Information Structure within the traditional nominal phrase:

### The case of Brazilian Portuguese

Ana Claudia Bastos-Gee

### University of Connecticut, 2011

This dissertation investigates the structure of the traditional nominal phrase (TNP) within a Minimalist framework (Chomsky, 1995, 2000, 2001, 2004, 2005). I argue that additional discourse-related projections higher than DP are available in the TNP. The phenomena studied in this dissertation are investigated from the perspective of the often-invoked parallelism between TNPs and clauses, with Brazilian Portuguese (BP) as a case study. My central claim in this respect is that clauses and TNPs are fully parallel within the same language regarding available projections.

In chapter 1, I introduce the parallelism hypothesis and the properties of the clausal left periphery in BP.

In chapter 2, I discuss multiple topic constructions in BP, analyzing them as "snowballing" TNP-internal movements. I argue for the existence of a nominal topic projection, which is fully parallel to its clausal counterpart with respect to properties such as comma intonation, preposition dropping and the possibility of resumptive pronouns. I also argue for the anti-locality condition, i.e. the ban on movement that is too short.

In chapter 3, I investigate TNPs containing expressive content and provide evidence for high and low focus projections within the TNP. In my analysis of gender and number agreement with expressive content, I provide arguments for the featuresharing version of Agree and for the dissociation of valuation and interpretability. I also show that the deletion of uninterpretable features must be done as soon as the next phase head is merged into the structure. Additionally, I provide evidence that if uninterpretable features are valued to start with, they can be deleted any time, even if they do not undergo feature-checking.

In chapter 4, I discuss reduced exclamatives analyzing them as involving internal movement from the predicate of a small clause into the  $\omega$ -layer of the TNP. I argue that exclamative wh-phrases target high nominal FocusP and provide further support for a low nominal focus projection in BP in special cases containing expressive content.

In chapter 5, I study extraction of modifiers from TNPs considering two factors: whether the relevant element is a syntactic argument or adjunct and a specificity effect. In the investigation of the behavior of arguments and adjuncts, I place special attention to discontinuous TNPs in BP.

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2011

# APPROVAL PAGE

# Doctor of Philosophy Dissertation

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The case of Brazilian Portuguese

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### Chapter 1

#### **INTRODUCTION**

### 1. Domain of investigation and main questions

This dissertation investigates the structure of the traditional nominal phrase within a Minimalist framework (Chomsky 1995, 2000, 2001, 2004, 2005). The term *traditional nominal phrase* (TNP) is a neutral term used here to replace the term *determiner phrase* (DP), since one of the hypotheses investigated in the dissertation is the availability of additional discourse-related projections higher than DP in the traditional nominal phrase. Most phenomena discussed in the dissertation come from Brazilian Portuguese (BP), since this language has a rich range of phenomena within its traditional nominal phrase, including: a. "snowballing" movements for topicalization; b. focus movement of expressive content within the TNP; c. nominal exclamatives; and d. discontinuous nominal phrases in WH-questions.

Each phenomenon noted above will be investigated in this dissertation from the perspective of the often-invoked parallelism between TNPs and clauses. A question that will be addressed is to what extent the left periphery of traditional nominal phrases is similar to the left periphery of clauses. In other words, do TNPs have their own rich information structure to encode discourse-related properties, such as topic, focus and other illocutionary forces on a par with clauses?

Each of the phenomena noted above can help us to shed light on specific questions related to the larger issue in question.

- Is there a nominal counterpart of (split) CP?
- Are there DP/PP-movements within the TNP related to the expression of discourse-related properties, for instance, topicalization? Do they provide sufficient evidence for postulating the existence of a nominal topic projection (TopP) or nominal focus projection (FocP)?
- How is illocutionary force, for instance, exclamation, expressed within the TNP? How is speaker-oriented expressive content manifested within the TNP and how is its semantic-pragmatic content related to the expression of the information structure?
- How are discourse-related notions, such as specificity and definiteness, codified in the TNP?

In section 2, I give a brief overview of the clause/ TNP parallelism hypothesis, i.e. the hypothesis that TNPs and clauses are similar in their overall structure, especially in the available projections. In section 3, I introduce my main proposals for the nominal architecture, as well as the structure of the clausal left periphery in BP and the status of the pseudo-preposition *de* 'of' in comparison with the complementizer *que* 'that'. Finally in section 4, I present the dissertation outline.

## 2. The parallelism hypothesis

"A clause will typically have the form (...) [ $_{CP}$  Spec [ $_{C}$  C [ $_{IP}$  Spec [ $_{\Gamma}$  I VP]]]]]" (Chomsky 1995:55). This statement is the end result of various studies on the clausal structure and clause internal movements in generative literature (Bresnan 1972, Chomsky 1986, Fassi Fehri 1980, Stowell 1981). In a broad sense, VP is where lexical (predicate-

argument) relations are established; IP is where agreement and inflectional features are checked/assigned/valued; and CP is where illocutionary force and discourse-related relations are encoded.

Studies comparing the clausal structure and the nominal structure can be divided in the following way: a. those involving lexical relations and argumental structure, b. those involving agreement properties and c. those involving discourse-related properties.<sup>1</sup>

To the best of my knowledge, Lees 1960 was the first to study similarities between clauses and nominal phrases, pointing out that they are similar in their external distribution, i.e. both clauses and TNPs can be subjects, objects and they can both even undergo passivization. Chomsky 1970, reviewing Lees's 1960 work, suggests that parallelism between clauses and nominal phrases comes from the fact that the argumental structure of a deverbal noun is the same as its related verb, as exemplified in (1). After that, comparisons of nominal and clausal structure focused on similarities in their argumental structure.

(1) a. John criticizes the book.

b. John's criticizing the book.

c. John's criticism of the book. (Selected from Chomsky 1970: 187)

The comparison was pursued early by Anderson 1979 for English and Cinque 1980 for Italian. They suggested that different word order arrangements in the noun phrase are generated by movement, similarly to those in the clauses, and that possessive modifiers behave similarly to clause subjects. Torrego 1987 and Giorgi and Longobardi

<sup>&</sup>lt;sup>1</sup> There are numerous works on the structure of TNP. In what follows, I will cite only some representative works from different lines of research on the structure of TNP; the references below should not be taken to be exhaustive.

1991, among others, further developed this parallelism, proposing a hierarchy for different types of arguments.

Later, work by Pollock 1989 on the split IP hypothesis and more recently work by Cinque 1999 on multiple functional heads for adverb placement inspired new aspects for comparison. Are there multiple functional projections in the TNP as well? Abney 1987 postulated the DP-hypothesis to provide a specifier position for genitive nouns where the head position of the phrase in question could hold inflectional morphology (for instance, in Turkish) or determiners (for instance, in English). The DP-hypothesis marks the beginning of systematic comparison between the functional configuration of clauses and TNPs. Szabolcsi 1987 discussed arguments from Hungarian for a richer DP structure. In the studies of Romance, many authors have postulated functional projections; for instance, Uriagereka 2001 argues for a Num(ber)P and Sánchez 1996 for Pred(icate)P and P(erson)-Agr(eement)P to account for adjective placement in Spanish.

With this explosion of functional projections within the TNP, DP was often taken to be the topmost projection within the TNP; as a result, a line of research in which phrases that move outside of DP have to move via specDP, similarly to movement via specCP, was established. Notice, however, that given Abney's original assumptions, DP is the counterpart of IP (TP or AgrP) in the TNP (see also Ogawa 2001 and Bošković 2010b for recent arguments to that effect.)

Rizzi's 1997 study of the fine structure of the clausal left periphery has opened the door to yet a new line of comparison: are there more fine-grained discourse-related projections within the TNP? Haegeman 2004, studying West Flemish, has postulated the existence of a TopP projection in the traditional nominal phrase to explain an instance of TNP-internal displacement. Ticio 2003 has also argued for a topic projection, but as an escape-hatch for movement out of the Spanish DP. Ormazabal 1991 has argued for a KomP projection as the escape-hatch for movement out of the TNP, a term that he adopted from Horrocks and Stravrou 1995. Bernstein 1997, 2001, studying Romance and Germanic, and also Aboh 2004 have argued that the nominal left periphery encodes topic, focus, and/or illocutionary force. Others, such as Bennis, Corver, and Den Dikken 1998 have argued for DP-internal phrasal movement to SpecDP to account for the structure of certain exclamative noun phrases in Dutch. In their structures, a wh-word starts out as a predicate of the noun and undergoes an A-bar DP-internal predicate movement to the specifier position of the functional head D, which, in their system, is the head that contains the 'force' feature [+Excl].

With an explosion of projections in the nominal left periphery, two major views on the structure of the TNP started to develop. For the first view, DP belongs to the nominal discourse layer ( $\omega$ -layer), the counterpart of CP, which dominates nominal agreement layer; under this view, if DP is the topmost nominal projection, it serves as an escape-hatch for movement out of the TNP. Some papers representative of this view are Grohmann and Haegeman 2003 and Haegeman 2004. In the second line of research, DP is the nominal counterpart of IP; under this view, DP may be dominated by discourse projections, such as KP, the nominal counterpart of CP. Some of the early papers' representative of this view are Abney 1987 and Ormazabal 1991. Recently, work by Bošković 2010b has shown on comparative grounds that when DP is missing in a given language, TP is missing as well. Giving the strong version of the parallelism hypothesis, this is what is expected if DP is the nominal counterpart of IP. For a long time, the standard view was that discourse information in the clausal level was codified in CP. In later research, CP has split into several projections to encode discourse notions like topic (TopicP) and focus (FocusP). More recently, Belletti 2004 has brought into the picture many arguments in favor of two separate loci for discourse-related projections within a clause: one in between IP and CP, containing the projections TopP>FocP>TopP in this order (this is basically split traditional CP), and another one in between VP and IP, containing again TopP>FocP>TopP (Belletti 2004:25).

Other studies on focus and focus typology have distinguished between high and low types of focus projections. Drubig 1994, 1998, 2003 claims that these two projections related to focus are, in fact, polarity projections; one is situated in COMP and the other one is in the INFL range of the clausal structure. (A rather clear evidence for a high and a low focus position is provided by Serbo-Croatian, see Bošković 1997.) López and Winkler 2000, in their crosslinguistic study of VP-anaphora in English, Spanish and German, found new evidence supporting the existence of a lower polarity phrase (also called Low FocusP and SigmaP, in the sense of Laka's 1990 functional category "Sigma", which holds NEG/AFF features and takes VP as a complement) and a higher polarity phrase (also called focus phrase).

This new twist on the locus of discourse-related projections opens up yet new possibilities of comparison between clauses and TNPs, which to the best of my knowledge have not yet been explored, i.e. if a language has high and low focus projections in the clause, will it have counterparts for them in the traditional nominal phrase? Pursuing the strong clause/ TNP parallelism hypothesis, according to which the two have a completely parallel structure, this dissertation will investigate the availability of low focus projections within BP traditional nominal phrases.

To summarize the discussion in this section, the investigation of nominal information structure is still in its initial stages when compared to the investigation of nominal  $\theta$ -structure and nominal  $\varphi$ -structure. So far, different authors have shown evidence for some discourse-related projections in the TNP; however, one question that still remains is: within the same language, can we find full parallelism with respect to available projections between clausal information structure and nominal information structure?

This dissertation aims to contribute to this discussion by investigating a language with rich information structure in the clause, namely BP, and then systematically comparing the available projections in BP clauses to the available projections in BP nominal phrases.

## 3. Main proposal

I will pursue a strong version of the parallelism hypothesis where TNPs and clauses are fully parallel within the same language. In this approach, e.g., if a given language does not show evidence for a multi-layered left periphery in the clause, the TNPs of that language will not have a multi-layered left periphery either. For example, if the language does not allow topic recursion in the clause, it will not allow it in the TNP, and so on.

As for the role of DP in the nominal architecture, DP is treated here as the nominal counterpart of IP, following the overall intuition of Abney 1987, where DP hosts

genitive nouns in its specifier position in English (in other words, specDP contains the subject of a TNP.) These are properties of the inflectional layer of the structure, not of the discourse layer. In my analysis, determiners are the nominal counterpart of modals and auxiliary verbs.

Following Ormazabal 1991, I will refer to the nominal counterpart of the CP field as KompP (KP). The following schema illustrates the structure adapted in this dissertation<sup>2</sup>.

- (2) a. Clausal structure:  $CP_{\omega} > IP_{\varphi} > vP_{\theta}$ 
  - b. Nominal structure:  $KP_{\omega} > DP_{\varphi} > nP_{\theta}$

Each of the above phrases is actually a representative of a structural layer which can be "split" into other projections. For instance, the  $\theta$ -layer contains nP and NP to accommodate different types of nominal PP-modifiers and arguments;  $\varphi$ -layer may contain one or more agreement projections as well as one or more projections for basegenerating different kinds of determiners, and the  $\omega$ -layer may contain – as I argue in this dissertation – topic and focus projections.

Given the strong version of the parallelism hypothesis regarding available projections, defended in this dissertation, the  $\omega$ -layer of the traditional nominal phrase in BP should exhibit strict correspondence with projections that are allowed in the  $\omega$ -layer of the clause. For this reason, before presenting my hypothesis regarding the nominal left periphery, I will summarize the most salient properties of the left periphery in BP, with special emphasis on topic, focus, interrogative force and exclamative force.

<sup>&</sup>lt;sup>2</sup> We will, however, later see that some discourse projections can occur lower than IP, which I ignore here.

One distinguishing property of BP is the prominent use of topic constructions (first noticed by Pontes 1987). DP-topics may be associated with an overt resumptive pronoun, or not, as in (3)a). BP also allows DP-topics that are not associated with verbal argumental structure (3)b), differently from languages like English and similarly to languages like Japanese and Chinese.<sup>3</sup> I take this to be evidence that DPs with topic interpretation may have default case.

(3) a. A flor, eu comprei (ela) para a Maria.

The flower, I bought (it) for the Mary.

'As for the flower, I bought it for Mary.'

b. Flor, eu prefiro rosa.

Flower, I prefer rose.

'As for flowers, I prefer roses'

It has been noted in many studies that two DPs can co-exist in the left periphery of BP as long as the first one is a topic and the second one is focused, but not the other way around (Bastos 2001, 2003, 2009b, Figueiredo Silva 1996, Galves 1993, 1998, Grolla 2000, Ilari 1986, Kato 1993, 1998, Kato and Raposo 1996, Mioto 2001, Pontes 1987, Raposo 1997)

(4) Topic > focus

A flor, (foi) PARA A MARIA (que) eu comprei ela. the flower, (was) FOR THE MARY (that) I bought it

'As for the flower, it was for Mary that I bought it.'

<sup>&</sup>lt;sup>3</sup> The sentence in (3)b) is only acceptable in English as involving an afterthought, but this not the relevant reading for the discussion.

#### (5) \*Focus > topic

\* (Foi) PARA A MARIA (que) a flor, eu comprei ela.
(was) FOR THE MARY (that) the flower, I bought it.

'As for the flower, it was for Mary that I bought it.'

In (4) and (5) I am assuming the standard notation in that focused constituents are marked with capital letters and topic constituents by a comma. In spoken BP, topic and focus display different intonation patterns. BP does not have morphological endings characterizing either topic or focus. However, the word *que* "that" optionally follows WH/exclamative/focused constituents in the left periphery; it has in fact been analyzed as head of FocP (Figueiredo Silva 1996, Mioto 2001, among others).

A prevalent view in the literature treats the example (4) in terms of Rizzi's 1997 split CP hypothesis (Bastos 2001, 2003, 2009b, Figueiredo Silva 1996, Grolla 2000, Mioto 2001). The structure proposed by Rizzi 1997 for the syntactic left periphery is given in (6) below.

(6) [ForceP ... Force° [TopP ... Top° \* [FocP ... Foc° [TopP ... Top° \* [FinP ... Fin° [IP ... ]]]]]], where \* is the Kleene operator, which means 0 or more.

Following Rizzi's system, the order topic-focus is straightforwardly accounted for if we assume that "the flower" is in the specifier of the higher TopP and "to Mary" is in the specifier of FocP. This obviously raises the question of why the sentence in (5) is unacceptable, since in Rizzi's system, there is a TopP right under FocP. In Bastos 2001, I argued that BP lacks the TopP projection lower than FocP.<sup>4</sup> In fact, BP does not allow TopP recursion at all, prohibiting sequences of DP-topics, as shown below.

(7) a. \*O livro, a Maria, (foi) o João (que) comprou ele pra ela.
The book, the Mary, (it-was) the John (that) bought it for her
'As for the book, as for Mary, (it was) John (who) bought it for her'.
b. \*A Maria, o livro, (foi) o João (que) comprou ele pra ela.
the Mary, the book, (it-was) the John (that) bought it for her
'As for Mary, as for the book, (it was) John (who) bought it for her'.

As can be seen by comparing (7)a and (7)b, the unacceptability of these double topics has nothing to do with superiority effects, since both sentences are unacceptable independently of the linear order in which the topics appear.<sup>5</sup>

As for interrogative force, BP does not allow co-occurrence of focused constituents and interrogative constituents in the left periphery.<sup>6</sup> In (8), I show a regular WH-interrogative sentence and in (9)-(10), the impossible combination of WH-phrases and moved focus.

<sup>&</sup>lt;sup>4</sup> Part of the evidence for a lower TopP projection in Rizzi 1997 comes from the position of adverbs. Lower adverbs can be accommodated as adjuncts of projections lower than FocP; they do not have to be necessarily placed as specifiers of TopP in BP. In addition to that, notice that high adverbs, commonly assumed to be base-generated in the CP-system, do not trigger the same comma intonation that follows full DP topics.

<sup>&</sup>lt;sup>5</sup> Benincà and Poletto 2004 argue that the projection corresponding to the lower topic projection in Rizzi's system is in fact an informational focus position in many Italian dialects and closely related Romance languages. They distinguish this informational focus projection from a higher focus projection, which is contrastive. They also argue for splitting TopP into Hanging Topic, Scene Setting Adverbials, Left Dislocated Structures and List Interpreted items.

<sup>&</sup>lt;sup>6</sup> Although data in (9)-(10) show that wh-phrases and focus compete for the same position, this is not always the case. In particular, a D-linked wh-phrase may co-occur with a fronted focus, suggesting that D-linked wh-phrases may also be base-generated in TopicP. I will put these cases aside, since they are not relevant for my concerns.

(8) O que (que) você comprou pra Maria?What (that) you bought to-the Mary'What did you buy to Mary!'

(9) \*WH > focus

*O que (que)	(foi) PRA MARIA (que)	você comprou?	
What (that)	(was) TO MARY (that)	you bought	
'What is the thing, such that it was to Mary that you bought?'			

(10) \*focus > WH

\* (Foi) PRA MARIA (que) o que (que) você comprou?

(was) TO MARY (that) what (that) you bought

'What is the thing, such that it was to Mary that you bought?'

Similar facts hold for exclamative force, i.e. BP does not allow co-occurrence of focused constituents and exclamative constituents in the left periphery. In (11), I show a regular exclamative sentence, also called WH-exclamative, and in (12)-(13), the impossible combination of WH-exclamative and moved focus.

(11) Que flor linda (que) você comprou pra Maria!
What flower pretty (that) you bought to-the Mary
'What a beautiful flower you bought to Mary!'

(12) \*excl > focus

\* Que flor linda (que) (foi) PRA MARIA (que) você comprou!
What flower pretty (that) (was) TO MARY (that) you bought
'What a beautiful flower this is and it was to Mary that you bought it'

#### (13) \*focus > excl

\* (Foi) PRA MARIA (que) que flor linda (que) você comprou?
(was) TO MARY (that) what flower pretty (that) you bought
'What a beautiful flower this is and it was to Mary that you bought it'

I take these facts to show that focused, interrogative and exclamative constituents target the same projection in the left periphery in BP, i.e. they all target FocP. One prediction that this claim makes is that they can all be preceded by a topic constituent. The prediction is borne out.

(14) Topic > WH

A Maria, o que (que) você comprou pra ela?

the Mary, what (that) you bought for her

'As for Mary, what did you buy for her?'

(15) Topic > excl

A Maria, que flor linda (que) você comprou para ela!
the Mary, what flower pretty (that) you bought for her
'As for Mary, what a pretty flower you bought her'

In short, DPs with interrogative and exclamative force overtly rise up to FocP.

With respect to ForceP, the best evidence for it in BP comes from embedded clauses. Following Mioto 2001, ForceP provides a host for complementizer words like *que* 'that', which are obligatory in embedded clauses. This is also the projection through which moving phrases pass on their way out of a clause. The label "force" is, however,

inadequate since neither exclamative nor interrogative phrases target this projection in BP to check features related to illocutionary/sentential force. I will refer to this projection simply as CP.

(16) Eu acho que a flor, (foi) PRA MARIA (que) o João comprou ela.
I think that the flower, (was) TO MARY (that) the John bought it
'I think that as for that flower, it was to Mary that John bought it.'

Finally, investigating the head of FinP, Mioto 2001 examines the status of the preposition *para* "for" in relation to the Italian head of FinP *di* "of", and notices that, differently from Italian, *para* "for" cannot be preceded by a topic. Following his line of reasoning, I apply this test to the preposition *de* "of", which is another potential candidate for the head of FinP; it turns out that *de* "of" cannot be preceded by a topic either.

- (17) \*Ela pediu os meninos, para eu chamar mais cedo.
  She asked the boys, for I call more early.
  'She asked me to call the boys earlier.' (Mioto 2001:7)
- (18) \*Ela lamentou os meninos, de eu chamar (eles) mais cedo.
  She regretted the boys, of I call (them) more early.
  'She regretted me calling the boys earlier.'

These results lead Mioto 2001 to the conclusion that FinP has a null head in BP. Contrary to Mioto's 2001 conclusion about FinP, I take the results presented above to be evidence for the lack of this projection altogether.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> In (17)-(18) I assume that the topic os meninos 'the boys' is in the specifier of the highest TopicP, since I already showed that BP does not have the lower TopicP from Rizzi's structure. Since BP does not have

Based on the discussion above, one may conclude that the left periphery in BP is not as rich as the one proposed by Rizzi 1997 for Italian, because BP does not allow topic recursion and does not have FinP.

In recent studies on BP quantified expressions and extraction out of the TNP, Lacerda 2011 and Avelar 2006 have argued for a low left periphery in BP in the sense of Belletti 2004. The examples discussed in their work are compatible with (low) focus interpretation. Consider, for instance, the example in (19) and its structure, adapted from Lacerda 2011.

(19) a. Os alunos fizeram todos<sub>[focus]</sub> a prova.

the students did all the exam.

'All the students did the exam.'

b.  $[TP [DP \text{ os alunos}]_d \text{ fizeram}_v [FocP [QP \text{ todos } t_d]_q t_v [vP t_q t_v [vP t_v a \text{ prova}]$ 

In the example above the quantifier *todos* 'all' is interpreted as focused, and it is in a "low" syntactic position. Under the strong clause/ TNP parallelism hypothesis, the availability of a low focus projection in the clausal level in BP makes the prediction that a low focus projection is also available in the TNP. I will give more evidence for a low clausal focus projection in chapter 5, where I propose that certain cases of discontinuous wh-phrases involve movement to low clausal FocusP followed by remnant movement.

Based on the discussion above, the clausal structure in BP is the following.

(20) [<sub>CP</sub> ... C [<sub>TopP</sub> ... Top [<sub>FocP</sub> ... High Foc [<sub>IP</sub> ... I [<sub>FocP</sub> ... Low Foc [<sub>vP</sub> ... v [<sub>vP</sub> V]]]]]]]

FinP, I assume that para 'for' and de 'of' are heads of real prepositional phrases, not part of the  $\omega$ -layer of the clause.

Given the version of the strong parallelism hypothesis that I am assuming here, in which TNPs and clauses are parallel in available projections, the traditional nominal phrase in BP is expected to have the same projections available in the  $\omega$ -layer, as shown below.

(21) [KP ... K [TopP ... Top [FocP ... High Foc [DP ... D [FocP ... Low Foc [nP ... n [NP N]]]]]]

One underlining assumption that comes from the structure above is that DP is the counterpart of IP in the clausal structure. For expository reasons, I am omitting further inflectional splits.

Strictly speaking, the strong clause/TNP parallelism investigated in the dissertation concerns only the projections that are available in the structure; however, the availability of "new" projections within the TNP makes a number of new predictions that I will investigate in this dissertation. Some of the predictions regarding how these projections reflect the information status of TNPs are these: a. displacement for focus, WH-words and exclamation should be internally available in the TNP and target the same position; b. we should be able to find examples of TNP-internal movement for topic purposes, but without recursion; c. there should be a phrase higher than TopP, which parallels CP; and d. there should be nominal focus projections.

Another reflex of the parallelism hypothesis that I will argue for in this dissertation is related to the status of *que* 'that' in comparison to the pseudo-preposition *de* 'of' in TNPs. In clauses, *que* 'that' is either the head of CP or the head of the clausal FocusP. I will argue that in the TNP, the pseudo-preposition *de* 'of' is either the head of KP, the nominal counterpart of CP, or the head of the nominal FocusP.

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One final aspect that is important to the study of the nominal information structure is the notion of phase (in the sense of Chomsky 2000, 2001, 2004, and 2005). With respect to nominal phasehood, I follow Bošković 2010c in that the highest projection in a TNP always counts as a phase. This assumption is consistent with the parallelism hypothesis, because as argued by Bošković 2010c, all major phrases (NP, AP, PP, and VP) project phases, but the exact projection that counts as a phase depends on the amount of functional structure above these major phrases, with the highest projection serving as the phase in all cases.

#### 4. Dissertation outline

The dissertation is organized into six chapters.

In the second chapter, I discuss multiple topic constructions in BP, analyzing them as "snowballing" movements within the TNP. In this chapter I argue for the existence of a nominal topic projection, which is fully parallel to its clausal counterpart with respect to properties such as comma intonation, preposition dropping and the possibility of resumptive pronouns. I will show that impossible topic ordering patterns are correctly ruled out by anti-locality, i.e. the ban on movement that is too short.

In the third chapter, I investigate TNPs containing expressive content. I propose that expressive words in BP are of three types: expressive abstract nouns, epithets and swear words. This semantic classification is crucial for explaining subtle differences in agreement patterns of these constructions, and it also interacts with the syntactic function of the TNP. I focus on argumental nominal phrases, both definite and indefinite, and provide evidence for high and low focus projections within the TNP. The most elaborated part of the paradigm is found in the cases that involve a gender mismatch between the noun and its determiner. In my analysis of gender and number agreement, I provide arguments for the feature-sharing version of Agree and for the dissociation of valuation and interpretability. In addition, I show that the deletion of uninterpretable features must be done as soon as the next phase head is merged into the structure. I also provide evidence that if uninterpretable features are valued to start with, they can be deleted any time, even if they do not undergo feature-checking.

In the fourth chapter, I discuss reduced exclamatives analyzing them as involving internal movement from the predicate of a small clause into the  $\omega$ -layer of the TNP. Additionally, I compare reduced exclamatives with full-fledged exclamatives that result from movement in the clause. I propose that exclamative wh-phrases target high nominal FocusP. Also, in this chapter I discuss expressive content in the predicate of small clauses to further support the proposal that there is a low nominal focus projection in BP.

In the fifth chapter, I study extraction of modifiers from TNPs considering two factors: whether the relevant element is a syntactic argument or adjunct and a specificity effect. In the investigation of the behavior of arguments and adjuncts, I place special attention to discontinuous TNPs in BP.

#### **Chapter 2**

## **MULTIPLE TOPICS**

## 1. Introduction

In this chapter, I argue for a topic projection within the traditional nominal phrase (TNP) in BP. This projection has the same basic properties as its clausal counterpart, e.g. "aboutness" interpretation, comma intonation pattern, and distribution. The main set of data studied here involves cases of multiple topic constructions in Brazilian Portuguese (BP). BP does not usually accept sequences of DP-topics with "aboutness" interpretation, as shown in (1).

(1)	a. *O livro,	a Maria,	(foi) o João (que) comprou ele pra ela.
	The book,	the Mary,	(it-was) the John (that) bought it for her
	'As for the book, as for Mary, (it was) John (who) bought it for her'.		
b. *A Maria, o livro, (foi) o João (que) compre		(foi) o João (que) comprou ele pra ela.	
	the Mary, the book, (it-was) the John (that) bought it for		
	'As for Mary, as for the book, (it was) John (who) bought it for her'.		

As shown in (1), it is not possible to topicalize two arguments of a verb. The unacceptability of these double topics has nothing to do with superiority effects, as can be seen by comparing (1)a) and (1)b); the sentences are unacceptable independently of the linear order in which the topics appear.

There is, however, a restricted number of cases where multiple topics are acceptable, such as the example in (3) below. The example in (2) is a single topic example.

(2) Single topic: A of-B of-C in BP

[a reprodução da pintura mais famosa dessa cidadezinha, ] (foi) minha [the reproduction of-the most famous picture of-this little-city, ] (was) my mãe<sub>F</sub> (que) encomendou.

mother<sub>F</sub> (that) ordered

'As for the reproduction of the most famous picture of this little city, (it was) my mother (that) ordered it.'

(3) Multiple topic: C, B, A,

[Essa cidadezinha, a pintura mais famosa, a reprodução, ] (foi) minha mãe<sub>F</sub> [this little-city, the most famous picture, the reproduction, ] (was) my mother<sub>F</sub> (que) encomendou.

(that) ordered

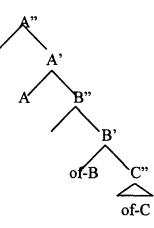
'As for the little city, as for the picture of it, as for the reproduction of the picture, (it was) my mother (that) ordered it'.

The main difference between the acceptable multiple topic construction in (3) and the non-acceptable multiple topic construction in (1) is that the multiple topics in the sequence schematically referred to as C, B, A are in a thematic relation, that is, *essa cidadezinha* 'this little-city' is the theme of the picture in *the most famous picture* 'the most famous picture' and the picture is the theme of the reproduction. The impossible multiple topics in (1) are not in a thematic relation with each other, i.e. they are two different arguments of the verb. The topics in (3) are also allowed in the reversed order, as shown in (2), which I will refer to as direct order. In the direct order, the TNP containing *a reprodução* 'the reproduction' dominates the TNP containing *a pintura mais famosa* 'the most famous picture', which dominates the TNP containing *essa cidadezinha* 'this little-city'.

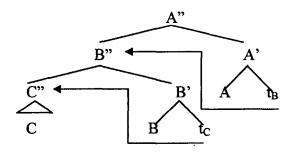
In this chapter, I investigate multiple topic constructions in BP, such as the one in (3). Given (1), which provides evidence against topic recursion, I argue that constructions like (3) involve a single spec-topicP, i.e. a single topic constituent, which is derived through internal movements in the TNP, i.e., the reversed sequence **C**, **B**, **A** is derived from the sequence **A of-B of C**. I show that my analysis successfully explains possible sequences of topics without overgeneration; it furthermore explains several additional properties of the construction, namely: comma intonation patterns, "optional" pseudo-prepositions and "optional" resumptive pronouns.

The following tree diagrams show in a preliminary and schematic way what the derivation looks like for a sequence of three nouns that follow the schema A of-B of-C in the direct order, and how they get to move to become a sequence of three topics.

(4) Direct order: A of-B of-C



(5) Multiple topic: C, B, A



To put it in very simple terms before I introduce the details of the analysis, C moves to the specifier of B, and B (carrying C with it) moves to the specifier of A.

These internal movements within the TNP are related to an "aboutness" interpretation of the moved constituents and comma intonation. For this reason, I propose that they target the nominal counterpart of the clausal TopicP, i.e. the nominal TopicP.

My analysis relies heavily on the strong version of the parallelism hypothesis discussed in the introduction of this dissertation. In this sense, the "aboutness" interpretation and comma intonation are a reflex of the parallelism between clauses and TNPs.

This chapter is organized as follows. In section 2, I review the main properties of topic constructions in BP and set the predictions for the TNP. In section 3, I present my

analysis for multiple topic constructions and discuss the full paradigm for the construction in question by investigating: a. possible and impossible sequences of topics, correlating them with comma intonation patterns, b. the issue of the presence or absence of de 'of', and c. the possibility of resumptive pronouns. In section 4, I discuss some issues regarding the thematic roles that can participate in multiple topic constructions, showing that constraints at work here follow from the nominal hierarchy of thematic roles.

