Exclamatives and interrogatives with 'ques': the CP/DP hierarchy and the plural marking in brazilian portuguese*

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ABSTRACT

This paper examines exclamatives and interrogatives containing the wh-determiner 'ques' in dialectal Brazilian Portuguese. As opposed to standard BP, in these structures, 'que' is the only constituent of the DP marked for plural. In order to explain these facts, I will propose an analysis that accounts for the CP/DP-internal hierarchy as well as the DP-internal distribution of the plural morpheme.

KEYWORDS: 'Ques', CP, wh-movement, DP, NumP, plural marking.

1. INTRODUCTION

This paper analyzes exclamatives and interrogatives in which 'que' is marked with the plural morpheme '-s' (1a, 2a), in dialectal Brazilian Portuguese (BP), as opposed to standard BP (1b, 2b) in which 'que' does not inflect for number.

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(1)

a. Ques	paisagem bonita!

What-PL landscape-ϕ[1] beautiful-ϕ

How beautiful these landscapes are!'

(Ouro Branco, March 2016)[2]

b. Que paisagens	bonitas!

What landscape-PL beautiful-PL

'How beautiful these landscapes are!'

(Adapted from (1a))

(2)

a. Ques ferramenta você usou?

Which-PL tool-ϕ	you	used

'Which tools did you use?'

(Belo Horizonte, April 2014)

b. Que/Quais ferramentas você usou?

Which/Which-PL tool-PL you	used

'Which tools did you use?'

(Adapted from (2a))

In order to account for the type of structures exemplified in (1a) and (2a), which are very productive in the dialect spoken in Minas Gerais[3], this paper aims to explain the syntactic operations responsible for deriving them, especially with regards to: the wh-movement of the DP containing 'ques' (section 2) and the DP-internal distribution of the plural morpheme (section 3).

Section 2.1 stablishes a comparison between 'que' and 'qual' in exclamatives and interrogatives in order to assume that 'que' is a determiner, following Vidor and Menuzzi (2004) and Nunes (2007). As a determiner, 'que' is valued with number features in dialectal BP. Additionally, in order to account for the word order in the DP, I will consider the DP-hierarchy, as described in Cinque (2005).

After that, section 2.2 offers an analysis that is parallel to the one made by Kato (2007) for small clauses, and the one made by Mioto (2001) for wh-questions. In order to explain how the DP gets inverted in

the linear sentential order, I propose that, in the exclamative (1a), the DP moves from the predicate of a small clause to the CP-domain. Likewise, in the interrogative (2a), it moves from the VP-internal argument position.

In addition, section 3.1 gives an account of feature valuation, based on Pesetsky and Torrego (2007), arguing that NumP is the projection valued with number features while the other DP-internal phrases get valued via concord. Crucially, this section adopts the assumptions made by Danon (2011) and Norris (2014) about cardinals, which are analyzed as a boundary for the DP-internal distribution of plural features. Based on this prediction, I show that the position of the cardinal numeral (NumP), in non-standard BP, divides the DP into two domains: the one in its left is marked for plural, whereas the one in its right is unmarked.

Finally, section 3.2 applies this assumption to the data under investigation in order to explain why 'ques', in dialectal BP, is marked for plural while the other elements of the DP are not.

In sum, considering the structures in (1a) and (2a), this paper investigates: on the one hand, their syntactic derivation in both the DP and the CP-domain; and on the other hand, the distribution of their plural morpheme in the DP-hierarchy.

2. The syntactic derivation[4]

This section firstly focuses on the status of 'que' as a wh-determiner, in both interrogatives and exclamatives (2.1), and secondly proposes an analysis of the syntactic structure to which it belongs (2.2).

2.1 The wh-determiner in exclamatives and interrogatives

Vidor and Menuzzi (2004) extend Rapposo's (1998 cited by Vidor; Menuzzi, 2004) analysis of Portuguese pronouns 'o' (like 'o', 'a', 'os' and 'as') as determiners (3) to the interrogative 'que' (4).

(3)
a. … mas só   compraria [$_{DP}$ [$_D$ o] [$_{NP}$ carro vermelho]].
but   only buy   the   car   red

'... but I would only buy the red car'.

b. …. mas só   compraria [$_{DP}$ [$_D$ o] [$_{NP}$ [$_N$ pro] vermelho]].

but   only buy   the   red

'... but I would only buy the red one'.

c. … mas não [$_{DET}$ o]$_i$ compraria [$_{DP}$ [$_D$ t$_i$] [$_{NP}$ [$_N$ pro]]]

but   not   it   buy

'... but I would not buy it.'

(VIDOR; MENUZZI, 2004, p. 2, glosses and translation are mine)

(4)

a. [$_{DP}$ [$_D$Que] [$_{NP}$ tipo de coisa]] o   João faz   pra agradar a Maria?

What   type of thing   the João do-3rdSG to please the Mary

'What sort of things does John do to please Mary?'

b. [$_{DP}$ [$_D$Que] [$_N$ pro]] fez o   João para agradar a Maria?

What   did the João to   please the Maria

'What did John do to please Mary?'

(VIDOR; MENUZZI, 2004, p. 7, glosses and translation are mine)

As explained by Vidor and Menuzzi (2004), in the traditional grammar, 'o' is: a definite article in (3a); a demonstrative pronoun in (3b); and a personal pronoun in (3c). In contrast, Rapposo (1998 cited by Vidor; Menuzzi, 2004) proposes that all of these three occurrences of 'o' are determiners. In (3a), 'o' is D in a sequence [DP [NP [AP]]] in which every constituent is overt; whereas, in (3b), N is covert. In (3c), D has moved up from its merge position and adjoined to I. In the three situations, it is assumed that 'o' is a proclitic form that needs a host. In (3a), its host is the noun; in (3b), the adjective; and, in (3c), the verb. In this case, due to the fact that there is no host in the DP domain, it is assumed that 'o' has to raise to I where it finds a verbal host and gets accusative Case. Therefore, in European Portuguese (EP), 'o' is a proclitic form.

Vidor and Menuzzi (2004) extend Rapposo's (1998 cited by Vidor; Menuzzi, 2004) analysis of 'o' (3) to the interrogative 'que' (4) in BP. In (4a), 'que' is exactly in the position of 'o' preceding a noun in a sequence [DP [NP]]; whereas, in (4b), N is covert. Furthermore, in

(4), 'que' is a weak form, as it is pronounced as [ki], instead of [kê][5]. According to the authors, the form [ki] is proclitic; as such, it has to precede a host. In (4a), its host is the noun while, in (4b), its host is the verb. Concerning (4b), it is argued that, in the lack of a host, 'que' raises from the internal argument position to the CP in order to check its interrogative wh-features. After moving, it gets then a verbal host.

Another source of evidence for describing 'que' as a determiner comes from the fact that 'que' (5b) may appear exactly in the same position of indefinite articles (5a) in exclamatives.

(5)

a. Uma droga aquele programa de televisão!

A   drug that   program of TV

'What a rubbish that TV program is!'

(SIBALDO, 2011, p. 231, glosses and translation are mine)

b. Que droga aquele programa de televisão!

What drug   that program of TV

'What a rubbish that TV program is!'

(Adapted from (5a))

More precisely, Nunes (2007) refers to 'que', in (6), explicitly as a determiner:

(6)

a. Ques   livro você comprou?

