português padrão, assim como em outras línguas românicas, os pronomes possessivos carregam traços não interpretáveis de número, que são valorados via concordância nominal. No entanto, certos dialetos do português do Brasil (PB) mostram que o possessivo de 2ª pessoa, principalmente em posição posposta, não concorda em número com o nome. Por exemplo, no dialeto mineiro, um N no singular pode coocorrer com possessivo no plural, que se refere a 2ª pessoa do plural (‘de vocês’). Do mesmo modo, um N no plural pode coocorrer com possessivo no singular, que se refere a 2ª pessoa do singular. Para explicar esses fatos, argumentarei que, nessa gramática, os traços de número no possessivo de 2ª pessoa são (i) traços da pessoa e não do nome e são (ii) valorados. Com base na primeira formulação, prediz-se que ‘seu’ seja o possessivo de 2ª pessoa do singular, e ‘seus’ do plural. Com base na segunda formulação,
não se desencadeia concordância em número no possessivo. Além disso, seguindo Danon (2011) e Norris (2014), argumentarei que os cardinais dividem DPs do PB em dois domínios, sendo que os sintagmas situados acima de NumP são marcados com o morfema de plural em concordância nominal, enquanto os situados abaixo de NumP são impedidos de terem esta marca. Assim, pelo fato de o possessivo pré-nominal estar antes do cardinal, ele é obrigatoriamente marcado com o morfema de plural, enquanto o possessivo pós-nominal não tem esta marca. Livre da marca morfológica de concordância nominal, o possessivo pós-nominal de 2ª pessoa favorece a reanálise do ‘-s’ como indicador do número da pessoa.

PALAVRAS-CHAVE: Possessivos de 2ª pessoa; traços- φ; NumP; cardinais; morfema de plural

Introduction

In standard Brazilian Portuguese (BP) and in other Romance languages, the possessive pronoun agrees in number with the determiner, the noun, and other DP-internal phrases. However, dialects of BP, especially the one spoken in Minas Gerais, show a different pattern of number agreement in DPs with 2nd person possessives. In this pattern, there is no agreement in number between the possessive and the noun. As observed in (1), the determiner ‘a’ and the noun ‘gerência’ are singular, whereas the possessive ‘suas’ is marked with the plural morpheme ‘-s’. In (2), it is the other way round: the possessive ‘sua’ is singular, whereas the noun ‘fotos’ is marked with the plural morpheme. This paper presents a proposal to explain why and how this phenomenon occurs.

(1)  A gerência                      suas só atende clientes grandes¹          (Belo Horizonte,   2016-06)

The-FEM-SG management-FEM-SG your-FEM-PL  only serve-3SG customer-PL big-PL

‘Your department works only with large business customers’

¹ Data from real speech situations are referred throughout this paper with place (city) and date (month and year) of utterance. I have been collecting them over the past five years or so, in Minas Gerais (MG), as part of this research. They come mainly from the central area (Belo Horizonte and surroundings), but they were also collected in other regions of this state, as indicated by the cities names written besides each example. They have been registered by writing them down or typing them right after every single occasion when they were heard, such as: academic events, classes, business meetings, counter service utterances, spontaneous conversations, and so forth. These examples are aimed at illustrating, from real utterances, the structures under analysis, rather than building a database. Besides, with the term ‘dialectal BP’, this paper refers to a dialect spoken in a region (that may be geographically mapped as a state, in this case, Minas Gerais). This is a general use of the term, considering different dialects in Brazil as well as linguistic variation inside a state.
In order to account for these structures, this paper is organized as follows: section 1 describes the possessive paradigms in BP (1.1) and then the pattern found in dialectal BP (1.2). Section 2 presents the theoretical background on valuation and interpretability of features (2.1) and on cardinals viewed as a boundary for the DP-internal distribution of the plural morpheme (2.2). Section 3 argues that number features, on the 2nd person possessive, are reanalyzed as interpretable and valued features associated with the person rather than the noun (3.1); and explains why this reanalysis is more frequent in postnominal position (3.2). Finally, section 4 presents hypotheses for further research.

1. The possessive system in BP

This section presents an overview of the possessive paradigm in Brazilian Portuguese (1.1) and then the specificities shown in the dialect spoken in Minas Gerais (1.2).

1.1 The possessive paradigm in BP

The possessive system in BP has pronominal and prepositional forms, as observed in Table 1.

Example (2) was collected from a written message sent via What’s App. Other examples of this pattern were found in spoken utterances, such as (i).

(i) Amanhã, ele verá dois serviços seu (Belo Horizonte, 2015-09)
‘Tomorrow he is coming to see your two works’

In (i), it is possible that the plural morpheme ‘-s’, in ‘serviços’, was not pronounced, as a result of a phonetic assimilation with the initial ‘s’ in ‘seu’. This possibility is also expected, under the view that, in plural DPs, phrases to the right of cardinals are not marked with the plural morpheme, in non-standard BP (section 2.1).
The pronominal forms may be both prenominal and postnominal and show nominal agreement in gender and number. In contrast, prepositional forms are strictly postnominal and do not have nominal agreement, but work as follows: 3rd person prepositional forms share the same gender and number features with their co-referent (whether it is overt in the sentence or indexed in the context); 2nd person prepositional forms do not inflect in gender, but share the same number features with their co-referent (whether it is overt – as in vocative position – or indexed in the context); and the 1st person plural prepositional form inflects neither in gender nor in number, as shown in Table 2.

3 Because this work is focused on ‘seu’, ‘teu’ (2nd person singular for the nominative ‘tu’) was not added to the tables. Besides, ‘teu’ is available in BP, but it can be uncommon in certain regions.