### 2. Review of topic projections

As mentioned above and in the introduction, I follow a strong version of the clause/ TNP parallelism hypothesis where the two have a parallel structure within a single language. The nominal and clausal structures are parallel in the following fashion, repeated below in (6) for convenience.

- (6) Nominal structure: KP > DP > nP
  - Clausal structure: CP > IP > vP

In the schema above, nPs and vPs are thematic structural layers, DPs and IPs are inflectional layers, and KPs and CPs are discourse layers. A language like BP, which allows split discourse layers at the clausal level, also allows them at the nominal level. In addition to that, a language like BP that allows High and Low Focus Phrases in the clause also allows them in the TNP. The fully articulated structure for clauses and TNPs is given in (7). (7) Nominal structure: KP > TopP > High FocP > DP > ... Low FocP > nP > NP
 Clausal structure: CP > TopP > High FocP > IP > ... Low FocP > vP > VP

The projections in the  $\omega$ -layer are optionally present. This claim is partly an application of Rizzi's 1997 original assumptions; he proposed that TopicP and FocusP are not always projected; when they are not projected, KP and FinP are combined into a single projection. My claim is stronger in the sense that even KP in the structure above may not be projected. KP, the nominal komplementizer phrase (see Horrocks and Stravrou 1985 and Ormazabal 1991), is the highest projection in the TNP and plays a role in case checking; the head of KP is the pseudo-preposition *de* 'of', as noted in section 3 of chapter 1. According to Bošković's 2010c work on phasehood within TNP, the highest projection within a TNP always counts as a phase; given this, I assume that KP is a phase whenever present. This assumption will play a role in section 3.3.

As we will see below, for the most part, failure to project KP results in the TNP being unable to check case and causes the derivation to crash, unless the TNP moves to a projection where it can have default case. Failure to project nominal TopicP may also cause the derivation to crash, but only if movement of a [+ topic] phrase out of the TNP is not an option for minimality reasons, for instance. If movement is available, the [+topic] feature can be checked in the clausal TopicP, if it is projected. On the other hand, if TopicP is projected, but no [+topic] phrase moves to its specifier to check the strong topic feature, then the derivation also crashes. I will refer to this as a ban on vacuous projection of TopicP.

As discussed in chapter 1, differently from the structure discussed by Rizzi 1997, there is no evidence for the projection FinP in the specific case of the BP. My conclusion comes from the results found in Mioto 2001, who applied Rizzi's 1997 tests to BP and did not find evidence for the head of this projection. Contrary to Mioto's 2001 conclusion that the head of FinP is always null in BP, I take his results to be evidence for the lack of this projection altogether (see chapter 1). Consequently, there is no nominal counterpart of it either.

Evidence for at least three functional projections in the clausal left periphery in BP can be better seen in embedded clauses, such as shown below.

(8) Eu acho [CP [C' que [TopP esse quadro [FocP PRA MARIA (que) [TP você deve
 I think that this painting to-theMary (that) you should comprar, não para o João.

buy, not to the John

'I think that, as for this painting, to Mary (not to John) you should buy it'.

(9) Eu acho [CP [C' que [TopP esse rapaz [FocP PRA MARIA (que) [TP você deve I think that this young-men to-theMary (that) you should apresentar (ele), não para o João.

introduce (him) not to the John

'I think that, as for this painting, to Mary (not to John) you should buy it'.

In BP, the complementizer word que 'that' is uncontroversially taken to be the head of CP. DP-topics, such as esse quadro 'this painting' and esse rapaz 'this young men' above, receive an aboutness interpretation and the PP pra Maria 'to Mary' bears contrastive focus. Given the strong version of the parallelism hypothesis assumed in this dissertation, it follows that the TNP in BP should also contain nominal counterparts for CP > TopP > FocP.

From now on, I concentrate my discussion on topic-related phenomena and on the role of KP/CP, which are the projections that play a direct role in the possibility of multiple topic constructions in BP. I discuss different types of topics, the hierarchy among them, and the issues regarding the first merge of topics and their case checking.

### 2.1 Three types of topics

There are three types of topics with "aboutness" interpretation in BP in the high left periphery of BP. I focus my discussion on topics with "aboutness" interpretation because this is the type that is found in multiple topic constructions. Of the three topics I discuss next, only full topics can participate in the multiple topic constructions. The relevant examples are given below.

(10) Hanging topic

Quanto às flores, eu comprei  $\emptyset$ / elas/ as rosas pra minha mãe, não pro meu pai. As for-the flowers, I bought  $\emptyset$ / them/ the roses to my mother, not to-the my father 'As for the flowers, I bought them to my mom, not to my father.'

(11) Full topic

As flores, eu comprei  $\emptyset$ / elas/ \*as rosas pra minha mãe, não pro meu pai. The flowers, I bought  $\emptyset$ / them/ the roses to my mother, not to-the my father 'As for the flowers, I bought them to my mom, not to my father.'

#### (12) Bare singular topics

Flor, eu comprei  $\emptyset$ / \*ela/ \*elas/ as rosas pra minha mãe, não pro meu pai. Flower, I bought  $\emptyset$ / she/ them/ the roses to my mother, not to-the my father 'As for flowers, I bought them to my mom, not to my father.'

The sentence in (10) provides an example of a hanging topic. Hanging topics are preceded by the expression *quanto a* 'as for' and may or may not be related to a resumptive pronoun. There are a number of other expressions that can introduce a hanging topic, for instance, *com respeito a* 'with respect to' and *em relação a* 'in relation to'. In the example in (11), the topic is a full TNP, containing a determiner and a noun; the determiner can be a definite article or a demonstrative, and the topic as a whole may or may not be related to a resumptive pronoun. Finally, in the example in (12), the topic is a bare noun interpreted generically, which cannot be related to a resumptive pronoun in the comment of the sentence. Notice also that, in addition to a null object or a trace, the object of the verb *comprar* 'to buy' may be a full TNP completely independent syntactically of the topic in (12). I take this as evidence that the bare noun is basegenerated as spec-TopicP and that TopicP is a projection that licenses default case in its specifier.

With respect to the hierarchy topic> focus, the following sentences show that this sequence is possible.

(foi) PRA MINHA MÃE (que) eu comprei Ø/ elas, (13) Quanto às flores, I bought  $\emptyset$ / them, As for-the flowers, was to my mother that não pro meu pai. not to-the my father 'As for the flowers, it was to my mom that I bought them, not to my father.' (foi) PRA MINHA MÃE (que) (14) As flores, eu comprei Ø/ elas, was to my mother that The flowers, I bought  $\emptyset$ / them, não pro meu pai. not to-the my father 'As for the flowers, it was to my mom that I bought them, not to my father.' (15) Flor, (foi) PRA MINHA MÃE (que) eu comprei Ø/ \*ela/ \*elas/ as rosas,

Flower, was to my mother that I bought  $\emptyset$ / it/ them/ the roses, não pro meu pai.

not to-the my father

'As for flowers, it was to my mom that I bought them, not to my father.'

The examples in (13)-(15) show that these three types of topic may precede a fronted contrastively focused phrase, which precedes the subject of the sentence. The sequence focus> topic is not acceptable, as shown below.

(16)	*(foi) PRA MINHA MÃE (que)	quanto às flore	s,	eu comprei Ø/ ela	ls,
	was to my mother that,	as for-the flow	ers,	I bought Ø/ them,	,
	não pro meu pai.				
	not to-the my father				
	'As for the flowers, it was to my mom that I bought them, not to my father.'				,
(17)	*(foi) PRA MINHA MÃE (que)	as flores,	eu com	1 comprei Ø/ elas,	
	Was to my mother that,	the flowers,	I bougł	nt Ø/ them,	
	não pro meu pai.				

not to-the my father

'As for the flowers, it was to my mom that I bought them, not to my father.'

(18) \*(foi) PRA MINHA MÃE (que), flor, eu comprei Ø/ \*ela/ \*elas/ as rosas,

Was to my mother that, flower, I bought  $\emptyset$ / it/ them/ the roses,

não pro meu pai.

not to-the my father

'As for flowers, it was to my mom that I bought them, not to my father.'

The examples in (13)-(15) and (16)-(18) provide evidence that topics are higher in the structure than fronted focused phrases.<sup>1</sup> However, it is not the case that they all

<sup>&</sup>lt;sup>1</sup> I leave open here the precise position of the hanging topic, since this plays no role in my analysis, merely noting that treating the hanging topic as an adjunct, rather than spec-TopicP, may explain why its distribution is similar to the distribution of adjuncts in BP.

<sup>(</sup>i) Regular adjunct

<sup>(</sup>Ontem) a Maria(ontem) sugeriu (ontem)[o investimento [de (\*ontem) [uns dois mil]]](yesterday) the Mary(yesterday) suggested (yesterday)the application of (\*ontem) some two thousand(ii) Hanging topic(iii) Hanging topic(iii) Hanging topic

<sup>(</sup>Quanto às doações) a Maria (quanto às doações) sugeriu (quanto às doações) [o investimento (as for the donations) the Mary (as for the donations) suggested (as for the donations) the application [de (?quanto às doações) [uns dois mil]]]

of (as for the donations) some two thousand

occupy the same projection; in fact, the hanging topic is higher than the other two types of topics.

(19) Quanto às flores, as rosas, (foi) PRA MINHA MÃE (que) eu comprei,

As for-the flowers, the roses, was to my mother that I bought, não pro meu pai.

not to-the my father

'As for the flowers, as for the roses, it was to my mom that I bought them, not to my father.'

(20) Quanto às flores, rosa, (foi) PRA MINHA MÃE (que) eu comprei,

As for-the flowers, rose, was to my mother that I bought,

não pro meu pai.

not to-the my father

'As for the flowers, as for roses, it was to my mom that I bought them, not to my father.'

(21) \*As flores, quanto às rosas, (foi) PRA MINHA MÃE (que) eu comprei,

the flowers, as for the roses, was to my mother that I bought,

não pro meu pai.

not to-the my father

'As for the flowers, as for the roses, it was to my mom that I bought them, not to my father.'

(22) \*Flor, quanto às rosas, (foi) PRA MINHA MÃE (que) eu comprei,
flower, as for the roses, was to my mother that I bought,
não pro meu pai.
not to-the my father
'As for the flowers, as for roses, it was to my mom that I bought them, not to my

father.'

Hanging topics can precede full and bare fronted TNPs with "aboutness" interpretation as shown in (19)-(20) above, but the opposite order is not possible, as exemplified in (21)-(22). Furthermore, full and bare fronted TNPs with "aboutness" interpretation cannot occur within the same sentence in any order.

- (23) \*As flores, rosa, (foi) PRA MINHA MÃE (que) eu comprei, não pro meu pai.
  the flowers, rose, was to my mother that I bought, not to-the my father
  'As for the flowers, as for the roses, it was to my mom that I bought them, not to my father.'
- (24) \*Flor, as rosas, (foi) PRA MINHA MÃE (que) eu comprei, não pro meu pai.
  flower, as for the roses, was to my mother that I bought, not to-the my father
  'As for the flowers, as for roses, it was to my mom that I bought them, not to my father.'

I interpret the examples in (23)-(24) as evidence that full and bare fronted TNPs with "aboutness" interpretation target the same topic projection, i.e. the unique topic projection above FocP which is located below the projection where hanging topics occur.

This is the projection where I will argue that what appears to be a multiple topic structure is licensed in BP through snowballing movements within the TNP. From this point on, I focus on the properties of this topic position when its specifier is occupied by a full or bare TNP.

Rizzi's system makes the prediction that the sequence topic > focus > topicshould be possible above the subject of the sentence. The existence of a TopicP under FocP has been questioned by the work of Benincà and Poletto 2004, who propose that the lower topic phrase is actually an informational focus position. The BP data discussed in this chapter provide evidence against the existence of a TopicP under FocP in BP, the analysis adapted above makes the prediction that all full topics should be bundled together above a focused phrase, which is in its turn higher than the subject of the sentence. The following data contrast the two systems.

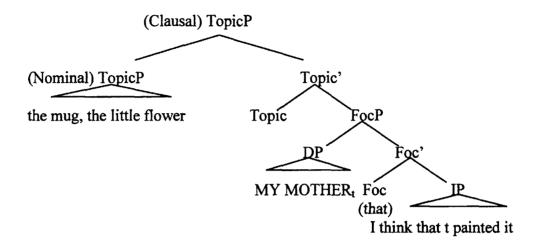
- (25) A caneca, a florzinha, (foi) MINHA MÃE (que) eu acho que pintou ela.
  The mug, the little-flower, (it-was) MY MOTHER (that) I think that painted her.
  'As for the mug, as for the flower on it, (it was) my mother (that) I think that painted it'
- (26) \*A caneca, (foi) MINHA MÃE (que) a florzinha, eu acho que pintou ela. The mug, (it-was) MY MOTHER (that) the little-flower, I think that painted her.
  'As for the mug, as for the flower on it, (it was) my mother (that) I think that painted it'

As the above data show, Rizzi's 1997 system does not make the right prediction for the multiple topic constructions in BP, since the sequence topic> focus> topic is not

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acceptable. The following tree diagram shows the structure with only one clausal TopicP (i.e. without TopicP recursion or multiple specs of TopicP), which I argue for.

(27) Structure without clausal TopicP recursion



The structure in (27) contains only one TopicP projection in the left periphery of the sentence in BP; the two phrases with topic interpretation, *a caneca* 'the mug'and *a florzinha* 'the little flower', are part of one larger phrase. This projection is right above FocP, which is the host for focused DPs. Additionally, these two projections are independent of the subject of the sentence.

### 2.2 Base generation versus movement of topics

Another issue pertinent to the study of topic constructions in BP is the basegeneration versus movement approach. The standard view of fronted topics in BP is that they are base-generated, since they are usually not island sensitive. Some studies show, however, that certain types of topics do move to the left periphery. Thus, Kato 1998 proposes that left dislocated topics are derived though movement of a secondary predicate whose subject is the resumptive pronoun, as shown in the adapted examples below.

(28) a. Eu acho que [elei o menorzinhoi] é tímido.

I think that [he the little-one] is shy

'I think that he the little-one is shy.'

b. Eu acho que o menorzinho<sub>i</sub> [ele<sub>i</sub> t<sub>i</sub>] é tímido.

I think that the little-one [he  $t_1$ ] is shy

'I think that the little-one he is shy.'

c. O menorzinho<sub>i</sub>, eu acho que  $[ele_i t_i]$  é tímido.

the little-one I think that [he  $t_i$ ] is shy

'the little-one I think that he is shy.'

Also, Grolla 2001 shows that some PP-topics in BP are island sensitive and concludes that PP-topics must move to the left periphery. The examples in (29)a-b) are adapted from her paper and contrast with (30)a-b), which have no islands and are acceptable.

(29) a. \*Com a Maria, o João se assustou [depois de falar ec]
With the Maria, the João self frightened [after talking ec]
'João was frightened after talking to Maria'
b. \*Desse livro, eu conheço [a menina que gosta ec]
Of-this book, I know [the girl who likes ec]
'I know the girl who likes this book'

(30) a. Com a Maria, o João disse [que falou (ontem)]
With the Maria, the João said [that talked yesterday]
'With Mary, John said that he talked to yesterday'.
b. Desse livro, eu acho [que a menina gosta muito]
Of-this book, I think [that the girl likes much]
'This book, I think the girl likes a lot'.

In addition to those works, Bastos 2001, 2003, 2009b argues that topicalized verbal projections are moved to the left periphery when the vP contains a full TNP and that they are base-generated when the vP contains a bare noun. This distinction is supported by tests involving extraction out of islands as shown in (34) and (35). The examples in (31) and (32) show that vP-topicalization is acceptable in regular sentences without islands.

(31) Proper names, not in an island construction

Vacinar **o Rex**, eu disse que o veterinário vacinou (mas...) vaccinate-INF the Rex, I said that the veterinarian vaccinated (but...) 'As for vaccinating the Rex, I said that the veterinarian vaccinated.'

(32) Bare NPs, not in an island construction

Vacinar **cachorro de rua**, eu disse que o veterinário vacina. vaccinate-INF dog of street, I said that the veterinarian vaccinates 'As for vaccinating stray dogs, I said that the veterinarian vaccinates.' (33) Proper names in an island construction

\* Vacinar o Rex, eu briguei com o veterinário que vacinou (mas...)
vaccinate-INF the Rex, I fought with the veterinarian that vaccinated (but...)
'As for vaccinating Rex, I fought with the veterinarian that vaccinated.'

(34) Bare NPs in an island construction

Vacinar cachorro de rua, eu conheço [um veterinário que vacina]. vaccinate-INF dog of street, I met [a veterinarian that vaccinates] 'As for vaccinating stray dogs, I met a veterinarian that vaccinates.'

The examples in (34) and (35) show that the extraction out of an island of vPs containing proper names, which are full TNPs in BP, is not acceptable while the extraction of a vP containing a bare noun is. The distinction shown above for topicalized verbal projections holds true for full TNPs versus bare nouns in the topic position as well. The sentences below exemplify this contrast.

(35) Proper names

\*O Rex, eu briguei com o veterinário que vacinou the Rex, I fought with the veterinarian that vaccinated 'As for Rex, I fought with the veterinarian that vaccinated him.'
(36) Bare NPs

Cachorro de rua, eu conheço [um veterinário que vacina].
dog of street, I met [a veterinarian that vaccinates]
'As for stray dogs, I met a veterinarian that vaccinates them.'

On the basis of the above data, I take the view that, while bare nouns and other phrases with generic interpretation may be base-generated as topics, full TNPs move to spec-TopicP but resumptive pronouns may rescue syntactic violations. This idea will be developed in section 3.3 by appealing to Grohmann's 2000 claim that (anti-)locality violations may be rescued by employing resumptive pronouns.

# 2.3 Preposition dropping within topics

One final aspect of interest to the study of topic constructions in the clause is preposition dropping. Preposition deletion/ dropping is a more general phenomenon in BP and other Romance languages like French (Bouchard 1981). In BP it occurs in certain kinds of relative constructions (Tarallo 1983) as well as wh-questions, cleft constructions and topicalization (Kato 2008, Kato and Nunes 2009, and Kato and Raposo 1996).

Kato 2008 notices that not all prepositions "delete" in the above configurations and proposes that, in fact, prepositions do not "delete" or "drop". According to her, with verbs that take prepositions that are inherent case markers (Chomsky 1986) the prepositions are only inserted when required while other prepositions are "real" prepositions and are always inserted. Following this line of argumentation, she proposes that, when a preposition that is an inherent case marker is not inserted, the DPcomplement remains with its case unvalued, as shown in (37), and the derivation only survives if the DP is moved to where it can get "default" case, as shown in (38).

(37)	*Eu vou precisar	esse dinheiro	para o teste.		
	I will need	this money	to the test		
	'As for this money, I will need it to the test.'				
(38)	Esse dinheiro <sub>i</sub> ,	eu vou precisar t <sub>i</sub>	para o teste.		
	This money	I will need	to the test		

'As for this money, I will need it to the test.'

On the other hand, if the preposition that is an inherent case marker is inserted, the resulting PP can stay in situ or be topicalized, as shown below.

(39)	Eu vou precisar	desse dinheiro	para o teste.			
	I will need	of-this money	to the test			
	'I will need this money to the test.'					
(40)	Desse dinheiro,	eu vou precisar	para o teste.			

Of-this money I will need to the test

'As for this money, I will need it to the test.'

One last case discussed by Kato 2008 is what she calls a mixed strategy in which the preposition is selected and its object is a complex DP, with a resumptive pronoun as its head and a DP as its spec (Kato and Raposo 1996; see also Kato 1998). The example below shows these cases. (41) Esse dinheiro<sub>i</sub>, eu vou precisar dele para o teste.

This money I will need of-it to the test 'As for this money, I will need it to the test.'

In the example above, the DP is topicalized getting "default" case, and the remaining pronoun is marked with inherent case by the preposition.

Returning to the multiple topic constructions in BP, this phenomenon can also involve preposition dropping, similarly to (37) above, as well as pied-piping of "prepositional" phrases, similarly to (39), and resumptive pronouns, similarly to (41). I adopt Kato's 2008 assumptions regarding the role of inherent case and "default" case in these constructions, but I assume a different view regarding the prepositions that she calls inherent case markers as well as the way resumptive pronouns are generated.

Starting with the preposition issue, I propose that the prepositions that Kato 2008 calls inherent case markers are an overt realization of the head of KP, when the TNP gets inherent case. To put it differently, these pseudo-prepositions, especially *de* 'of', are part of the  $\infty$ -layer of the TNP; no extra prepositional phrase is added to the structure in such cases. The "real" prepositions are heads of real prepositional phrases that take KP as their complement. When a TNP gets structural case, KP is usually not present, but when KP has inherent case, the pseudo-preposition is realized morphologically to mark it. Recall that the projections in the  $\omega$ -layer are optionally projected; then if KP is not projected the derivation will fail, unless the noun phrase moves to a position where "default" case is

available.<sup>2</sup> I follow Kato 1998 in assuming that spec-Top is one of the projections where "default" case is available in BP. These assumptions will be illustrated in detail below.

The advantage of having two different syntactic structures for pseudoprepositions and real prepositions is that we can explain a difference between these two groups of elements with respect to binding; the presence of a real preposition interferes with binding while pseudo-prepositions are transparent to binding. This was originally noticed for Italian by Giorgi and Longobardi 1991; they called them "dummy" preposition and suggest that they are a semantically empty realization of genitive case.

As for resumptive pronouns, instead of assuming that they involve complex DPs, with a resumptive pronoun as its head and a DP as its spec, I assume with Grohmann 2000 that resumptive pronouns are the syntactic realization of the copy of the moved TNP, and that the copy's realization as a pronoun rescues an anti-locality violation. This will be discussed in detail below.

In the following sections, I present my analysis for multiple topic constructions in BP, taking into consideration the general properties presented above.

# 3. Analysis

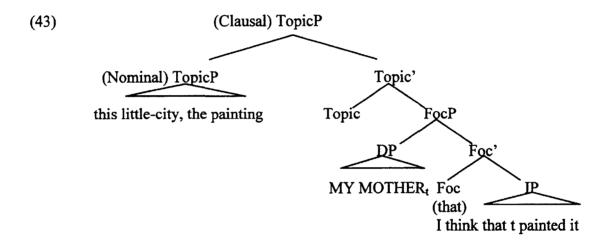
In the previous section, I proposed that multiple topic constructions involving full traditional nominal phrases in BP are derived through snowballing movements within the TNP and that thus, as a whole, occupy a single spec-TopicP. The sentence in (42) and its tree in (43) provide an additional example of the overall structure of multiple topics.

 $<sup>^2</sup>$  The suggestion that KP is not present when TNP gets structural case will be relevant to the discussion of expressive content in chapter 3, but it plays no role in the analysis of multiple topic constructions in this chapter. In chapter 3, I will show that if KP is not present, but nominal FocusP is present in the structure, then DP can get case from the head of FocusP, which is also the pseudo-preposition *de* 'of'.

(42) Double topic

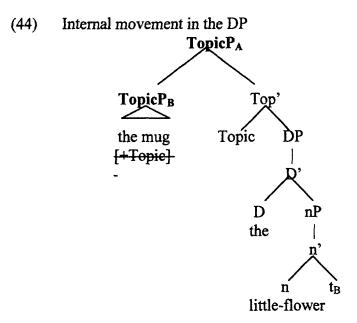
Essa cidadezinha, a pintura (mais famosa), (foi) PRA MINHA MÃE This little-city, the picture (most famous), (it-was) TO MY MOTHER (que) eu comprei ela, não pro meu pai. (that) I bought her, not to-the my father. 'As for this little-city, as for the most famous painting of it, (it was) to my mother

(that) I bought it, not to my father.'



Now, let us take a closer look at the TNP in the specifier of TopicP to see in detail how the internal movements can be implemented. The key to implementing my analysis is the claim that the nominal  $\omega$ -layer contains a Topic Phrase. This has been proposed by Grohmann and Haegeman 2003, Ticio 2003, among others. My proposal is different from those because TopicP is not simply an escape-hatch for the TNP, but a real topic projection that triggers comma intonation and "aboutness" reading, and requires oldinformation status. The following diagram shows this in more detail.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The full structure for the theta layer in the TNP has nP and NP. For ease of exposition I represent the theta layer with nP only, unless otherwise indicated.



The motivation for movement to the nominal TopicP projection is implemented here in terms of the checking theory, i.e. modifiers of an N may have a [+Topic] feature, which is a strong feature; phrases that contain this feature must move to the specifier of the first available TopicP, which can be the nominal one or the clausal one. In the specific case above, the traditional nominal phrase B did not project KP and it moves as a whole to the next TopicP where "default" case is available.<sup>4</sup> Notice that the traditional nominal phrase A did not project KP either and it moves as a whole, carrying the traditional nominal phrase B with it, to the clausal TopicP.

The structure above makes the prediction that multiple topic constructions should be very restricted in BP, i.e. the only possible combinations of multiple topics should be the ones compatible with an internal rearrangement of the constituents within the TNP in the specifier of TopicP. This prediction is borne out. In the following section I discuss

<sup>&</sup>lt;sup>4</sup> I will discuss later, in section 3.1, the reasons why a DP cannot check its topic feature *in situ* with the TopicP that immediately dominates it.

case by case possible and impossible sequences, which I summarize in the following tables for convenience, using the schema A of-B of-C, in which A, B and C are TNPs.

Schema	Example		
A of-B of-C	[ a reprodução [ the reproduction	da pintura of-the picture	da cidadezinha, ] of-the little-city, ]
(of)C, (*of)B, A	[ (d)a cidadezinha, [ (of)the little-city,	(*d)a pintura, (*of)the picture,	a reprodução, ] the reproduction, ]
(of)C, A of-B	[ (d)a cidadezinha, [ (of)the little-city,	a reprodução da pintura, ] the reproduction of-the picture, ]	
(of)B of-C, A	[ (d)a pintura da cidadezinha, [ (of) the picture of-the little-city,		a reprodução, ] the reproduction, ]

(45) Patterns of "optional" pseudo-preposition

(46) Patterns for "optional" resumptive pronouns

Schema	Example
A of-B of-C	[ a reprodução da pintura da cidadezinha, ] [ the reproduction of-the picture of-the little-city, ]
C, B (of-it), A (of-it)	[ a cidadezinha, a pintura ( <b>dela</b> ), a reprodução ( <b>dela</b> ), ] [ the little-city, the picture ( <b>of-her</b> ), the reproduction ( <b>of-her</b> ), ]
C, A of-B (of-it)	[ a cidadezinha,a reprodução da pintura (dela), ][ the little-city,the reproduction of-the picture (of-her), ]
B of-C, A (of-it)	[ a pintura da cidadezinha,a reprodução (dela), ][ the picture of-the little-city,the reproduction (of-her), ]

The table in (45) summarizes the acceptable cases with and without pseudoprepositions. The cases without pseudo-prepositions are what I call the basic cases and are discussed in section 3.1, while the cases with pseudo-preposition are discussed in 3.2. The table in (46) summarizes the pattern of "optional" resumptive pronouns. This will be discussed in section 3.3.

#### 3.1 Possible and impossible sequences of topics

In this section I will be concerned with TNPs that follow the schema in (47)a) or can be derived from it.

(47) a. A of-B of-C

b. a flor do fundo da caneca the flower of-the bottom of-the mug 'the flower of the bottom of the mug'

As discussed above, the generalization is that multiple DP-topic constructions are possible only if there is a dominance relation among the DPs inside a larger TNP. Thus, in (47), *a caneca* 'the mug' is the complement of *o fundo* 'the bottom' and *o fundo da caneca* 'the bottom of the mug' is the complement of *a flor* 'the flower'.

Given the TNP in (47)b), BP allows the phrase to undergo topicalization as a whole, as shown in (48) below, where there is only one comma intonation separating the topic and the rest of sentence.

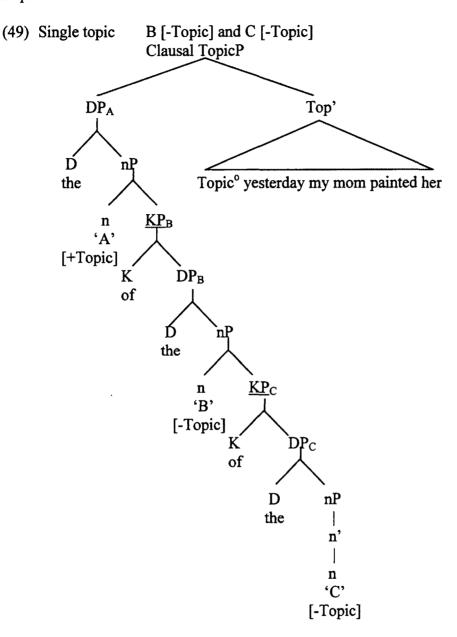
(48) a. Single topic: A of-B of-C

b. a flor do fundo da caneca, (foi)  $ONTEM_F$  (que) minha mãe the flower of-the bottom of-the mug, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

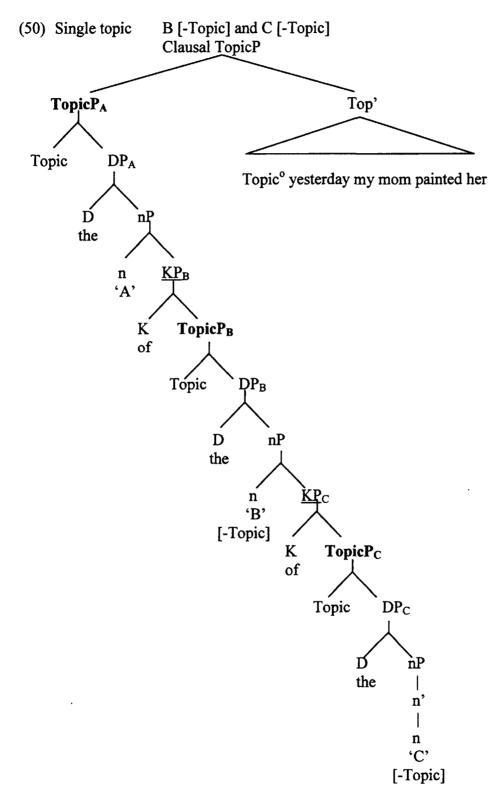
'As for the flower of the bottom of the mug, it was yesterday that my mom painted it'

The following tree shows the structure for this single topic, which contains a sequence of embedded TNPs.



Single topics as in (47) are generated when A is [+topic] and both B and C are [-topic]. It is important to notice that the topic feature is just another feature that the TNP may or may not have; the positive value of the topic feature in a given TNP does not force the projection of nominal TopicP within that TNP. In the above tree, the traditional nominal phrases B and C, which remain in situ, have inherent case, as discussed above.

The pseudo-preposition de 'of' is the overt realization of the head of KP, when KP has inherent case. The tree in (50) illustrates a variation of (49).



I assume that if the projections  $\text{TopicP}_A$ ,  $\text{TopicP}_B$  and  $\text{TopicP}_C$  are present in the structure and no phrase moves to their respective specifiers to check the strong  $\text{Topic}^\circ$  [+topic] feature, this would cause the derivation to crash. I am assuming that movement to spec-TopicP is needed to check  $\text{Topic}^\circ$ 's [+topic] feature, i.e. the feature must be checked in a spec-head configuration.

Among the variations of this single topic construction, one finds double topics, where A is still [+topic], and either B or C, but not both, are [+topic], as well as multiple topics, where A, B and C are all [+topic]. Before we discuss double topics and multiple topics, let us take a look at some unacceptable cases.

Notice that the sequence of topics ABC becomes unacceptable if there are comma intonations separating each of the traditional nominal phrases A, B and C, as exemplified below. The resulting sentence is unacceptable even if *de* 'of' is present in (51).

(51) a. \*A, B, C and \*A, of-B, of-C

b. \*a flor, (d)o fundo, (d)a caneca, (foi)  $ONTEM_F$  (que) minha mãe the flower, (of)the bottom, (of)the mug, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the flower of the bottom of the mug, it was yesterday that my mom painted it'

Given my proposal in the previous sections, only TNPs that have a [+Topic] feature move up to the specifier of TopicP. The sequence A of-B of-C can be generated if neither the traditional nominal phrase B nor the traditional nominal phrase C has a

[+Topic] feature, as we saw in the tree in (50) above. As a consequence, they do not have to undergo topic movement.

The sequences A,B,C, and A,of-B,of-C, in (51) can be ruled out straightforwardly, given that the comma intonation is triggered by topicalization, i.e. given that the comma intonation is triggered by Top<sup>o</sup> when its specifier position is filled up. Since the TNPs *o fundo* 'the bottom' and *a caneca* 'the mug' have not independently undergone topicalization, they cannot show the typical topic intonation.