Which-PL book-ϕ you bought

'Which books did you buy?'

b. Mas ques   coisa interessante!

But   what-PL thing-ϕ interesting-ϕ

'How interesting these things are!'

(NUNES, 2007, p. 31, glosses and translation are mine)

However, Vidor and Menuzzi (2004) assume that, unlike the interrogative pronoun 'qual', 'que' lacks number features in standard

BP, because 'qual' inflects in standard BP ('quais'), whereas 'que' does not. Likewise, the English words 'which' and 'what' in (7) do not bear inflection and are assumed to be in D:

> They certainly seem to serve one of the syntactic-semantic functions of determiners in English in that their presence is enough to license the use of a singular count noun. They are 'wh' because the DPs they head undergo wh-movement just like a wh-pronoun. (NORRIS, 2014, p. 47 - 48).

(7)

a. [Which/what man] did you see at the store?

b. I wondered [what/which vase] he broke.

(NORRIS, 2014, p. 47)

Nonetheless, for dialectal BP, it is not possible to assume that 'que' does not license number features. In fact, in (1a), (2a), and (6), 'que' is the only item in the DP which has the morphological mark of plural '-s'.

In order to account for the determiner inflection in (1a), (2a), and (6), it is worth pointing out that 'ques' [kis] (used instead of standard 'que' - 1b), in exclamatives (1a), and 'ques' [kis] (used instead of standard 'quais' - 8b), in interrogatives (8a), are homophones.

(8)

a. [Ques   menina bonita]$_i$ você conhece t$_i$? ('Ques' instead of 'Quais'[6])

Which-PL girl-ϕ beautiful-ϕ you know?

Which beautiful girls do you know?'

b. [Quais   meninas bonitas]$_i$ você conhece t$_i$?

Which-PL girl-PL   beautiful-PL you know?

'Which beautiful girls do you know?'

(Examples, glosses and translation are mine)

Therefore, because 'ques' and 'quais' have exactly the same pronunciation [kis] in non-standard BP, it seems that, through analogy[7] (HOPPER; TRAUGOTT, 2003; ROBERTS; ROUSSOU, 2003), exclamative 'ques' mirrors 'quais' inflection. In other words, the

speakers may understand that, if [kis] is the plural form of the wh-item 'qual' in (8a), an interrogative sentence, thus [kis] ('ques') should be the plural form of the wh-item 'que' in both interrogatives (9a) and exclamatives (9b). As a result, the property of 'qual' to bear inflection is transferred via [kis] to 'que', which is reanalyzed[8] as a wh-determiner with number features.

(9)

a. Ques menina bonita é essas? De onde elas vêm? ('Ques' instead of interrogative 'Que')

Who-PL girl-ϕ beautiful-ϕ is these? From where they come?

'Who are these beautiful girls? Where do they come from?'

b. Ques menina bonita (é essas)! ('Ques' instead of exclamative 'Que')

What-PL girl-ϕ beautiful-ϕ (is these)!

'How beautiful these girls are!'

(Examples, glosses and translation are mine)

Therefore, 'que', in standard BP, is similar to 'quão' (10) in that it does not bear number features, while 'que', in non-standard BP, is similar to 'qual' (11) in that it does bear number features.

(10)

a. Quão maravilhosas são as tuas obras![9]

How   wonderful-PL are the-PL your-PL deed-PL

'How great your works are!'

b. Quão seguras estão nossas informações pessoais?[10]

How   safe-PL are   our-PL information-PL personal-PL

'How safe are our personal data?'

(Glosses and translation are mine)

(11)

a. São quais regalos para a alma e o coração![11]

Are how-PL joy-PL to the soul and the heart

'How enjoyable they are for our soul and our heart!'

b. Quais   experiências   você teve?[12]

Which-PL experience-PL you had

'Which experiences did you have?'

(Glosses and translation are mine)

Another aspect of the relation between interrogatives and exclamatives is that, in some cases (12), they may have the same syntactic structure, though different illocutionary forces (ZANUTTINI; PORTNER, 2003). This happens in (9a) and (9b) where the wh-DP raises to the CP-domain, both in the exclamative (9b) and in the interrogative (9a). In (8), it raises from the internal argument position of the verb 'conhecer'; in (9), from the predicate of a small clause, which will be discussed in the next section.

(12)

Isn't he the cutest thing!

(ZANUTTINI; PORTNER, 2003, p. 3)

Finally, it is worth pointing out that, in a historical point of view, inflection of 'ques' is not exactly an innovation. Data below from the 14th to the 19th centuries, available in the data basis *Corpus do Português* (DAVIES; FERREIRA, 2006), show several occurrences of 'que' inflected for plural. In most of them, especially in the earliest centuries, as observed in (13a) and (13b), 'ques' is preceded by a determiner. In others, especially in the latest centuries, as observed in (13c), it seems to appear as a D itself, preceding a noun, in interrogative sentences.

(13)

a. As virtudes teologaes sã tres [..] ffe esperãça & caridade das **ques** as duas acabã neste mûdo (14th Century).

The-PL virtue-PL theological-PL are three faith hope & charity of-the-PL that-PL the-PL two end in-this world

'The three theological virtues are faith, hope and charity; among them, two end in this world.'

b. [...] encherse a Lusitania de Romanos, contra os **ques** se levantaraõ os Lusitanos (17th Century).

Fill-INF-se the Lusitania of Romans against the-PL que-PL se raise-FUT the Lusophones

'Lusitania is populated by Romans whom the Lusophones will fight against.'

c. Que tempo eu (..) não venho! (..)' '**Ques**' dias não é preciso aqui vir (..) para tirar um litro (19th Century).

how long   I   not come   which-PL day-PL not is needed here come to take a liter

'It has been so long since I last came. Which days am I not required to come and take a liter?'

(DAVIES; FERREIRA, 2006, glosses and translation are mine)

To sum up, in this section, I assumed that 'que' is a determiner licensing number features in dialectal BP. In contrast to 'que', 'qual' is able to inflect in both standard and non-standard BP. However, the pronunciation of 'quais' and 'ques', in non-standard BP, is exactly the same [kis], which triggers the reanalysis of 'que' as an item able to inflect for number. This seems to be expected, because 'ques', with plural inflection, is attested in Old Portuguese. Considering this, the next section examines the syntactic derivation of these structures with regard to the movement of the wh-DP to the CP-domain.

2.2 MOVEMENT OF THE DP CONTAINING 'QUES'

It is clear that, in (2a), the DP containing 'ques' is the internal argument of the verb, which is raised to the CP under wh-movement. In this section, I will claim that the DP in (1a) is the predicate of a free small clause, and that it moves from this position to the CP in order to check illocutionary force.

In BP free small clauses, "the predicate and the subject appear one after the other with no tense and verbal morphology in its superficial structure"[13] (SIBALDO, 2011, p. 231, my translation). For instance, in (15a), the predicate "inteligente" and the subject "esse menino" appear one after the other without the presence of a copula.

According to Kato (2007, p. 110), "adult small clauses in BP are ordinary finite cleft sentences" (14a). In the author's analysis, the AP of

the small clause moves all the way up, from the complement position of a little v, to a functional projection situated above the IP, as shown in (15b).