4 Some authors consider that ‘de você’ is ungrammatical, in a structure such as “*pai de você” (PERINI, 1985, p. 5), while others do not (KATO, 1985, p. 115; NEVES, 2000, p. 473). There are examples of possessive forms with ‘de você’ shown in the mentioned references (i) and elsewhere (ii).

(i) “sei os podres de todos, de você e de seus amigos” (NEVES, 2000, p. 473).
   Know-1SG the-PL evil-PL of everyone, of you-SG and of your-PL friend-PL
   ‘I know the evils of you all, of yours and of your friends’

   I always go-FUT be of you-SG
   ‘I will always be yours’

Table 1: The possessive system in BP
NumP and PossP in dialectal Brazilian Portuguese

<table>
<thead>
<tr>
<th></th>
<th>Nominative pronouns</th>
<th>Possessive pronouns</th>
<th>Prepositional forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SG</td>
<td>eu ‘I’</td>
<td>minha(s) ‘my’</td>
<td></td>
</tr>
<tr>
<td>2 SG</td>
<td>você ‘you’</td>
<td>sua(s) ‘your’</td>
<td>de você ‘of you-SG’ ‘your’</td>
</tr>
<tr>
<td>3 SG</td>
<td>ela ‘she’</td>
<td>sua(s) ‘her’</td>
<td>dela ‘of-she’ ‘her’</td>
</tr>
<tr>
<td>1 PL</td>
<td>nós ‘we’</td>
<td>nossa(s) ‘our’</td>
<td>da gente ‘of-the folks’ ‘our’</td>
</tr>
<tr>
<td>2 PL</td>
<td>vocês ‘you’</td>
<td>sua(s) ‘your’</td>
<td>de vocês ‘of you-PL’ ‘your’</td>
</tr>
<tr>
<td>3 PL</td>
<td>elas ‘they’</td>
<td>sua(s) ‘their’</td>
<td>delas ‘of-they-FEM’ ‘their’</td>
</tr>
</tbody>
</table>

Table 2: The possessive system in BP with number and gender inflection

Tables 1 and 2 roughly summarize what is described by Perini (1985), Kato (1985), Cerqueira (1993), Silva (1996), Müller (1997) and Castro (2001), and do not intend to represent all the views of these authors.

Therefore, in standard BP, the possessive ‘seu’ agrees in number and gender with the noun and may refer to either 2nd person plural or 2nd person singular. This is observed in (3), which allows the two possible readings shown in (4a) and (4b).

(3) Preciso de dois favores seus (‘seus’ = ‘de você’ or ‘de vocês’)  
Need-1SG of two favor-MASC-PL your-MASC-PL (your-PL = ‘of you-SG’ or ‘of you-PL’)  
‘I need two favors from you’

(4) a. Amigo1, preciso de dois favores seus1! (‘seus’ = ‘de você’)  
Friend need-1SG of two favor-MASC-PL your-MASC-PL (your-PL = ‘of you-SG’)  
‘My friend, I need two favors from you’

b. Amigos1, preciso de dois favores seus1! (‘seus’ = ‘de vocês’)  
Friends need-1SG of two favor-MASC-PL your-MASC-PL (your-PL = ‘of you-PL’)  
‘My friends, I need two favors from you (guys)’
In sum, ‘seu’, in standard BP, is isomorphic for 2nd person singular and 2nd person plural.\(^5\)

### 1.2 The 2nd person possessive in dialectal Brazilian Portuguese

In order to make clear the reference to 2nd person plural, two different structures may be used: the first and more common one in BP is the prepositional form ‘de vocês’ (5a); the second one, productive in dialectal BP, is the addition of an ‘-s’ to the possessive pronoun (1; 5b),\(^6\) regardless of which number the DP-internal phrases are inflected for.

\[(5)\]

\[\begin{align*}
\text{a.} & \quad \text{um} & \text{favor} & \text{de vocês} \\
& \quad \text{a-MASC-SG favor-MASC-SG of you-PL} \\
& \quad \text{‘a favor from you (guys)’} \\
\text{b.} & \quad \text{um} & \text{favor} & \text{seus} \\
& \quad \text{a-MASC-SG favor-MASC-SG your-MASC-PL} \\
& \quad \text{‘a favor from you (guys)’}
\end{align*}\]

Likewise, ‘seu’, without the plural morpheme, is interpreted as referring to 2nd person singular, and is not sensitive to nominal concord either, as seen in (2). This is the difference in the dialect spoken in Minas Gerais with regard to the possessive paradigm: ‘seu’ is for 2nd person singular, and ‘seus’ is for 2nd person plural.

\[5\] Another very well known fact is that, in standard BP, the possessive ‘seu’ is isomorphic for reference to 3rd person plural (ia) and 3rd person singular (ib).

\[(i)\]

\[\begin{align*}
\text{a.} & \quad \text{Os moradores} & \text{viram suas casas inundadas.} \\
& \quad \text{The-PL resident-PL saw their houses flooded} \\
& \quad \text{‘The residents saw their houses flooded out’} \\
\text{b.} & \quad \text{O morador} & \text{viu suas casas inundadas.} \\
& \quad \text{The-SG resident-SG saw his houses flooded} \\
& \quad \text{‘The resident saw his houses flooded out’}
\end{align*}\]

In addition, in standard BP, ‘seu’ is ambiguous for reference to 2nd person and 3rd person:

\[(ii)\]

\[\begin{align*}
& \quad \text{‘Joana, vi Stella beijando seu namorado’} \quad \text{(SILVA, 1996, p. 172).} \\
& \quad \text{Joana, saw-1SG Stella kissing your/her boyfriend} \\
& \quad \text{‘Joana, I saw Stella kissing your/her boyfriend’}
\end{align*}\]

\[6\] Similarly, in some dialects, English 2nd person plural may have forms other than ‘you’: ‘yous’, ‘you-uns’, ‘you-all’, ‘you-guys’, ‘y’all’ (MAYNOR, 2000).
This reanalysis occurs, when the possessive is postnominal. In contrast, the prenominal position does not make it often available. Among several data that I have been collecting over the past years, there were few examples in which the mentioned reanalysis occurs with prenominal possessives, as the one in (6):

(6) O seus carro não pode ficar estacionado aqui (Ouro Preto, 2015-06)

The-MASC-SG your-MASC-PL car-MASC-SG not may stay parked here

‘Your (guys’s) car is not allowed to be parked here’

Except by this restriction, the possessive with reanalyzed number features occurs inside a DP, which may contain definite (7) or indefinite articles (11), indefinite pronouns (8), nominal ellipsis (9), and nouns without determiners (2, 10).