Let us suppose, however, that the traditional nominal phrases A, B, and C have undergone topicalization independently. For the traditional nominal phrases A, B and C to undergo topicalization independently and still preserve the order ABC, there would have to be topic recursion as proposed for Italian by Rizzi 1997, or multiple specifier/ multiply adjoined configurations as proposed for, e.g. related phenomenon in Japanese by Fukui 1986, Heycock & Lee 1989, Heycock 1993, Koizumi 1994, Saito 1982, Takahashi 1994, 1996, Takezawa 1987, Tateishi 1991, Ura 1994, 1996, 1999, 2000, among others, or different types of independent topic projections, as proposed by Benincá 2001 and Benincá and Poletto 2004.<sup>5</sup> The following schema shows cyclic movements of A, B and C separately to different topic projections, but the resulting word order would be the same if we were to assume multiple specifiers or right adjunction to any projection in the  $\omega$ -layer (see Rudin 1988 for such an analysis of multiple wh-fronting).

(52)  $\begin{bmatrix} T_{OP} & A \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & B \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & C \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} & T_{OP} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \end{bmatrix} \\ \begin{bmatrix} T_{OP} &$ [t<sub>B</sub> [t<sub>c</sub>]]] ]]]]]]]]

<sup>&</sup>lt;sup>5</sup> See also Bastos 2008 for additional examples.

As a result of the movements in the structure above, the traditional nominal phrases A, B, and C would trigger the topic intonation independently. The resulting sequence A,B,C, is unacceptable; this provides strong evidence against topic recursion, multiple specifiers and multiple right adjunction in multiple topic constructions in BP, because if any of these mechanisms were available in BP, we would predict that the sequence A, B, C, should be possible.

Notice that the considerations above do not rule out different types of independent topic projections, as proposed by Benincá 2001 and Benincá and Poletto 2004. It only excludes them as the landing site for the multiple topic constructions under study in this chapter. Their system predicts that topics in different topic projections would have different semantic-discourse functions, which the multiple topics I am studying here do not have.

Notice also that I am not excluding topic recursion and multiple specifier/ adjunction as possible explanations for other languages, like Japanese, in which the word order is always C B A for all cases since the TNP complement precedes the head; I am only excluding topic recursion and multiple specifier/ adjunction as a possibility for BP, which only allows the reversed order.

Notice as well that if the unacceptable sequence A,B,C, corresponds to cases in which [-topic] B and [-topic] C are in situ, under the current analysis this would be additionally ruled out for case reasons, i.e., the lack of de 'of' indicates that KP has not been projected, given that I assume that de 'of' is the phonetic realization of the head K<sup>o</sup>. Under the assumption discussed above that KP is necessary to establish inherent case, if KP is not projected, then the derivation crashes.

Now, let us discuss the case in which A and C are [+topic].

## (53) a. Double topic: C, A of-B,

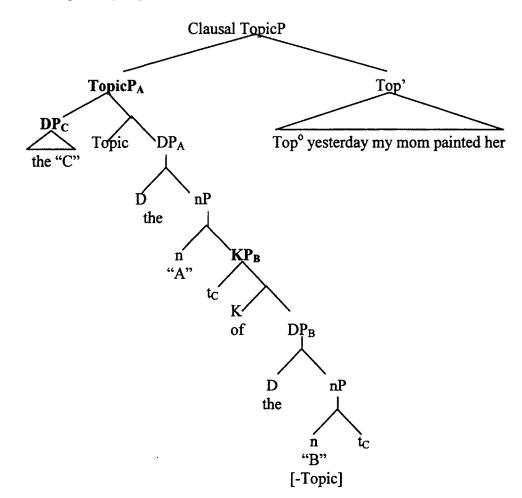
b. a caneca, a flor do fundo, (foi)  $ONTEM_F$  (que) minha mãe the mug, the flower of-the bottom, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for the flower of the bottom, it was yesterday that my mom painted it'

The case in (53) can be easily generated if the traditional nominal phrase C has the feature [+Topic] and the traditional nominal phrase B does not. The traditional nominal phrase C will move successive cyclically to the highest TopicP, producing the order where C is the first topic, while B remains in situ.

In the tree diagram below,  $KP_B$  is projected and  $DP_C$  moves through its specifier to the specifier of TopicP<sub>A</sub> to check its [+Topic] feature. There is no feature checking in the intermediate landing site, and therefore,  $DP_C$  does not remain in the intermediate position. Notice that TopicP<sub>C</sub> is not present in the structure, because if it were projected, its unchecked [+topic] feature would cause the derivation to crash. TopicP<sub>B</sub> is not present in the structure either, because without a filled specifier, its topic feature would not be checked; more importantly, TopicP<sub>B</sub>'s presence would interfere with inherent case checking between K<sup>o</sup> and DP<sub>B</sub>. (54) Double topic: B [-Topic] and C [+Topic]



Another aspect of the tree diagram above that deserves notice is that  $KP_C$  is also not projected. As I emphasized above, the projections in the  $\omega$ -layer are freely projected or not. If  $KP_C$  is not projected,  $DP_C$  must move to a syntactic configuration in which default case is available, and it just happens that its final landing site,  $TopicP_A$  is such a position. The case in which  $KP_C$  is projected will be discussed in section 3.2.

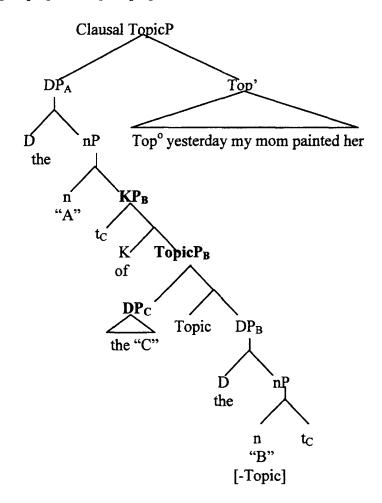
Let us consider a variation of the structure above in which both  $KP_B$  and  $TopicP_B$ are present and  $DP_C$  stays in the intermediate spec-TopicP<sub>B</sub> instead of moving to  $TopicP_A$ . Schematically, this would generate the sequence A of C, B, as shown below. (55) a. \* A of C, B,

b. \*a flor de a caneca, o fundo, (foi)  $ONTEM_F$  (que) minha the flower of the mug, the bottom, (was) YESTERDAY<sub>F</sub> (that) my mãe pintou ela.

mom painted her.

'As for the flower of, the mug, the bottom, it was yesterday that my mom painted it'

(56) Double topic: B [-Topic] and C [+Topic]



Notice that, in this case,  $TopicP_B$  has a topic phrase in its specifier and the feature [+topic] is checked.

The sequence A of C, B, is unacceptable in BP and at a first sight, this is a problem for the analysis proposed here, because the structure in (56) is in many ways parallel to the cases of topicalization of phrases in an embedded clause. To put it differently, intermediate topicalization within a TNP is banished while intermediate topicalization within a clause is not.<sup>6</sup> How can we explain this sudden breakdown in the parallelism between clauses and TNPs? The answer relies on case and the standard assumption that clauses do not need case while DPs do. In other words, a CP is a link between two clauses while KP, in addition to being a link between two TNPs, is also the locus of inherent case, i.e. the head of KP, the pseudo-preposition *de* 'of', checks inherent case of DP. I assume that the presence of TopicP<sub>B</sub> interferes with the case checking between K<sup>o</sup> and DP<sub>B</sub>. If TopicP<sub>B</sub> is present, the derivation then crashes. That is, I suggest, why in the structure in (54) TopicP<sub>B</sub> cannot occur.

Another variation of double topic construction that is excluded for case reasons is A C, of B,. In this variation, KP is present, but not  $TopicP_B$ . The example and structure are given below.

<sup>&</sup>lt;sup>6</sup> The sentence *a flor da caneca, o fundo, foi ontem que minha mãe pintou* 'as for the flower of the mug, as for the bottom, it was yesterday that my mom painted it' is acceptable with an irrelevant meaning, in which *o fundo* 'the bottom' is in a part-whole relation with *a flor* 'the flower', and not with *a caneca* 'o fundo'.

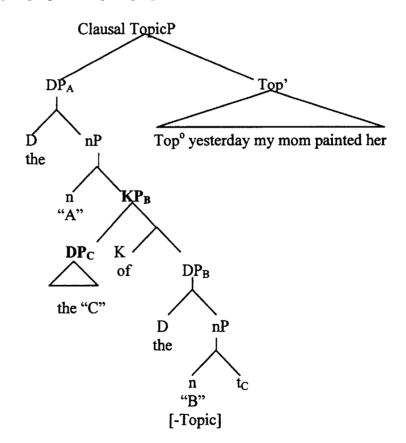
(57) a. \* A C, of B,

b. \*a flor a caneca,, do fundo, (foi)  $ONTEM_F$  (que) minha mãe the flower the mug, of-the bottom, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the flower the mug, as for the bottom, it was yesterday that my mom painted it'

(58) Double topic: B [-Topic] and C [+Topic]



In the example above, when  $K_B$  is merged with  $DP_B$ , case checking takes place. If  $DP_C$  moves to spec-KP<sub>B</sub> and remains in that position, the derivation crashes, because

spec-KP<sub>B</sub> is not a "default" case position, only spec-TopicP is, and also because  $K^{\circ}$  cannot check the [+topic] feature of DP<sub>C</sub>. However, DP<sub>C</sub> can move to the next  $\omega$ -layer, as originally shown in (54) above.

A side note on the structure in (54) and the other structures discussed so far is that the traditional nominal phrase A is in the clausal spec-TopicP, which is a "default" case position. Some interesting cases to consider are the ones in which the traditional nominal phrase A is in situ, e.g. it remains in the complement position of a verb. This would correspond, for instance, to a situation in which the traditional nominal phrase A is not [+topic].

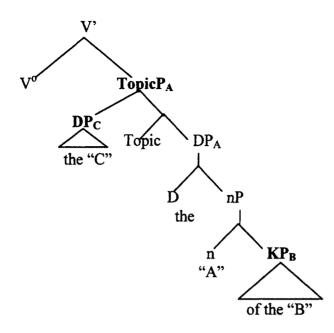
If the assumption that the presence of TopicP between  $K^{\circ}$  and DP blocks inherent case checking can be extended to structural case configurations as well, then we make the prediction that topicalization should not be possible when the whole TNP remains in situ. This prediction is borne out as exemplified below in (59).

(59) a. Double topic: C, A of-B, in the complement of a verb

b. Minha mãe	pintou	(*a caneca, )	a flor do fundo.		
my mom	painted	the mug,	the flower of-the bottom.		
'My mom painted, as for the mug, as for the flower of the bottom.'					

The simplified tree for (60) in given below, where the traditional nominal phrase A is [-topic] and the traditional nominal phrase C is [+topic].

(60) Double topic in the complement position of a verb: A [-topic] and C [+topic]



Notice that a [-topic] feature in A does not mean that the traditional nominal phrase A does not have an internal topic phrase; it only means that A does not have the feature that causes DPs to move.

In the above tree,  $v^{\circ}$  assigns structural accusative case to its complement. However, if TopicP<sub>A</sub> is projected within the TNP, it intervenes between  $v^{\circ}$  and DP<sub>A</sub>, causing the derivation to crash. Notice that DP<sub>C</sub> is in a default case position; hence it causes no problem with respect to case.

Some other impossible variations of (53) are shown below and they can be explained by topicalization and the comma intonation patterns as well.

(61) a. \*C, A, B, and \*C, A, of-B,

b. \*a caneca, a flor, (d)o fundo, (foi)  $ONTEM_F$  (que) minha mãe the mug, the flower, (of)the bottom, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for the flower of the bottom, it was yesterday that my mom painted it'

The sequences C, A, B, and C, A, of-B, are ruled out because of the comma intonation triggered by Top<sup>0</sup>. The line of reasoning I use to exclude this sequence is the same one used previously for the sequence in (51) above. In the specific case of (61), if the traditional nominal phrase B undergoes topicalization independently, this movement would require topic recursion on the clausal level, because it is not possible to generate it with nominal internal movements.

The explanation for the other case of double topics goes along the same lines as the one presented above, except that now A and B are [+topic], and C is not.

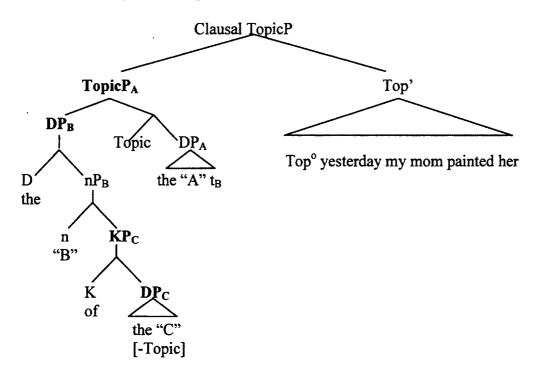
(62) a. Double topic: B of-C, A,

b. o fundo da caneca, a flor, (foi)  $ONTEM_F$  (que) minha mãe the bottom of-the mug, the flower, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the bottom of the mug, as for the flower, it was yesterday that my mom painted it'

(63) Double topic: B [+Topic] and C [-Topic]



The case in (62) can be easily generated if the traditional nominal phrase B has the feature [+Topic] and the traditional nominal phrase C does not. The traditional nominal phrase B will move to TopicP<sub>A</sub> caring the traditional nominal phrase C along. This generates the order in which B of-C is the first topic. Notice now that in the derivation above, KP<sub>B</sub> is not projected, and this is not a problem since the landing site of DP<sub>B</sub> is a configuration in which default case is available. The case in which KP<sub>B</sub> is projected will be discussed in section 3.2. Finally, as for the unacceptable cases below, the explanation is as follows.

(64) a. \*B, C, A, and \*B, of-C, A,

b. **\*o fundo, (d)a caneca**, **a flor**, (foi) ONTEM<sub>F</sub> (que) minha mãe the bottom, (of)the mug, the flower, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the bottom of the mug, as for the flower, it was yesterday that my mom painted it'

The sequences in (64) are ruled out because the comma intonation is associated with constituents that undergo topicalization. In the case of (64), for the traditional nominal phrase C to undergo topicalization independently, one would need topic recursion on the clausal level, because it is not possible to generate it with nominal internal movements.

One final unacceptable variation of double topics is the sequence B, A C, exemplified below. The tree is given in (66).

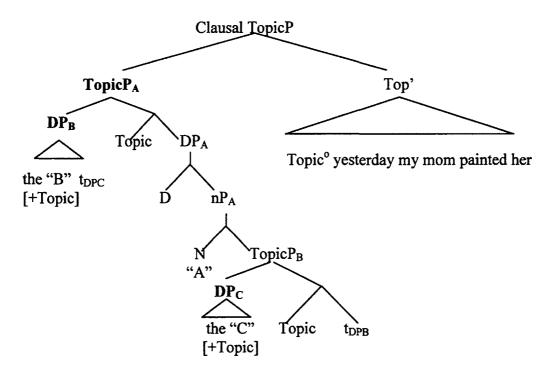
(65) a. \* B, A C,

b. \* o fundo, a flor a caneca, (foi)  $ONTEM_F$  (que) minha mãe the bottom, the flower the mug, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for the flower of the bottom, it was yesterday that my mom painted it'

(66) Double topic: B [+Topic] and C [-Topic]



In the tree above,  $DP_C$  moves to spec-TopicB to check its [+topic] feature. Then,  $DP_B$  moves to spec-TopicP<sub>A</sub> to check its [+topic] feature. Both  $DP_B$  and  $DP_C$  are now in default case position positions. However, this derivation fails due to a crossing effect, when  $DP_B$  moves across a filled spec-TopicP<sub>B</sub>.

The most interesting cases of multiple topics are the ones that involve three or more DP-topics, such as the example in (67) below and its derivation in (68).

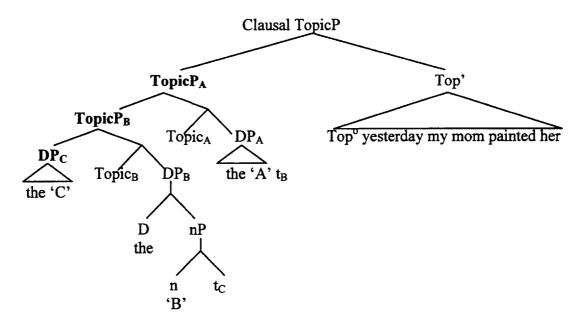
(67) a. C, B, A,

b. **a caneca**, **o fundo**, **a flor**, (foi) ONTEM<sub>F</sub> (que) minha mãe the mug, the bottom, the flower, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for the bottom, as for the flower, it was yesterday that my mom painted it'

(68) Multiple topics B [+Topic] and C [+Topic]



In (67) the three traditional nominal phrases A, B and C have [+Topic] features. In the structure above, no KP is projected, and the three TNPs get default case in their final landing positions.

One question that can be raised at this point with regard to the structure of TNPs in general is why they move as a whole for topicalization. Suppose that in (67) above, the

traditional nominal phrase C projects its own nominal TopicP. If the [+Topic] feature is a feature of the noun or a feature of the DP, one could expect the NP or the DP to move on its own to  $TopicP_C$ , and check the [+topic] feature within its own traditional nominal phrase C, but these movements are blocked by a constraint on movement, as discussed below. The tree in (69) shows the structure of the traditional nominal phrase C if TopicP is projected.

(69) Traditional nominal phrase C with TopicP TopicP<sub>C</sub> Topic DP<sub>C</sub> Dthe  $P_C$  C' C'C'

In the structure above, why can't NP<sub>C</sub> move to spec-TopicP? The resulting sequence with a post-nominal determiner is unacceptable in BP. One reason could be the impossibility of stranding the determiner. I do not follow this path and instead explore a different possibility, on which the feature [+ topic] is a property of DP. This makes sense, since topicalization imposes restrictions on the type of the determiner of topicalized phrases; furthermore, topicalization is sensitive to notions like definiteness, specificity, and familiarity, which are assumed to be encoded in DP. If DP, and not NP, is the projection that carries the [+topic] feature, then NP has no motivation to move up on its own to check this feature.

With respect to the possibility of movement of  $DP_C$  to  $TopicP_C$ , this movement is blocked by the anti-locality condition, i.e. the ban on movement that is too short, proposed in Bošković 1994 and later developed by a number of authors, including Grohmann 2000 and Abels 2003. The condition is given below.

(70) Anti-locality condition (Bošković 2005)

Each chain link must be at least of length 1, where a chain link from A to B is of length n if there are n XPs that dominate B, but no A.

Following a version of Bošković's 1994, 1997 and Saito and Murasugi 1999's condition on chain links, Bošković 2005 formulates the condition above, which blocks movement that is too local, for instance, the movement of the complement of the head to its specifier. Assuming this version of the anti-locality condition, we can successfully exclude the possibility of movement of  $DP_C$  to  $TopicP_C$ . The only way of checking the [+Topic] feature within the traditional nominal phrase C is to move the whole traditional nominal phrase C to the next available specifier of TopicP, which is the specifier of TopicP<sub>B</sub>.

One final aspect that should be discussed in this section refers to the nature of the snowballing movement. As I argued above, the snowballing movement moves TNPs within TNPs. Although not very productive, snowballing movements with clauses is also possible in BP. The following example is adapted from Lobato 1986, who was the first to notice this for BP.

(71) [CP É possível [CP que incomode aos pais dela [CP que a Maria durma fora de casa]]]
is possible that bothers to-the parents of-her that the Mary sleeps out of house
'It is possible that it bothers her parents that Mary sleeps out of the house.'

(72) [CP [CP [CP que a Maria durma fora de casa] incomode aos pais dela] é possível] that the Mary sleeps out of house bothers to-the parents of-her is possible
 'It is possible that it bothers her parents that Mary sleeps out of the house.'

The example in (71) shows a sentence with three clauses A, B, and C and the example in (72) shows that clause C can move to the left periphery of clause B and clause B carrying clause C along can move to the left periphery of clause A in a similar fashion as shown for the TNP. I will not go into details regarding the landing site of this movement, limiting myself to using this as evidence for the overall fashion of snowballing movements.

To summarize the discussion so far, in this section I have shown that the mechanism of snowballing movements accounts for the patterns of multiple topic constructions in BP. I have also shown that alternative analyses using topic recursion, multiple specifiers or multiple adjunctions to the left periphery overgenerate. Finally, I also discussed why the TNPs move as a whole and provided an example of snowballing movements with clauses.

# 3.2 Accounting for 'optional' pseudo-prepositions

The term pseudo-preposition is used here simply to refer to the phonetic realization of  $K^{\circ}$  de 'of', which is obligatory for a TNP embedded with another TNP in BP in parallel to the facts associated with the complementizer que 'that', which is obligatory in embedded clauses. As discussed above, the pseudo-preposition is optional

in certain cases. The generalization is that the pseudo-preposition de 'of' is optional in the very first topic in a multiple topic construction. The relevant data are given below.

(73) a. C, A of-B, and of-C, A of-B,

b. (d)**a caneca**, **a flor do fundo**, (foi) ONTEM<sub>F</sub> (que) minha mãe (of)the mug, the flower of-the bottom, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for the flower of the bottom, it was yesterday that my mom painted it'

(74) a. B of-C, A, and of-B of-C, A,

b. (d)**o fundo da caneca**, **a flor**, (foi) ONTEM<sub>F</sub> (que) minha mãe (of) the bottom of-the mug, the flower, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the bottom of the mug, as for the flower, it was yesterday that my mom painted it'

(75) a. C, B, A, and of-C, B, A, vs \*of-C, of-B, A,

b. (d)**a caneca**, (\*d)**o fundo**, **a flor**, (foi) ONTEM<sub>F</sub> (que) minha mãe (of)the mug, (of)the bottom, the flower, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

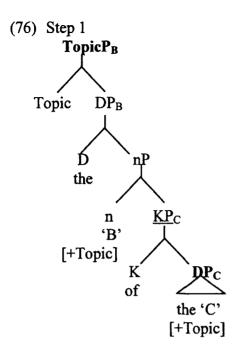
painted her.

'As for the mug, as for the bottom, as for the flower, it was yesterday that my mom painted it'

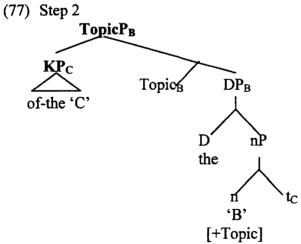
Notice that the presence of de 'of' in a topic is only possible with the very first topic in the sequence of topics in the examples above. The case in (75) clearly shows that the second topic cannot have an overt pseudo-preposition. Putting aside the case of the second topic in (75) for a moment, this paradigm is very easy to explain under my proposal that the projections in the  $\omega$ -layer are optionally present. In section 3.1 I discussed many cases in which KP was not projected and showed that this does not cause the sentence to crash as long as the TNP lacking KP moves to the specifier of TopicP, where it gets default case. The presence of de 'of' indicates that KP was projected and that the relevant TNP got inherent case. Suppose that in this case, the TNP has the [+topic] feature, and moves as a whole to the specifier of the next available TopicP. This generates a sequence in which the pseudo-preposition is present in the moved phrase. In short, the "optional" pseudo-prepositions reflect the optional projection of KP; the sentences in (73)-(75) exemplify this optionality.

Let us now turn our attention to the most puzzling part of the paradigm, which is the contrast between the sequence of-C, B, A, which is acceptable, and the sequence \*of-C, of-B, A, which is not acceptable due to the presence of the pseudo-preposition *de* 'of' in B. For the sake of clarity, I will show the derivation in four major "steps".

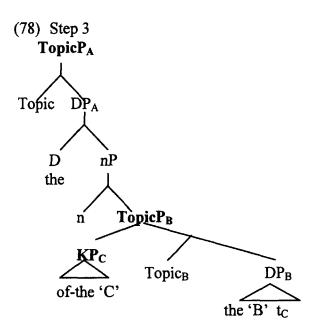
In the tree in (76) below, the traditional nominal phrase C has a [+Topic] feature, is dominated by KP and has inherent case, while the traditional nominal phrase B has a [+Topic] feature, is not dominated by KP, hence has to move to get default case.



In the step 2 of the tree in (77), the whole  $KP_C$  moves up to the specifier of TopicP<sub>B</sub>.

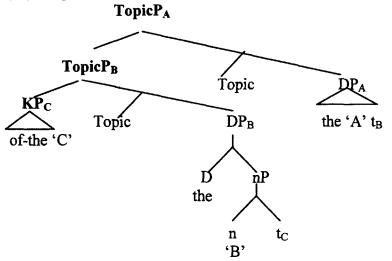


Then  $\text{TopicP}_B$  is taken as complement of the head of  $nP_A$ , as shown below.

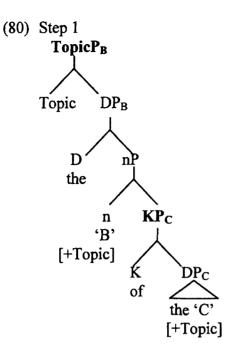


The derivation proceeds with  $TopicP_B$  moving to the specifier of  $TopicP_A$  as in the step 4 shown in (79) below and the resulting sequence will be in accordance with the schema [of-C, B, A].

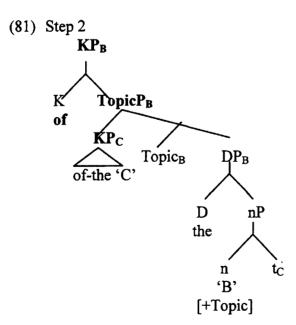
(79) Step 4



As for the unacceptable case \*[of-C, of-B, A], this word order cannot be generated with snowballing movement, as shown below in the trees in (80) and (81).

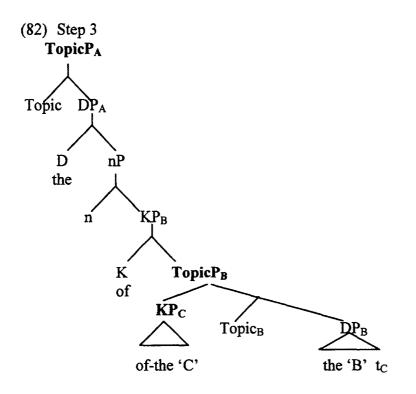


In (80) we can see the step of the derivation in which the  $KP_C$  and the  $TNP_B$  are already merged. As the derivation progresses,  $KP_C$  moves up to spec-TopicP<sub>B</sub> and  $KP_B$  is projected, as shown below.



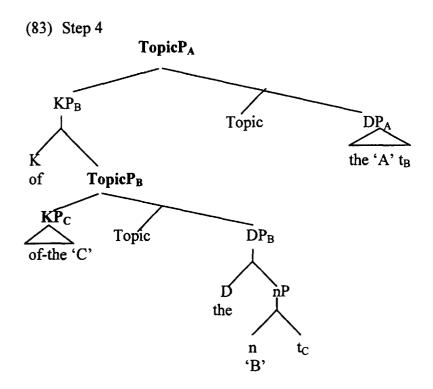
.

As can be seen above, the resulting sequence turns out to be \* of- of-C, B, A with a cluster of two prepositions, which is banned in BP. Putting aside the preposition cluster issue, in the structure above,  $TopicP_B$  intervenes between  $K^o$  and  $DP_B$  and as shown in many previous cases, the presence of a TopicP in between the case assigner/checker and a DP causes the derivation to crash for case reasons. This is the step in which the derivation crashes, but if the derivation were to continue, we would have the following.



In the tree above,  $KP_B$  merges with the TNP<sub>A</sub>. Notice now that TopicP<sub>B</sub> cannot move as a whole to spec-TopicP<sub>A</sub>, because KP is a phase and movement to spec-KP would induce an anti-locality violation. Recall that KP is a phase whenever present in the TNP, because KP is the highest projection within a TNP (Cf. Bošković's 2010c).

If the derivation were to continue with the movement of  $KP_B$ , as a whole, to TopicP<sub>A</sub>, one would have the following, with an of-of sequence.



In conclusion, the subtle distinction between of-C, B, A, and \*of-C, of-B, A is explained by combining the idea that projections in the  $\omega$ -layer are optionally present and a case intervention effect.

# 3.3 Accounting for 'optional' resumptive pronouns

Another property of constructions with sequences of topics in BP is that they optionally allow resumptive pronouns, as exemplified below.

(84) a. C, A of-B (of it),

## b. a caneca, a flor do fundo (dela), (foi) ONTEM<sub>F</sub> (que)

the mug, the flower of-the bottom (of it), (was) YESTERDAY<sub>F</sub> (that) minha mãe pintou ela.

my mom painted her.

'As for the mug, as for the flower of the bottom, it was yesterday that my mom painted it'

(85) a. B of-C, A (of it),

b. o fundo da caneca, a flor (dele), (foi) ONTEM<sub>F</sub> (que)

the bottom of-the mug, the flower (of it), (was) YESTERDAY<sub>F</sub> (that) minha mãe pintou ela.

my mom painted her.

'As for the bottom of the mug, as for the flower, it was yesterday that My mom painted it'

```
(86) a. C, B (of it), A (of it), ^{7}
```

b. a caneca, o fundo (dela), a flor (dele), (foi)  $ONTEM_F$  (que) the mug, the bottom (of it), the flower (of it), (was) YESTERDAY<sub>F</sub> (that) minha mãe pintou ela.

my mom painted her.

'As for the mug, as for the bottom, as for the flower, it was yesterday that My mom painted it'

To account for the presence of resumptive pronouns, I follow Grohmann's 2000 system in which anti-locality violations may be rescued by the operation Copy Spell Out. In this view, the pronunciation of a copy/ trace as a resumptive pronoun rescues anti-

<sup>&</sup>lt;sup>7</sup> For some speakers, the word *fundo* 'bottom' used in example (86) seems to be incompatible with a resumptive pronoun due to its low referentiality. To my own judgments, the example above is acceptable. The following example makes the same point without the referentiality issue:

<sup>(</sup>i) Essa cidadezinha, o desenho dela, a reprodução dele, foi ontem que minha mãe encomendeu ela.

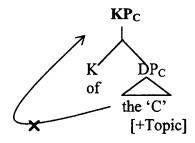
This little-city, the drawing of-her, the reproduction of-him, was yesterday that my mother ordered it. 'As for this little city, as for the drawing of it, as for the reproduction of it, it was yesterday that my mother

ordered it.'

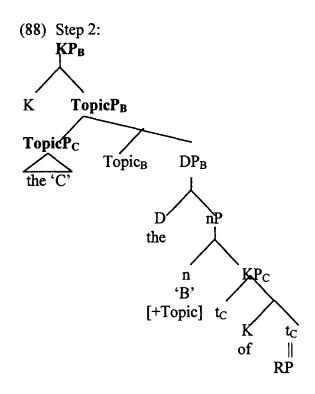
locality violations. It is well-known that resumptives rescue standard locality violations. I will show here that if resumptive pronouns rescue anti-locality violations in the same way they rescue standard locality violations, it is possible to successfully explain the patterns of resumptive pronouns found in constructions with multiple topics in BP.

I will concentrate my discussion on the sentence in (86), which is the most complex case. As discussed in section 3.1 with the tree in (69),  $DP_C$  cannot move to spec-TopicP<sub>C</sub> within its own TNP due to the anti-locality condition, which bans movements that are too short. Following the same line of reasoning, moving  $DP_C$  to the specifier of KP<sub>C</sub> is a violation of the anti-locality condition, as exemplified in the tree in (87).



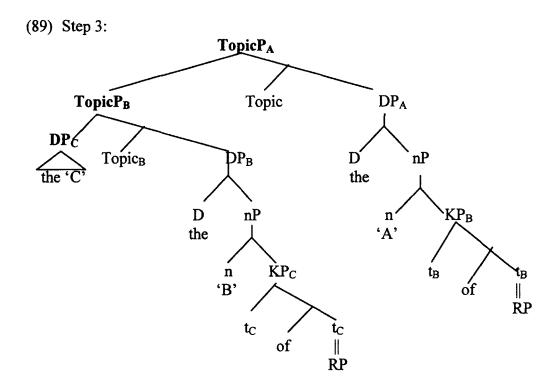


Suppose, however, that we do make this illicit movement, but rescue the derivation by spelling out the copy of the moved  $DP_C$  as a resumptive pronoun.  $DP_C$  can then move to its final landing position, spec-TopicP<sub>B</sub>, as shown below.