(14)

a. "É INTELIGENTE que o   menino é

 is   intelligent   that the-sg boy-sg is

'It is intelligent that the boy is'".

b. É [$_{FP}$[INTELIGENTE$_{+F}$]$_i$ que$_{+F}$ [$_{IP}$ o menino é t_i]]]

(KATO, 2007, p. 106-107)

(15)

a. "[$_{AP}$ Inteligente$_{+F}$ [este menino]]"

Clever   this boy

'How clever this boy is!'

b. "[$_{FP}$ [INTELIGENTE$_{+F}$]$_i$ F [$_{IP}$ é$_j$ [$_{vP}$ t$_j$ [$_{AP}$ t$_i$ [este menino]]]"

(KATO, 2007, p. 107, glosses and translation are mine)

Considering this, I hypothesize that, in (1a), repeated below as (16a), the DP 'ques paisagem bonita' is the predicate of a small clause. In addition, this small clause has, in its subject, a null demonstrative pronoun 'essas' (16b), because the kind of exclamatives, in (1a) or (16a), is always attached to the utterance time. Moreover, (16c) shows that a copula is covert, which is evidence of the small clause analysis. Finally, (16d) shows that the whole structure is in fact an exclamative sentence. This sentence has a small clause inside whose predicate (a wh-DP) gets inverted as a result of wh-movement to the CP-domain (17a).

(16)

a. Ques   paisagem bonita!

What-PL landscape-ϕ beautiful-ϕ

'How beautiful these landscapes are!'

(Ouro Branco, March 2016)

b. Ques   paisagem bonita (essas)!

What-PL landscape-ϕ beautiful-ϕ (this-PL)

'How beautiful these landscapes are!'

c. Ques   paisagem bonita (é essas)!

What-PL landscape-ϕ beautiful-ϕ (is this-PL)

'How beautiful these landscapes are!'

d. Ques paisagem bonita (que é essas)!

What-PL landscape-ϕ beautiful-ϕ (that is this-FEM-PL)

'How beautiful these landscapes are!'

(Adapted from (16a))

As represented in the diagram (17a), the DP 'ques paisagem bonita' raises from the small clause to Spec,CP in order to check exclamative force. Besides, in the diagram (17b)[14], it is possible to visualize that, inside the DP, 'ques' is merged in D.

(17)

(17) a. For the CP in (16a)
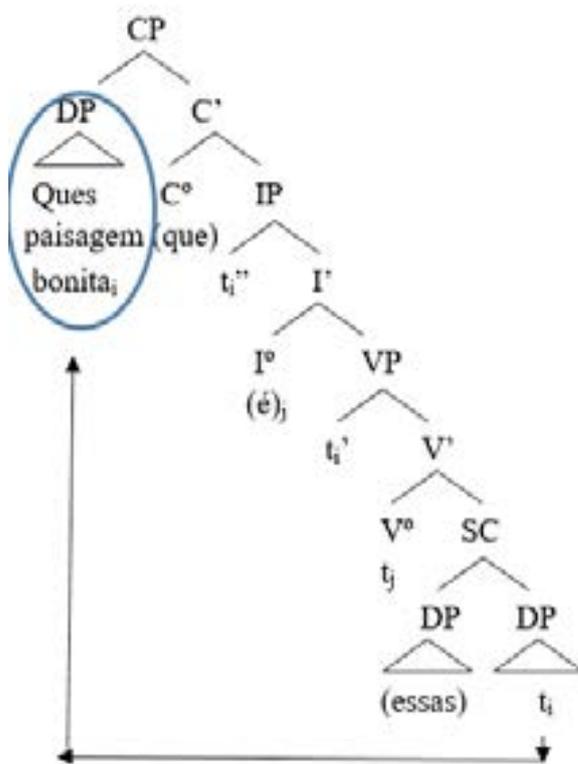
(17) b. For the DP in (16a)
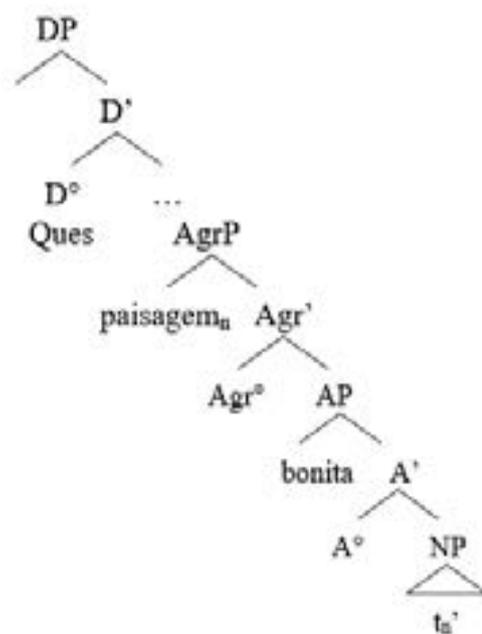
(Source: Elaborated by the author)

That this is an exclamative sentence with a raised wh-DP is also observed in (18a). In this data, the wh-DP is not the predicate of a small clause; instead, it is the VP-internal argument, which raises to Spec,CP, as represented in (18b).

(18)

a. Ques   foto   ruim   que ela fez!
What-PL picture-ϕ bad-ϕ that she did
'How bad the pictures that she took are!'
(Ouro Branco, February 2016)

(18) b. For the CP in (18a)
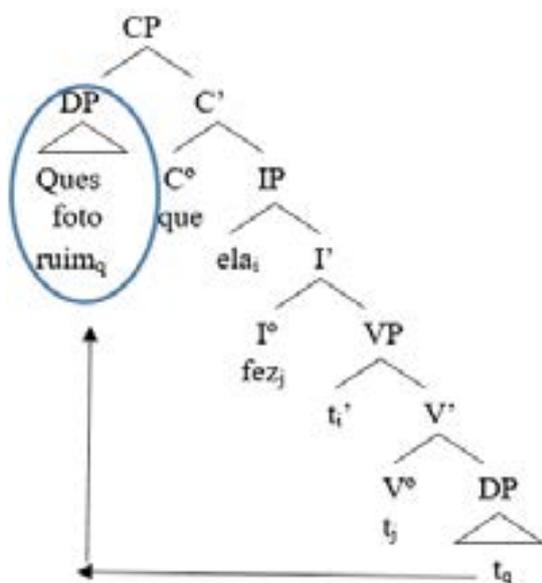
(18) c. For the DP in (18a)
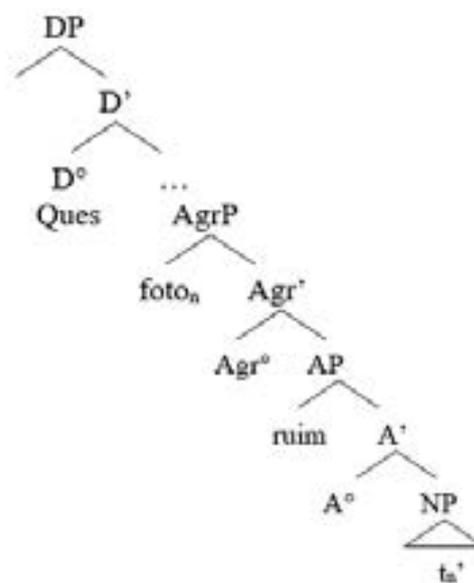
(Source: Elaborated by the author)

The derivation, in (18b), for the exclamative sentence (18a), is basically the same as the derivation, in (19b), for the interrogative sentence (2a), repeated below as (19a). The only difference is that, in (2a) or (19a), the wh-movement is due to interrogative illocutionary force rather than exclamative force[15].