(7) “Para a sorte suas, eu não vou estar aqui na próxima votação” (Belo Horizonte, 2015-12)

For the-FEM-SG luck-FEM-SG your-FEM-PL I not go-fut be here in-the next voting

‘For your (guys’s) luck, I will not be here in the next election’

(8) “Eu não quero nada seus” (Belo Horizonte, 2014-04)

I not want-1SG anything your-PL

‘I do not want anything from you (guys)’

(9) “O meu olhar é diferente do seus” (Belo Horizonte, 2014-11)

The-MASC-SG my-MASC-SG view-MASC-SG is different of-the-MASC-SG [e] your-MASC-PL

‘My view is different from yours’

(10) “É interesse seus aprovar a proposta” (Belo Horizonte, 2015-12)

Is interest-MASC-SG your-MASC-PL approve the proposal

‘It is in your interest to approve the proposal’
To sum up, in this grammar, the postnominal possessive ‘seu’: refers to 2\textsuperscript{nd} person plural, when it has the plural morpheme ‘-s’; and to 2\textsuperscript{nd} person singular, when it does not have ‘-s’.

2. **Theoretical background**

This section presents the theoretical background on valuation and interpretability of features (2.1) as well as on the position of cardinals as a boundary for the DP-internal plural marking (2.2).

2.1. **The valuation and interpretability of features**

The term phi-feature is used to cover broadly the three main categories that involve agreement (person, gender, and number) and that are analyzed under the concepts of valuation and interpretability. In this paper, I will follow the feature sharing approach (PESETSKY; TORREGO, 2007) for the understanding of these operations.

Concerning valuation, according to Pesetsky and Torrego (2007, p. 263), “Certain features on lexical items appear to come from the lexicon unvalued, and receive their value from a valued instance of the same feature, present on another lexical item”. For instance, gender is a property of the noun (N), and comes valued with the noun from the lexicon. In contrast, D and A are lexically unvalued for gender, and they get “valued as a consequence of a syntactic process of agreement with the gender feature of N” (PESETSKY; TORREGO, 2007, p. 263). D and A are also lexically unvalued for number, and they get “valued as a result of agreement with N” (PESETSKY; TORREGO, 2007, p. 263).

Concerning interpretability, the distinction between interpretable and uninterpretable features is related to “whether or not a feature of a particular lexical item
makes a semantic contribution to the interpretation of that item” (PESETSKY; TORREGO, 2007, p. 264). For instance, the number feature of A does not make any contribution to its meaning, while number and person contribute to the interpretation on the DP.

Having made this brief summary on the concepts of valuation and interpretability, it is important to inquire how one can tell whether the noun is lexically valued for number and also how number agreement is triggered inside the DP.

As for the first question, an explanation, according to Pesetsky and Torrego (2007), is related to pluralia tantum nouns, such as ‘scissors’. These nouns are always plural, which indicates that English nouns come lexically valued for number in the derivation; whereas there is no pluralia tantum D or A, which means that they cannot be lexically valued for number. Nevertheless, not every language has pluralia tantum nouns. According to Pesetsky and Torrego (2007), in Spanish, for instance, genuine pluralia tantum nouns “seem not to exist”, and this entails a different understanding on the source of number features in this language. Based on previous researches, Pesetsky and Torrego (2007) suggest that Spanish number is in fact a feature of NumP. Similarly, Blühdorn et al. (2008) assume that BP does not have genuine pluralia tantum, which means that BP nouns are not lexically valued for number. From these facts, I assume that the locus of number in BP is NumP, as in Spanish.

As for the second question, under the assignment view (CHOMSKY, 2001), agreement takes place when a probe with uninterpretable features seeks its goal with interpretable features, in order to become valued. Once uninterpretable features have been assigned a value, they must be deleted. As opposed to the assignment view just described, one of the consequences of adopting a feature sharing approach is that, after valuation takes place, the feature is not deleted, but is still available for another probe:

In this respect, the output of the feature sharing version of Agree [...] is the same as the output of the assignment version of Agree [...] H now contains valued F. Of course, F on H may

7 In BP, ‘óculos’ (‘glasses’) is not always understood as plural. In fact, against what is prescribed in traditional grammars, it is often used with modifiers in the singular. In addition, most speakers understand that “o óculos” (the-SG glasses) refers to only one object (a pair of glasses), while “os óculos” (the-PL glasses) refers to more than one object (pair).

8 Blühdorn et al. (2008, p. 15) explain that, in BP, the plural morpheme may be either added to a noun in the singular or taken from a noun in the plural. Among the examples given, nouns such as “pêsames” (‘condolences’), “afazeres” (‘doings’), and “núpcias” (‘nuptials’) may appear without ‘-s’, while nouns such as “gado” (‘cattle’), “gente” (‘folks’), and “fôlego” (‘breath’) may appear with ‘-s’.
now serve as the goal for some later operation of Agree triggered by an unvalued, higher instance of F serving as a new probe. The result will be a single feature F shared by three positions, as the process could iterate further (PESETSKY; TORREGO, 2007, p. 268).