This is the point in the discussion where the notion of phase becomes necessary. As I briefly discussed in chapter 1, I assume with Bošković 2010c that the highest projection within a TNP always counts as a phase; given this, KP is a phase whenever present in the structure. In the derivation above, DP<sub>c</sub> then must move through spec-KP<sub>c</sub> out of the TNP given the PIC, which requires that a moving phrase must be at the edge of the phase in order to be eligible for movement outside the phase. As discussed above, DP<sub>c</sub> can move to spec-KP<sub>c</sub> only if resumptivization is employed.

In the next step of the derivation,  $TopicP_B$  moves through spec-KP<sub>B</sub> out of its own TNP, which also yields a violation of the anti-locality condition. If this violation is also rescued by spelling out the copy of the moved DP<sub>B</sub> as a resumptive pronoun, then we obtain the tree in (89) below with two resumptive pronouns.



The derivation above yields the desired result, i.e. the sequence [C, B of-it, A of-it]. The positions in which the resumptive pronouns appear are successfully accounted for.

The conclusion of this section is that the patterns of resumptive pronouns can be explained by the anti-locality condition and the resumptive pronouns, as a rescue strategy for anti-locality violations.

### 4. Some notes on thematic roles

The occurrence of multiple topics is constrained in many ways, for instance, in the number of inversed multiple topics. It is possible to come up with examples with four or more DP topics, but they become progressively degraded the more topics are added, since it is harder to process them. By adding determiners like *esse* 'this' and *aquele* 'that', resumptive pronouns, or additional contextualizing elements, they improve considerably. Sequences with three DP topics may be slightly degraded in comparison with the ones with two DP topics, but I have still used them since they provide the most interesting patterns.

Another way in which the occurrence of multiple topics is constrained has to do with the semantic relation between the traditional head of the TNP and the arguments that undergo topicalization. The generalization is that only modifiers that are complements of  $N^{\circ}$  can undergo topicalization in multiple topic constructions without pseudoprepositions or resumptives. The great majority of the acceptable cases involve partwhole relations, such as cases of inalienable possession and some types of locatives, but other relations, such as sequences of themes, are also allowed.

(90) a. O parafuso do pneu daquele carro (part-whole)

the screw of-the tire of-this car

'the screw of the tire of that car'

b. Aquele carro, o pneu, o parafuso, o meu mecânico não conseguiu
that car, the tire, the screw, the my mechanic not managed
desenroscar ele.

unscrew it.

'As for the car, as for its tire, as for the screw, my mechanic didn't manage to unscrew it.'

(91) a. A unha desse dedinho aqui da minha mão (inalienable possession)
the nail of-this little-finger here of-the my hand
'The nail of the little-finger here of my hand'
b. A minha mão, esse dedinho aqui, a unha, (fui) eu (que) pintei ela.
the my hand, this little-finger here, the nail, (it-as) I (who) painted it
'As for my hand, as for the little finger here, as for the nail, it was me who painted

it.'

(92) a. A mancha da toalha dessa mesa (locative)

the spot of-the tablecloth of-this table

'The spot of the tablecloth of this table'

b. Essa mesa, a toalha, a mancha, (fui) eu (que) consegui limpar ela.This table, the tablecloth, the spot, (it-as) I (who) manage to clean her'As for this table, as for table cloth, as for the spot on it, it was me who manage to clean it.'

(93) a. A reprodução da pintura dessa cidadezinha (sequences of themes) the reproduction of-the picture of-this little city
'The reproduction of the picture of this little city'

b. Essa cidadezinha, a pintura, a reprodução, (foi) minha mãe (que)
this little-city, the picture, the reproduction,(it-was) my mother (that)
encomendou ela.

ordered it.

'As for the little city, as for the picture of it, as for the reproduction of the picture, (it was) my mother (who) ordered it' The example in (90) illustrates a sequence of three topics involving elements in a partwhole relation in which *o parafuso* 'the screw' is part of *o pneu* 'the tire' which is a part of *o carro* 'the car'. The example in (91) shows multiple topics involving inalienable possession, a kind of part-whole relation, and the example in (92) illustrates multiple topics involving a relation which is ambiguous between locative and part-whole. Finally, the example in (93) shows a sequence of themes in which *a cidadezinha* 'the little city' is the theme of *a pintura* 'the picture' and *a pintura* 'the picture' is the theme of *a reprodução* 'the reproduction'.

Contrasting with the examples above, there are other relations that result in unacceptable sequences of topics, such as alienable possession, kinship relations and sequences of agents.

(94) Alienable possession

a. Eu vendi o carro do João.

I sold the car of-the John

'I sold John's car.'

b. \*O João, o carro, (fui) eu (que) vendi (ele).

The John, the car, was I that sold it

'As for John, as for his car, it was me who sold it.'

(95) Kinship

a. Eu cumprimentei o pai da noiva do meu irmão.

I congratulated the father of-the bride of-the my brother

'I congratulated my brother's bride's father.'

b. \*O meu irmão, a noiva, o pai, (fui) eu (que) cumprimentei (ele)

The my brother, the bride, the father, was I that congratulated him

'As for brother, as for his bride, as for her father, it was me who congratulated him.'

(96) Agents

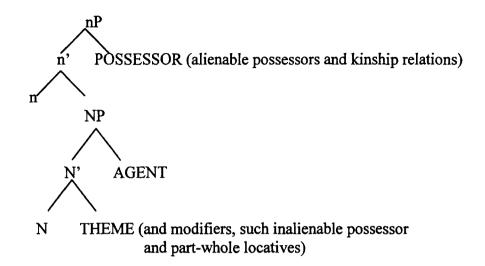
a. Eu entrevistei o empresário da autora do livro O lustre.

I interviewed the manager of-the author of-the book The Chandelier

'I interviewed the manager of the author of the book The Chandelier.'

b. \*O livro *O lustre*, a autora, o empresário, (fui) eu (que) entrevistei (ele). The book *The Chandelier*, the author, the manager, was I that interviewed him 'As for the book *The Chandelier*, as for its author's manager, was I that interviewed him'

This difference between inalienable possession, part-whole locatives and themes, on one hand, and alienable possession, kinship and agents, on the other hand, corresponds to a difference in the position these phrases occupy in the thematic structure. As mentioned in chapter 1, I adopt a view in which the nominal  $\theta$ -layer contains two projections, nP and NP. The assumption that the nominal  $\theta$ -layer is split is a version of Ticio's 2003 structure, adapted to BP. Consider (97). (97) Adapted  $\theta$ -layer for Brazilian TNPs



In the above structure, possessors (more specifically, alienable possessors and kinship relations) are base-generated as spec-nP, agents are base-generated as spec-NP, and themes (and other extractable semantic relations) are base-generated as complements of N. I will provide empirical evidence for the structure proposed above regarding the  $\theta$ -layer of the TNPs in section 2 of chapter 5, where I discuss tests involving extraction out of the nominal domain and binding. For the sake of the current discussion, the important point is that the only relations that can participate in multiple topic constructions without resumptives or pseudo-prepositions are the ones that are base-generated as complements of N.

At this point, I do not have an explanation for why modifiers in spec-nP and spec-NP cannot move up to the specifier of TopicP, and consequently, for the unacceptability of (94)b), (95)b) and (96)b). One possibility that comes to mind is that the unacceptability of (94)b), (95)b) and (96)b) is somehow related to a locality violation in the movement from their base position to the specifier of TopicP. If it is true that examples above involve a locality violation, then we predict that they will improve with a resumptive pronoun, which as seen above is a strategy to rescue locality violations. The prediction is borne out as can be seen in the following examples.

(98) O João, o carro dele, (fui) eu (que) vendi (ele).
The John, the car of-his, was I that sold it
'As for John, as for his car, it was me who sold it.'

(99) O meu irmão, a noiva dele, o pai dela, (fui) eu (que) cumprimenteiThe my brother, the bride of-his, the father of-her, was I that congratulated(ele)

him

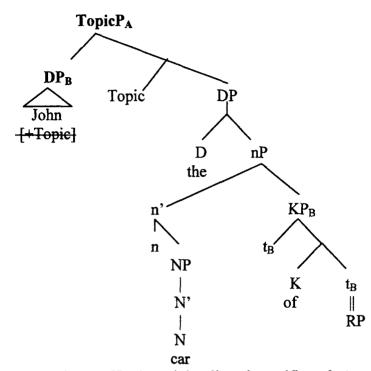
'As for brother, as for his bride, as for her father, it was me who congratulated him.'

(100)?O livro O lustre, a autora dele, o empresário dela, (fui) eu (que)
 The book The Chandelier, the author of-it, the manager of-her, was I that entrevistei (ele).

interviewed him

'As for the book *The Chandelier*, as for its author's manager, it was me who interviewed him'

Taking the case of alienable possessor, for instance, my analysis can be extended for these cases in the following manner. The relevant structure is given in (101). (101)Internal movement in the DP, when modifier is a possessor



In the structure above,  $KP_B$  is a right-aligned specifier of n', not a complement like in the other cases discussed in this chapter. The movement from  $TNP_B$  through spec- $KP_B$  yields a violation of the anti-locality condition. If this violation is rescued by spelling out the copy of the moved  $DP_B$  as a resumptive pronoun, then we obtain the tree in (101) above with a resumptive pronoun. Differently from the cases that involve a complement of N<sup>o</sup>, the resumptive pronoun is not optional in these cases, but obligatory. This analysis captures the improvement shown in (98). The reason why the sentence in (98) is not acceptable without resumptive pronouns may also be related to a locality or anti-locality, but I leave this issue open to further research.

#### 5. Final remarks

In this chapter I have shown that multiple topic constructions in BP are generated by internal rearrangements in the TNP. I have argued that the nominal architecture of BP is rich enough to accommodate a topic phrase in parallel to the left periphery of clauses. I showed that the properties of the nominal topic phrase are completely parallel to the properties of the topic phrase found in the clause. In addition to nominal TopicP, KP is another projection that has played an important role in my account of multiple topics in BP, because it is a link between two TNPs, the locus of case, and a phase, as the highest projection in the TNP. Assuming that the projections in the  $\omega$ -layer are optionally projected, I have shown that the presence or absence of KP is responsible for "optional" pseudo-preposition patterns and that resumptive pronouns can rescue anti-locality violations.

## Chapter 3

### **EXPRESSIVE CONTENT**

#### 1. Introduction

In this chapter I discuss constructions involving nouns that carry expressive content, such as certain abstract words, epithets and swear words in Brazilian Portuguese (BP).

(1)	[A	<u>beleza/ galinha/ droga</u>	da	Maria]	fugiu.	
	The(FEM)	beauty/ hen/ drug	of-the(FEM)	Mary	vanished.	
	'That lazy/ promiscuous/ piece of shit of Mary vanished'					

In (1), the abstract noun *beleza* 'beauty' is used ironically to describe *Maria* 'Mary' as 'vain, snobbish or lazy'; the epithet *galinha* 'hen' is a pejorative way of characterizing a person who has many lovers; and the swear word *droga* 'drug' expresses speaker's strong disapproval in a more general fashion, similarly to the English expression 'piece of shit', which I use to translate all members of this class.

The bracketed traditional nominal phrases (TNPs) in the above example follow the schema  $DP_1$ -of- $DP_2$  and contain nouns carrying expressive content. In (2) I show the labels I use to refer to the different items in this construction.

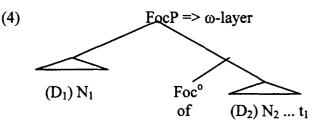
- (2)  $D_1 N_1$  of  $D_2 N_2$ 
  - A droga da Maria the drug of-the Mary 'that piece of shit of Mary'

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The main goal of this chapter is to show that these constructions involve movement of  $DP_1$  to the nominal left periphery, in line with the main proposal of this dissertation, discussed in the introduction, according to which clausal and nominal structures are parallel in the following fashion repeated below in (3) for convenience.

- (3) a. Clausal structure:  $CP_{\omega} > IP_{\phi} > vP_{\theta}$ 
  - b. Nominal structure:  $KP_{\omega} > DP_{\varphi} > nP_{\theta}$

nPs and vPs are thematic structural layers, DPs and IPs are inflectional layers, and KPs and CPs are discourse layers. BP, which allows a split discourse layer at the clausal level, will also allow it at the nominal level, given the TNP/ clause parallelism hypothesis in which TNP and clausal structures are fully parallel within a single language. Additionally, since BP allows High and Low Focus Phrases in the clause as discussed in chapter 1, it is also expected to allow them in the TNP. In the specific case of the constructions in (1), I argue that they involve movement of DP<sub>1</sub> to the nominal left periphery, to be more precise, to the nominal counterpart of the Focus Phrase. The tree below shows the most basic aspects of the structure.



The organization of this chapter is as follows. In section 2, I discuss the most important properties of constructions with expressive content introducing three different semantic classes: abstract nouns, epithets and swear words. In section 3 I review the

literature on focus projections, considering specifically what kinds of focus phrases BP allows as well as what kinds of phrases move to the focus projection. In section 4 I present the general structure of these constructions, discussing each nominal layer, i.e. theta-layer, phi-layer and omega-layer; I also provide independent support for the assumptions made. In section 5, I discuss argumental cases in which  $N_2$  is not bare, relating their somewhat unusual agreement patterns to their morphological properties and to the movement of DP<sub>1</sub> to nominal High FocusP. This section contains a detailed analysis of gender and number agreement, where I adopt the feature-sharing version of Agree and argue for the dissociation of valuation and interpretability. I also examine in detail the timing of the deletion of uninterpretable features. In section 6, I discuss argumental cases in which  $N_2$  is bare, arguing for a low focus projection within the TNP. I also discuss some consequences of this projection for regular bare singular constructions in BP.

### 2. The big picture

Nouns with expressive content within the TNP can be used in two major functions, within an argument of a verb as in (5), or within predicative expressions as in (6).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Whether the argument is a subject or an object may play a role in the acceptability of these constructions if  $N_2$  is a common noun instead of a proper name, as shown below.

<sup>(</sup>i) Eu visitei [a droga da escola ??(do João.)]/ [a droga do João]

I visited [the drug of-the school of John's]/ [the drug of-the John]

<sup>(</sup>ii) [A droga da escola (do João)]/ [a droga do João] desapareceu de repente.

<sup>[</sup>the drug of-the school of-the John]/ [the drug of-the John] vanished suddenly.

If  $N_2$  is a common noun in object position, it requires additional information to make it more specific. I will not discuss this difference in this chapter, limiting my analysis to the cases where agreement matters for the paradigm, such as the distinction between bare and non-bare  $N_2$ .

- (5) Eu comprei <u>a droga da casa/ uma droga de (uma) casa</u>.
  I bought the drug of-the house/ a drug of a house
  'I bought that piece of shit of a house.'
- (6) (Uma/ que) droga de casa, essa do João!
  A/how drug of house this of-the John
  'What a piece of shit of a house this one of John's is!'

To the best of my knowledge, Di Tullio and Saab 2006 were the first to observe, for Spanish, that these different functions are associated with different interpretations and should be analyzed as different configurations. Syntactic function is one of their criteria used to distinguish between what they call referential and attributive epithet constructions. In Spanish, referential constructions are argumental and definite, and show agreement between DP<sub>1</sub> and DP<sub>2</sub> while attributive constructions are predicative and indefinite, and do not show agreement between DP<sub>1</sub> and DP<sub>2</sub>. I will not go into the details of their classification, but limit myself to noticing that, different from Spanish, in BP TNPs containing expressive content within an argument can be definite or indefinite as in (5), and TNPs containing expressive content within predicative expressions can be indefinite, contain the pronoun *que* 'how' or bare, as shown in (6).

I limit the scope of this chapter to the argumental cases, both definite and indefinite, as exemplified in (5), leaving the predicative expressions to chapter 4, where I analyze them as nominal exclamatives.

With respect to agreement between  $DP_1$  and  $DP_2$ , the paradigm depends on the semantic class of the expressive word and on morpho-syntactic properties of  $N_2$ . BP has

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quite a few nouns that can carry expressive content in the construction studied here, as well as some adjectives, but I focus my discussion on nouns only. I propose a classification of these nouns into three semantic classes: abstract nouns, epithets and swear words.

(7) Abstract expressive nouns

Abeleza/ gracinha/ lindezada minha irmã/ Maria/ minha impressorathebeauty/ little-grace/ beautyof-the my sister/ Mary/ my printer

"that lazy of a printer/ sister of mine"

Abstract nouns with expressive content, such as those shown in (7), are usually combined with very specific classes of nouns, for instance, the ones presented above tend to be combined with persons and with pets and pet-objects as long as they can be characterized by the property described by the abstract word; for instance, *beauty* and *grace* in the examples above can characterize a large number of things.<sup>2</sup> When in a

the disgust of-the soup/ food

(i) a. O **amorzinho** de menina mentiu para mim.

<sup>&</sup>lt;sup>2</sup> Examples of abstract nouns that can only characterize very specific types of nouns are asco 'disgust' and *fiasco* 'failure', which combine with situations and events, and with food, respectively.

<sup>(</sup>i) a. O fiasco da festa/ apresentação/ campanha

the failure of-the party/ presentation/ campaign

<sup>&</sup>quot;the failure of a party/ presentation/ campaign"

b. O asco da sopa/ comida

<sup>&</sup>quot;the disgust of a soup/ food"

In addition to that, abstract nouns like *amorzinho* 'little love' and maravilha 'wonder' can only be combined with bare  $N_2$ , which in BP are expressions of kind. In this case, they have a kind of ironic interpretation when used in a definite TNP, as shown below. This ironic interpretation is better translated by the phrase "the so called" in English.

the little-love of girl lied to me.

<sup>&</sup>quot;that so-called love of a girl lied to me."

b. A maravilha de cidade tem altos índices de criminalidade

the wonder of city has high rates of criminality

<sup>&</sup>quot;that so-called wonder of a city has high rates of criminality."

definite TNP, these abstract nouns can only convey irony and express the property of being 'vain, snobbish or lazy'.

(8) Epithets

 A
 mosca-morta/ galinha/ banana/ laranja
 da minha irmã/ Maria/

 The
 fly-dead/ hen/ banana/ orange
 of-the my sister/ Mary

 \*minha impressora

my printer

"That stiff/ promiscuous/ wimp/ fool of a sister of mine/ Mary"

Epithets in the strict sense of the term were originally concrete nouns applied metaphorically to persons to describe an attributed quality. The epithets shown in (8) and a large number of others collected during my research can only and exclusively be combined with persons, with exceptions for pets and pet-objects when they are attributed anthropomorphic characteristics by the speaker, and only if they can be characterized by the property described by the epithet. One curious aspect of epithets is that each of them has a very specific meaning that sometimes can no longer be associated with the literal meaning of the term that they have originated from. In the examples above, for instance, *mosca-morta* 'dead fly' is someone who is stiff and not lively, *galinha* 'hen' is a promiscuous person, *banana* 'banana' is a wimp, and *laranja* 'orange' is a fool who was blamed for something they did not do, especially in a money laundering operation.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> For the sake of completeness, I would like to add to the list of **epithets** in the strict sense the following ones, which were suggested by my informants and peers. The translations next to them are literal translations: *animal* 'animal', *anta* 'tapir', *babaca* 'idiot', *babão* 'fool', *bacana* 'rich, cool', *barata tonta* 'flustered cockroach', *bundão* 'big bottom', *burro(a)* 'donkey', *cachorro(a)* 'dog', *canalha* 'scoundrel', *corno(a)* 'cheated man', *cuzão* 'big bottom', *doido(a)* 'crazy', *escroto(a)* 'scrotum', *filho(a)-da-mãe* 'son

(9) Swear words

 A
 merda/ bosta/ porcaria/ porra/ droga
 da minha irmã/ Maria/

 the
 shit/ crap/ garbage/ semen/ drug
 of-the my sister/ Mary/

 minha impressora

my printer

All: "the piece of shit of my printer/sister"

Finally, swear words shown in (9), which were originally concrete nouns but are now somewhat empty semantically, can be freely used for any type of noun – person, animal, object, situation, etc. – and they all mean pretty much the same thing, i.e. they are all used to express speakers strong negative feelings toward something or someone, similarly to the English 'piece of shit' expression that I used to translate them.<sup>4</sup>

of the mother', filho(a)-da-puta 'son of the whore', idiota 'idiot', pamonha 'combread', peste 'pest', porre 'drunk', and puto(a) 'whore'.

The epithet gato(a) 'cat' does not convey an offensive characterization, although it is slightly vulgar, meaning sexually attractive.

I removed from the main text of this chapter a number of epithets used to express prejudiced views against minorities based on gender, ethnicity and/or sexual orientation. All of them are epithets in the strict sense and are used exclusively for humans. The ones that are offensive to homosexuals are only combined with male persons (I reserve the right of not naming them); the ones that are offensive to women are only combined with female persons and usually originate from animal designations, *perua* 'female turkey', *piranha* 'piranha', *vaca* 'cow', *cadela* 'bitch', *égua* 'mare', etc.; and the ones that are offensive to people who live in the countryside can usually be combined with female or male persons, *matuto* 'countryside person', *caipira* 'countryside person', *zé bedeu* 'nosy John', *zé ruela* 'smallroad John', *bicho-do-mato* 'beast of the jungle', etc.

The only masculine swear word that I found is caralho 'dick'.

One special note should be made with respect to the **abstract word** beleza 'beauty', which nowadays is used with feminine diminutive when used for women, a belezinha 'the little pretty' and with masculine augmentative when used for men, o belezão 'the big pretty'. These derived versions may follow different rules from the original noun, but I will leave this issue open for further study.

<sup>&</sup>lt;sup>4</sup> It is important to notice that different speakers assign slightly different semantic restrictions to some of the expressive nouns presented here. For instance, for some speakers, *porcaria* 'trash' can only be used for [-animate] nouns; for other speakers, *porra* 'semen' can only be an interjection and it cannot occur within the TNP. The results described above are my own judgments and of my informants who are from different parts of Brazil, hence, in spite of potential minor individual variation, they can be taken to be representative of the whole country.

Differently from epithets, which always have to be directed at someone, swear words are self-sufficient interjections, used to express emotional states.

The semantic class of an expressive word is crucial for its pattern of agreement, more precisely agreement is optional when the expressive noun is a swear word, but obligatory with expressive nouns and epithets. In addition to the semantic class of the expressive word, the agreement patterns depend on morpho-syntactic properties of  $N_2$ ; nearly all epithets are incompatible with bare  $N_2$ . When  $N_2$  is bare, there is never agreement between DP<sub>1</sub> and DP<sub>2</sub>. When  $N_2$  is indefinite, the agreement between DP<sub>1</sub> and DP<sub>2</sub> is in gender and number. When  $N_2$  is definite, the agreement between DP<sub>1</sub> and DP<sub>2</sub> is in gender and number, as well as in definiteness. Before I discuss the actual data and present my analysis of these properties, I will review the literature on focus positions in the clause and specify the predictions for the focus projections within the TNP under the strong clause/TNP parallelism hypothesis on the available projections.

### 3. Review of focus positions

As discussed in chapters 1-2, I follow a strong version of the parallelism hypothesis and argue that the structure of clauses and TNPs are parallel in the way shown in (10) below.

(10) Nominal structure: 
$$KP > TopP > High FocP > DP > ... Low FocP > nP > NP$$
  
Clausal structure:  $CP > TopP > High FocP > IP > ... Low FocP > vP > VP$ 

Following Ormazabal 1991, KP is the highest nominal projection, which also plays a role in the extraction of phrases out of the TNP, i.e. phrases move through KP out of the TNP. Following Rizzi 1997, I assume that, when needed, the clausal left periphery can be split; however, differently from Rizzi 1997, there is no evidence for the projection FinP in the specific case of BP. I refer the reader to the discussion of this issue in section 3 of chapter 1. Evidence for at least three functional projections in the clausal left periphery in BP can be best seen in embedded clauses, as shown below.

(11) Eu acho [CP [C' que [TopP esse rapaz [FocP PRA MARIA (que) [TP você deve
I think that this young-men to-theMary (that) you should apresentar (ele), não para o João.

introduce him, not to the John

'I think that, as for this painting, to Mary (not to John) you should buy it'.

In BP, the complementizer word *que* 'that' is uncontroversially taken to be the head of CP.<sup>5</sup> DP-topics, such as *esse rapaz* 'this young men' above, receive an aboutness interpretation and the PP *pra Maria* 'to Mary' bears contrastive focus. Giving the strong version of the parallelism hypothesis I pursue in this dissertation, the TNPs in BP should contain nominal counterparts of CP > TopicP > FocusP. From now on, I concentrate my discussion on focus-related phenomena.

There are at least three types of movement that target spec-FocusP in BP: whmovement, contrastive focus, and exclamative movement. The first two types have been extensively described in the literature on BP (Figueiredo Silva 1996, Grolla 2000, Mioto

<sup>&</sup>lt;sup>5</sup> The traditional grammar distinguishes up to 25 distinct functions for the word *que* in BP. The relevant ones for my discussion here are: a) *que* 'that' which is the complementizer word that links two clauses as in (11) above; b) *que* that may follow a focused/ exclamative/ wh phrase, which has been analyzed as head of FocP (cf. example (12)-(14) later in the discussion); c) *que* 'how', which is a degree wh-word that initiates an exclamative phrase, e.g. *que linda* 'how pretty', d) *que* 'which', which is an interrogative wh-word, e.g. *que casa você comprou?* 'Which house did you buy?' and e) *que* 'who/that', which is a relative pronoun, e.g. o homem que eu amo é alto 'the man who I love is tall'.

2001, Bastos 2001, 2003, 2009b, among others) and the third type was recently discussed in Bastos 2008, 2011.

(12) Wh-movement

(A Maria, ) o que (que) você comprou pra ela?the Mary what (that) you bought for her'As for Mary, what did you buy for her?'

(13) Contrastive focus movement

(A Maria, ) A FLOR (que) você comprou pra ela (não o chocolate.)
the Mary the flower (that) you bought for her (not the chocolate.)
'As for Mary, it is the flower the you bought for her, not the chocolate.'

(14) Exclamative movement

(A Maria, ) que flor linda (que) você comprou pra ela!
the Mary what flower pretty (that) you bought for her
'As for Mary, what a beautiful flower you bought for her!'

These three types of fronted phrases can be optionally followed by que 'that', which has been analyzed as the head of focus phrase. In the examples above, a Maria 'the Mary' receives aboutness interpretation and can optionally precede wh-phrases, contrastive focus phrases and exclamative phrases. This fact is compatible with the hierarchy Topic>Focus.

Another important property of wh-movement, contrastive focus movement and exclamative movement is that they cannot co-occur.

(15) \*WH > focus

\*O que (que) (foi) PRA MARIA (que) você comprou? the what (that) (was) TO MARY (that) you bought 'What is the thing, such that it was to Mary that you bought?'

\* (Foi) PRA MARIA (que) o que (que) você comprou?

(was) TO MARY (that) the what (that) you bought

'What is the thing, such that it was to Mary that you bought?'

```
(17) *excl > focus
```

\* Que flor linda (que) (foi) PRA MARIA (que) você comprou!
What flower pretty (that) (was) TO MARY (that) you bought
'What a beautiful flower this is and it was to Mary that you bought it'

\* Que flor linda (que) (foi) pra quem (que) você comprou!?
What flower pretty (that) (was) to whom (that) you bought
'What a beautiful flower this is and to whom you bought it'

(20) \*wh > excl

* Pra quem (que)	que flor linda (que)	você comprou!?				
To whom (that)	what flower pretty (that)	you bought				
'What a beautiful flower this is and to whom you bought it'						

My conclusion from these facts is that wh-movement, contrastive focus movement and exclamative movement target the same projection in BP's clausal left periphery, that is, the High Focus projection, which hosts movement driven by different operators.

There is yet another kind of operator-driven movement that targets the High FocusP. In Bastos 2008, 2011, I studied certain constructions involving movement to the clausal left periphery. These constructions exemplified below in (21)-(22) have in common the property of conveying a strong negative-bias and speaker disapproval of the content of the main assertion.<sup>6</sup>

(21) Fake negation-cleft

(E) não é que o João vendeu o carro para a Maria!

(And) not is that the John sold the car to the Mary

"John sold the car to Mary (and the speaker disapproves it)"

<sup>&</sup>lt;sup>6</sup> In addition to the constructions exemplified above, in Bastos-Gee 2008, 2011, I also studied a low fake negation construction and an ethical pronoun construction. In Bastos 2006, 2007 I proposed that the ethical pronoun is actually in a projection within the clausal inflection layer, which I called OrientP. The syntactic analysis for the ethical pronoun does not extend to the fake-negation cleft and the *but-how* expression discussed above, which is reflected in word order, i.e. the ethical pronoun follows the subject while the fake-negation cleft and the *but-how* expression precede the subject of the sentence.

#### (22) "but-how" expression

(Mas) como o João vendeu o carro pra Maria! (But) how the John sold the car to the Mary "John sold the car to Mary (and the speaker disapproves it)" Alternative reading: "How dare John sold the car to Mary!"

At first sight, the sentence in (21) resembles a negative cleft construction and the expression (e) não é que 'and it is not that' resembles a negative cleft. However, the content of (22) is not negative; this sentence is, in fact, an affirmative sentence that strongly expresses speaker's disapproval and surprise toward the main assertion. Similarly, the sentence in (22) contains the wh-word *como* 'how' but it is not a question; this sentence is also an affirmative sentence with a strong negative-bias towards the main statement. Speakers of BP distinguish the sentences in (21)-(22) from the real negative cleft and the real how-question by their different pitch patterns, i.e. they have an exclamative intonation contour (21)-(22) which is different from the contour of sentences with contrastive focus and wh-questions. In Bastos 2008, 2011 I analyzed these constructions as a subtype of exclamative constructions and argued that the inference, a.k.a. the "bothering inference", comes from a specialized exclamative operator that correlates the main assertion with speaker's disapproval towards it.

In addition to the strong negative-bias and speaker disapproval that led me to correlate them with the exclamative type, these constructions are incompatible with whphrases, contrastively focused phrases and exclamative phrases within the same clause, as exemplified below. (23) Wh-phrase > Fake negation-cleft > wh-phrase

*(Pra quem),	(e) não é que	(pra quem),	o João vendeu o	carro?
(To whom)	(and) not is that	(to whom)	the John sold the	he car?
"John sold the car	to Mary, not to M	fartha (and the spea	aker disapproves i	t)"

(24) Wh-phrase > "but-how" expression > wh-phrase

\*(Pra quem), (mas) como (pra quem), o João vendeu o carro?
(To whom) (but) how (to whom) the John sold the car?
"To whom did John sold the car? (and the speaker disapproves it)"

(25) Contrastive phrase > Fake negation-cleft > contrastive phrase

*(PRA MARIA),	(e) não é que	(PRA MARIA),	o João vendeu	i o carro,
(TO MARY)	(and) not is that	t (TO MARY)	the John sold	the car,
não pra Marta!				

not to Martha

"John sold the car to Mary, not to Martha (and the speaker disapproves it)"

(26) Contrastive phrase > "but-how" expression > contrastive phrase

\*(PRA MARIA), (mas) como (PRA MARIA), o João vendeu o carro, (TO MARY) (but) how (TO MARY) the John sold the car, não pra Marta!
not to Martha

"John sold the car to Mary, not to Martha (and the speaker disapproves it)"

(27) Exclamative phrase > Fake negation-cleft > exclamative phrase

\*(Que carro lindo), (e) não é que (que carro lindo), o João vendeu pra Maria!
(What a pretty car) (and) not is that (what a pretty car) the John sold to Mary!
"John sold the car to Mary, not to Martha (and the speaker disapproves it)"

(28) Exclamative phrase > "but-how" expression > exclamative phrase

\*(Que carro lindo), (mas) como (que carro lindo), o João vendeu (What a pretty car) (but) how (what a pretty car) the John sold pra Maria!

to Mary!

"John sold the car to Mary, not to Martha (and the speaker disapproves it)"

The examples in (23)-(24) show that wh-phrases in the left periphery and the "bother" type of phrases cannot co-exist in the same left periphery. The examples in (25)-(26) show that the same is true for focused phrases and "bother" phrases in the same left periphery. Finally, the examples in (27)-(28) make the same point for exclamative phrases and "bother" phrases. My conclusion from these results is that "bother" phrases also move to spec-High-FocusP. The incompatibility results from competition for the same syntactic position.

Similarly to what was shown above for other types of movement to spec-FocusP, "bother" phrases can be preceded by topicalized phrases, as shown below.