19)

a. Ques ferramenta você usou?

Which-PL tool-ϕ   you   used

'Which tools did you use?'

(Belo Horizonte, April 2014)

(19) b. For the CP in (19a)
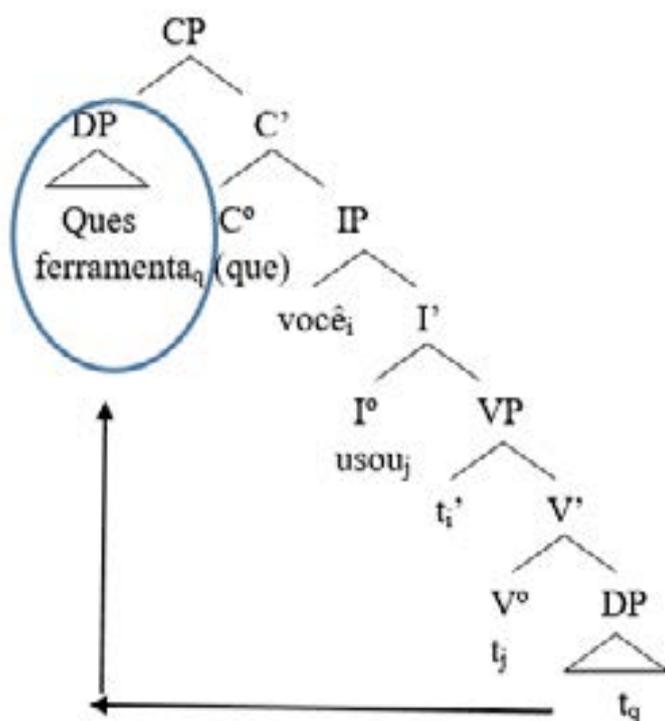
(19) c. For the DP in (19a)
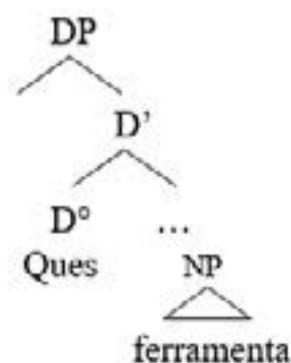
(Source: Elaborated by the author)

This analysis also accounts for a small clause (20a) containing simultaneously: an overt DP ('essas banana'), in its subject position, with the deictic pronoun followed by the noun (20b); and another overt DP ('ques fresquinha'), in its predicate position, with a null noun (20c)[16].

(20)

a. Ques   fresquinha essas   banana!

What-PL fresh-DIM-ϕ this-PL banana-ϕ

'How fresh these bananas are!'

(Perdões, January 2015)

(20) b. For the CP in (20a)
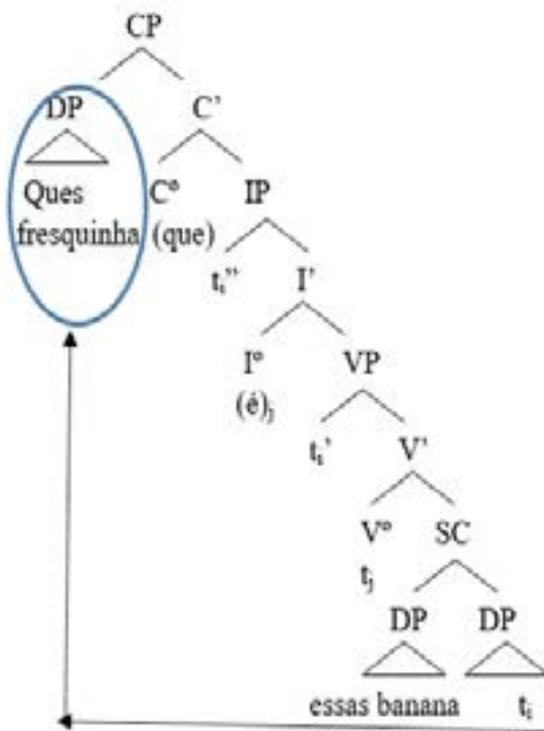
(20) c. For the DP predicate in (20a)
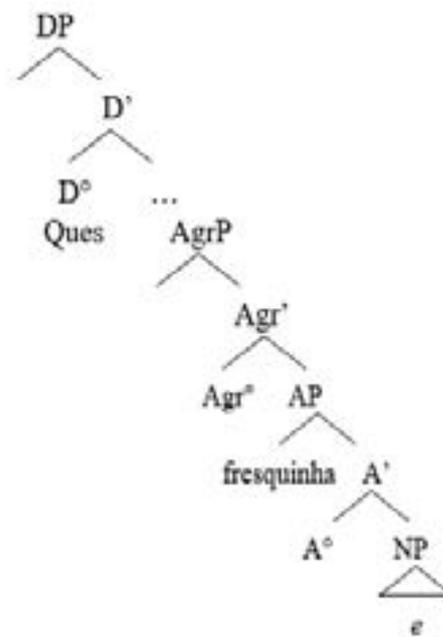
(Source: Elaborated by the author)

Additionally, this analysis also accounts for small clauses containing only a predicate with a null noun, as exemplified in (21a) and represented in (21b) and (21c).

(21)
a. Ques   idiota![17]
What-PL stupid-φ
'How stupid these boys are!'
(Belo Horizonte, May 2016)

(21) b. For the CP in (21a)
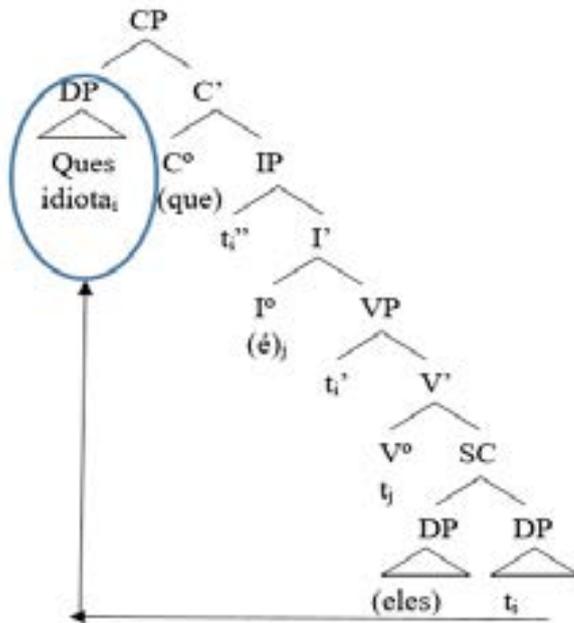
(21) c. For the DP predicate in (21a)
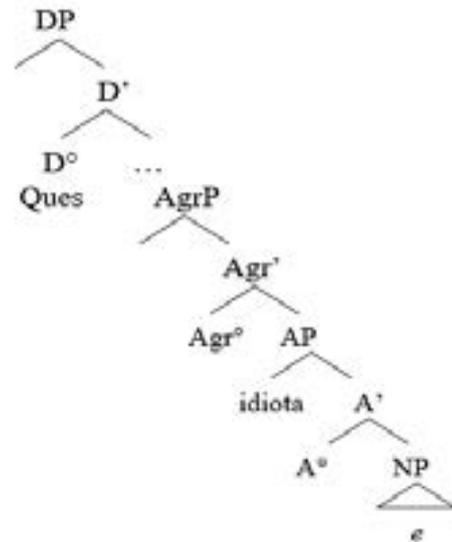
(Source: Elaborated by the author)

Overall, the proposal assumed for exclamatives and interrogatives with 'ques' is aligned with: the one proposed by Kato (2007) for free small clauses and the one proposed by Mioto (2001) for questions of the type 'Wh que'.