Another consequence of adopting a feature sharing approach is that there is an independence between valuation and interpretability. Thus, the lexicon is expected to have four types of features, as follows.

\[
\begin{array}{ll}
    uF \text{ val} & \text{uninterpretable, valued} \\
    uF [ ] & \text{uninterpretable, unvalued} \\
    iF \text{ val} & \text{interpretable, valued} \\
    iF [ ] & \text{interpretable, unvalued}
\end{array}
\]

(PESETSKY; TORREGO, 2007, p. 269)

Danon (2011) explains and exemplifies this reasoning:

Assume […] that D enters the derivation with unvalued gender and number features, and with a valued person feature. D would then probe for the φ-features of lower projections: NP for gender, and either NP or NumP for number. Unlike the system of Chomsky 2000, 2001, these features on D would not delete at this stage; they will continue to exist as instances of shared φ-features […]

Consider, for instance, the derivation of the following French sentence:

[...] La fille a parlé

the.F.SG girl.F.SG has.3SG spoken

‘The girl spoke’

Putting aside Move operations, the two relevant steps in the derivation are:

1. The unvalued gender and number features of the D la probe for those of the N fille; following Agree, the valued gender and number features have two instances each, on D and on N.

2. The unvalued φ-features of the T a probe for those of the D la […]

Following step 1, the φ-features of D are all valued—not as a result of being interpretable (as the gender and number features are not interpretable on D), but simply as a result of being instances of shared, valued features […]
Finally, interface conditions, such as the lexical category of each head, determine where each of these features should be interpreted: person on D, number on N (or Num), and gender on N.

(DANON, 2011, p. 308-309)

In sum, D and A probe NumP (in some languages or NP in others) as the goal for number feature valuation. The next section (2.2) will show how this mechanism applies to BP.

2.2. Cardinals and the DP-internal distribution of the plural morpheme

According to Danon (2011) and Norris (2014), in several languages, such as Finish and Estonian9, cardinals work as a boundary dividing the DP into two domains, such that phrases preceding the cardinal are marked with the plural morpheme, while phrases following it are unmarked. In Pereira (2017), I assume that this prediction applies to non-standard BP. For instance, in (12), phrases above NumP are marked with the plural morpheme, while phrases under its c-command domain are unmarked10, as represented in (13).

(i) Finnish:
Ne kaksi pien-tä auto-a seiso-ivat tiellä. (Brattico 2010) (DANON, 2011, p. 301)
those.PL two.SG small-PART.SG car-PART.SG stand-PAST.3PL road.ADESS
‘Those two small cars stood at the road’

(ii) Estonian:
nee-d viis ilusa-t maja. (NORRIS, 2014, p. 144)
this-PL.NOM 5.NOM beautiful-PAR house.PAR
‘these five beautiful houses’ (Erelt et al. 1993b:143)

10 Two grammars co-exist in BP: in non-standard BP, the cardinal is a boundary for the DP-internal distribution of the plural morpheme; in standard BP, every single DP-internal phrase is marked with the plural morpheme ‘-s’, regardless of the cardinal position (i, ii).

(i) Os únicos (dois) baldes vermelhos
The-PL only-PL (two) bucket- PL red-PL
‘The only (two) red buckets’

(ii) Os (dois) únicos baldes vermelhos
The-PL (two) only-PL bucket- PL red-PL
‘The only (two) red buckets’
(12)

a. Os único balde vermelho  
   The-PL only-∅ bucket-∅[11 red-∅
   ‘The only red buckets’

b. Os únicos balde vermelho  
   The-PL only-PL bucket-∅ red-∅
   ‘The only red buckets’

c. *O únicos baldes vermelho  
   The-∅ only-PL bucket-PL red-∅
   ‘The only red buckets’

a’. Os dois único balde vermelho  
   The-PL two only-∅ bucket-∅ red-∅
   ‘The only two red buckets’

b’. Os únicos dois balde vermelho  
   The-PL only-PL two bucket-∅ red-∅
   ‘The only two red buckets’

c’. *O únicos dois baldes vermelho  
   The-∅ only-PL two bucket-PL red-∅
   ‘The only two red buckets’

(13) For (12a/a’): [DP dOs [NumP(dois) [AgrP [AP único [AgrP baldei [AP vermelho [NP_i]]]]]]]]

Therefore, in (12a, a’), the determiner, which precedes the cardinal, is marked with the plural morpheme; and, in (12b, b’), both the determiner and its most adjacent adjective, which precede the cardinal, are marked. In contrast, (12c, c’) are ruled out both (i) because phrases located to the left of the cardinal are not marked with the plural morpheme, when they should be[13], and (ii) because phrases located to the right of the cardinal are marked with the plural morpheme, when they should not be.

11 This paper glosses unmarked plurals with the symbol ‘∅’.
12 According to Cinque (2005), the universal order of the DP-internal functional projections is: [DP NumP AP NP]. Other possible linear word orders are explained by movement of the NP as an XP to the Spec of AgrP positions, which are merged with each functional projection in the DP-structure. For instance, in (13), the postnominal position of ‘vermelho’ is derived by moving the NP to Spec,AgrP, a position higher than the AP. In contrast, (12b’) has the following word order [DP AP NumP NP], with an AP preceding NumP. This order is not generated under NP-movement. Cinque (2005, p. 381) explains that “Neither head movement nor movement of a phrase not containing the (overt) NP is possible (except perhaps for focus-related movements of phrases to a DP-initial position)”. Considering Giusti (1996, p. 121), I argue, in Pereira (2017), that the word order in (12b’) is derived by moving the AP ‘únicos’ to Spec,TopP, a position higher than NumP.
13 Following the same reasoning, (i) is ruled out because ‘único’, preceding the overt cardinal, should be marked with the plural morpheme.