### (29) Fake negation-cleft

(A Maria), (e) não é que o João vendeu o carro pra ela!
(The Mary), (and) not is that the John sold the car to her
"As for Mary, John sold the car to her (and the speaker disapproves it)"

(30) "but-how" expression

(A Maria), (mas) como o João vendeu o carro pra ela!

(The Mary), (but) how the John sold the car to her

"As for Mary, John sold the car to her (and the speaker disapproves it)"

The data in (29)-(30) above show that "bother" phrases are in a lower position than topicalized phrases, which can be taken to provide further evidence that movement triggered by the bothering operator also targets High FocusP in BP.

Among the four types of operator-driven movements that target clausal spec-FocusP in BP, the movement of the expressive content within the TNP to spec-FocusP has more properties in common with the bothering type. Nouns with expressive content, such as the ones studied in this chapter, have a negative-bias and express speaker's disapproval, not towards a statement, but towards a noun, usually a person or an object. Another similarity is that phrases that trigger the bothering inference are idiomatic expressions, such as  $e \ não \ e \ que$  'and it is not that' and mas como 'but how'; in other words, the original negative and interrogative meaning of these phrases were lost in favor of the bothering interpretation; this is also the case for most expressive content, which were originally concrete or abstract words that became idiomatic expressions. At this point, I turn my attention to the properties of the low clausal focus projection in BP. Recent studies in BP on quantified expressions (Lacerda 2011) and extraction out of the TNP (Avelar 2006) have argued for a low left periphery in BP in the sense of Belletti 2004. The examples discussed in their work are compatible with (low) focus interpretation. Consider, for instance, the example in (31) and its structure, adapted from Lacerda 2011.

(31) a. Os alunos fizeram todos[focus] a prova.

the students did all the exam

'All the students did the exam.'

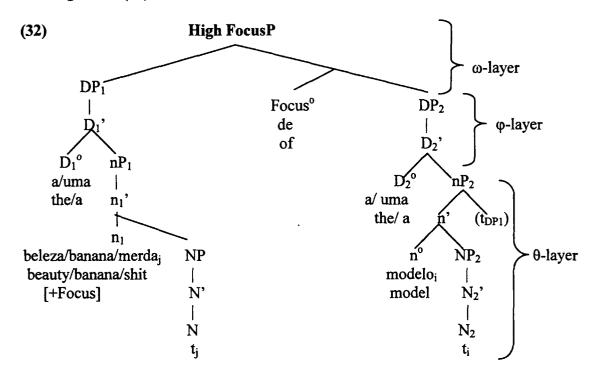
b.  $[TP [DP \text{ os alunos}]_d \text{ fizeram}_v [FocP [QP \text{ todos } t_d]_q t_v [vP t_q t_v [vP t_v a \text{ prova}]$ 

In the above example the quantifier *todos* 'all' is interpreted as focused, and it is in a low syntactic position. As for the interpretation of low focus in the clause in BP, further study is necessary to determine what types of foci can be found in the lower left periphery in this language. Differently from the study of high topic and high focus constructions in BP, the study of Low Focus projections is still in its initial stages. Some pertinent questions that still need to be addressed are whether some instances of wh-insitu in BP actually involve movement to Low FocusP and whether low contrastive focus is licensed in that position. In section 2 of chapter 5 of this dissertation I will discuss cases of extraction out of the TNP that provide additional evidence for low clausal FocusP. Tentatively, I assume that exclamative movement to the Low-FocusP is banned because the EXCL operator must always be in the highest  $\omega$ -layer but, more pertinent to the current chapter, I assume that movement of expressive content to the Low-FocusP is possible. Notice also that if the analysis in Bastos 2008, 2011 regarding the subtype of exclamatives with a bothering inference is correct, the bothering inference is never present in phrases moved to Low FocusP; it is exclusively found in the High FocusP.

Let us now summarize the predictions for the nominal structure, given the strong clause/ TNP parallelism on the available projections within a single language. High focus takes IP as its complement in the clause and it takes DP as its complement in the TNP. Nominal internal movements targeting High FocusP should be available for wh-phrases, contrastively focused phrases, exclamative phrases and the "bothering" type of phrases. Among these, I suggested that phrases containing expressive content should move to nominal high FocusP and that this movement is of the "bothering" type. The availability of a low focus projection in the clausal level in BP makes the prediction that a low focus projection should also be available in the TNP. I will argue that expressive content may in fact move into the spec of Low-FocusP.

## 4. The structure

In this section, I introduce the structure of constructions with expressive content in TNPs in argument position and discuss their most general aspects, such as inversed headedness and speaker-orientation. In sections 4 and 5, I study specific properties of these constructions when they take non-bare  $N_2$  and bare  $N_2$ , respectively. The relevant structure for constructions with expressive content when  $N_2$  is not bare is given in (32) below.<sup>7</sup>



The tree above shows a full TNP with non-bare  $N_2$ . This TNP contains a  $\theta$ -layer, a

 $\varphi$ -layer and a  $\omega$ -layer, which is the layer where discourse-related information is codified.

I will now discuss the different properties of these layers, starting with the  $\theta$ -layer.

'the promiscuous of my husband'

<sup>&</sup>lt;sup>7</sup> For different analyses of the structure of TNPs with expressive content proposed for Spanish, see Suffer 1990, Español-Echevarría 1997, Di Tullio and Saab 2006 and Di Tullio and Suffer 2004.

Suñer 1990 and Español-Echevarría 1997 adapt Moro's 1997 (see also Moro 2000) dynamic antisymmetry analysis of *books of this type* and *this type of books* to the case of constructions with expressive content. Their analyses were criticized by Di Tullio and Saab 2006 because not all cases of DP-of-DP constructions can be inverted in Spanish. The following is the structure for the referential cases.

Di Tullio and Saab 2006 and Di Tullio and Suñer 2004 distinguish two classes of expressive nouns in Spanish: attributive and referential.

<sup>(</sup>i) [DP el(DEF) [NumberP [SN gallina] [N' NUM(SING) [NP [DP mi marido] [N' N('human',male')]]]] the chicken my husband

By their description, it seems possible to have a clear-cut distinction between these two types in Spanish, but applying their tests to BP, these two classes don't find correspondents in BP. For this reason, I will propose an independent analysis of the phenomenon in question in BP.

#### 4.1 Nominal θ-layer

The  $\theta$ -layer of the TNP represented above contains NP and nP. The specifier and the complement of NP and the specifier of nP are positions where nominal arguments and adjectives are merged into the structure (see chapter 5 for detailed discussion). In the structure above, we can see that the TNP carrying expressive content, DP<sub>1</sub>, may be merged into the structure as spec-nP. I used parenthesis on the trace of  $DP_1$  in order to show that this is not the only option; however, whether or not  $DP_1$  merges into the structure as a specifier of nP is not random, it depends on the type of expressive content that DP1 has. To be more precise, expressive abstract nouns and epithets, such as beleza 'beauty' and banana 'banana', are base-generated as spec-nP and move to the position of spec-FocusP while swear words such as merda 'shit' are base-generated directly as spec-FocusP. This difference is motivated by semantic selection; there is semantic selection between  $DP_1$  and  $N_2$  when  $DP_1$  contains an expressive abstract noun or an epithet, but not when  $DP_1$  contains a swear word. As mentioned in section 1, abstract nouns can only be combined with very specific semantic classes of nouns and epithets can only be combined with people, which suggests that N<sub>2</sub> selects (i.e. "chooses") whether its modifiers can be abstract nouns or epithets; on the other hand, swear words can be combined with any kind of noun, including people, animals, objects, concepts, etc. There are no semantic restrictions on what swear words can characterize.

A syntactic piece of evidence for the distinction presented above can be seen below with respect to post-nominal occurrences of expressive content.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Notice that in a post-nominal position, expressive abstract nouns loose the "bothering" interpretation and can be interpreted as a positive aspect. This is compatible with my analysis, since I claim that the left-dislocated position is associated with the "bothering" interpretation due to a specialized operator.

(33) Abstract nouns and epithets

(34)

Eu tenho	um advogado	beleza/ gracinha/ mosca-morta/ galinha/
I have	a lawyer	beauty/ little-grace/ dead-fly/ hen/
banana/ lar	anja	
banana/ orar	nge	
"I have a la	wyer, who is nice/	nice/ stiff/ promiscuous/ wimp/ fool"
Swear words		
*Eu tenho	um advogado	merda/ bosta/ porcaria/ porra/ droga

I have a lawyer shit/ crap/ garbage/ semen/ drug

All: "I have a piece of shit of a lawyer"

If my analysis is correct, the expressive nouns in (33) are in spec-nP, their position of base-generation, where they can only remain if they are bare and do not have a [+focus] feature, behaving similarly to attributive adjectives. Notice that BP does not have productive noun-noun compounds, hence this possibility can be discarded. As for (34), these cases are not allowed because swear words cannot be base-generated lower in the structure, in spec-nP.

Another issue pertinent to the discussion of the  $\theta$ -layer in (32) is the role of N<sub>2</sub>. In (32), N<sub>2</sub> is the traditional head of the nominal phrase and the expressive noun N<sub>1</sub> within DP<sub>1</sub> is a modifier of N<sub>2</sub>. To put it differently, N<sub>2</sub>, which is the second noun in the linear order, is the semantic head of the TNP rather than N<sub>1</sub>, which is first in the linear order. I will refer to this property as inverse headedness.

It has been noticed crosslinguistically that in some constructions that follow the schema  $DP_1$ -of- $DP_2$ , the second noun in the linear order, rather than the first one, is the

traditional head of the TNP; examples include some partitive constructions, pseudopartitive constructions and TNPs with expressive contents, as I argue here.

Before I go into the discussion, this is a good moment to clarify the terminology used here. Strictly speaking the head of the TNP for those who adopt Abney's DP hypothesis is  $D^{\circ}$ ; furthermore, strictly speaking, the head of the TNP in the system I am using here with a split discourse layer within the TNP is whatever is the head of the highest projection of the TNP in a given phrase. This can vary, because the projections in the  $\omega$ -layer are optionally present. I use the term *traditional head* of the nominal phrase to refer to the noun that enters into semantic and syntactic relations with the rest of the sentence (i.e. for what was traditionally considered to be the NP head). For instance, the headedness of the pseudopartitive construction.

(35) She broke/ drank a bottle of wine.

The verbs to break and to drink show different semantic restrictions when selecting their complements, i.e., the verb to break selects a solid complement and the verb to drink selects a liquid complement. In Selkirk's 1977 analysis, bottle is the head of the complement of to break in the "container reading" but wine is the head of the complement of to drink in the "content reading". To account for the difference between container and content readings, she proposes that each reading corresponds to a different structure.

The content reading provides an example of a phrase in which  $N_2$  is actually the traditional head of the nominal phrase. TNPs with expressive content in BP, as well as in

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other languages, also display this property. The following examples involving anaphor binding show a contrast between sentences without expressive content in (36)a-b) and sentences with expressive content in (36)c).

(36) Binding

a. O João<sub>i</sub> /o mecânico<sub>i</sub> se<sub>i/i</sub> machucou na porta.

The John/ the mechanic himself hurt in-the door

'John/ the mechanic hurt himself in the door.'

b. O filho<sub>l</sub> do João<sub>j</sub>/ do mecânico<sub>i</sub> se\*i/\*j/l machucou na porta.

The son of-the John/ of-the mechanic himself hurt in-the door

'The son of John's/ of the mechanic hurt himself in the door.'

c. O filho-da-mãe do Joãoj/ do mecânicoi sei/j/ machucou na porta.

The son-of-the-mother of-the John/ of-the mechanic himself hurt in-the door

'The son of a bitch of John/ of the mechanic hurt himself in the door.'

Se 'himself/herself' is an anaphor. In (36)a), it can co-refer with o João 'John' and o mecânico 'the mechanic'. This pattern differs from (36)b), where the N<sub>1</sub> filho 'son' is the head of the TNP, and o João 'John'/ o mecânico 'the mechanic' is the complement of N<sub>1</sub>. In (36)b), the only noun that can co-refer with se 'himself/herself' is the N<sub>1</sub> filho 'son'. In (36)c) we can see that the epithet is transparent to binding, its presence does not change the possibility of co-reference between se 'himself/herself' and o João 'John'/ o mecânico 'the mechanic'. One may conclude from these facts that o João 'John' and o mecânico 'the mechanic' are the traditional heads of the nominal phrase in these cases as well. In other words, if they were not the heads the co-reference should not be possible, similarly to the case shown in (36)b).

Another piece of evidence is presented in (37), which shows the patterns of subject-verb agreement in sentences with TNPs with expressive contents when  $N_1$  is singular and  $N_2$  is plural.

(37) Subject-verb agreement

Essa merda desses taxistas \*estacionou/ estacionaram na frente da this shit of-these taxi-drivers parked(SING)/ parked(PL) in-the front of-the minha casa.

my house

'those piece of shit of taxi drivers parked in front of my house.'

In the above case, the verb must agree with  $N_2$  *taxistas* "taxi drivers", not with  $N_1$ *merda* "shit", which reinforces the conclusion that  $N_2$  is the head of the TNP in (37).

The binding patterns and the subject-verb agreement pattern are captured by my analysis in the following terms:  $DP_1$  is left-dislocated in the nominal left periphery, and there is percolation of features between  $D_2^{\circ}$  and the highest head of the nominal left periphery, as shown in the tree in (32) above.

## 4.2 Nominal *q*-layer

With respect to the  $\varphi$ -layer of the TNP represented in (32) above, I argue that DP is the nominal counterpart of IP (Cf. Abney 1987, Ogawa 2001, Bošković 2010b). Consequently, determiners, such as a/o 'the (FEM and MASC)', um/uma 'a (MASC and

FEM)', esse/ essa 'this (MASC and FEM)' and aquele/ aquela 'that (MASC and FEM), basegenerated as  $D^{\circ}$ , are nominal counterparts of auxiliary and modal verbs. I omit in (32) above further splits in the  $\varphi$ -layer, since they do not play a role in the analysis I propose in this chapter.

# 4.3 Nominal ω-layer

Let us now turn our attention to the nominal  $\omega$ -layer. The first important assumption that I make is that the projections in the  $\omega$ -layer are optionally present (see also chapter 2). A fully articulated  $\omega$ -layer contains KP>TopicP> High FocusP; however, in (32) above, only High FocusP is present.<sup>9</sup> When KP is not present in the structure, as in (32), High FocusP becomes the topmost projection and, as discussed in chapters 1 and 2, the topmost projection is a phase (cf. Bošković 2010c). The notion of nominal phase will play a role in my analysis in section 5.2 of this chapter.

Recall that the cases discussed in this chapter involve TNPs with expressive content serving as arguments, which means that the TNP merges with a verb system, either as an internal or an external argument of a verb. In chapter 2, I argued that, if TopicP is present in the nominal  $\omega$ -layer, its presence in between the case assigner/checker and the DP interferes with case checking/ valuation. Differently from that case, the presence of High FocusP in between the case assigner/checker and the DP does not cause the sentence to crash. I attribute this to the presence of the pseudo-preposition *de* 'of' is the overt-realization of the nominal head Focus<sup>0</sup>, as shown in (32), which can check/ value the case of a DP it

<sup>&</sup>lt;sup>9</sup> For the most part, KP is only present when its head, the pseudo-preposition *de* 'of', is present in the sentence. This is usually the case for TNPs embedded under other TNPs.

c-commands.<sup>10</sup> Regarding similarities between clauses and TNPs, the overt realization of nominal Focus<sup>o</sup> is parallel to the overt-realization of clausal Focus<sup>o</sup> as the word *que* 'that', exemplified in (12)-(14) and discussed in section 3 in the review of clausal focus movement. One apparent difference between these two instances of Focus<sup>o</sup> is that the realization of clausal Focus<sup>o</sup> is optional while the realization of nominal Focus<sup>o</sup> is obligatory. This follows from case considerations; if Focus<sup>o</sup> in the TNP is not realized, the DP that normally follows it will not have its case checked/ valued. To put it differently, the nominal Focus<sup>o</sup>, similarly to its clausal counterpart, is in principle optionally realized, but the cases where it is not there are ruled out for independent reasons.

In the structure in (32) above,  $DP_1$  occupies the spec-FocusP. As discussed above, if  $DP_1$  contains an abstract noun or an epithet, it moves to spec-FocusP from spec-nP; if  $DP_1$  is a swear word, it is base-generated as spec-FocusP. The difference between these two semantic types of expressive words is crucial to my analysis of agreement, which will be developed in the next section.

If  $DP_1$  is indeed located in spec-FocusP, we predict that extraction out of a TNP under consideration here, which has filled nominal spec-FocusP, should yield an intervention effect similar to what is found in the clause when a wh-phrase moves across a filled clausal spec-FocusP, as exemplified below.

<sup>&</sup>lt;sup>10</sup> Notice that the *de* 'of' from chapter 2 is the head of KP, which is present in embedded TNPs.

(38) Embedded focus construction

A Maria disse que [FoCP PRO JOÃO], a Marta apresentou o cantor de MPB, The Mary said that [FoCP to-the John], the Martha introduced the singer of MPB, não pro Pedro.

not to-the Peter.

'Mary said that it was to John that Martha introduced the MPB singer, not to Peter.'

(39) Wh-construction

 $[F_{OCP} de que música]$  a Maria disse que a Marta apresentou o cantor t  $[F_{OCP} of what music]$  the Mary said that the Martha introduced the singer t pro Pedro?

to Peter?

'What is the music such that Mary said that Martha introduced a singer of it to Peter?'

(40) Wh across focus

?\*[ $_{FocP}$  de que música] a Maria disse que [ $_{FocP}$  PRO JOÃO], a Marta [ $_{FocP}$  of what music] the Mary said that [ $_{FocP}$  to-the John], the Martha apresentou o cantor t, não pro Pedro.

introduced the singer t, not to-the Peter.

'What is the music such that Mary said that Martha introduced a singer of it to John, not Peter?'

The example in (38) shows that embedded focus constructions are possible in BP and the example in (39) shows that long wh-questions are equally possible. The example in (40) shows that combining both types of focus movement yields an unacceptable result. Applying a similar test to a TNP with expressive content, we obtain the following result.

(41) Abstract noun/ epithet/ swear word

De que música você apresentou (?\* o beleza/ banana/ merda d)o cantor Of what music you introduced (?\* the beauty / banana/ shit of) the singer pro João?

to-the John?

"What is the music such that you introduced the singer to John?"

(42) Swear word

De quem	o seu filho rasgou	(? <b>* a merda d</b> )o	livro t?
Of whom	the your son ripped	(?* the shit of)the	book t?
"Who is the	e person such that your	son ripped his boo	k?"

As shown above, the prediction is borne out. In the examples above, *de quem* 'of whom' moves out of the TNP crossing an expressive noun and the resulting sentences are unacceptable.

Another piece of evidence for the availability of the  $\omega$ -layer and the presence of nominal FocusP in (32) concerns speaker-orientation. Expressive abstract nouns, epithets and swear words are interpreted as a semantic contribution of the speaker of the sentence, but syntactically they are clearly within the limits of a TNP. This observation is not new,

and it has been made for many languages. Just to cite a few cases, Aoun, Choueiri, and Hornstein (2001: 386) refer to this property of epithets in Lebanese Arabic as a "main clause" interpretation, and Aoun and Choueiri (2000:2–3) attest that some epithets in that language have an extra definite marker, a characteristic that distinguishes them from other nominal-internal items, but which reinforces the claim that they are nominal-internal. Similarly, Potts 2005 observes for English that expressions carrying expressive content, such as expressive adjectives and epithets, have "widest scope", and Huddleston and Pullum (2002:553) show that expressive adjectives in this language behave like strictly attributive adjectives, such as *former* and *premier*, in the sense that they must be prenominal and can co-occur with other adjectives in the TNP. Potts 2005 also shows that in German, expressive adjectives are case-marked just like all other adjectives.

This property of being at same time interpreted as part of the discourse-layer, on one hand, and internal to the TNP, on the other hand, is also present in BP.

(43) A Maria disse que o chefe reclamou que o <u>filho da mãe</u> do motorista the Mary said that the boss complained that the son of-the mother of-the driver sumiu.

vanished.

'Mary said the boss complained that son of a bitch of a driver vanished'

(44) A Maria disse que o chefe reclamou que o merda do motorista sumiu.
the Mary said that the boss complained that the shit of-the driver vanished.
'Mary said the boss complained that piece of shit of a driver vanished'

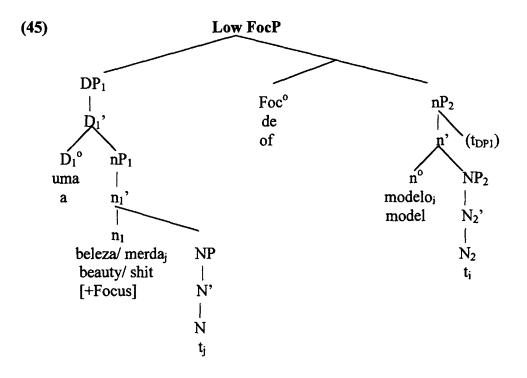
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On one hand, the negative opinion towards the driver in the sentences above is perceived as a contribution of the speaker, not as Mary's or her boss's. On the other hand, *filho da mãe* 'son of a bitch' and *merda* 'shit' are clearly within the TNP. It is actually not true for BP that items with expressive content behave exactly like other nominal-internal items, since such constructions have some special properties, which will be discussed next. However, the fact that a determiner precedes them strongly suggests that the expressive nouns are within the limits of the TNP.

The puzzle of the elements in question being interpreted as part of the  $\omega$ -layer and at the same time being nominal-internal is easy to explain under my analysis. TNPs contain their own  $\omega$ -layer, where, for instance, the "bothering" operator can access speaker's attitudes without any need for further movement to the clausal left periphery.

# 4.4 The reduced structure

The structure presented and discussed above concerns the cases in which  $N_2$  is not bare. When  $N_2$  is bare, the inflectional and high  $\omega$ -layers are not projected. The following tree exemplifies this reduced structure.



I will argue for the structure in (45) in section 6; what should be noticed at this point is that the main difference between the structure in (45) and the one in (32) is that in (45) above, there is a defective TNP containing only the  $\theta$ -layer. The bare singular noun does not project the  $\varphi$ -layer and the high  $\omega$ -layer. Notice, however, that although DP and KP are not projected, the low focus phrase that takes nP as its complement can be projected and host expressive phrases in its specifier. The availability of the low focus projection is predicted under the parallelism hypothesis, since, as discussed above, BP has a low focus phrase taking vP as its complement in the clause; the case in (45) is parallel to clauses in the relevant respect. This also means that bare nouns in BP are not entirely bare, since they can be taken as the complement of the low focus phrase. I

discuss the consequences of this analysis for constructions with expressive content in section  $6.^{11}$ 

In summary, in this section I presented, layer by layer, the properties of full TNPs that are relevant for a complete account of the syntax of expressive nouns in BP. Among other aspects, I discussed the position of base-generation of expressive nouns, their presence in the specifier of FocusP and the status of  $N_2$  as the traditional head of the nominal phrase. In the following two sections, I discuss the agreement patterns of expressive nouns in full TNPs and bare TNPs respectively.

# 5. Definite and Indefinite arguments with non-bare N<sub>2</sub>

This section is dedicated to argumental TNPs with non-bare  $N_2$ . Their structure corresponds to the tree in (32). My goal in this section is to show that a number of agreement properties, such as gender and number agreement and a definiteness issue in constructions with expressive content, can be accounted for under the proposed analysis given that the expressive content moves internally to high FocusP.

<sup>&</sup>lt;sup>11</sup> Notice that the properties of bare singular nouns in BP described above are different from the properties found in Spanish bare nouns. In Spanish, bare nouns are restricted to being objects of verbs like *tener* "to have", *comprar* "to buy" and other verbs of possession and acquisition; intensional verbs such as *buscar* "to look for", *necesitar* "to need" or *querer* "to want"; and verbs such as *llevar* "to wear" and *usar* "to use" while in BP they can be object of any kind of verb without restriction. Dobrovie-Sorin, Bleam, and Espinal 2006 and Espinal 2010 proposed for Spanish that bare singular nouns are simple NPs. This analysis has been recently challenged by Riqueros 2011, who shows, with extraction data, that there should be more structure with Spanish bare singular nouns. My analysis presented above meets both views half way by proposing that there should be more structure in the case of bare singular nouns, but not necessarily DP or any other inflectional projection.

## 5.1 The mechanics of agreement

Before I discuss gender, number and definiteness in constructions with expressive content, I will introduce the theoretical background of the minimalist framework that I will use in my account of agreement.

Following Chomsky 1995, I adopt the distinction between interpretable and uninterpretable features, where interpretable features receive interpretation in the semantics. Uninterpretable features, which do not receive an interpretation in semantics, must be deleted in the course of the derivation before they enter semantics, to prevent a Full Interpretation violation (Chomsky 1995, 2000, 2001). I also adopt the distinction between valued and unvalued features, where an unvalued feature F (probe) on element H scans its c-command domain for another instance of F (goal) to agree with (Chomsky 2000, 2001). Following Pesetsky and Torrego 2007 and Bošković 2009, 2010a, 2011 (contra Chomsky 2000, 2001), I assume that valuation and interpretability are independent from each other, and consequently, a lexical item can be uninterpretable and valued (uF, val), uninterpretable and unvalued (uF, []), interpretable and valued (iF, val), or interpretable and unvalued (iF, []).

I assume that valuation is a prerequisite for deletion, so unvalued features cannot be deleted. Regarding the deletion of uninterpretable features, I assume with Bošković 2009, 2010a, 2011 that uninterpretable **valued** features (uF, val) may be simply deleted any time without any need to undergo Agree, i.e. valuation, since they already have a value. This is contrary to Chomsky 2000, 2001 and Pesetsky and Torrego 2007, where all uninterpretable features, including valued ones, must undergo Agree, i.e. feature checking. (See Bošković 2009, 2010a, 2011 for empirical evidence that there are occurrences of valued uninterpretable features that never undergo feature checking, yet they don't cause a crash.) I will refer to this case as **premature deletion** of uninterpretable features. This assumption will play a crucial role in my account of the phenomenon under study here. With respect to uninterpretable **unvalued** features (uF, []), which must undergo valuation (recall that only valued features can be deleted), I will assume the standard view that, after they undergo Agree, they remain in the derivation only until the head of the next phase is introduced, i.e. they are deleted at the next phase level, assuming that a phase determines the point of transfer to the interfaces.

With respect to nominal phasehood, I follow Bošković 2010c that the highest projection in a TNP always counts as a phase. Bošković 2010c argues that all lexical categories (N, A, P, and V) project phases, but the exact projection that counts as a phase depends on the amount of functional structure above these elements, with the highest phrase in their extended domain functioning as a phase. In TNPs with expressive content, High FocusP is usually the highest projection of the TNP; therefore, it is the phase. On the other, in the reduced structure introduced above in section 4.4, Low FocusP is the highest projection; therefore, it counts as the phase. The notion of phase will be relevant to my analysis of gender agreement in section 5.2.

With respect to the mechanics of Agree, I follow Pesetsky and Torrego 2007 (see also Brody 1997, Frampton and Gutman 2000, and Frampton at al 2000) that agreement results in "feature sharing", not assignment of features. In Chomsky 2000, 2001, an unvalued feature F (probe) scans its c-command domain for another instance of F (goal), and if the goal has a value, its value is assigned to the probe. In the "feature sharing" version of Agree, instead of assigning a value to the probe, the feature of the probe is replaced with the feature of the goal and they become two instances of the same F. This mechanism makes different predictions from the standard assignment version of the Agree in cases of vacuous agreement. As noted by Frampton at al 2000, the standard assignment version of the Agree makes the prediction that Agree between an unvalued probe and an unvalued goal is either vacuous or impossible; on the other hand, the "feature sharing" version of Agree makes the prediction that Agree between two unvalued occurrences of F will turn the probe and the goal into two instances of the same F; when one of the two instances of the unvalued feature F undergoes Agree with a valued feature F later on, all three instances of F will share a value.

Regarding number and gender features, I take the standard assumption that phiprobing heads in BP probe for all phi-features together, i.e. BP has a non-split phiprobe.<sup>12</sup> With respect to number, I assume that the number feature's values are singular and plural in BP; the number feature in nouns is interpretable and valued, the number feature in adjectives is uninterpretable and unvalued and the number feature in determiners is uninterpretable and unvalued. With respect to gender, I follow Bošković 2009, 2010a, 2011 in assuming that there are two types of gender: the grammatical gender, which is uninterpretable, and the biologically based, natural gender, which is interpretable. As an illustration of this difference, Bošković 2009 notices a surprising difference between the following sentences in Serbo-Croatian with regard to last conjunct agreement.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Although, it is a standard assumption that the phi-probe is a non-split probe, languages may vary with respect to this (Bejar 2003). I will provide arguments to motivate the assumption that BP has a non-split phi-probe in section 5.3.1.

<sup>&</sup>lt;sup>13</sup> Examples were adapted from Bošković 2009; examples (5)b), (28) and (36)a).

- (46) Sve varošice i sva sela su lijepa.all towns.fem and all villages.neut are beautiful.pl.neut'All towns and all villages are beautiful.'
- (47) ?\*Sve žene i sva djeca su došla.
  all women.fem and all children.neut are left.pl.neut
  'All women and all children left.'
- (48) Part<sub>[number, gender]</sub> [&P[number] NP1[gender]</sub> [.... NP2[gender]]] EPP

Both sentences follow the schema in (48) (prior to the movement of &P), but the sentence in (46) allows last conjunct agreement (LCA) for gender while the sentence in (47) does not, i.e. the participle/ adjective can have neuter gender, just like the noun in the second conjunct, only in (46). Bošković's analysis for (46) above is that in LCA the participial/adjective probe (Part) matches &P and NP1 for number and gender respectively, but the valuation fails, since it cannot determine which of the two will be pied-piped due to McGinnis's 1998 lethal ambiguity/ the possibility of first conjunct extraction in SC (the first conjunct can be extracted in SC). Even though valuation fails, the uninterpretable gender feature of *varošice* 'towns' (NP1) in (46) is deleted after Match. A secondary Agree takes place matching &P for number and NP2 for gender (since the uninterpretable gender of NP1 is now out of the way; note that NP2 is not equidistant with &P and cannot undergo movement). This is responsible for the LCA for gender. With respect to (47) above, the same analysis applies; however, the gender

feature of žene 'women' is now interpretable and cannot be deleted. For this reason, LCA is blocked.

My analysis for gender agreement with nouns carrying expressive content follows the overall spirit of Bošković's analysis; in fact, I will provide additional evidence for the distinction between grammatical and natural gender as well as premature deletion of uninterpretable features. The gender feature's values in BP are feminine and masculine; the gender feature in nouns is valued while the gender feature of adjectives and determiners is unvalued. Expressive content is a mixed class of lexical items with some N-like properties and some A-like properties. For instance, they can function as complement of D like regular nouns and at the same time, their number and gender features may be unvalued like adjectives; in this case, they must be valued in the course of the derivation. I will show in the following sections that the three different classes of expressive nouns have different feature specifications for gender and number, for instance, some epithets are interpretable and unvalued; all swear words are uninterpretable and valued, etc.

One final assumption that I make is that certain features may have encyclopedic specifications (ES) associated with them, following Pesetsky and Torrego 2007. Pesetsky and Torrego 2007 argue that various tenses (past, present and future) do not correspond to values of a grammatical feature T, but constitute different sorts of encyclopedic information that may be associated with a positive value of the feature T. In this view, the +/- values of T participate in morphological agreement and are shared by two instances of F, but the encyclopedic specifications associated with that feature are not shared. I will explain the mechanism in more details later, when I argue that a definiteness effect found

in constructions with expressive content relates to the [+/-] values of a feature D and that each value of D is associated with different encyclopedic specifications; the positive value is associated with strong definite article and demonstratives while the negative value is associated with weak definite article and indefinites.

Now that we have all the ingredients of the analysis, let us get started with gender agreement. In the following sections I discuss gender and number separately for ease of exposition, and then later, I discuss evidence for the phi-probe as a non-split probe in BP.

# 5.2 Gender agreement

As in other Romance languages, determiners, nouns and adjectives agree in gender within the TNP in BP, as exemplified below.