For instance, a clausal structure is postulated both in (17a) and (15b). In Kato's (2007) analysis (14b), it is a cleft clausal structure; whereas, in the structures under investigation, such as (17a or 1a) and (19a or 2a), this is not the case. According to Mioto (2001), cleft interrogatives with 'Wh *é que*' (22b) and interrogatives with 'Wh *que*' (22a) do not have the same structure, being (22a) derived in (23).

(22)

a. "O que que a Maria viu?"

The what that the Maria saw

'What did Mary see?'

b. "O que é que a Maria viu?"

The what is that the Maria saw

'What is it that Mary saw?'

(MIOTO, 2001, p. 116-117, glosses and translation are mine)

(23)

[$_\text{FocP}$ [O que]$_\text{i Foc}$que [$_\text{IP}$ a Maria viu t_i]]

(MIOTO, 2001, p. 117)

Mioto (2001, p. 118, my translation) explains that:

> exclamatives provide additional evidence to support the hypothesis that 'Wh *é que*' and 'Wh *que*' are not structurally equivalent because it is not possible to derive [(24a)] from [(24b)], as the latter is ungrammatical.[18]

From this observation, it is worth pointing out that exclamatives, as the ones in (16d) and (18a), are also ungrammatical in cleft structures, respectively, in (24c) and (24d).

(24)

a. Que saudade que eu tenho da Bahia!

   What lack that I have of-the Bahia

   'How deeply I miss Bahia!'

   b. *Que saudade é que eu tenho da Bahia!

What lack is that I have of-the Bahia

(MIOTO, 2001, p. 118, glosses and translation are mine)

c. *Ques paisagem bonita é (que é essas)!

What-PL landscape-ϕ beautiful-ϕ is (that is this-PL)

d. *Ques foto ruim é que ela fez!

What-PL picture-ϕ bad-ϕ is that she did

(Adapted from (16d) and (18a))

Therefore, the analysis proposed here for exclamatives with 'ques' (17a) is parallel to the one (15b) developed by Kato (2007), because both of them predict: firstly, a small clause, such that, in Kato's (2007) analysis, it is inside a cleft structure while, in the structures under investigation, this is not case, as discussed above; secondly, a predicate position, such that, in Kato's (2007) analysis, it is filled with an AP while, in the structures under investigation, it is filled with a DP containing a wh-determiner; thirdly, the movement of the predicate from a small clause to a functional projection (FP), such that, in Kato's

analysis (2007), the target position is FP (which may or may not be the CP) while, in the structures under investigation, it is the CP-domain[19].

In addition, the analysis proposed here for interrogatives with 'ques' is also parallel to the one developed by Mioto (2011) for interrogatives of the type 'Wh *que*'. Comparing (23) with (19b), the difference is that, in (19b), the CP-internal functional projection to which the wh-DP moves is not specified.

Finally, comparing (19b) with (18b), one may observe that the same analysis applied to interrogatives (19b) is extended to exclamatives (18b). Besides, comparing the exclamatives (18b) and (17a), one may observe that, in (18b), the wh-DP moves from the VP-internal argument position rather than the predicate of a small clause (17a). Likewise, comparing the interrogatives (19b) and (9a), one may observe these two possible merge positions as well: in (19b), the wh-DP moves from the VP-internal argument position rather than the predicate of a small clause (9a). Accordingly, although the wh-DP merge position may be different in both exclamatives (17a, 18b) and interrogatives (9a, 19b), the target position is the same (the CP-domain).

To sum up, 'ques' is a head that checks φ-features in D. The DP to which it belongs raises to the CP-domain from two different positions: the predicate of a small clause (1a) or the VP-internal argument (2a). That is how the DP gets inverted in the linear sentential order. This movement is triggered by illocutionary force, in both exclamatives (1a) and interrogatives (2a).

3. The DP-internal distribution of the plural morpheme

This section firstly presents an account of cardinals, which are analyzed as a boundary for the DP-internal distribution of plural features (3.1); and secondly, it shows that this prediction applies to the data under investigation, which explains why 'ques' is marked for plural while the other elements of the DP are not (3.2).

3.1 Cardinals as a boundary for the DP-internal plural marking in BP

In Pereira (2016), based on Danon (2011) and Norris (2014), I claim that the DP-internal distribution of the plural morpheme in non-

standard BP is explained by the position of the cardinal numeral in the DP-hierarchy. It divides the DP into two domains, such that phrases higher than the cardinal are marked with the plural morpheme, while phrases lower than the cardinal are unmarked.

Concerning current proposals on the issue, according to Costa and Figueiredo Silva (2006), BP has a singleton morpheme for plural, while EP has a dissociated one. This proposal is aimed at explaining the situation in which non-standard BP allows the presence of the plural morpheme in one element of the DP, usually D (25a), while EP allows it "to spread over all elements able to bear it" (COSTA; FIGUEIREDO SILVA, 2006, p. 38) (25b).

(25)

a. "Os primeiro livro   da   biblioteca

The-pl first-sg[20] book-sg of-the library

'The first books of the library'."

b. "Todos os meus primeiros livros bonitos.

All-pl the-pl my-pl first-pl book-pl pretty-pl

'All my first pretty books'.".

(COSTA; FIGUEIREDO SILVA, 2006, p. 28)

In non-standard BP, it is true that the plural morpheme may appear only in the determiner, but it is also true that it may appear in more than one element of the DP; for instance, in the determiner and in the adjective (26a) or in the determiner and in the possessive (26b).

(26)

a. "Os primeiros livro da biblioteca

The-pl first-pl book-sg of-the library

'The first books of the library'."

b. "Os meus livro

The-pl my-pl book-sg

'My books'.".

(COSTA; FIGUEIREDO SILVA, 2006, p. 28 - 29)

That is the reason why Castro and Pratas (2006, p. 18) assume that:

> In most cases the plural marker seems to surface as a singleton, but in others the plural is marked in two different positions [...] C&FS [COSTA; FIGUEIREDO SILVA, 2006] do not account for the 'half--way' singleton morpheme [as in (26)] [...] these patterns must be subject to further investigation.

Therefore, the 'singleton' proposal (COSTA; FIGUEIREDO SILVA, 2006) does not account for the fact that the plural morpheme may be marked in more than one element of the DP nor does it explain the syntactic reasons why some elements are marked, while others cannot be.

In contrast, as observed by Danon (2011, p. 301), in many languages, the distribution of plural features is determined by the position of cardinal numerals in the DP structure. For instance, in Finnish (27), "a (plural) number feature is only available above the position of the numeral" (DANON, 2011, p. 302).

(27)

"Ne   kaksi   pien-tä   auto-a   seiso-ivat   tiellä.

those.PL two.SG small-PART.SG car-PART.SG stand-PAST.3PL road. ADESS

'Those two small cars stood at the road' (Brattico 2010)".