(i) *os único dois balde vermelho  
   The-PL only-∅ two balde-∅ vermelho-∅
   ‘The only two red buckets’
This assumption reveals that the plural marking is explained by the syntactic hierarchy of the DP. As a result, this conclusion challenges current proposals, which, under the basis of an “autonomous morphological component […] partly independent from syntax” (COSTA; FIGUEIREDO SILVA, 2006, p. 44), argue for a “singleton” plural morpheme in BP (14). As pointed out by Castro and Pratas (2006, p. 18), this description does not account for the fact that: “In most cases the plural marker seems to surface as a singleton, but in others the plural is marked in two different positions […] these patterns must be subject to further investigation”.

(14)  “Os primeiro livro da biblioteca” (COSTA; FIGUEIREDO SILVA, 2006, p. 28)

The-PL  first-ϕ₁⁴  book-ϕ  of-the library

‘The first books of the library’

In addition, assuming the concepts presented in section (2.1), the valuation of number features, in an example such as (12a, a’), can be described in (15), which means that number features come lexically valued neither with D nor with N, but with Num.

(15)  a.  D, A, and N are lexically uninterpretable and unvalued for number: uF []

b.  NumP has interpretable and valued number features: iF val

c.  D probes NumP, the closest in its c-command domain, and gets valued: uF val

d.  A and N are under the c-command domain of NumP and constitute a chain sharing the same unvalued number features

e.  A probes Num and gets its number features valued¹⁵: uF val

¹⁴ In Costa and Figueiredo Silva (2006, p. 28), the glosses given for ‘primeiro’ and ‘livro’ in (14) are with ‘-SG’ (“The-PL first-sg book-sg”). Under the view assumed here, glossing these phrases with ‘-SG’ is unjustified, because they are not inflected for singular in these data. They are just not marked morphologically for plural, but become valued with plural features.

¹⁵ According to Norris (2014: 104-105, and references therein), “the relationship between a c-commanding probe and a c-commanded goal encoded in Agree is only a preference. Under this view, adjectival heads search their c-command domains for suitable goals as normal. Upon finding nothing to
f. As a consequence of being in a chain with A, N and the lowest A get their number features valued as well: $uF_{val}$

Therefore, (12) complies with the assumption made by Danon (2011) and Norris (2014) that the cardinal divides the DP into two domains, such that phrases on its left are marked with the plural morpheme while phrases on its right are unmarked.

3. **Analysis**

In this section, I explain: firstly, how the mentioned reanalysis occurs, in terms of $\varphi$-feature interpretability and valuation (3.1); and secondly, why the postnominal position is more suitable for this, in terms of the DP-internal distribution of the plural morpheme (3.2).

3.1. **Possessive number features in dialectal BP**

Possessives “combine two independent features for number: the first one is related to person, the other one is related to the DP”\(^{16}\) (ZRIBI-HERTS, 1998, p. 151, my translation). For instance, 1\(^{st}\) person possessive pronouns have two number layers (Table 3): the number associated with the person (‘meu’ versus ‘nosso’) is interpretable, while the number associated with the noun (‘meu’ versus ‘meus’ or ‘nosso’ versus ‘nossos’) is uninterpretable.

<table>
<thead>
<tr>
<th>1(^{st}) person</th>
<th>Person number</th>
<th>Noun number</th>
</tr>
</thead>
<tbody>
<tr>
<td>meu</td>
<td><em>my</em>-MASC-SG 'my'</td>
<td>SG</td>
</tr>
<tr>
<td>meus</td>
<td><em>my</em>-MASC-PL 'my'</td>
<td>SG</td>
</tr>
<tr>
<td>nosso</td>
<td><em>our</em>-MASC-SG 'our'</td>
<td>PL</td>
</tr>
<tr>
<td>nossos</td>
<td><em>our</em>-MASC-PL 'our'</td>
<td>PL</td>
</tr>
</tbody>
</table>

Table 3: Combination of number features on 1\(^{st}\) person possessives

Agree with, the search continues upward, i.e., the probe search for a $c$-commanding goal rather than a $c$-commanded goal”.

\(^{16}\) “les possessifs (...) combinent deux traits de nombre indépendants, le premier, solidaire de la marque de personne, l’autre étant celui du DP” (ZRIBI-HERTS, 1998, p. 151)
These two layers are not so distinctively specified with 2nd person possessives (Table 4). In standard BP, the layer on person features is unspecified for number, which means that ‘seu(s)’ is ambiguous between 2nd person plural and 2nd person singular.

<table>
<thead>
<tr>
<th>2nd person</th>
<th>Person number</th>
<th>Noun number</th>
</tr>
</thead>
<tbody>
<tr>
<td>seu</td>
<td>your-MASC-SG</td>
<td>SG</td>
</tr>
<tr>
<td>seus</td>
<td>your-MASC-PL</td>
<td>PL</td>
</tr>
</tbody>
</table>

Table 4: Number features on 2nd person possessives in standard BP

In contrast, dialectal BP inverts this pattern (Table 5), which means that ‘seu’ is specified for 2nd person singular, and ‘seus’ for 2nd person plural.

<table>
<thead>
<tr>
<th>2nd person</th>
<th>Person number</th>
<th>Noun number</th>
</tr>
</thead>
<tbody>
<tr>
<td>seu</td>
<td>your-MASC-SG</td>
<td>SG</td>
</tr>
<tr>
<td>seus</td>
<td>your-MASC-PL</td>
<td>PL</td>
</tr>
</tbody>
</table>

Table 5: Number features on 2nd person possessives in dialectal BP

To sum up, dialectal BP reanalyzes number features on the 2nd person possessive as being the number of the person and as being interpretable and valued. Therefore, the plural morpheme ‘-s’, on postnominal 2nd person possessives, does not reflect nominal number agreement.