(49) O pat-o pret-o versus a pat-a pret-a
The(MASC) duck-MASC black-MASC the(FEM) duck-FEM black-FEM
'The black duck'

In the above example, the noun gato(a) 'cat' and the adjective preto(a) 'black' are both biform, i.e. they have two distinct inflectional forms for gender. In the above example, the distinction is between the inflectional morpheme -o, masculine, and the inflectional morpheme -a, feminine. BP, like other Romance languages, distinguishes between masculine and feminine only, and when the reference to mix-gender groups is necessary, the suffix -0 is used.<sup>14</sup> The example in (50) shows different classes of nouns and ways of identifying gender in BP.

(50) a. heteronyms: o homem 'the(MASC) man' and a mulher 'the(FEM) woman'

b. inflectional biforms: o pato 'the(MASC) duck' and a pata 'the(FEM) duck-FEM'

c. uniforms: o/a pianista 'the(MASC)/ (FEM) pianist'

d. epicene: a zebra macho/ fêmea 'the(FEM) zebra male/ female'

e. grammatical gender only: a mesa 'the(FEM) table'

One of the most common ways of distinguishing natural gender in BP is through the semantic relation between two nouns with different stems, as in (50)a). The cases in which natural gender is expressed by inflectional forms are exemplified in (50)b) and referred to as biform nouns. Different from those, BP has some nouns that have only one form, but natural gender can be identified by the masculine or feminine determiners that accompany them, as in (50)c). The traditional grammar also mentions epicene nouns like the one in (50)d), which are usually animal common nouns with only one form for masculine and feminine, but to which the terms *macho/fēmea* 'male/female' can be added in order to disambiguate the biological gender of the animal. The last two cases are considered contextual disambiguation of the natural gender, not morphological properties. Importantly, the gender of the epicene noun itself does not change after the terms *macho/fēmea* 'male/female' are added to the phrase. Finally, BP does not have

<sup>&</sup>lt;sup>14</sup> This analysis is actually controversial in traditional and structuralist grammars. There are two lines of analysis: Câmara Jr. 1984, Macambira 1987, 1992, among others, argue that the morpheme -a is an inflectional morpheme for feminine and -o is a neutral form that indicates the class of the noun (thematic vowel). Kehdi (1990), among others, argues that there is a true opposition between the morpheme -a, feminine, and the morpheme -o, masculine.

neuter gender; even nouns that do not express biological gender are classified as masculine or feminine, as in (50)e) above. In the light of these distinctions, we can postulate at least two groups of nouns: (a) the nouns in (50)a-c) have an interpretable gender feature, since the gender corresponds to the biological distinction between female and male entities; (b) the nouns in (50)d-e) have an uninterpretable gender. The gender feature is valued in the nouns in BP, except for the nouns with expressive content, as I will discuss later.

Also relevant to my analysis is that some adjectives in BP are biform for gender and some are uniform, as exemplified below.

(51)	Homem bonit-o/ útil	versus	mulher bonit-a/ útil
	man pretty-MASC/ useful		woman pretty-FEM/ useful
	'handsome/ useful man'		'pretty/ useful woman'

In (51) the adjective bonito(a) 'pretty' if biform, i.e. it has two forms for masculine and feminine while the adjective *útil* 'useful' has only one. With respect to biform adjectives like bonito(a) 'pretty', I take the standard assumption that they are uninterpretable and unvalued for gender. As for uniform adjectives, I will take the radical view that in the construction under consideration here they are not specified for gender at all, i.e. they simply do not have the gender feature.

The properties described above for gender in nouns and adjectives are important, because, as noted above, nouns with expressive content are a mixed class of lexical items. They have some properties that are N-like and some properties that are A-like. I will now describe the main data regarding gender agreement in constructions with expressive content.

One of the most fascinating pieces of data regarding gender agreement in constructions with expressive content is the so-called "gender mismatch", which consists of apparent gender agreement between  $D_1$  with  $N_2$ , which ignores  $N_1$  although it is syntactically closer to  $D_1$ . This phenomenon has been observed for Spanish by Di Tullio and Saab 2006, Di Tullio and Suñer 2004, among others. In Spanish, differently from BP, the gender mismatch is only possible with what they call an attributive class of expressive nouns. This restriction is not found in BP, where the apparent gender mismatch is possible for nouns belonging to any of the three classes of expressive nouns found in this language, as shown below.<sup>15</sup>

(52) Abstract noun/epithet/swear word

O beleza/ banana/ merda do meu irmão the(MASC) beauty(FEM)/banana(FEM)/shit(FEM) of-the(MASC) my brother fugiu.

vanished.

'That promiscuous/ wimp/ fool of a brother of mine vanished.'

Beleza 'beauty' is an abstract noun, banana 'banana' is an epithet and merda 'shit' is a swear word. In BP, this apparent gender mismatch targets a very specific morphological class of nouns: they are all expressive nouns, feminine in their literal non-

<sup>&</sup>lt;sup>15</sup> All cases discussed in this chapter involve two TNPs. I put aside more complex examples involving three TNPs, such as examples like *o bosta do merda do N* 'the crap of the shit of N', which I leave for future research.

expressive origin, and ending with the suffix –a. There are no cases of gender mismatch between  $N_1$  and  $D_1$  with masculine  $N_1$  as exemplified below.<sup>16 17</sup>

(53) Swear word/ epithet/ epithet

O/\*Acaralho/animal/asnod-aMariathe(MASC)/the(FEM)dick(MASC)/animal(MASC)/donkey(MASC)of-the(FEM)Marysumiu.

vanished.

'That dick/ animal/ idiot of Mary vanished.'

The example in (53) shows that if  $N_1$  is masculine, a feminine  $D_1$  cannot precede it. This means that the so-called gender mismatch only targets a very specific class of expressive nouns. It is, however, a fact that the great majority of expressive nouns in BP is feminine.

Among the **epithets**, there are many that are biform nouns and many that were originally biform adjectives used now expressively. These cases do not show gender mismatch, but the gender of  $N_1$ , as well as  $D_1$ , is clearly dependent on the gender of  $N_2$ .

<sup>&</sup>lt;sup>16</sup> I found two feminine expressive epithets ending in the thematic vowel –e that allow gender mismatch. They are *peste* 'pest' and *gilete* 'gillette'. Except for these two words, all other feminine words that allow gender mismatch end with –a. I also found one, and only one, expressive feminine epithet ending with –a that does not allow gender mismatch. It is the epithet *anta* 'tapir', with which agreement between N<sub>1</sub> and D<sub>1</sub> is obligatory. All these exceptions are borrowed words from English, French and Native American Languages.

<sup>&</sup>lt;sup>17</sup> Thanks to Alberto Guerreiro (p.c.) who pointed out to me the colloquial neologism *a caralha* 'the(FEM) dick(FEM)', which derives a feminine form of the masculine swear word. His suggestion is that nouns that do not conform to the general rule might become regular in the historical evolution of the language.

(54) Epithet

	a. O	burr-o	d-o	João fugiu.
	the(MASC)	donkey-MASC	of-the(MASC)	John vanished.
	'That stupio	d John vanished.'		
	b. *a	burr-a	d-o	João fugiu.
	the(FEM)	donkey-FEM	of-the(MASC)	John vanished.
	'That stupic	d John vanished.'		
(55)	Epithet		-	
	a. *O	burr-o	d-a	Maria fugiu.
	the(MASC)	donkey-MASC	of-the(FEM)	Mary vanished.
	'That stupic	l Mary vanished.	3	
	b. a	burr-a	d-a	Maria fugiu.
	the(FEM)	donkey-FEM	of-the(FEM)	Mary vanished.
	'That stupic	l Mary vanished.	,	

The epithet *burro* 'donkey' is originally a biform noun. If it were valued for gender in its expressive usage, it should be possible for  $N_1$  and  $N_2$  to have different genders. The fact that this is not possible shows that its gender value is dependent on the gender value of  $N_2$  in the same way that the gender of biform adjectives is dependent on the gender of the noun they modify.

The class of **swear words** behaves differently from epithets and abstracts nouns. To the best of my knowledge, this is a new observation. Consider (56)-(57). (56) Swear word

a. O	merda	d-o	homem/	pat-o	sumiu.
the(MASC)	shit(FEM)	of-the(MASC)	man/	duck-MASC	vanished
'that piece of	of shit of a	man/duck vani	shed'		
b. A	merda	d-o	homem/	pat-o	sumiu.
the(FEM)	shit(FEM)	of-the(MASC)	man/	duck-MASC	vanished

'that piece of shit of a man/ duck vanished'

(57) Swear word

a. *O	merda	d-o	carro	sumiu.
the(MASC)	shit(FEM)	of-the(MASC)	car(MASC)	vanished
"that piece	of shit of car	vanished"		

b. A	merda	d-o	carro	sumiu.
the(FEM)	shit(FEM)	of-the(MASC)	car(MASC)	vanished
"that piece	of shit of ca	r vanished"		

In the above examples, gender agreement between  $D_1$  and  $N_2$  (i.e. the so-called "gender mismatch") is only possible if  $N_2$  has natural gender, but not possible if  $N_2$  has only grammatical gender.  $D_1$  can be masculine in (56)a) agreeing with the nouns *homem* 'man' and *pato* 'duck', but it cannot be masculine in (57)a) agreeing with *carro* 'car'. Notice that this issue does not arise with epithets and abstract nouns because they can only be combined with people, i.e. elements with natural gender, to start with.

Notice that this is not a case of "semantic" agreement in the traditional sense of "gender sylepsis" between  $D_1$  and  $N_2$ ; this is a real syntactic issue. One way of testing for the issue is to use an epicene, i.e. a noun that is either masculine or feminine, but allows natural gender disambiguation through the adjectives *macho* 'male' and *femea* 'female'. One example is provided below.

(58) A cobra macho sumiu.

the(FEM) snake male vanished

"the male snake vanished."

The word *cobra* 'snake' is grammatically feminine, and the adjective *macho* 'male' is used to contextually identify natural gender when the distinction is relevant, for instance, to contrast it with a female snake in the same context. The test has the following format. In TNPs with expressive content, if  $D_1$  agrees with the grammatical gender of  $N_2$ , it should be feminine; if  $D_1$  agrees with the contextually salient masculine gender, it should be masculine.

(59) Swear word

A/ \*o merda d-a cobra macho sumiu. the(FEM)/ the(MASC) shit the(FEM) snake male vanished "that piece of shit of a male snake vanished."

As shown above,  $D_1$  cannot agree with the semantic idea of masculine; the only agreement possible is the syntactic agreement. This shows that the gender mismatch is a syntactic phenomenon, and not a semantic, contextual phenomenon.

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Another way in which **swear words** are different from epithets and abstract nouns is that the so-called "gender mismatch" is optional for swear words, as shown in (56)-(57) above. As can be seen in the examples with swear words, there is always the possibility of  $D_1$  and  $N_1$  agreeing internally within their own TNP, and having a different gender from  $N_2$ . There is no such optionality with epithets and abstract nouns, where either  $D_1$  agrees with  $N_2$  in gender or both  $D_1$  and  $N_1$  agree with  $N_2$  in gender. My conclusion from this is that the gender feature of swear words is actually valued; below I will treat the cases in which gender mismatch is possible as premature deletion of the uninterpretable gender feature of the swear word.

The following table summarizes my proposal for the gender feature of nouns with expressive content in BP.

(60) Table 1: gender feature

Type of expressive noun	Examples	Specifications
Expressive abstract nouns and uniform epithets (same as uniform adjectives)	<i>beleza</i> and <i>banana</i> 'beauty' and 'banana'	No gender feature
Biform epithets (similar to biform adjectives)	<i>burro(a)</i> 'donkey/ idiot'	iF <sub>(gender)</sub> []
Swear words (same as nouns with grammatical gender)	<i>merda</i> 'shit'	uF <sub>(gender)</sub> val

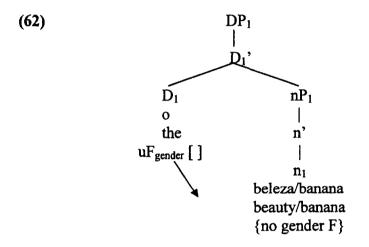
I will now discuss each case step-by-step in the following sections.

## 5.2.1 Gender mismatch with expressive abstract nouns and uniform epithets

In this section, I discuss gender mismatch with expressive abstract nouns and uniform epithets. In this case the expressive content is not specified for the gender feature. The relevant example is repeated below for convenience. (61) Expressive abstract nouns and uniform epithets

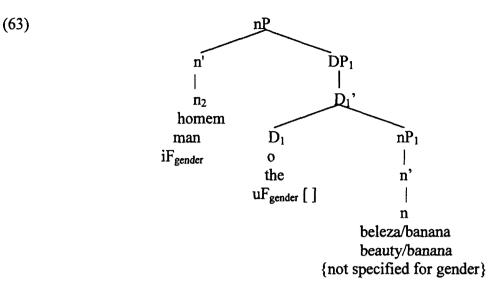
Obeleza/ bananado meu irmão/João fugiu.The(masc)beauty/ bananaof-the(masc) my(masc) brother/John vanished."That vain/ wimp of a brother of mine/ John vanished"

The following trees will show step-by-step the derivation for this TNP.



This tree shows the steps in the derivation in which the TNP containing the abstract noun/epithet is built.<sup>18</sup> When  $D_1$  merges with NP<sub>1</sub>, the unvalued gender feature of  $D_1$  scans its c-command domain for another instance of F, but in this case, it finds none, because the abstract noun and this type of epithet are not specified for gender. In the next step of the derivation, DP<sub>1</sub> merges with n, as illustrated below.

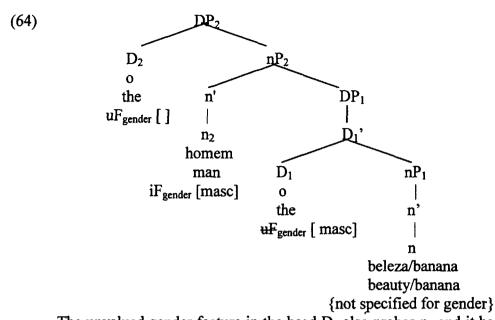
<sup>&</sup>lt;sup>18</sup> In the diagram in (62), the full structure for the theta layer in the TNP has nP and NP. For ease of exposition, from this point on I will represent the theta layer with nP only, unless otherwise indicated.



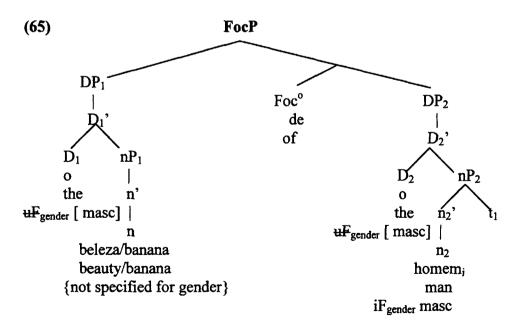
Notice that, from the position where  $D_1$  is, it cannot probe  $N_2$ . However, every feature that the head has is also a feature of its projection, based on Chomsky's 1995 assumption that the label of a phrase is the head of the phrase. For this reason, I assume that the unvalued gender feature of  $DP_1$  can scan its own c-command domain for another occurrence of a gender feature. The goal  $n_2$  has masculine value and the feature of the probe is replaced with the feature of the goal, becoming two instances of the same feature.

As a side note, it is important to highlight that the unvalued gender feature of  $DP_1$  can only probe  $n_2$  because  $KP_1$  was not projected. If  $KP_1$  were projected, the unvalued gender feature of  $DP_1$  would be too deeply embedded within its own TNP. I will come back to this point later in order to show that these assumptions do not overgenerate.

In the next step of the derivation,  $D_2$  is merged to the structure.



The unvalued gender feature in the head  $D_2$  also probes  $n_2$  and it has its unvalued feature replaced with the masculine feature of the goal. In the following steps of the derivation, Focus<sup>o</sup> is merged into the structure and DP<sub>1</sub> moves to spec-high-FocusP, giving rise to the word order DP<sub>1</sub>-of-DP<sub>2</sub>, for the reasons discussed in the previous sections.



The fact that  $N_1$  in its non-expressive use is a feminine word creates the apparent gender mismatch. But indeed, there is no mismatch, since  $N_1$  simply does not carry the gender feature in a similar way that uniform adjectives don't either.

It is not uncommon for a noun in BP to loose its specification for some formal features, especially if the noun takes a typical adjectival position with respect to another noun. This can be seen, for instance, with noun-noun compounds in BP when compared to noun-adjective compounds.

(66) a. NN compounds, singular and plural

salário família	salário-s família
salary family	salaries family(SG)
b. NA coumpounds,	singular and plural
caixa preta	caixa-s preta-s
box black	boxes black(PL)

In the above example, the second N, the one that characterizes the first noun N, does not pluralize. On the other hand, in plural NA compounds, both the noun and the adjective pluralize. This suggests that nouns used to characterize other nouns may undergo a process of weakening/suppressing of some morphological features.

#### 5.2.2 Gender mismatch with biform epithets

The derivation discussed in the previous section is for expressive abstract nouns and uniform epithets. I will now discuss the case of epithets that have masculine and feminine forms. Some relevant examples are given below. (67) Epithet

Oburr-o /\*aburr-ad-oJoão fugiu.the(MASC) donkey-MASC /the(FEM)donkey-FEMof-the(MASC)John vanished.'That stupid John vanished.'

(68) Epithet

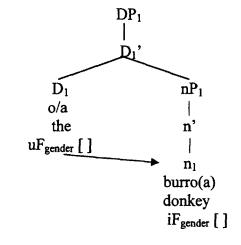
\*O **burr-o** / a **burr-a** d-a Maria the(MASC)donkey-MASC/ the(FEM) donkey-FEM of-the(FEM) Mary fugiu.

vanished.

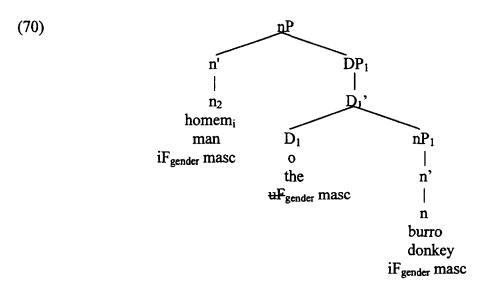
'That stupid Mary vanished.'

As discussed above, the epithets in questions are interpretable, but not valued for gender. The following tree shows the steps taken to form the  $DP_1$ , which contains a biform epithet.

(69)



As can be seen above, the situation now is different. When  $D_1$  merges with NP<sub>1</sub>, the unvalued gender feature of  $D_1$  scans its c-command domain for another instance of F; in this case, it finds another unvalued occurrence of the gender feature. Giving the "feature sharing" version of Agree I assume in this paper, Agree between two unvalued occurrences of F turns the probe and the goal into two instances of the same F. At this point of the derivation, they are both still unvalued, but they have become the same feature. When one of these two instances of the gender feature undergoes Agree with a valued gender feature, both instances above will share the same value. This is what happens when DP<sub>1</sub> merges with n, as illustrated below.



The unvalued gender feature of  $DP_1$  scans its own c-command domain for another occurrence of the gender feature. The goal  $n_2$  has masculine value and the feature of the probe is replaced with the feature of the goal, and the same holds for the other instance of the gender feature in question, namely the one in *burro* 'donkey'.

As the derivation progresses, the unvalued uninterpretable gender feature of  $D_2$  also targets  $n_2$  and has its feature replaced with the feature of  $n_2$ , thus, becoming another instance of the same gender feature. I omit the tree for these last steps because it is identical to (64) and (65).

# 5.2.3 Gender mismatch with swear words

The derivations discussed in the previous sections are for epithets and expressive nouns, which are base-generated as spec-nP<sub>2</sub> and are subject to semantic selection constraints. I now turn my attention to the case of swear words, which are base-generated as spec-FocusP. Remember that the gender mismatches with swear words are sensitive to the distinction between grammatical gender and natural gender of N<sub>2</sub> and furthermore, that gender mismatch is optional. I repeat the relevant examples here for convenience.

(71) Swear word

a. Omerdad-ohomem/pat-osumiu.the(MASC)shit(FEM)of-the(MASC)man/duck-MASCvanished'that piece of shit of a man/ duck vanished'

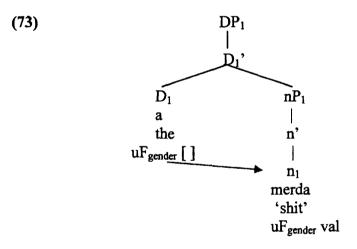
b. A	merda	d-o	homem/	pat-o	sumiu.
the(FEM)	shit(FEM)	of-the(MASC)	man/	duck-MASC	vanished
'that piece of shit of a man/ duck vanished'					

(72) Swear word

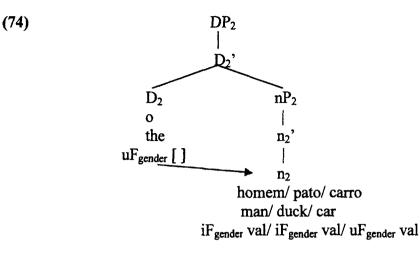
a. *O	merda	d-o	carro	sumiu.	
the(MASC)	shit(FEM)	of-the(MASC)	car(MASC)	vanished	
"that piece of shit of car vanished"					

b. A	merda	d-o	carro	sumiu.	
the(FEM)	shit(FEM)	of-the(MASC)	car(MASC)	vanished	
"that piece of shit of car vanished"					

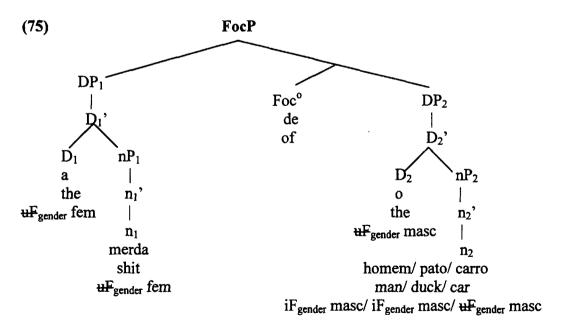
This distinction between grammatical and natural gender is only noticeable with swear words, because most abstract nouns and epithets can only characterize people (or specific classes of people). As discussed above, I assume that swear words have fewer adjective-like properties than epithets and abstract nouns, i.e. the gender feature of swear words is valued and uninterpretable just like the gender feature of all other nouns that do not designate entities with natural gender. Let us start the analysis with the somewhat less complex part of the paradigm in which  $D_1$  agrees with  $N_1$  and there is no dependence between the gender of  $N_1$  and  $N_2$ . Since the properties of the gender of  $N_2$  are not relevant for this case, I will describe them together in the same tree below.



As shown above, when  $D_1$  merges with NP<sub>1</sub>, the unvalued gender feature of  $D_1$  scans its c-command domain for another instance of F; in this case, it finds the valued occurrence of the gender feature in N<sub>1</sub>. The feature of the probe is then replaced with the feature of the goal and they become two instances of the same feature; in this case, with the feminine value. No further probing is necessary, since the unvalued gender feature of  $D_1$  has a value now. On the other "side" of the structure,  $DP_2$  is built and its tree looks like this.



Similarly to what was shown above, when  $D_2$  merges with NP<sub>2</sub>, the unvalued gender feature of  $D_2$  scans its c-command domain for another instance of F and it finds it in N<sub>2</sub>. The feature of the probe is then replaced with the feature of the goal and they become two instances of the same feature; in this case, with the masculine value. In the following steps of the derivation, Focus<sup>o</sup> is merged with DP<sub>2</sub> and DP<sub>1</sub> merges into spechigh-FocusP.

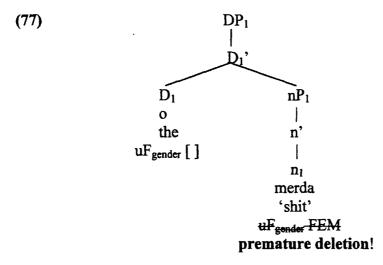


In the resulting TNP,  $N_1$  and  $N_2$  have different gender specifications. Notice that the gender feature of *homem* 'man' and *pato* 'duck' are interpretable while the gender feature of *carro* 'car' is uninterpretable. An important point here is also that after uninterpretable features undergo Agree, they remain in the derivation only until the head of the next phase is introduced. In the case of the structure above, the highest projection within the TNP is High FocusP, which counts as the phase under Bošković's 2010c claim that the highest projection in a TNP works as a phase. When Focus<sup>o</sup> is merged into the structure, the uninterpretable features are deleted. This will become important for the other part of the paradigm, discussed below.

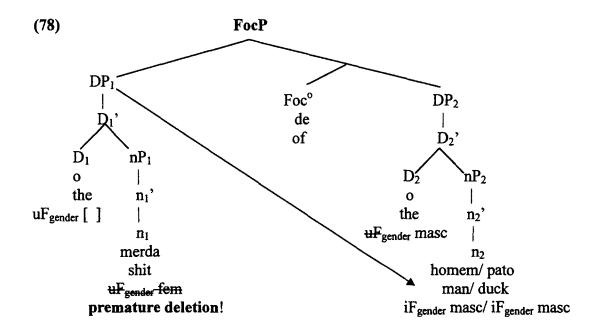
The question that arises now is how "gender mismatch" is possible if swear words are valued and why "gender mismatch" is sensitive to whether N<sub>2</sub> has grammatical or natural gender. To account for this part of the paradigm, I extend Bošković's 2009, 2010a, 2011 analysis of first and second conjunct agreement in Serbo-Croatian to the case of expressive nouns in BP. As discussed above, Bošković's 2009, 2010a, 2011 system allows valued uninterpretable features and distinguishes between grammatical gender and natural gender in the following terms: the natural gender of nouns is valued and interpretable while the grammatical gender of nouns is valued but uninterpretable. Also from his system, I assume premature deletion of uninterpretable features (i.e. valued uninterpretable features can be deleted without undergoing feature checking.)

As discussed above the swear word is valued and uninterpretable for gender.

(76) nP<sub>1</sub> | n' | n<sub>1</sub> merda 'shit' <del>uF<sub>gender</sub> FEM</del> premature deletion! Given the assumptions discussed when I introduced the theoretical background of my analysis, uninterpretable features that are also valued do not have to wait for Agree or for the next phase to be deleted. I would like to explore the possibility that the uninterpretable feature of the swear word is prematurely deleted before NP<sub>1</sub> even merges with D<sub>1</sub>. Then, when D<sub>1</sub> merges with NP<sub>1</sub> and the unvalued gender feature of D<sub>1</sub> scans its c-command domain, it does not find any occurrence of the gender feature, as shown below.

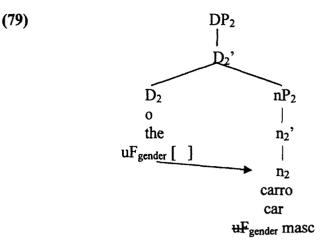


This leaves the gender feature of  $D_1$  unvalued and similarly to what has happened in the previous cases, as soon as  $DP_1$  merges into spec-high-FocusP, the unvalued gender feature can start new probing, as can be seen below.



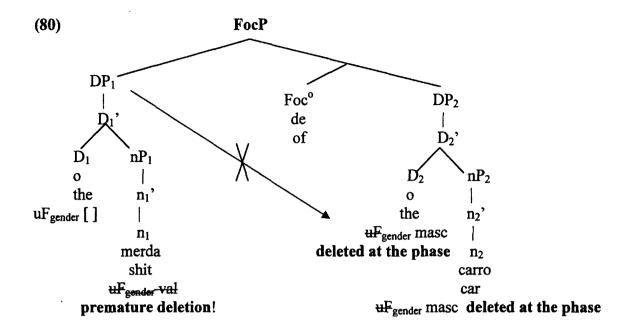
Obviously, premature deletion cannot be enforced; this is in fact what is responsible for the apparent optionality of "gender mismatch" with swear words in (71). On the other hand, disallowing premature deletion can only be done by stipulation in the current system.

Now, what happens on the other "side" of the TNP is also relevant for the outcome, since "gender mismatch" with swear words is only possible with nouns that have natural gender; it is not possible with nouns that have grammatical gender. In the tree below, the noun *carro* 'car' has grammatical gender.



Exactly as described above, the unvalued gender feature of  $D_2$  scans, finds and is replaced with the feature of the goal. However, as discussed above, when the phase head Focus<sup>o</sup> merges with  $DP_2$ , the uninterpretable features of  $D_2$  are immediately deleted. Recall that I assume that, after uninterpretable **unvalued** features (uF, []) undergo Agree, they remain in the derivation only until the next phase head is introduced, i.e. they are deleted at the next phase level, assuming that a phase determines the point of transfer to the interfaces.

If  $N_2$  has an uninterpretable gender feature, such as the case of *carro* 'car', this feature is also immediately deleted at this point, since it is within the complement of a phase, High FocusP. On the other hand, if  $N_2$  has an interpretable gender feature, such as *homem* 'man' and *pato* 'duck' above, this feature is not deleted, hence it is still available to enter into an Agree operation. This is what causes the "gender mismatch" sensitive to the grammatical/natural gender distinction. (Note also that I am assuming with Bošković 2007 that Agree is not subjected to the PIC. Bošković bases this claim on the possibility of object agreement across CP in several languages and the possibility of wh-in-situ in a number of languages, among other arguments).



As can be seen in the tree above, by the time the unvalued gender feature in  $DP_1$  scans its c-command domain, there is no longer any gender feature available. In other words, when  $N_2$  has an uninterpretable gender, its uninterpretable gender feature is deleted when Focus<sup>o</sup> merged with the  $DP_2$ . These data are then evidence for the deletion of uninterpretable features at the phase level as well as evidence that High FocusP is a phase, given that it is the topmost projection within this TNP.

Notice that this analysis does not overgenerate. Consider the following example.

(81) Foi uma merda!

Was a shit

"It was shit."

In the above example, the swear word *merda* "shit" is within its own TNP; it is not a modifier of another noun. If the uninterpretable gender feature of *merda* "shit" is prematurely deleted,  $D_1$  would not be able to value its unvalued gender feature and the derivation would fail. The sentence above is acceptable because premature deletion is optional, which means that the gender feature of the swear word does not have to delete before it is probed by  $D_{1}$ .

To summarize the key point of the analysis for gender mismatch, expressive abstract words and uniform epithets are not specified for gender, biform epithets are unvalued for gender, and swear words are valued and uninterpretable for gender. The differences between these groups of words with respect to gender agreement can be captured by the differences in their feature specifications and locations at which Agree is established. Deletion at the phase level and premature deletion of uninterpretable features have played the crucial role in the apparent optionality of "gender mismatch" with swear words. As a result, to the extent that the current analysis is successful, it can be taken as an argument in favor of these mechanisms. In the next section, I extend this analysis to the cases of number mismatch.

# 5.3 Number agreement

In BP, like other Romance languages, determiners, adjectives and nouns agree in number within the TNP.

(82) O pato preto versus o-s pato-s preto-s
The(SING) duck(SING) black(SING) the-PL duck-PL black-PL
'The black duck(s)'

In BP, plural nouns, adjectives and determiners are marked with the inflectional suffix -s (and its allomorphs) that is added to the stem of the word, after the feminine suffix if there is one. Singular forms are indicated by the absence of the morpheme -s.<sup>19</sup>

With respect to the number feature, as presented earlier, I assume that the number feature's values are singular and plural in BP; the number feature in nouns is interpretable and valued, the number feature in adjectives is uninterpretable and unvalued and the number feature in determiners is uninterpretable and unvalued.

When it comes to number agreement in TNPs with expressive content, the paradigm is considerably simpler than the one presented for gender agreement: Number agreement is obligatory when  $N_1$  is an abstract word or an epithet, and optional when  $N_1$  is a swear word. The following examples illustrate definite TNPs but the generalization is also true for indefinite TNPs in argumental positions. Also, the distinction between uniform/ biform epithets does not play a role here.

(83) Abstract noun

A-s beleza-s/	*a beleza	d-a-s	modelo-s
The(FEM)-PL beauty-PL/	the(FEM) beauty	of-the(FEM)- PL	model-s
viajaram.			
traveled.			

'those snobbish models traveled.'

<sup>&</sup>lt;sup>19</sup> In non-standard BP, the plural marker is usually retained in the first word in the TNP in the linear order, which is usually the determiner, but not exclusively.

# (84) Epithet

(85)

A-s banana-s/	*a banana	d-a-s	modelo-s
The(FEM)-PL banana-PL/	the(FEM) banana	of-the(FEM)-PL	model-s
viajaram.			
traveled			
'those wimpy models tra	veled.'		
Swear word			
A-s merda-s/	a merda	d-a-s	modelo-s
The(FEM)-PL shit-PL/	the(FEM) shit	of-the(FEM)-PL	model-s
viajaram.			
traveled			

'those shitty models traveled.'