(DANON, 2011, p. 301)

In addition, Norris (2014) presents data from Estonian (28) in which "material to the left of the numeral is plural, and material to the right is singular" (NORRIS, 2014, p. 143). That is why the author assumes that the numeral divides the DP into two domains.

(28)

"nee-d   viis   ilusa-t   maja

this-PL.NOM   5.NOM beautiful-PAR house.PAR

'these five beautiful houses' (Erelt et al. 1993b:143)".

(NORRIS, 2014, p. 144)

Therefore, in several languages, the DP-internal distribution of number features is determined by the position of the cardinal numeral. This explanation applies to non-standard BP as well. For instance, in

(29), the position of NumP in the DP functions as a clear boundary, such that phrases above it are marked with the plural morpheme and phrases under its c-command domain are unmarked. This is represented in (30).

(29)

a. Os   único balde   vermelho
The-PL only-ϕ bucket-ϕ red-ϕ
'The only red buckets'

a'. Os   **dois** único balde   vermelho
The-PL   two only-ϕ bucket-ϕ red-ϕ
'The only two red buckets'

b. Os   únicos balde   vermelho
The-PL only-PL bucket-ϕ red-ϕ
'The only red buckets'

b'. Os únicos **dois** balde vermelho
The-PL only-PL two bucket-ϕ red-ϕ
'The only two red buckets'

c. *O   únicos baldes   vermelho
The-ϕ only-PL bucket-PL red-ϕ
'The only red buckets'

c'. *O únicos **dois** baldes vermelho
The-ϕ only-PL two bucket-PL red-ϕ
'The only two red buckets'

d. *O único baldes   vermelhos
The-ϕ only-ϕ bucket-PL red-PL
'The only red buckets'

d'. *O único **dois** baldes vermelhos
The-ϕ only-ϕ two bucket-PL red-PL
'The only two red buckets'

(Examples, glosses and translation are mine)

In (29a, a'), the cardinal numeral 'dois' is right after D. As a result, only D is marked for plural with the morpheme '-s', whereas nothing to the right of the numeral is marked for this feature. In (29b, b'), the numeral is after D 'os' plus the adjective 'únicos', which explains the fact that both of them are marked for plural, whereas everything to the right of the numeral is unmarked for this feature. In contrast, (29c, c') and (29d, d') are ruled out either (i) because phrases located to the left of the cardinal are not marked with the plural morpheme when they should or (ii) because phrases located to the right of the cardinal are marked with the plural morpheme when they should not.

(30)
For (29a, a')

DP

D'

D°
Os

...

NumP

Num'

Num°
(dois)

AgrP

Agr'

Agr°

AP

único

A'

A°

AgrP

balde_n

Agr'

Agr°

AP

vermelho

A'

A°

NP

t_n'
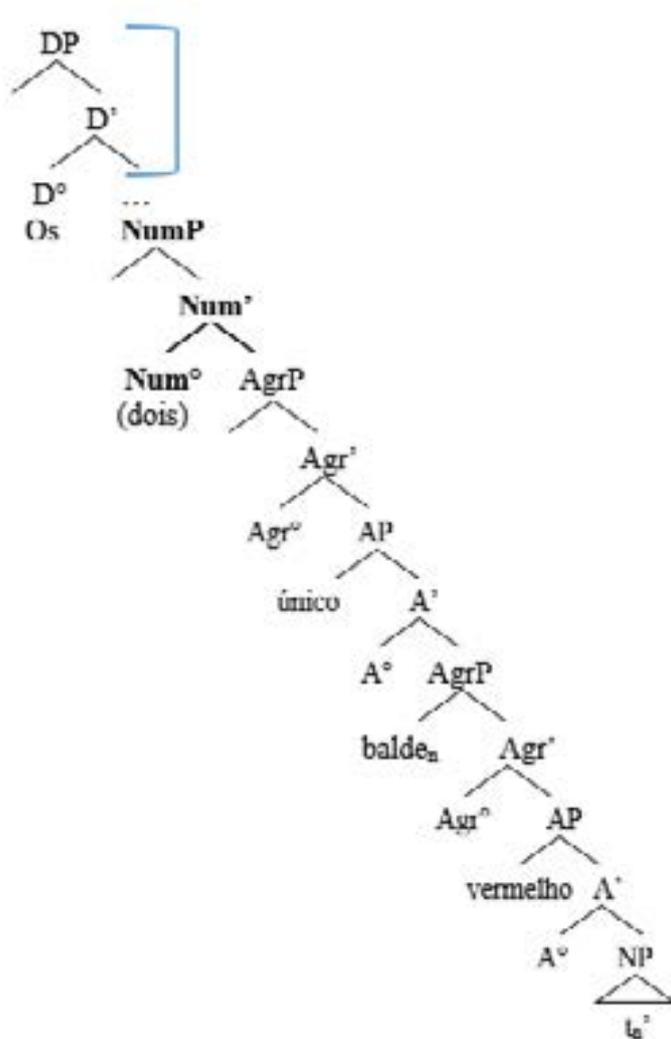
(Source: Elaborated by the author)

In addition, concerning interpretability and valuation of features, based on Chomsky (2001) and on Pesetsky and Torrego (2007), Danon (2011) explains how features are checked in the DP:

> 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 […]

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).

Accordingly, the valuation of number features, in an example as the one in (29a), repeated below as (31), is described in (32), which means that number features come valued neither with D nor with N, but with Num. Moreover, overt morphology is not required in every single DP-internal phrase to show valuation, as discussed above.

(31)

Os   único balde   vermelho

The-PL only-φ bucket-φ red-φ

'The only red buckets'

(32)

a. D, N, and A are lexically uninterpretable and unvalued for number;

b. NumP has interpretable and valued number features;

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

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

e. A, which is the closest under the c-command domain of NumP, probes Num and gets its number features valued;

f. As a consequence of being in a chain with A, N and the lowest A get their number features valued as well.

Therefore, (29) complies with the assumption made by Danon (2011) and Norris (2014) that the cardinal numeral 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.

3.2 THE PLURAL MARKING IN DPS CONTAINING 'QUES'

Having explained this, one can finally turn to the structures with 'ques' (1a, 2a), repeated below as (33a, 34a), and see that this analysis also applies to them. Internally to the DP, 'ques' is in a phrase located to the left of the cardinal, as represented in (33b, 34b). As a result, the determiner 'ques' is marked with the plural morpheme, while the constituents to the right of the numeral – 'paisagem' and 'bonita', in (33a), and 'ferramenta', in (34a) – are unmarked.

(33) a. Ques (duas) paisagem bonita!

What-PL (two) landscape-φ beautiful-φ

'How beautiful these (two) landscapes are!'

(34) a. Ques (duas) ferramenta você usou?

Which-PL (two) tool-φ you used

'Which two tools did you use?'