17 In dialectal BP, when ‘seus’ is for 2nd person plural and ‘seu’ for 2nd person singular, the person distinction between singular and plural is produced by the presence or absence of the morpheme ‘-s’ in the same pronominal form, as a result of reanalysis. In EP, this distinction is made in two different lexical forms: ‘vosso’ and ‘teu’. In standard BP, no formal distinction is made on the possessive pronoun, as ‘seu’ is used for both 2nd person plural and 2nd person singular. The reason why this reanalysis is excluded on 1st person possessives is that person distinction between singular and plural is already made in two different lexical forms: ‘nosso’ for 1st person plural and ‘meu’ for 1st person singular.

18 These two different grammars, the dialectal (Table 5) and the standard one (Table 4), co-exist.
3.2. 2nd person possessives in the DP-hierarchy: prenominal versus postnominal positions

This section is focused on the following question: why does the postnominal position favor the reanalysis explained above, while the prenominal position does not?

In section 2.2, I assumed that cardinals function as a boundary that divides the DP into two domains, such that phrases above NumP are marked with the plural morpheme, whereas phrases below NumP are unmarked. This prediction applies straightforwardly to possessives in plural DPs of non-standard BP. As shown in (16a), the article ‘os’ and the possessive ‘seus’, which precede the cardinal numeral, are marked for plural; whereas the noun ‘carro’ and the adjective ‘novo’, which follow the cardinal, are unmarked.

(16)  a. Não vi [os seus (dois) carro novo]

Not saw the-MASC-PL your-MASC-PL two car-ϕ novo-ϕ

‘I did not see your two new cars’

In prenominal position, the possessive precedes cardinals (16a). For this reason, it is always marked with the plural morpheme, in plural DPs. In fact, the definite article is allowed to be unmarked (16b), but never is the possessive (16c).

(16)  b. Não vi [o seus carro novo]

Not saw the-MASC-ϕ your-MASC-PL car-ϕ novo-ϕ

‘I did not see your new cars’

(16)  c. *Não vi [os seu carro novo]

Not saw the-MASC-PL your-MASC-ϕ car-ϕ novo-ϕ

‘I did not see your new cars’
Therefore, (16b) may apparently represent a problem for the analysis I am assuming, because, as the article is located to the left of NumP, it should be marked with the plural morpheme as well as the possessive. Concerning this, it has been observed that, when the definite article co-occurs with prenominal possessives, “the definite article […] is not the marker of definiteness, and is just an expletive” (COSTA; FIGUEIREDO SILVA, 2006, p. 40). Under this view, being an expletive determiner, the definite article is allowed to be dropped or to appear without plural marking.

My analysis of these facts is that the definite article, when co-occurring with prenominal possessives, forms, with the prenominal possessive, a single phrase (DP) in which the article is the specifier (Spec,DP)19, while the possessive is the head (D). The strongest evidence for this is the adjacency20 between the article and the prenominal possessive, which has already been observed in the literature (CASTRO, 2001, p. 611). For instance, in (16d), the cardinal can not intervene between the article and the possessive, nor can an adjective (16e).

---

19 I disagree with an anonymous reviewer who claims that Spec,DP is the position for quantifiers. In a classical paper by Giusti (1991, p. 438), it is assumed that “Quantified nominals are of category QP, namely that Q […] is a functional category that selects a definite nominal (DP) or an indefinite one (NP)

20 I disagree with an anonymous reviewer who claims, based on the examples (ib) and (iib), that there is no adjacency between definite articles and prenominal possessives. Possessives, in (ib) and (iib), are originally postnominal rather than prenominal, despite the appearances. Linearly, one may think that, in (ib) and (iib), an adverb (‘quase’ or ‘ainda’) intervenes between the definite article and a prenominal possessive, but this is not the case. This superficial ordering derives from movement of a postnominal possessive with its preceding adverb (‘quase seus’ or ‘ainda minhas’) by pied-pipe. The functional projection containing the adverb and dominating the projection containing the possessive (‘quase seus’ or ‘ainda minhas’) move to Spec of an intermediate position (TopP) situated between the DP (‘os’ or ‘as’) and the NP (‘namorados’ and ‘mulheres’). An evidence for that comes from the canonical order in (ia) and (iia) where the possessive, preceded by an adverb, is shown to be in fact postnominal. Therefore, the possessive in (ib) and (iib), is not a D-head, but an XP, situated originally low (Spec,PossP), in the DP-structure. Its superficial prenominal position is a result of movement (with an adverb) from a postnominal position to a topic position (GIUSTI, 1996) that precedes the noun.
(16)  d.  *Não vi [os dois seu carro novo]
Not saw the-MASC-PL two your-MASC-ϕ car-ϕ new-ϕ
‘I did not see your two new cars’

e.  *Não vi [os único seu carro novo]
Not saw the-MASC-PL only-ϕ your-MASC-ϕ car-ϕ new-ϕ
‘I did not see your unique new cars’

As the definite article and the prenominal possessive form together a single phrase, the specifier (the article) is optionally marked with the plural morpheme, while the head (possessive) is mandatorily marked. In view of this, the prediction in which NumP divides the DP into two domains applies: the DP (containing the article and the possessive) is above NumP, as shown in (20a), which makes it get the plural marking. The fact that the article may be optionally marked does not cause any problem for this prediction, because it is inside a phrase whose head is already marked.

To sum up, in (16b), the 2nd person possessive: (i) is in a plural DP; (ii) is prenominal; (iii) is a D-head; (iv) has its number features valued by NumP; (v) must be marked with the plural morpheme, which represents nominal number features; and (vi) may refer to either 2nd person singular or 2nd person plural.

Having said that, I will compare (16b) with (6), both repeated below. In these data, the DP-internal distribution of the plural morpheme ‘-s’ looks the same (17).