In (83)-(84) above, abstract nouns, epithets and their respective determiners must agree with  $N_2$  in number. I give to these cases a treatment similar to the treatment I gave to adjectives, i.e. I propose that these elements are uninterpretable and unvalued for number. In (85), the swear words display optional number agreement in the same way they display optional gender agreement, as discussed in the previous section. One empirical difference between the gender and the number of constructions with swear words is that there is no "number mismatch", in the sense I used the term "mismatch" for gender. These differences can be easily accounted for in terms of the interpretability of the features gender and number. The gender feature of the swear word is valued and uninterpretable, which creates the possibility of premature deletion of the gender feature; however, the number feature of swear words is always interpretable. Therefore, it cannot be deleted.

A piece of evidence for the semantic interpretability of the number feature when  $N_1$  is a swear word comes from subtle differences in the interpretation of the TNPs containing singular swear words and plural swear words in (85) above. In *a merda das modelos* 'the shit of the models', the speaker is upset with the models as a group. In *as merdas das modelos* 'the shits of the models', the speaker attributes the negative property to each of the members of the group. This leads me to the conclusion that in both cases,  $D_1$  agrees internally with  $N_1$ , which is always valued for number.

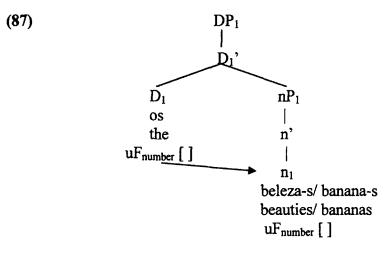
The following table summarizes my proposal for the number feature of nouns with expressive content in BP.

(86) Table 1: number feature

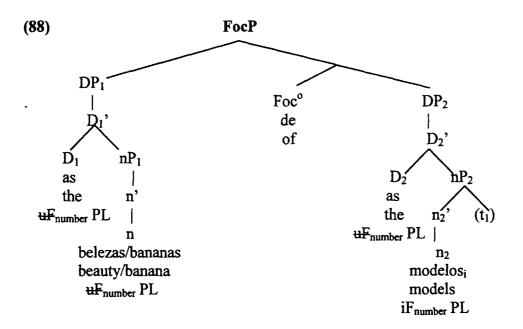
Type of expressive noun	Examples	Specifications
Expressive abstract nouns and epithets (same	beleza and banana	uF <sub>(number)</sub> []
as adjectives)	'beauty' and 'banana'	
Swear words (same as nouns)	merda	iF <sub>(number)</sub> val
	'shit'	

The partial conclusion for this section is that number agreement in TNPs with expressive content depends on the semantic type of the expressive  $N_1$ . Expressive abstract nouns and epithets are unvalued for number, while swear words are always valued for number, since their number value affects interpretation.

The following trees show my analysis for abstract nouns and epithets.



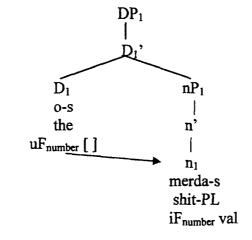
The tree above shows another case of "vacuous" feature sharing. When  $D_1$  merges with NP<sub>1</sub>, the unvalued number feature of  $D_1$  scans its c-command domain for another instance of F; in this case, it finds another unvalued occurrence of the number feature. Agree between the two unvalued occurrences of F turns the probe and the goal into two instances of the same F. At this point of the derivation, they are both still unvalued, but they have become the same feature. At the point of the derivation in which DP<sub>1</sub> merges with n<sub>2</sub>, the number feature of DP<sub>1</sub> will probe n<sub>2</sub> and all three instances of the number feature will share the same value. The following tree shows the step of the derivation in which DP<sub>1</sub> has already moved to spec-high-FocusP.



In the tree above, we can see all four instances of the number feature after "feature sharing".

As for the analysis of number agreement with swear words, this case is extremely simple. The following tree shows the structure for  $DP_1$  only, since the other steps are obvious.

(89)



As can be seen above, the number feature of  $D_1$  always agrees internally with the valued occurrence of the number feature in  $N_1$ , and no further probing is necessary. Since

the number feature in  $N_1$  is also interpretable, there is no possibility of premature deletion of the feature. I conclude therefore that the system developed above to account for gender agreement with expressive content in BP can be extended to number agreement.

## 5.3.1 Gender and number features as a non-split phi-probe in BP

In the section that introduced the theoretical background, I mentioned that the probe within the TNP in BP is a non-split  $\varphi$ -probe; in other words, phi-probing heads in BP probe for all phi-features together. Although it is a standard assumption that the phi-probe is a non-split probe, languages may actually vary with respect to this property (Bejar 2003). For this reason, I will now discuss some arguments in favor of the non-split  $\varphi$ -probe analysis for BP.

In Bošković's 2009, 2010a, 2011 analysis of first and second conjunct agreement in Serbo-Croatian, Bošković shows that the participial agreement probe is a non-split  $\varphi$ probe which crucially probes for the number and gender feature together, matches and agrees with &P for number and NP1 (the first conjunct) for gender.<sup>20</sup> Now that we have investigated the properties of gender and number agreement in the TNP with expressive content, we are in the privileged position to investigate whether the relevant probe in BP is a non-split  $\varphi$ -probe for gender and number or we are dealing here with two separate probes. The relevant data involve **swear words**, as shown below.

<sup>&</sup>lt;sup>20</sup> As discussed by Bošković 2009, 2010a, 2011, there are certain dependencies between gender and number agreement in Serbo-Croatian, which require non-split phi-probing.

(90) Swear word

Α	merda	dos	encanadores	fugiram.
The-FEM-SING	shit-FEM-SING	of-the-MASC-PL	plumber- MASC-PL	sumiram.
'those shitty p	lumbers vanishe	d.'		

(91) Swear word

As	merdas	dos	encanadores	fugiram.	
The-FEM-PL	shit-FEM-PL	of-the-MASC-PL	plumber- MASC-PL	sumiram.	
'those shitty plumbers vanished.'					

(92) Swear word

\*O merda dos encanadores fugiram. The-MASC-SING shit-FEM-SING of-the-MASC-PL plumber-MASC-PL sumiram. 'those shitty plumbers vanished.'

(93) Swear word

Osmerdasdosencanadoresfugiram.The-MASC-PL shit-FEM-PLof-the-MASC-PLplumber-MASC-PLsumiram.'those shitty plumbers vanished.'

In the examples in (90)-(91), the phi-features of  $D_1$  probe internally and agree with  $N_1$  in both cases. In (90), the phi-features of  $N_1$  are feminine and singular and in (91), the phi-features of  $N_1$  are feminine and plural.

The example in (92) is the perfect case to investigate whether the probe in these constructions is a non-split  $\varphi$ -probe or we have two separate probes here, because for (92) to be acceptable, the number feature of D<sub>1</sub> would have to agree in singular number with

 $N_1$  and the gender feature of  $D_1$  would have to agree in masculine gender with  $N_2$ . As can be seen, the example in (92) is not acceptable. My conclusion from the unacceptability of (92) is that the probe is a non-split  $\varphi$ -probe, i.e. the probe targets and agrees with both features at once.

The case in (93) is now a very intriguing one. At first glance, it looks like the number feature of  $D_1$  agrees with  $n_1$  in plural number and the gender feature of  $D_1$  agrees with  $n_2$  in masculine gender, but an alternative interpretation of this data is possible. In (93), the values for the phi-features of  $N_1$  are feminine and plural. The plural feature of  $N_1$  is always interpretable, but the gender feature of  $N_1$  is uninterpretable and valued, therefore, it can be prematurely deleted, as discussed above in section 5.2. If the non-split  $\varphi$ -probe scans its c-command domain and finds  $N_1$ , but its gender feature has been deleted, the non-split  $\varphi$ -probe cannot value both its features at once. In this case, the unvalued phi-features of DP<sub>1</sub> (which contains all and the same phi-features of D<sub>1</sub>) undergo a secondary probing and find  $N_2$ , which is valued for masculine and plural. This alternative is compatible with the idea that the probe in TNPs with expressive content is a non-split  $\varphi$ -probe.

In summary, the results presented above provide evidence for a non-split  $\varphi$ -probe in the constituent containing the expressive noun.

#### 5.4 The definiteness issue

The final piece of the puzzle is related to the definiteness effect. To the best of my knowledge, the facts described in this section are new observations. Constructions with

expressive nouns within the TNP show a definiteness effect when  $D_2$  is a definite article or a demonstrative. This generalization holds for all semantic types of expressive nouns.

- (94) Eu despedi a/essa/\*uma/\*Ø gracinha da/dessa modelo
  I fired the/ this/ a/Ø little-grace of-the/ of-this modelo
  'I fired that snobbish model'
- (95) Eu despedi a/essa/\*uma/\*Ø mosca-morta do/ desse encanador
  I fired the /this/a/Ø fly-dead of-the/ of-this plumber
  'I fired that stiff plumber'
- (96) Eu despedi a/essa/\*uma/\*Ø merda do/ desse encanador
  I fired the /this/a/Ø shit of-the/ of-this plumber
  'I fired that piece of shit of a plumber'

As illustrated in (94)-(96), if  $D_2$  is a definite article or demonstrative pronoun, then  $D_1$  must be a definite article or demonstrative pronoun. In this case,  $D_1$  cannot be an indefinite article, and it cannot be  $\emptyset$ .

On the other hand, if  $D_2$  is an indefinite article, then  $D_1$  can be a definite article or an indefinite article. However, in this case,  $D_1$  cannot be a demonstrative pronoun or  $\emptyset$ .

(97) Eu despedi a /*essa/ uma/* $Ø$		gracinha	de uma modelo	
	I fired	the /this/a/Ø	little-grace	of a modelo
'Eu despedi that snobbish model'				
(98)	Eu despedi	a /*essa/ uma/*Ø	mosca-morta	de <u>um</u> encanador

I fired the /this/a/ $\emptyset$  fly-dead of a plumber

'Eu despedi the/a stiff plumber'

(99) Eu despedi	a /*essa/ uma/*Ø	merda	de <u>um</u> encanador	
I fired	the /this/a/Ø	shit	of a plumber	
'Eu despedi the/a piece of shit of a plumber'				

The definiteness effect in general has been studied extensively in the generative literature from both syntactic and semantic viewpoints. In this section, I pursue a syntactic account of the distribution of the definiteness effect presented above, which reflects the presence of two distinct classes of prenominal modifiers. The definite articles, the demonstratives and the indefinite articles are higher in the structure than other modifiers, such as *muitos* 'many', *poucos* 'few' and *vários* 'several', as exemplified below.

(100) As/ aquelas/ umas poucas/ muitas/ várias modelos viajaram.
The/ those/ a few/ many/ several models traveled
'Few/ many/ several models traveled'.

In the above example, the prenominal modifiers *poucos* 'few', *muitos* 'many' and *vários* 'several' can be preceded by the prenominal modifiers *as* 'the', *aquelas* 'those' and *umas* 'a', but not the other way around, i.e. the prenominal modifiers *as* 'the', *aquelas* 'those' and *umas* 'a' cannot follow the prenominal modifiers *poucos* 'few', *muitos* 'many' and *vários* 'several'. I take this as evidence for high and low prenominal modifiers in BP. Low modifiers do not appear in constructions with expressive content, which shows that this phenomenon affects a class of determiners that is higher in the structure, which in turn can be interpreted as an indication that a syntactic treatment is the

most appropriate here. As for the reason why low modifiers are not allowed with expressive content, I do not have a fully worked out proposal; I tentatively suggest that low modifiers are base-generated as specifiers of the low nominal focus projection and that they are banned due to an intervention effect when high focus is present in the same structure. In the case of epithets and expressive abstract nouns, which move from the theta layer of the TNP to the high focus projection, this intervention effect could be interpreted as a relatived minimality effect in the sense of Rizzi 1990.

In order to account for (94)-(96) and (97)-(99) I propose that BP has strong and weak definite articles, which is a recurring idea in the Romance literature (Torrego 1987, Ormazabal 1991, Vernaud and Zubizarreta 1992, Longobardi 1994, Ticio 2003, Tellier and Valois 1995, among others.) Strong definite articles induce definiteness effects and behave similarly to demonstratives, while weak definite articles do not induce definiteness effects and behave similarly to indefinite articles. Since strong and weak definite articles have the same form, it is very difficult to tease them apart.

I implement the analysis of the definiteness issue discussed above by using the feature-sharing implementation of Agree combined with Pesetsky and Torrego's 2007 suggestion that some features have encyclopedic specifications associated with them. To illustrate the idea of encyclopedic specifications I show the following two schemas with two examples of Agree, one for the number feature N and the other for the tense feature T.

(101)uN[] ... iN[PL] => uN[PL] ... iN[PL]

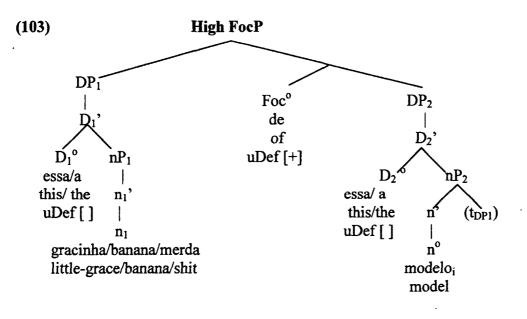
(102) uT [] ... iT [+](present, past or future) => uT [+](present, past or future) ... iT [+](present, past or future)

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When an unvalued feature F agrees with a valued occurrence of F, the unvalued occurrence of the feature is replaced with the value of the goal. The values of the number feature are singular and plural; in (101), the unvalued occurrence of N is replaced with the plural value. This is not the case for the feature tense T, as argued by Pesetsky and Torrego 2007, because the values for the feature tense are +/- T. As a result, after Agree, both instances of T share the positive value, as exemplified in (102), but not necessarily the specification for past, present and future. These specifications are not carried out by feature sharing, as exemplified above, and they can be different. According to Pesetsky and Torrego 2007, these considerations help to explain why morphological agreement in a language may be sensitive to animacy, number, person, etc. but it is typically not sensitive to fine-grained distinctions, for instance, in the case of animacy the distinction between 'dog' and 'giraffe'.

Applying the notion of encyclopedic specification to the issue of definiteness presented above, I propose that there is a feature F, whose values are +/- F, which is associated with different encyclopedic specifications. When this feature F is valued +F, it is associated with the strong definite article and the demonstrative. When this feature F is valued -F, it is associated with the weak definite article and the indefinite article. I will tentatively call this feature Def, since it is related to the definiteness issue.

The main difference between the definiteness issue and the gender/number agreement issue is that  $D_1$  and  $D_2$  always share the same value for the feature Def, independently of the type of the expressive noun. For this reason, I propose that this feature is not a phi-feature like gender and number, whose properties depend on the morphological properties of the expressive nouns. This feature Def, which is closely related to some aspects of the definiteness effect, is a feature of the  $\omega$ -layer, i.e. the heads of projections within the  $\omega$ -layer are valued for this feature. In the specific case of the constructions under study in here Focus<sup>o</sup> is valued either positive or negative. I propose that high determiners are unvalued for Def. The reason why D<sub>1</sub> and D<sub>2</sub> always share a value for this feature is because they probe Focus<sup>o</sup> for it. The tree below illustrates the main aspects of my analysis.



The tree above shows a case in which Focus<sup>o</sup> has the positive value for the feature Def. After Agree, both  $D_1$  and  $D_2$  share with Focus<sup>o</sup> the positive value of the feature (both  $D_1$  and  $D_2$  probe Focus<sup>o</sup> in this case;  $DP_1$  after movement, as discussed below). +Def has two possible encyclopedic specifications: either the strong definite or the demonstrative may be associated with it. In the same configuration shown above, if the feature Def had a negative value, it would be associated with the weak definite article or the indefinite article.

Notice that this feature is one of the features that trigger the movement of  $DP_1$ , but does not have to be necessarily the only one, since  $DP_1$  is also focused, speakeroriented and carries the bothering inference, as discussed above. One piece of evidence that this feature triggers the movement of  $DP_1$  comes from the data in (33) adapted and extended here in (104)-(106).

(104) Abstract nouns/ epithets

Eu contratei um	advogado	beleza/ gracinha/ galinha/ banana/ laranja		
I hired	a lawyer	beauty/ little-grace/ hen/ banana/ orange		
"I hired a nice/ nice/ promiscuous/ wimp/ fool lawyer."				

(105) Abstract nouns/ epithets

Eu contratei	um/o	beleza/ gracinha/ galinha/ banana/ laranja de um
I hired	a/the	beauty/ little-grace/ hen/ banana/ orange of a
advogado		

lawyer

"I hired a lazy/ lazy/ promiscuous/ wimp/ fool lawyer."

(106) Abstract nouns/ epithets

Eu contratei	um advogado	(de) ( <b>*um/*o</b> )	beleza/ gracinha/ galinha/			
I hired	a lawyer	(of) (*a/*the)	beauty/ little-grace/ hen/			
banana/ laranja						

banana/ orange

"I have a nice/ nice/ promiscuous/ wimp/ fool lawyer."

The example in (104) shows that epithets and abstract nouns can appear to the right of  $N_2$ , presumably in their position of base-generation, as discussed previously (cf. tree in (103) above.) The example in (106) shows that epithets and abstract nouns cannot

stay in situ if they are a full DP, independently of the presence of the pseudo-preposition de 'of'. They can only stay in situ as bare nouns. If my analysis is correct, they cannot stay in situ because from that position they cannot get the unvalued feature Def of D<sub>1</sub> valued. The presence of the unvalued feature Def forces the movement of DP<sub>1</sub>. In other words, the driving force of this movement is in the moving element, which has unvalued features and moves in order to probe for these features. This line of reasoning has been largely discussed in Bošković 2007, who gives a number of cases of this type; and I take the examples discussed by him as independent evidence that motivation for the movement of DP<sub>1</sub> lies in a property of the DP.

To summarize, in this section, I argued that some cases of the definiteness effect in constructions with expressive content are a reflex of Agree between the determiners  $D_1$ and  $D_2$  and the head Focus<sup>0</sup>. The operation triggers the movement of DP<sub>1</sub> to spec-FocusP.

#### 6. Some notes on arguments with bare N<sub>2</sub>

In constructions with expressive content in the TNP,  $N_2$  can also be bare. Bare  $N_2$  can occur within arguments, as in (107), or within predicative expressions, as in (108).

(107) Eu contratei uma merda de advogado.

I hired a shit of lawyer

"I hired a shitty lawyer."

(108) Uma merda de advogado, esse da sua empresa.
A shit of lawyer, this of-the your business
'What a piece of shit of a lawyer, this one of your business.'

As mentioned above in section 2, I focus my discussion on the argumental cases, but the solution proposed in this section for bare  $N_2$  is applicable to the predicative expressions too. I will discuss them in chapter 4.

Before we enter into the analysis, I would like to make a remark concerning the judgments used in this section. There is variation on the judgments involving bare nouns in BP. Speaker variation of this type is not surprising and it has, for instance, given rise to different semantic treatments in the literature on bare nouns in BP; there are those who argue that bare nouns express "kinds" in BP (Schmitt & Munn 1999 and Pires de Oliveira et al. 2006) and those who argue against this view (Müller 2002). The judgments described and analyzed here are from the majority of my informants. The following set of data exemplifies the presence of gender mismatch in constructions with expressive content and bare N<sub>2</sub>. I used indefinite articles as  $D_1$ , but the results are similar for definite articles and demonstratives as well.

(109) Eu contratei um banana/ gracinha/ merda de advogado.
I hired a(MASC) banana/little-grace/shit(FEM) of lawyer
"I hired a wimp/snobbish/shitty lawyer."

The examples in (109) show that BP allows "gender mismatch" in spite of  $N_2$  being bare. Given the system developed in this chapter, this shows that bare nouns are specified for gender and, given my assumption that the probe is a non-split phi-probe which only undergoes feature sharing if there are occurrences of both gender and number features (cf. section 5.3.1), this leads me to the conclusion that bare N<sub>2</sub>s are also specified

for number, in this case, singular number.<sup>21</sup> These facts contribute to the on-going discussion on the properties of bare nouns in BP. It is a well-known fact that bare nouns are number neutral in BP, as shown below in (110). However, this is not the case for constructions with expressive content with bare  $N_2$ .

(110) Eu contratei advogado. Ele está ali./ Eles estão ali.

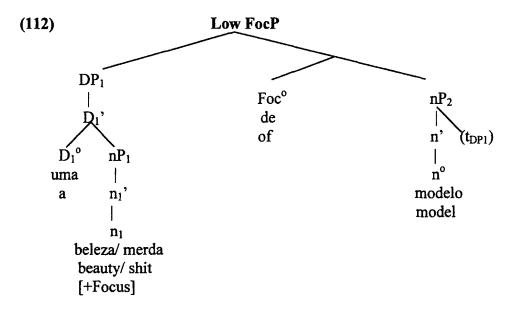
He is over-there./ They are over-there.

I hired lawyer He is over-there./ They are over-there. "I hired lawyers. He is over there./ they are over there."

(111) Eu contratei um banana/ gracinha/ merda de advogado.
I hired a(MASC) banana/little-grace/shit(FEM) of lawyer
"I hired a wimp/snobbish/shitty lawyer. He is over there"
Ele está ali./ \*Eles estão ali.

A plural pronoun is not possible in (111), which I take to indicate that the bare N in (111) is not number neuter. Given the above, I propose that the structure of argumental TNPs with bare  $N_2$  corresponds to the tree repeated here for convenience.

<sup>&</sup>lt;sup>21</sup> In my own dialect of BP, epithets are completely incompatible with bare  $N_2$ . Maybe this is the case because epithets select individuals and bare nouns are used as reference to "kinds" of people and objects, thus being semantically incompatible with epithets.



The main difference between the structure in (112) above and the full structure used in the previous sections is that in (112), there is a defective TNP containing only the  $\theta$ -layer. The bare singular noun does not project the  $\varphi$ -layer and the high  $\omega$ -layer. Notice, however, that even if DP and KP are not projected, the head of the low focus phrase that takes nP as its complement can be projected and host expressive phrases in its specifier, since as discussed above, the low focus phrase is below DP in the TNP and below IP in the clause. This means that bare nouns in BP are not entirely bare, since they can be taken as the complement of the low focus phrase.<sup>2223</sup>

This structure and the proposal described above are meant for all cases of bare nouns in BP, even the ones that are not modified by expressive nouns. It is in fact worth

<sup>&</sup>lt;sup>22</sup> See also Riqueros 2011 for evidence based on extraction that bare NPs are not bare in Spanish.

<sup>&</sup>lt;sup>23</sup> In the tree in (112), if instead of *modelo* 'model', N<sub>2</sub> were a word like *carro* 'car', which has uninterpretable gender features, the agreement between D<sub>1</sub> and N<sub>2</sub> (if the swear word were prematurely deleted) would still be impossible because Low FocusP is a phase (being the highest projection within the TNP) which means that the uninterpretable features of *carro* 'car' are deleted when Foc<sup>o</sup> is merged with nP, which is the complement of the phase in this case. I refer the reader to the discussion of the example (76).

noting here that in BP, bare singular nouns are freely used as syntactic subjects or objects; there are no restrictions on types of verbs that can take them as objects.

A full description of bare singular nouns in BP is beyond the scope of this chapter; however, I will provide two pieces of argument in favor of the structure in (112). BP like other Romance languages has adjectives that can be pre-nominal or post-nominal, such as the adjective *alto* 'tall'. Curiously, pre-nominal adjectives are not allowed with bare singular nouns.

(113)Eu gosto de [um (alto) homem (alto)]/ [(\*alto) homem (alto)]

I like of [a (tall) man (tall)]/ [ (tall) man (tall)]

'I like a tall man/ tall men.'

As can be seen above, the adjective *alto* 'tall' can appear before or after the noun *homem* 'man' within a full TNP, but it can only appear after the noun *homem* 'man' within a bare singular TNP. In order to explain this distinction, I apply Ticio's 2003 analysis and tests for identifying different types of adjectives to BP adjectives. In her system, adjectives like *alto* 'tall' above are qualitative adjectives; in their pre-nominal position, they are intensional, non-restrictive and specific while in their post-nominal position, they are extensional, restrictive and non-specific. With respect to their position in the structure of the TNP, Ticio 2003 proposes that pre-nominal qualitative adjectives are adjuncts to NP. In both cases, they are base-generated within the theta layer of the TNP. However, Ticio 2003 points out that, given their interpretation, qualitative pre-nominal adjectives must be outside of the DP at the point when the structure receives its interpretation. To

put it differently, pre-nominal adjectives are not interpreted under the scope of D, hence they must move to a higher position within the TNP. I tentatively modify her analysis by assuming that this movement of pre-nominal adjectives is not scope-driven, but it is rather feature-driven, forcing these adjectives to move from their base-position into the phi/high discourse layer. In the case of the bare singular noun in (113), the pre-nominal qualitative adjective cannot move out into the phi-layer of the TNP, since bare singular nouns do not project the inflectional layer or the high discourse layer, therefore, they cause the derivation to fail. For this reason, pre-nominal adjectives are incompatible with bare singular nouns.

A piece of evidence for the low focus projection in the structure in (45) comes from the possibility of the focus-bearing adverb  $s\delta$  'only' preceding a bare noun, as in (114), where I argue that  $s\delta$  'only' is within the TNP.

(114)Eu alugo [só casa.]

I rent only house.

'House is the only thing I rent.'

In the above example, the focus-bearing adverb before *casa* 'house' takes scope over the noun only, hence the translation 'house is the only thing I rent'. By itself, the presence of so 'only' taking scope over the noun is not evidence for low focus in the TNP since so 'only' could be located outside the TNP, but notice that in BP bare nouns must be adjacent to the verb as opposed to full TNPs, which do not have to be adjacent. Saraiva 1997 describes this difference with many tests, which include the one adapted below.<sup>24</sup>

(115)		Full TNPs	bare singular nouns			
a. Fui buscar	no colégio	(o meu menino)/	(*menino)			
went pick-up	in-the school	(the my boy)/	(boy)			
'I went to pick up my son in the school.'						
b. Vou alugar	depressa	(este apartamento) /	(*apartamento)			
will-go rent	quickly	(this apartment)/	(apartament)			
'I will rent this apartment quickly'						

In (115) the PP *no colégio* 'in the school' and the adverb *depressa* 'quickly' cannot be in between the verb and the bare singular noun. This constraint does not apply to full TNPs, as shown above. Since regular adjuncts cannot intervene between the verb and a bare noun, why would a focus-bearing adverb that takes scope over the noun be allowed? If there is a low focus projection taking the nP as its complement, it follows straightforwardly that the focus-bearing element can adjoin to that focus projection within the TNP, hence the object in (115) can still be adjacent to the verb. (I assume that the PP-adjuncts and the adverb in (115) adjoin to vP, not to nominal internal projections.)

If this analysis is on the right track, the following examples provide evidence for both high and low focus phrases within the TNP.

<sup>&</sup>lt;sup>24</sup> The examples above are adapted from Saraiva 1997: 26-28. She also shows that topicalization and clefting of bare singular nouns is marginal as opposed to topicalization and clefting of full TNP, which is acceptable.

# (116)Eu vendi [só uma casa]/ [uma só casa] na semana passada. I sold only a house/ a only house in-the week passed 'One house is the only thing I sold last week.'

The example in (116) above shows that the focus-bearing element  $s\delta$  'only' can either precede or follow the indefinite determiner *uma* 'a'. I suggest that in the former case, the focus-bearing element adjoins to the high focus phrase, preceding D<sup>o</sup>, and in the latter case, it adjoins to the low focus phrase, following D<sup>o</sup>.

The main conclusion of this section is that constructions with expressive contents and bare  $N_2$  are not entirely bare, since they still allow gender mismatch.

## 7. Conclusion

In this chapter, I argued that constructions with expressive content in the TNP provide an example of nominal internal movement to FocusP, a projection of the nominal discourse-layer. This movement is an operator-driven movement of the "bothering type" in the sense of Bastos 2008, 2011, not the common contrastive type of focus movement. I proposed that nouns carrying expressive content should be classified into three different semantic classes: abstract nouns, epithets and swear words. Nouns carrying expressive content show many adjective-like properties, which plays a role in the patterns of gender and number agreement discussed in this chapter. The most elaborated part of the paradigm is found in the argumental cases with non-bare N<sub>2</sub>, where we can find "gender mismatch" between D<sub>1</sub> and N<sub>1</sub> (TNPs with expressive content involve two DPs, D<sub>1</sub> + N<sub>1</sub> and D<sub>2</sub> + N<sub>2</sub>.) In my analysis of gender and number agreement, I argued for the feature-

sharing version of Agree and for the dissociation of valuation and interpretability. In addition, I showed that the deletion of uninterpretable features must be done as soon as the next phase head is merged into the structure. I have also provided evidence that if uninterpretable features are valued to start with, they can be deleted any time, even if they do not undergo feature-checking. These assumptions accounted for all cases of "optional" agreement, discussed for the semantic class of swear words. I have also provided an account of a definiteness agreement effect found in constructions with expressive content. Finally, this chapter also argues for the availability of a low focus projection within the TNP. It presence is more easily attested when the TNP contains a bare singular noun. The presence of this projection has consequences for the analysis of regular bare singular constructions in BP, which cannot be simply bare NPs.

#### Chapter 4

## **REDUCED EXCLAMATIVES**

#### 1. Introduction

In the previous chapter I argued for a focus projection within the traditional nominal phrase (TNP) and argued that DPs with expressive content target the specifier of this projection. Some constructions with expressive content in Spanish and Dutch have been analyzed before in the literature as containing small clauses. For instance, Español-Echevarría 1997 analyzes Spanish epithet constructions as symmetrical small clauses in the lines of Moro 1997, 2000 and Den Dikken 2006 analyzes them in Dutch and other languages as an asymmetrical small clause structure, in which the word *of*, the English equivalent of the Portuguese *de*, is the nominal counterpart of the verbal copula 'be'. In chapter 3 I proposed a different line of analysis in which the Portuguese *de* 'of' is the counterpart of the clausal head *que* 'that' and DPs with expressive content do not start out in a small clause configuration. In my analysis, DPs containing expressive content are nominal modifiers; epithets and abstract expressive move to spec-FocP, swear words are base-generated as spec-FocP. I argued that their behavior is similar to the behavior of adjectives, especially with regard to agreement patterns.

However, given the strong parallelism between clauses and traditional TNPs, if small clause structures are found in the clause, we should be able to find them in the TNP as well, with the same basic properties found in the clause. In this chapter I investigate an exclamative type of construction that is a true nominal counterpart of the verbal copular constructions in BP; I call them reduced exclamatives. In addition to exemplifying small clauses within the TNP, this chapter also provides additional evidence for nominal internal focus projection by showing that exclamative phrases can move internally to nominal FocP.

Brazilian Portuguese (BP) allows various types of exclamative constructions, including the ones in (1), where *que linda* "how pretty" is a left dislocated constituent. In the examples below, the left dislocated phrase contains an exclamative wh-word and an adjective.

(1) a. **Que linda**, essa casa é!

How pretty, this house is!

- b. Que linda é essa casa!
   How pretty is this house!
- c. Que linda, essa casa!

How pretty, this house!

All: 'How pretty, this house is!'

The sentences in (1)a and (1)b show that the subject of the sentence can precede or follow the verb *ser* 'to be', and the sentence in (1)c) shows a third possibility in which the copula is not present. At first glance, one might think that the structure for (1)c) is the same as the structure for (1)a and/or (1)b, except that the copula is omitted, i.e. that this is a case of zero copula in which the inflectional phrase is present in the structure but the copula is silent, a possibility found in other languages, e.g. Russian. One argument against this view is that BP does not allow zero copula in other types of sentences, as shown below.

(2)	a. Affirmative:	Essa mulher *(é) muito alta.	
		This woman *(is) very tall	
		'This woman is very tall'.	
	b. Interrogative:	Quão interativo *(é) esse jogo?	
		How interactive *(is) this game	
		'How interactive is this game?'	
	c. Interrogative:	Que tipo de médico *(é) o teu irmão?	
		What type of doctor *(is) the your brother	
		'What kind of doctor is your brother?'	

Since BP does not allow zero copula in other sentence types, I pursue a different line of analysis in which (1)a-b) and (1)c) have different structures. The main claim of this chapter is that the construction in (1)c) involves movement to the nominal left periphery. The fully articulated structure for clauses and TNPs is repeated below in (3) for convenience.