(Adapted from (1a) and (2a))

b. For the DP in (33a)
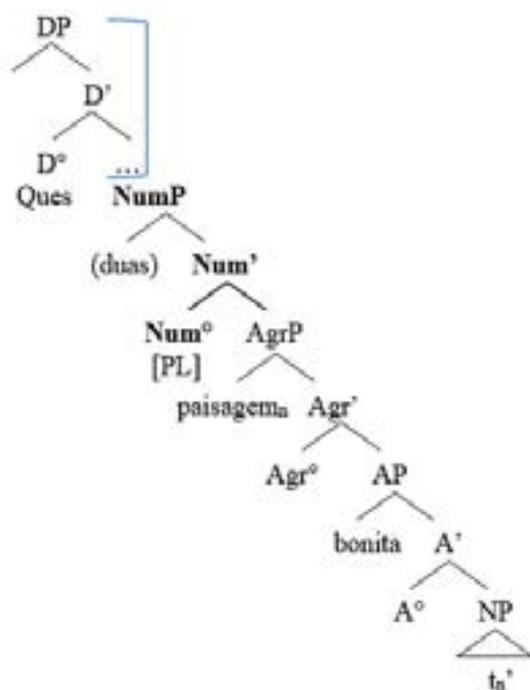
b. For the DP in (34a)
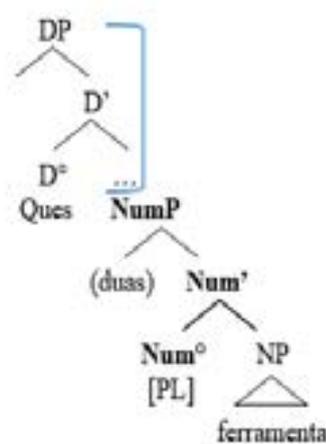
(Source: Elaborated by the author)

One last issue on the DP-internal distribution of the plural morpheme, in structures with 'ques', needs to be addressed. Even in utterances in which the speaker wants to sound formal, it is possible to find 'ques'. However, in these cases, the plural morpheme is marked in every single element of the DP, as follows:

(35)

a. Ques   números   são esses   que o Fernando está olhando?

Which-PL number-PL are this-PL that the Fernando is looking

Which numbers are those that Fernando is looking at?

(Belo Horizonte, January 2016)

b. Sua noiva   dá   aula pra ques   cursos?

Your fiancée gives class to which-PL course-PL

'Which courses does your fiancée teach?'

(Belo Horizonte, April 2014)

c. Ques   panos   mais vistosos,   ques   coisas   mais em flor …[21]

What-PL fabric-PL more dressy-PL, what-PL thing-PL more in flower

How dressy and flowery these clothes are!

d. Ques rodas enferrujadas![22]

What-PL wheel-PL rusty-PL

How rusty these wheels are!

(Glosses and translation are mine)

Therefore, in this dialect, even in situations where the conservative non-inflected form 'que' would be expected, the inflected form 'ques' may appear as any other inflected determiner of standard BP, inside a DP in which all the constituents are marked with the plural morpheme.

4. Conclusions

This paper analyzed exclamatives and interrogatives with 'ques' in BP, especially in the dialect spoken in Minas Gerais. In this analysis, the structures above mentioned were provided with an explanation for their syntactic derivation and for the reasons why 'ques' is marked with the plural morpheme, while the other DP-internal phrases are not.

As for their syntactic derivation, I assumed, following current proposals, that 'ques' is a determiner, and therefore it is a D-head. With respect to interrogative sentences like (2a), it is known that the DP to which 'que' belongs undergoes wh-movement, from the VP-internal argument position, to the CP-domain. With respect to exclamative sentences like (1a), I claimed that the DP moves, from the predicate position of a small clause, to the CP-domain. In both cases, the movement is driven by illocutionary force.

As for the distribution of the plural morpheme, several languages show that the cardinal numeral divides the DP into two domains, such that the phrases on its left are marked with plural, whereas the phrases on its right are unmarked. This prediction applies to non-standard BP in general as well as to the dialects that have 'ques' inflection. As a result, because 'ques' is the only phrase situated higher than the position of the cardinal in these structures, it is the only one marked with the plural morpheme.

To conclude, this paper carried out an analysis that accounts for: firstly, the clausal structure (CP) to which the DP containing 'ques' belongs; secondly, the DP-internal hierarchy; and finally, the DP-internal distribution of the plural morpheme.

Exclamativas e interrogativas com 'ques':
a hierarquia do CP/DP e a marcação de plural no português brasileiro

Resumo

Neste artigo, examinam-se exclamativas e interrogativas que contêm o determinante 'ques', em dialetos do português do Brasil. Diferentemente do português padrão, nestas estruturas, 'que' é o único constituinte do DP marcado com o morfema '-s' de plural. Para explicar esses fatos, propõe-se uma análise não apenas da hierarquia do CP/DP na qual 'ques' se insere, mas também da distribuição do morfema de plural no DP.

Palavras-chave: 'Ques', CP, movimento wh, DP, NumP, marcação de plural.

Resumen

Este trabajo se centra en estructuras exclamativas e interrogativas con el determinante 'ques', en dialectos del portugués de Brasil. A diferencia del PB estándar, en estas estructuras, el determinante 'que' es el único elemento del DP marcado con el morfema '-s' de plural. Para explicar estos hechos, se propone un análisis no sólo de la jerarquía interna del CP/DP en el que 'ques' se inserta, sino también de la distribución del morfema de plural en el DP.

Palabras clave: 'Ques', CP, movimiento wh, DP, NumP, marca de plural.

5. Notas

1   In order to distinguish words unmarked with the plural morpheme '-s' vs. words in singular, which are orthographically the same, this paper glosses unmarked plurals with the symbol 'ɸ'.

2   Data from spontaneous speech are referred throughout this paper with place (city) and date (month and year) of utterance. They have been collected over the past years, in the state of Minas Gerais (MG), as part of this research. The glosses and translation given for them are mine. I am thankful to Marcus Vinícius for his contribution in sending the data he had the chance to collect in Belo Horizonte and cities nearby.

3   According to Nunes (2007), some dialects in the neighborhood of Minas Gerais, as in Goiás, also have this pattern.

4   This section develops, improves and reformulates what appears in Pereira (2014).

5   Vidor and Menuzzi (2004) argue that, though the form 'que' in (4b), pronounced as [ki], is a determiner, the form 'que', in (i) below, pronounced as [kê], is a noun. They point out that, in this case, 'que' may be preceded by the determiner 'o'. So, in their view, [kê] is not proclitic nor is it a determiner. In my view, in (i), 'o' (Spec,DP) and 'quê' (D) form together a single phrase (DP), due to the adjacency between them.

(i)   (O) quê   a Maria fez para agradar o João?

The what the Mary did to please   the João

'What did Mary do to please John?'

6   In (8a), 'ques' may also be interpreted as the non-standard version of standard interrogative 'que' (i):

(i)   [Que meninas bonitas]i   você conhece ti?

What girl-PL beautiful-PL you know?

'Which beautiful girls do you know?'

7   Hopper and Traugott (2003, p. 22 and p. 54, respectively) explain that analogy is a process whereby:

1) "new paradigms come into being through formal resemblance to already established paradigms. (An example of analogy in recent English would be the replacement of the plural *shoen* by shoes through analogy to such established plurals as *stones*.)".

2) "irregularities in grammar, particularly at the morphological level, were regularized. The mechanism was seen as one of "proportion" or equation. Thus, given the singular-plural alternation *cat-cats*, one can conceive of analogizing *child-children* as *child-childs* (as indeed occurs in child language)".

8   Hopper and Traugott (2003, p. 68) explain that "Reanalysis essentially involves linear, syntagmatic, often local, reorganization and rule change. It is not directly observable. On the other hand, analogy essentially involves paradigmatic organization, change in surface collocations, and in patterns of use. Analogy makes the unobservable changes of reanalysis observable.".