(16)  b.  Não vi [o seus carro novo]
Not saw the-MASC-ϕ your-MASC-PL car-ϕ new-ϕ
‘I did not see your new cars’
(6) [O seus carro] não pode ficar estacionado aqui (Ouro Preto, 2015-06)

The-MASC-SG your-MASC-PL car-MASC-SG not may stay parked here

‘Your (guys’s) car is not allowed to be parked here’

(17) D[--] Poss[-s] Noun[--]

Nonetheless, as discussed in previous sections, in (6), although the possessive is prenominal, it: (i) is in a singular DP; (ii) has interpretable and valued number features associated with the person; (iii) does not have its number features valued by NumP; (iv) does not have agreement in nominal concord; and (v) refers to 2nd person plural only.

Therefore, the structure in (17), for “o seus carro”, may refer to two readings (18). Thus, the formula in (17) represents in fact two possible different structures. The one in (19a) refers to the reading in (18a) and corresponds to (16b); whereas the one in (19b) refers to the reading in (18b) and corresponds to (6).

(18) a. The DP is plural, and the ‘-s’ on the possessive indicates DP-internal agreement.

b. The DP is singular, and the ‘-s’ on the possessive indicates 2nd person plural.

(19) a. D[-$\phi$] Poss[-s] Noun[-$\phi$]

b. D[-SG] Poss[-s] Noun[-SG]

In this sense, sentences like (6), that presents reanalysis of number features in the possessive ‘seu’, are uncommon, because the possessive in prenominal position is mandatorily marked with the plural morpheme for nominal concord, which makes it resistant to the reanalysis described above. A sharp contrast is shown by the postnominal possessive. It is prevented from being marked with the plural morpheme for nominal concord, which makes it free for the reanalysis to occur.
This contrast is also evident in the DP-hierarchy. In (16b), the possessive is a D-head (20a); whereas, in (1), repeated below, the postnominal possessive is the specifier of a functional projection (PossP\(^{21}\)), which is merged lower in the DP (20b).

(1) A gerência suas só atende clientes grandes (Belo Horizonte, 2016-06)

The-FEM-SG management-FEM-SG your-FEM-PL only serve-3SG customer-PL big-PL

‘Your department works only with large business customers’.

(20) a. For (16a, b):

In sum, this section began with the following question: why does the postnominal position favor the reanalysis (of the number features on the 2\(^{nd}\) person possessive), while the prenominal position does not? The answer is the following: prenominal possessives are in a phrase (DP) located above NumP; as such, they must receive the plural marking associated with nominal agreement. In contrast, postnominal possessives are in a phrase (PossP) located below NumP; as such, they must not receive this mark. Being free from this mark, the latter is suitable for the mentioned reanalysis to take place.

\(^{21}\) PossP stands for Possessive Phrase, as seen in Coene and D’hulst (2003) and other references. Besides, Castro (2001), Costa and Castro (2001), and Brito (2007) recognize that prenominal possessives differ from postnominal possessives in that the latter is an XP – PossP in Brito (2007) – while the former is an X\(^{\circ}\). In (20), the XP is a PossP, and the X\(^{\circ}\) is a D.
4. Hypotheses for a further discussion

An important aspect of the distribution of the possessive ‘seu’ that remains to be addressed is the relation between its position and its interpretation with regard to 2\textsuperscript{nd} and 3\textsuperscript{rd} person readings as well as the distinction between weak and strong forms.\footnote{Brito (2007) claims that European Portuguese (EP) has three grammars for possessives, which can be D (clitic - i), AgrP (weak pronoun - ii) or PossP (strong pronoun - iii). In the last two cases, possessive movement to AgrP (ii) and N movement to a higher position than the PossP (iii) are assumed.}

As seen above, the 2\textsuperscript{nd} person possessive, in dialectal BP, has its number features reanalyzed in postnominal position preferably. In addition, it is observed that the postnominal position, in BP, is more likely to license ‘seu’ as a 2\textsuperscript{nd} person pronoun than ‘seu’ as a 3\textsuperscript{rd} person pronoun. For instance, in (21)\footnote{The pairs in (21) were elaborated based on the idea that ‘seu’ in BP refers to 3\textsuperscript{rd} person when its antecedent is a bound variable (MÜLLER, 1997).\footnote{The following questions were asked to informants in a written test:}

In (21a), whose problem is it?

( ) the teacher’s
( ) the listener’s
( ) the teacher’s and the listener’s (both readings are possible).

In (21b), whose problem is it?

( ) the teacher’s
( ) the listener’s
( ) the teacher’s and the listener’s (both readings are possible).}, when the possessive ‘seu’ is prenominal, ambiguity between 3\textsuperscript{rd} and 2\textsuperscript{nd} person readings is conveyed. However, when it is postnominal, 2\textsuperscript{nd} person reading is the predominant interpretation\footnote{23 The pairs in (21) were elaborated based on the idea that ‘seu’ in BP refers to 3\textsuperscript{rd} person when its antecedent is a bound variable (MÜLLER, 1997).\footnote{The following questions were asked to informants in a written test:}

In (21a), whose problem is it?

( ) the teacher’s
( ) the listener’s
( ) the teacher’s and the listener’s (both readings are possible).

In (21b), whose problem is it?

( ) the teacher’s
( ) the listener’s
( ) the teacher’s and the listener’s (both readings are possible).}.

The analysis given to (i), for prenominal possessives in EP as D, is the closest to the one I am assuming for prenominal possessives in BP, due to adjacency facts. However, in BP, no phonological reduction of the type given in (i) can be found, which means that prenominal possessives in BP cannot be analyzed as clitics. In fact, Castro and Costa (2001, p. 109) have already pointed out that pre-nominal possessives are weak (but not clitic) forms that exhibit typical behavior of X°: “Sendo formas fracas não-clíticas, espera-se que exibam um comportamento típico de X°, mas não idêntico ao dos clíticos”. In addition, as opposed to movement of possessives or of N as a head, I am adopting Cinque’s (2005) proposal for movement of the NP (as an XP) only or conjoined with another phrase by pied-pipe, which does not allow for the possessive to move alone.
(21) a. Cada professor\textsubscript{1} tratou de resolver o seu\textsubscript{1/2} problema.

Each teacher treat-PAST-PL of solve-INF the his/your problem

‘Each teacher sorted out his/your problem’

b. Cada professor tratou de resolver o problema seu

Each teacher treat-PAST-PL of solve-INF the problem his?/your

‘Every teacher sorted out his?/your problem’


<table>
<thead>
<tr>
<th></th>
<th>(&lt;i=John&gt;)</th>
<th>(&lt;i=frying pan&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(22) a. Il suo\textsubscript{i} coperchio è molto pratico. The his/its lid is very practical</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>b. Il coperchio SUOi è molto pratico.</td>
<td>√</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 6: The interpretation of Italian postnominal ‘suo’

In (21), repeated below as (23), the interpretation of the possessive ‘seu’ seems to become restricted to 2\textsuperscript{nd} person, when it occurs in postnominal position, as shown in Table 7:

Most informants have chosen the 3\textsuperscript{rd} alternative for (21a) and the 2\textsuperscript{nd} alternative for (21b). This was an initial test that should be verified with more speakers and other structures, such as the one in (24).
NumP and PossP in dialectal Brazilian Portuguese

(23) a. Cada professor tratou de resolver o seu problema
      b. Cada professor tratou de resolver o problema seu

<table>
<thead>
<tr>
<th></th>
<th>&lt;2nd person&gt;</th>
<th>&lt;3rd person&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>(23) a. Cada professor tratou de resolver o seu problema</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>√</td>
<td>?</td>
</tr>
</tbody>
</table>

Table 7: The interpretation of BP postnominal ‘seu’ with [+animate] antecedent

Nonetheless, 3rd person reading is not excluded, in postnominal ‘seu’ (21b/23b), when the antecedent is [+animate]. If we then replace “cada professor” with an antecedent “cada numeral” that has [-animate] reference, as in (24b), 3rd person interpretation seems to be excluded in postnominal position.

(24) a. Escreva ao lado de cada numeral o seu nome
        b. Escreva ao lado de cada numeral o nome seu

<table>
<thead>
<tr>
<th></th>
<th>&lt;2nd person&gt;</th>
<th>&lt;3rd person&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>(24) a. Escreva ao lado de cada numeral o seu nome</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>√</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 8: The interpretation of BP postnominal ‘seu’ with [-animate] antecedent

(24a) was taken from a school assignment. In this task, it is expected that students write in full the names of each numeral listed in the question, but it turns out that some students wrote their own names, repeated times, in the blank spaces. This shows that, in prenominal position, even when the antecedent has [-animate] reference, ‘seu’ allows

both 2nd and 3rd person readings. However, in postnominal position (24b), when the antecedent has [-animate] reference, only 2nd person reading is available.

In other words, 3rd person postnominal ‘seu’ searches for its antecedent, inside the IP, in a bound variable with [+animate] reference, while 2nd person postnominal ‘seu’ searches for its antecedent, outside the IP domain, in an operator located in the SaP [addressee].

In sum, according to Cardinaletti (1998, p. 21), in Italian, 3rd person pronoun ‘suo’, as a strong form, has its interpretation restricted to human referents in postnominal position. Likewise, in BP, the hypothesis to be verified is the following: 3rd person reading seems to be excluded in postnominal ‘seu’, when the antecedent is a bound variable with [-animate] reference. In this case, only 2nd person reading is available. In contrast, when the sentence has a bound variable with [+animate] reference, both 3rd and 2nd person readings are available in postnominal ‘seu’.

5. Conclusions

In standard BP, as well as in other Romance languages, possessives have uninterpretable number features, which are valued via nominal agreement. However, dialects of BP, especially the one spoken in Minas Gerais, show that postnominal 2nd person possessives do not have number agreement with the noun. In order to account for these facts, I analyzed the interpretability and valuation of number features in addition to the positions of the possessive in the DP-hierarchy.

With respect to the interpretability and valuation of features, I have claimed that, in this dialect, number features on 2nd person possessives are reanalyzed as being: (i) associated with the person and (ii) interpretable and valued. From the first postulation, ‘seu’ is expected to be the possessive for 2nd person singular, and ‘seus’ for 2nd person plural. From the second postulation, no nominal number agreement is triggered on the possessive, which means that there is neither “mismatch” of agreement with the noun, as one could presume, nor even agreement with something else, such as “possessor” or “addressee”.

As such, the analysis carried out in this paper reformulates and prevails over other hypotheses proposed in previous stages of this research (PEREIRA, 2015, 2016a, 2016b). Concerning Pereira (2016b), it is...
Furthermore, with respect to the DP-hierarchy, I have claimed that cardinals divide BP DPs into two domains, such that phrases preceding NumP are marked with the plural morpheme for nominal concord, whereas phrases following it are unmarked. The prenominal possessive precedes cardinals and must be marked, which makes it resistant to the reanalysis described above. In contrast, the postnominal possessive follows cardinals and must be unmarked, which makes it free for the reanalysis to occur.

To conclude, assuming that the 2nd person possessive has its number features reanalyzed explains why they are independent of the number for which the DP-internal phrases are inflected. Finally, assuming that the DP is divided into two domains, with regard to the DP-internal plural marking, explains why the postnominal position favors the mentioned reanalysis.

References


CASTRO, Ana; Pratas, Fernanda. Capeverdean DP-internal number agreement: additional arguments for a distributed morphology approach. In: COSTA, João;