9   Available at: <http://bibliaportugues.com/psalms/92-5.htm>. Access on: May 4th, 2016.

10 Available   at: <http://www.administradores.com.br/noticias/tecnologia/ quao-seguras-estao-nossas-informacoes-pessoais/109830/>.   Access   on: May 4th, 2016.

11 Available   at: <http://www.recantodasletras.com.br/visualizar. php?idt=3628322>. Access on: May 4th, 2016.

12 Available at: <http://maquinadoesporte.uol.com.br/artigo/entrevista-valeria-rocha_257.html>. Access on: May 4th, 2016.

13 "justaposição de um predicado e seu sujeito, nessa ordem, sem nenhum verbo nem nenhuma morfologia de tempo na superfície" (SIBALDO, 2011, p. 231).

14 Concerning the DP-internal hierarchy, according to Cinque (2005), [Dem Num A N] is a fixed and universal order. Therefore, the different word orders available in languages are explained by NP-movement, with or without pied-piped material. In this sense, the NP moves to the specifier of AgrP positions merged with each of the DP-internal functional projections. For instance, in (17b), the AP is merged with an AgrP. In this configuration, the NP 'paisagem' moves to the Spec,AgrP right above the AP in which 'bonita' is its functional specifier (Spec,AP). That is how the adjective postnominal order is explained in (17b).

15 Illocutionary force is a strong feature in exclamatives with 'ques', because the wh-DP is not allowed to remain in situ in exclamatives (i), as opposed to interrogatives (ii).

(i) *Ela fez ques foto ruim!

She did what-PL picture-ϕ bad-ϕ

(ii) Você usou ques ferramenta?

You   used which-PL tool-ϕ

'Which tools did you use?'

16 In fact, (20a) may have an overt noun replacing the null one: "Ques (fruta) fresquinha essas banana!". When the noun is overt, it moves to Spec,AgrP to derive the postnominal order of the adjective.

17 A little girl shouted this while playing with a group of boys.

18 "As sentenças exclamativas servem de suporte adicional para a hipótese de que Wh *é que* e Wh *que* não são estruturalmente equivalentes porque não é possível derivar [(24a)] de [(24b)] em vista da agramaticalidade desta última" (MIOTO, 2001, p. 118).

19 Considering the fact that the CP is a rich domain of functional projections, such as: Force, Focus, Topic, Finiteness (RIZZI, 1997), it is worth clarifying that, in using the term CP instead of FocusP or ForceP, I leave

open the question about which exactly is the functional projection to which the wh-DP moves in the CP-cartography. According to Mioto (2001), in wh-questions, this projection is FocusP (23).

20 The glosses with '-SG', in the examples (25) and (26), are quoted exactly as in the original. However, unless it is a quotation, throughout this paper, elements that are unmarked with the plural morpheme, in plural DPs, are not glossed with '-SG'. Glossing them with '-SG' is unjustified, under the view assumed here, because these elements are not inflected for singular in these examples, they are just not marked/specified morphologically for plural.

21 Excerpt from Autran Dourado's novel Uma vida em segredo. Available at: <http://bdm.unb.br/bitstream/10483/9595/1/2014_JanaMeloAraujo.pdf>. Access on: April 9th, 2016.

22 Canal High Torque, Belo Horizonte (MG). The occurrence can be heard at the minute 21'14" of the video. Available at: <https://www.youtube.com/watch?v=Cte7Ez4YPkk>. Access on: July 4th, 2016.

6. REFERENCES

CASTRO, Ana; PRATAS, Fernanda. Capeverdean DP-internal number agreement: additional arguments for a distributed morphology approach. In: COSTA, João; FIGUEIREDO SILVA, Maria (Ed.). *Studies on agreement.* Amsterdam; Philadelphia: John Benjamins, 2006. p. 11-24.

CHOMSKY, Noam. Derivation by phase. In: Kenstowicz, Michael (Ed.). *Ken Hale*: a life in language. Cambridge, MA: The MIT Press, 2001. p. 1 - 52.

CINQUE, Guglielmo. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry*, v. 36, n. 3, p. 315 - 332, 2005.

COSTA, João; FIGUEIREDO SILVA, Maria. Nominal and verbal agreement in Portuguese: an argument for distributed morphology. In: _____ (Ed.). *Studies on agreement.* Amsterdam; Philadelphia: John Benjamins, 2006. p. 25-46.

DANON, Gabi. Agreement and DP-Internal Feature Distribution. *Syntax*, v. 14, n. 4, p. 297–317, 2011.

DAVIES, Mark; FERREIRA, Michael. *Corpus do Português*: 45 million words, 1300s-1900s. Brigham Young University; Georgetown University,

2006. Available at: <http://www.corpusdoportugues.org/hist-gen/2008/>. Access on: May 4th, 2016.

HOPPER, Paul; TRAUGOTT, Elizabeth. *Grammaticalization*. 2. ed. Cambridge: Cambridge University Press, 2003.

KATO, Mary. Free and dependent small clauses in Brazilian Portuguese. *DELTA*, v. 23, n. esp., p. 85–111, 2007.

MIOTO, Carlos. Sobre o sistema CP no português brasileiro. *Revista de Letras*, Curitiba, n. 56, p. 97-139, 2001.

NORRIS, Mark. *A theory of nominal concord*. 2014. 276 f. Dissertation (PhD in Linguistics) – University of California, Santa Cruz, 2014.

NUNES, Jairo. Triangulismos e a sintaxe do português brasileiro. In: CASTILHO, Ataliba; KATO, Mary (Org.). *Descrição, história e aquisição do português brasileiro*. Campinas: Pontes, 2007. p. 25-34.

PEREIRA, Bruna. Exclamativas com 'que+s': checagem de traços em C e D. In: CONGRESSO INTERNACIONAL DA ALFAL, 17., 2014, João Pessoa. *Anais* … João Pessoa: UFPB, 2014. p. 2750-2760.

PEREIRA, Bruna. The DP-internal distribution of the plural morpheme in non-standard Brazilian Portuguese. *MIT Working Papers in Linguistics*, 2016 (In press).

PESETSKY, David; TORREGO, Esther. The syntax of valuation and interpretability of features. In: KARIMI, S. et al. (Org.). *Phrasal and clausal architecture*. Amsterdam: John Benjamins, 2007. p. 262-294.

RIZZI, Luigi. The fine structure of the left periphery. In: HAEGEMAN, Liliane (Ed.). *Elements of grammar*: handbook of gererative syntax. Dordrecht, Boston, London: Kluwer Academic Publishers, 1997. p. 281 - 337.

ROBERTS, Ian; ROUSSOU, Anna. *Syntactic change*: a minimalist approach to grammaticalization. Cambridge: Cambridge University Press, 2003.

SIBALDO, Marcelo. Sobre a estrutura interna das *Small Clauses* livres do português brasileiro. *Estudos Linguísticos*, São Paulo, v. 40, n. 1, p. 231 - 240, 2011.

VIDOR, Deise; MENUZZI, Sérgio. Pronomes como determinantes: algumas propriedades do elemento interrogativo 'que' em português brasileiro. *Leitura*, Maceió, v. 33, p. 65-86, 2004.

ZANUTTINI, Raffaella; PORTNER, Paul. Exclamative clauses: at the syntax-semantics interface. *Language*, v. 79, n. 1, p. 39–81, 2003.