(3) Nominal structure: KP > TopP > High FocP > DP > ... Low FocP > nP > NPClausal structure: CP > TopP > High FocP > IP > ... Low FocP > vP > VP

The above structure has already been discussed in chapters 1-3. The most important aspects of it are that nPs and vPs are thematic layers, DPs and IPs are inflectional layers, and KPs and CPs are discourse layers. Each of these layers can be split further. If a language allows a split discourse layer in the clausal level, it will also allow it in the nominal level. For the specific case of the constructions in (1) above, I propose that in (1)a-b), there is a full clause; the phrase *que linda* 'how pretty' moves to the clausal left periphery, more precisely to the specifier of the clausal Focus projection, while in (1)c), there is only a nominal phrase, i.e. no VP or IP. The phrase *que linda* 'how pretty' moves to the nominal left periphery, more precisely to the nominal Focus projection.

The chapter is organized as follows. In section 2, I justify the classification of the sentences above as exclamatives, since my analysis relies crucially on the fact that *que linda* "how pretty" carries an exclamative feature. In section 3, I discuss the structure of copular wh-exclamatives and reduced exclamatives. In section 4, I discuss some constructions that are a mix of reduced exclamatives and TNPs with expressive content, providing evidence for High and Low FocusP. Finally, in the last section, I summarize the main conclusions of the chapter.

## 2. Review on exclamatives

In this section I discuss the syntactic position of moved exclamative constituents within the clausal  $\omega$ -layer in BP to set the ground for comparison with the nominal  $\omega$ -layer, and apply classical tests to diagnose the exclamative type in order to provide evidence for my claim that the reduced structures studied here are exclamatives.

## 2.1 Syntactic position of moved exclamative constituents

As discussed in chapters 1-3, the main hypothesis of this dissertation is that projections that are available in the clausal structure in a language are also available in the nominal structure of the language. So far, I have argued with respect to BP in chapter

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2 that a KP and a topic projection are available in the TNP and in chapter 3 that a focus projection is also available for the movement of phrases carrying negatively biased content.

Although I claim that the same types of projections are available in nominal and clausal structures, it is possible that interfering properties will constraint some types of movements, e.g. topic and focus phrases may disrupt case agreement (see, for example, chapter 2), so acceptable constructions may be reduced to those in which agreement disruption is not an issue. In the case of the focus projection, many different types of operator movements target that position in BP, such as wh, contrastive focus and exclamative movement. The following examples, which have already been discussed in chapters 1-3, show that these types of operator movement cannot co-exist in BP.

(4) \*wh > focus

\*O que (que) (foi) PRA MARIA (que) você comprou? the what (that) (was) TO MARY (that) you bought 'What is the thing, such that it was to Mary that you bought?'

(5) 
$$*$$
focus > wh

\* (Foi) PRA MARIA (que) o que (que) você comprou?
(was) TO MARY (that) the what (that) you bought
'What is the thing, such that it was to Mary that you bought?'

(6) 
$$*$$
excl > focus

\* Que flor linda (que) (foi) PRA MARIA (que) você comprou!
What flower pretty (that) (was) TO MARY (that) you bought
'What a beautiful flower this is and it was to Mary that you bought it'

(7) \*focus > excl

\* (Foi) PRA MARIA (que) que flor linda (que) você comprou?
(was) TO MARY (that) what flower pretty (that) you bought
'What a beautiful flower this is and it was to Mary that you bought it'

(8) \*excl > wh

\* Que flor linda (que) (foi) pra quem (que) você comprou!?
What flower pretty (that) (was) to whom (that) you bought
'What a beautiful flower this is and to whom you bought it'

(9) \*wh > excl

* Pra quem (que)	que flor linda (que)	você comprou!?		
To whom (that)	what flower pretty (that)	you bought		
'What a beautiful flower this is and to whom you bought it'				

I conclude from the examples above that wh, contrastive focus and exclamative phrases compete for the same syntactic projection. The following examples show that topic phrases are higher than wh, contrastive focus and exclamative phrases, suggesting that these three types of fronted phrases target the projection FocusP that is located below TopicP. This word order has also been discussed in the previous chapters, as well as the ban on the order focus > topic in BP.

(10) Topic > wh

(A Maria, ) o que (que) você comprou pra ela?the Mary what (that) you bought for her'As for Mary, what did you buy for her?'

(11) Topic >contrastive focus

(A Maria, ) A FLOR (que) você comprou pra ela (não o chocolate.)
the Mary the flower (that) you bought for her (not the chocolate.)
'As for Mary, it is the flower the you bought for her, not the chocolate.'

(12) Topic >exclamative

(A Maria, ) que flor linda (que) você comprou pra ela!the Mary what flower pretty (that) you bought for her'As for Mary, what a beautiful flower you bought for her!'

The sentences studied in this chapter provide evidence for nominal internal movement to focus phrase to check a [+excl] feature. From this point on, I turn my attention to exclamative constructions in general.

## 2.2 Tests for the exclamative type of sentence

There is some controversy in the literature regarding what kind of utterances should be classified as exclamatives. The standard criterion to identify the exclamative type is the sense of surprise, i.e. exclamatives express speakers' view that something is surprising, amazing, or outstanding.<sup>1</sup>

Oda 2004 proposes the following classification of exclamatives.

<sup>&</sup>lt;sup>1</sup> In this section, I focus on syntactic properties of exclamatives. For a recent analysis of semantic properties of certain types of exclamative constructions, called polar exclamatives, I refer the reader to Grosz 2011. See also Bastos 2009a for additional data of reduced exclamatives in BP.

- (13) Adjective wh-exclamatives
  - a. What a nice person John is!
  - b. How nice John is!
  - c. What a nice car he bought!

### (14) Wh-exclamatives

- a. What a house is that!
- b. What a car he bought!
- (15) Such-exclamatives
  - a. He is such a nice person!
  - b. He bought such a nice car!
- (16) So-exclamatives (cf. Elliot 1974)

He is so nice!

- (17) Interrogative exclamatives
  - a. Is he nice!
  - b. Does he sing well!

In addition to these types, Zanuttini and Portner 2003 also include what they call 'nominal exclamatives'.

(18) Nominal exclamatives

The things he eats!

Considering the exclamative types listed above, BP allows most of them in addition to what I will call mixed types between exclamatives and expressive content. Below, I present the relevant exclamative types by separating them into two groups: a. the ones in which the exclamative phrase is (within) an argument, as in (19), and the ones in which the exclamative phrase is a predicate of a small clause, as in (20).

(19) a. Adjective wh-exclamative

[Que bolsa lind	a]	a Maria comprou!		
what purse pretty		the Mary bought		
'What a pretty purse, Mary bought!'				
b. Wh-exclamative				
[Que bolsa]	a Maria comprou!			
what purse	the Mar	y bought		

'What a purse, Mary bought!'

c. So-exclamative

A Maria comprou [uma bolsa tão linda]!

the Mary bought a purse so pretty

'Mary bought such a pretty purse.'

d. Nominal exclamatives

[Cada coisa] que você compra!

each thing that you buy!

'the things you buy!'

(20) a. Adjective wh-exclamative

[Que linda] é a bolsa da Maria!

what pretty is the purse of-the Mary

'How pretty is Mary's purse!'

b. Adjective and noun wh-exclamative

[Que bolsa linda] é a da Maria!

what purse pretty is the of-the Mary

'What a pretty purse is Mary's purse!'

c. So-exclamative

Essa bolsa é [tão linda]!

this purse is so pretty

'this purse is so pretty'

Argumental and predicate wh-exclamative constituents include either the whword *que* 'how/what', as exemplified in (19)a-b) and (20)a-b) or the intensifier  $t\tilde{a}o$  'so' as exemplified in (19)c) and (20)c). Among the argumental cases there are also nominal exclamatives with the quantifier *cada* 'each'.

As for the sense of surprise in the constructions discussed above in BP, it is rather uncontroversial that these constructions, including the examples given in (1), express speakers' view that something is surprising, outstanding, and unexpected, and that this is a contribution of the left dislocated exclamative constituent. The reduced exclamatives I study in this chapter are a variation of the exclamative sentences in (20)a-b) without the copula. I will also discuss cases in which the exclamative constituent contains expressive content, such as epithets, expressive abstract nouns and swear words.

In addition to the sense of surprise, which is analyzed as a scalar implicature, Zanuttini and Portner 2003 take into consideration two other criteria: *inability to function in question-answer pairs* and *factivity*. In their classification, for instance, *such*- constructions and *so*-constructions do not belong to the class of exclamatives, since they fail the factivity test.

The property called "inability to function in question/answer pairs" is what makes exclamatives different from interrogatives and declaratives, because unlike declaratives, they cannot be used as answers, as shown in (22)b) for English; additionally, unlike interrogatives, they cannot be used as questions in spite of the presence of a wh-word, as shown in (21)b).

(21) a. Interrogative: How tall is he? Seven feet.
b. Exclamative: How very tall he is! #Seven feet.
(22) a. How tall is he? Affirmative: He is very tall.
b. How tall is he? Exclamative: # How very tall he is!

The results found for exclamatives in BP are similar to the ones found for English. I illustrate the results found in BP using regular copular exclamatives and reduced exclamatives, but the results are the same for other types for exclamatives as well.

(23) a. Regular copular exclamatives

Que alto (é) o João (é)! How tall is the John is 'How tall John is!' b. Reduced exclamatives

Que alto, o João!

How tall the John

'How tall John is!'

The constructions exemplified in (23) above cannot be used to obtain information/answers, as shown in (25), in contrast to the interrogatives in (24).

(24) Interrogatives:

Qual é a altura do João? Dois metros а Two meters What is the height of John 'What is John's height?' Quão alto é o João? Muito alto

Very tall How tall is the John? 'How tall is John?'

## (25) Exclamatives:

b.

- Que alto, o João é! #Dois metros/ #Muito alto. a. How tall the John is #Two meters/ # Very tall 'How tall, John is!'
- #Dois metros/ #Muito alto. b. Que alto é o João! How tall is the John #Two meters/ # Very tall 'How tall, John is!'

c. Que alto, o João! #Dois metros/ #Muito alto.
How tall the John #Two meters/ # Very tall
'How tall, John is!'

The constructions in (23) also cannot be used to answer questions, as exemplified in (27), in contrast to the affirmative sentences in (26).

(26)	a.	Qual é a altura do João?	Af	firmative:	Ele tem dois metros de altura.
		What is the height of Jo	hn		He has two meters of height.
		'What is John's height?	,		'He is two meters tall'
	b.	Quão alto é o João?	Af	firmative:	Ele é muito alto.
		How tall is the John			He is very tall
		'How tall is John?'			'He is very tall'.
(27)	a. (	Qual é a altura do João?	Exclar	n: #Que alt	o (é) o João (é)!/ #Que alto, o João!
	W	hat is the height of John		How tall (	is) the John (is)/ How tall the John
	٢V	Vhat is John's height?'		All: 'How	tall, John is'
	b. •	Quão alto é o João?	Exclar	n: #Que alt	o (é) o João (é)!/ #Que alto, o João!
	H	ow tall is the John		How tall (	is) the John (is)/ How tall the John
	Ή	low tall is John?'		All: 'How	tall, John is'

Turning to factives, Grimshaw 1979 and Zanuttini and Portner 2003 claim that factivity is a crucial property of exclamatives, since their main content is presupposed. The main argument for the claim that exclamatives are factive comes from the fact that exclamatives in English, e.g. the wh-exclamative in (28)a), can only be embedded under certain factive predicates, as in (28)b-c).<sup>2</sup>

(28) a. How very cute he is!

- b. Mary knows/ realized how very cute he is.
- c. I can't believe/ you wouldn't believe how very cute he is!
- d. Mary \*thinks/\*wonders how very cute he is.

The exclamative sentence in (28)a) can be embedded under factive predicates "know" and "realize" in (28)b) and under some special factive uses of the verb "believe", such as "I can't believe..." and "You wouldn't believe..." in (28)c). On the other hand, the exclamative sentence in (28)a) cannot be embedded under non-factive predicates "think" and "wonder". It is important to highlight that not every factive predicate can take an exclamative as its complement, as noted by Zanuttini and Portner 2003. For instance, the factive predicate "to regret" in (29) cannot embed an exclamative.

(29) Mary \*regrets how very cute he is.

Such-constructions and so-constructions below fail the factivity test since they can be embedded under non-factive predicates. Zanuttini and Portner 2003 do not consider them to be exclamatives because of this.

- (30) Such-exclamatives
  - a. Mary thinks that he is such a nice person!/ he bought such a nice car!
  - b. Mary wonders if he is such a nice person!/ he bought such a nice car!

 $<sup>^{2}</sup>$  Examples in (15a,b and d) are adapted from Zanuttini and Portner (2003: 9) and (9c) is adapted from Zanuttini and Portner (2003: footnote 12) and Grimshaw (1979: 319).

#### (31) So-exclamatives

- a. Mary thinks that he is so nice!
- b. Mary wonders if he is so nice!

Turning to BP, in contrast to English, exclamatives cannot be embedded at all in BP, not even under factive predicates. The following examples show the results for exclamative phrases that are arguments and predicates, and in both cases embedding is not allowed.

- (32) a. Que lindo carro o Pedro comprou!How pretty car the Peter bought'What a pretty car Peter bought!'
  - b. \*A Maria sabe/ se deu conta de que lindo carro o Pedro comprou!
    The Mary knows/ herself give account of how pretty car the Peter bought
    'Mary knows/realized What a pretty car Peter bought'.
  - c. \*Você não vai acreditar em que lindo carro o Pedro comprou!
    You not will-go believe in how pretty car the Peter bought
    'You won't believe What a pretty car Peter bought'.
  - d. \*A Maria se pergunta que lindo carro o Pedro comprou!
    The Mary self asks how pretty car the Peter bought
    'Mary wonders what a pretty car Peter bought'.
  - e. \*A Maria lamenta que lindo carro o Pedro comprou!
    The Mary regrets how pretty car the Peter bought
    'Mary regrets what a pretty car Peter bought'.

(33) a. Que lindo ele é!

How pretty he is

'How pretty he is!'

b. \*A Maria sabe/ se deu conta de que lindo ele é!

The Mary knows/ herself give account of how pretty he is

'Mary knows/realized how pretty he is'.

c. \*Você não vai acreditar em que lindo ele é!

You not will-go believe in how pretty he is

'You won't believe how pretty he is'.

d. \*A Maria se pergunta que lindo ele é!

The Mary self asks how pretty he is

'Mary wonders how pretty he is'.

e. \*A Maria lamenta que lindo ele é!

The Mary regrets how pretty he is

'Mary regrets how pretty he is'.

Note that it is not the case that BP fails the factivity test; the test simply cannot be applied in BP.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> BP allows the old-fashioned exclamative form in (i)a) with the wh-form  $qu\tilde{a}o$  "how/ to what degree". This form is similar to the wh-question in (ii), except for the intonation, and allows embedding.

(i)		Quão lindo ele é! (ii)	Quão lindo ele é?
		How pretty he is	How pretty he is
		'How pretty he is!'	'How pretty is he?'
(iii)	2	A Maria sabe/ se deu conta do quão lindo ele él	

- (iii) a. A Maria sabe/ se deu conta do quão lindo ele é! The Mary knows/ herself give account of-the how pretty he is 'Mary knows/realized how pretty he is'.
  - b. Você não vai acreditar no quão lindo ele é! You not will-go believe in-the how pretty he is

In short, the constructions under study here pass two tests for exclamatives. The third test could not be conducted, which does not exclude the possibility that their main content is presupposed. I conclude from these results that the constructions in question belong to the exclamative type. I interpret the difference between English and Portuguese regarding embedding in the following term: exclamative-phrases in BP must move to the topmost  $\omega$ -layer in the structure. Languages like English do not have this constraint; hence, exclamatives may appear in intermediate  $\omega$ -layers (i.e. they can be embedded.)

### 3. My analysis

My proposal to account for reduced copular wh-exclamatives is based on the claim that the traditional noun phrase has a high  $\omega$ -layer that can be split into KP, TopicP, and FocusP. With this in mind, I propose that in (34) the phrase *que bolsa linda* 'what a pretty purse' moves to the clausal FocusP while in (35), the phrase *que bolsa linda* 'what a pretty purse' moves to the nominal FocusP.<sup>4</sup>

(34) [Que bolsa linda], [essa bolsa nova (da Charity)] é!

what purse pretty this purse new of-the Charity is

'What a pretty purse is Charity's new purse!'

d. A Maria lamenta o quão lindo ele é! The Mary regrets the how pretty he is 'Mary regrets how pretty he is'.

<sup>&#</sup>x27;You won't believe how pretty he is'.

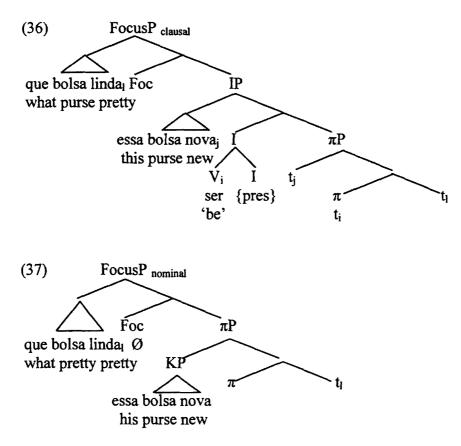
c. A Maria se pergunta o quão lindo ele é! The Mary self asks the how pretty he is 'Mary wonders how pretty he is'.

In all embedded sentences above involving the wh-word quão "how", the sense of surprise is lost. The sense of surprise is the most important property of exclamative constructions and, without it, the sentences in (iii) should not be classified as exclamatives. My conclusion is that those are not cases of embedded exclamatives, but simply embedded questions.

<sup>&</sup>lt;sup>4</sup> See Kato 2007 for a study of independent small clauses, which contains constructions that are analyzed in this chapter as reduced exclamatives.

(35) [Que bolsa linda], [essa bolsa nova (da Charity)] !
what purse pretty this purse new of-the Charity
'What a pretty purse is Charity's new purse!'

The following trees illustrate the syntactic derivation for (34) and (35). Before I discuss specific parts of the structure for the reduced exclamatives, I would like to point out that, although I chose to represent the small clause as an asymmetric structure mediated by  $\pi$ P following Bowers 2002, the kind of data I discuss in this chapter is fully compatible with a flat structure of small clauses along the line of Moro 1997, 2000 or an asymmetric structure mediated by a relator phrase as in Den Dikken 2006. The focus of my discussion is not the internal structure of the small clause *per se*, but only its availability in both clauses and TNPs.



The structures in (36) and (37) have in common a couple of aspects. First, they both start as small clauses ( $\pi$ P); *ser* 'be' is the head of the verbal small clause and a null element, which I assume to be a null pronoun, is the head of the nominal small clause. I will leave open the question regarding the true nature of the head of the nominal small clause; I speculate that it might be a pronoun, since many languages have pronominal small clauses, where a pronoun has been argued to be the counterpart of the verbal copula *be*.<sup>5</sup> Second, they both involve movement of the [+excl] predicate of the small clause to the left periphery. I will discuss evidence for FocP as the landing site for the movement of the predicate later in this section.

Before doing that, as a side note, the verb *ser* 'be' can either follow or precede the subject in full copular exclamatives, as can be seen in the following example.

(38) Que linda casa (é) essa casa nova da Charity (é)!

what pretty house (is), this house new of-the Charity (is)!

'What a pretty house Charity's new house is!'

This is simply a reflex of reversibility of certain types of copular constructions. Based on reversed copular constructions, I assume that in full exclamatives, the predicate first moves to spec-IP for EPP reasons and then to spec-FocP to check the [+wh, +excl] features. Since the subject does not leave the small clause, the verb precedes it, as shown below.

<sup>&</sup>lt;sup>5</sup> Among the languages that have pronominal copula constructions are Arabic (Eid 1983), Hebrew (Doron 1983, Rapoport 1987), Russian (Pereltsvaig 2001), Polish (Rothstein 1986, Citko 2008) and Scotish Gaelic (Adger and Ramchand 2003).

(39) [FocP [Que linda casa]<sub>j</sub> [IP t<sub>j</sub> [I é<sub>i</sub> [πP [essa casa nova da Charity] t<sub>i</sub> t<sub>j</sub> ]] what pretty house is this house new of-the Charity
'What a pretty house Charity's new house is!'

These considerations bear no weight on the structure of reduced exclamatives, since IP is not projected, but they bring forth another aspect that some types of full copular exclamatives have in common with reduced exclamatives: the subject does not leave the small clause.

As for the movement to the left periphery, there are two pieces of argument in favor of the idea that *que bolsa linda* 'what a pretty purse' moves to FocusP, and not to a higher projection in the left periphery, such as TopicP, for instance. First, the word *que* "what/how" is a wh-word and in BP, wh-words move to FocusP just like other focused phrases. Second, it is always possible to have a topic phrase preceding fronted wh-words/ focused phrases. The sentences below show this for copular exclamatives.

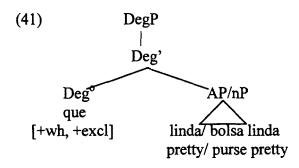
(40) Topic >exclamative

A Maria,	que bolsa linda	(é) essa bolsa nova dela!	
the Mary	what purse pretty	(is) this purse new of-her	
'As for Mary, what a beautiful purse is her new purse!'			

Given that the topic projection is higher in the structure than the focus projection, and that BP does not allow topic recursion, as discussed in chapters 1-2, it follows that wh-phrases and focused phrases should be in the focus projection immediately below the topic projection.

## 3.1 Internal structure of the exclamative predicate

Now let us take a look at the internal structure of the exclamative phrase. Whexclamative phrases contain the wh-word *que* 'how/that', which contributes the sense of surprise and "outstanding" interpretation. I propose that *que* 'how/what' is the head of a degree phrase, which takes either AP or nP as its complement, as shown below.



DegP takes nP as its complement instead of DP or KP. Evidence for this claim is that no determiner or quantifier can co-exist with the exclamative *que* 'how/what' in the predicate. The following examples illustrate this restriction.

- (42) (\*a/ \*essa/ \*uma) que (\*a/ \*essa/ \*uma) bolsa linda é essa bolsa nova!
  the/ this/a what the/this/a purse pretty is this purse new
  'What a pretty purse this new one is.'
- (43) (\*muitas/ \*poucas/ \*várias) que (\*muitas/ \*poucas/ \*várias) bolsas lindas many/ few/ several what many/ few/ several purses pretty-PL são essas bolsas novas! are these purses new-PL

'How many pretty purses these new ones are.'

The example in (42) shows that *que* 'how/what' cannot precede or be preceded by determiners and the example in (43) shows that it cannot precede or be preceded by quantifiers. One way of interpreting the incompatibility of *que* 'how/ what' and other prenominal modifiers is that the phrase headed by *que* 'how/what' is an instantiation of the phi-layer. Although I take the view that DegP is part of the phi-layer, it is not correct to assume that this is the same projection as DP, because DegP can also take AP as its complement, which is not the case for DP.

## 3.2 No exclamatives in situ

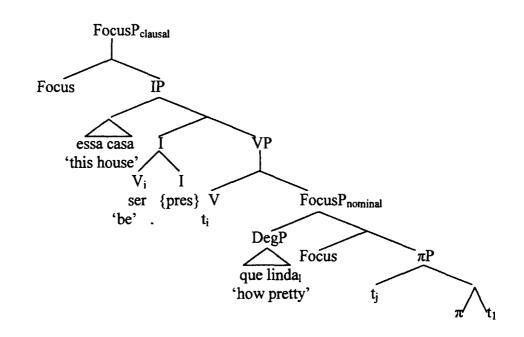
One additional assumption that is necessary to account for the full paradigm is that FocusP (as well as other phrases in the left periphery) is optionally projected. The sentences in (1)a-b) are derived when the nominal FocusP is not projected. This is related to the fact that *in situ* exclamatives are banished, as shown in (44).

(44) \*Essa casa é <u>que linda</u>!

This house is how pretty!

'How pretty, this house is!'

One could take (44) to indicate that exclamatives simple must move to a FocusP. However, one could analyze (44) as involving movement of *que linda* 'how pretty' to a TNP internal focus phrase, which would check the relevant strong feature and enable *que linda* 'how pretty' to surface in a low sentential position, as in the tree diagram below.



To account for this I propose that the ban on low exclamatives results from a property of the phrase *que linda* 'how pretty', one related to the exclamative operator. As discussed in section 2.2, exclamatives in BP cannot be embedded at all (not even in the exceptional contexts involving embedding under factive predicates in English.) In other words, the exclamative operator has to move to the highest  $\omega$ -layer in the structure, but not necessarily the highest projection in the highest  $\omega$ -layer, since it can be preceded by a topic. This property of exclamatives may be related to the fact that they are speaker-oriented, since there are other speaker-oriented adverbs and expressions that are also high in the structure, close to the highest clausal CP. Notice that I am not claming that every speaker-oriented item will follow the same constraint as exclamatives, but only that the exclamative constraint in question may be related to speaker-orientation.

(45)

The idea here is that the [+excl] feature is a strong feature and if it is checked prematurely in a low discourse projection, then the exclamative operator will be frozen in that low position, not being able to reach the highest  $\omega$ -layer.

## 3.3 Impossibility of que 'that'

Finally, I would like to present one last piece of evidence that reduced exclamatives do not involve a full-fledged clause. In BP when the specifier of a clausal FocP is filled, Foc<sup>o</sup> may be realized as *que* "that", as shown in the following examples.<sup>6</sup>

(46) a. Question

O que (que)	você comprou pra Maria?			
What (that)	you bought to-the Mary			
'What did you buy to Mar	y?'			
b. Focus construction				
PARA A MARIA (que)	eu comprei a flor, não para a Marta.			
FOR THE MARY (that)	I bought the flower, not to the Marta			
'As for the flower, it was for Mary that I bought it.'				
c. Exclamative				
Que flor linda (que)	você comprou pra Maria!			
What flower pretty (that)	you bought to-the Mary			
'What a beautiful flower you bought to Mary!'				

<sup>&</sup>lt;sup>6</sup> As discussed in chapter 3, there are different types of *que* in BP. The relevant ones for my discussion here are: a) *que* 'that' which is the complementizer word that links two clauses; b) *que* that may follow a focused/ exclamative/ wh phrase, which has been analyzed as the head of FocP (cf. examples (47)-(48)); c) *que* 'how', which is a degree wh-word that initiates an exclamative phrase, e.g. *que linda* 'how pretty' as in (47b), and d) *que* 'which', which is an interrogative wh-word, e.g. *que casa você comprou?* 'Which house did you buy?

Given the assumption that que 'that' is the overt realization of clausal Foc<sup>o</sup>, we can use the presence of que 'that' as a test for the status of the construction I am calling reduced exclamative. The results are shown below.

(47) a. Copular exclamative

Que linda (**que**) essa casa é! How pretty (that) this house is! b. Copular exclamative Que linda (**que**) é essa casa! How pretty (that) is this house! c. Reduced exclamative Que linda (**\*que**) essa casa! How pretty (that) this house! All: 'How pretty, this house is!'

In (47)a-b), que "that" can follow the phrase que linda "how pretty", while in (47)c) it can not. This fact indicates that in (47)c), the phrase que linda "how pretty" is not in the clausal FocP. Notice that the impossibility of que 'that' cannot be attributed to the comma intonation that separates the phrase que linda 'how pretty' from the rest of the sentence in (47)c), because the sentence in (47)a) also triggers the same comma intonation. This result is then supportive of my claim that the exclamative phrase in reduced exclamative constructions is in the nominal FocP.

#### 3.4 Section summary

In this section I discussed the structure of copular exclamatives in general and proposed that reduced exclamatives start as a small clause, which serves as the complement of the nominal focus phrase. The exclamative phrase moves the specifier of FocusP and checks the [+excl] feature in this low position. In the next section, I discuss copular exclamatives that contain nouns with expressive content.

#### 4. Mixed types: exclamatives and expressive content

Exclamative sentences may contain words that carry expressive content, such as the epithets, abstract nouns and swear words studied in the chapter 3 of this dissertation. I refer to these cases as the mixed types; they can be used as a convenient way to illustrate how different reduced exclamatives and nominal phrases with expressive content are.

In chapter 3, I argued that, when within a full TNP, words with expressive content target the TNP-internal high focus phrase. On the contrary, when within a bare TNP, they target the TNP-internal low focus phrase. There are three types of constructions I would like to discuss in this section. They are exemplified below with the swear word *porcaria* 'rubbish', located within an exclamative phrase.

(48) [wh + expressive N]

Que porcaria, essa HP.

how rubbish, this HP

'How lame, this HP is.'

(49) [wh + expressive N + bare N]

Que porcaria de impressora, essa HP. how rubbish of printer, this HP

'What a rubbish of a printer, this HP is.'

(50) [wh + expressive N + bare N] [expressive N + DP]

Que porcaria de impressora, essa merda dessa HP!

how rubbish of printer, this shit of-this HP

'What a rubbish of a printer, this piece of shit of a HP is!'

In (48), the wh-exclamative phrase contains *que* 'how/what' and the noun carrying expressive content. In chapter 3, I proposed that nouns carrying expressive content are in many aspects similar to adjectives. In the construction in (48) the noun carrying expressive content characterizes a TNP, *essa HP* 'this HP', in the same fashion an adjective would. In (49), the expressive content characterizes the bare noun *impressora* 'printer' within its own phrase. And the example in (50) shows that expressive content can appear in both the subject and the small clause predicate; I will show that the properties of expressive content differ depending on whether it is located within the subject or the predicate, which will provide additional support for my claim that there is a low and a high focus projection within the TNP.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Versions of copular exclamatives without *que* 'how/what' can also be found, as exemplified below.

<sup>(</sup>i) Linda, essa modelo alta!

Pretty this model tall

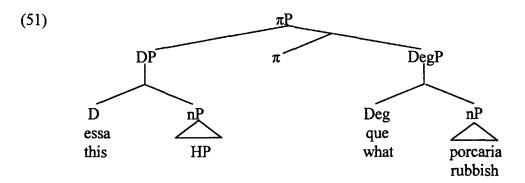
<sup>&#</sup>x27;this tall model is so pretty!'

<sup>(</sup>ii) Porcaria de impressora, essa HP.

rubbish of printer, this HP

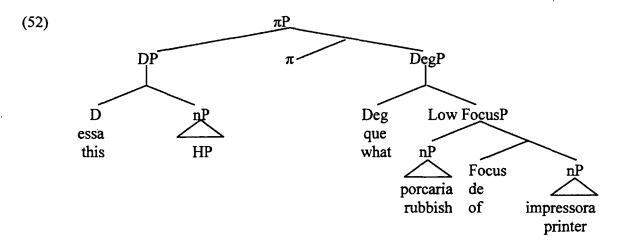
<sup>&#</sup>x27;What a rubbish of a printer, this HP is.'

Let us start with the tree for (48) up to the level of the small clause.



The phrase *essa HP* 'this HP' is the subject of a small clause. The exclamative phrase is the predicate, which I assume is defective; it contains nP, which I take to be the complement of DegP, by hypothesis, one of the projections of the phi-layer.

The structure for (49) is similar, except for the exclamative phrase.



In (52) the phrase *essa HP* 'this HP' is the subject of a small clause as well. The exclamative phrase on the right contains nP, but this time, the low focus projection is present in the structure and the swear word *porcaria* 'rubbish' is base-generated as its

In (i) we have a fronted adjective in a construction that is entirely parallel to the adjective wh-exclamative, except that there is no wh-word. In (ii), the example is identical to the mixed type with expressive content, except that there is no wh-word either. I assume that Deg<sup>o</sup> is present here, but its head is not phonetically realized.

specifier. Focus<sup>o</sup> is phonetically realized as *de* 'of' (See chapter 3 for details of the structure). Deg takes Low FocusP as its complement.

In section 3.1 I have suggested that DegP is one of the projections within the philayer. Although Deg<sup> $\circ$ </sup> does not exhibit any morphological endings, there is actually evidence that DegP probes n<sup> $\circ$ </sup> within nP for its phi-feature values, which I will discuss now.

The agreement mechanism I will use is the same as the one discussed in chapter 3. I follow Pesetsky and Torrego 2007 (see also Brody 1997, Frampton and Gutman 2000, and Frampton at al 2000) in assuming that that agreement results in "feature sharing", not assignment of features. In the "feature sharing" version of Agree, instead of assigning a value to the probe, the feature of the probe is replaced with the feature of the goal and they become two instances of the same F. Under the "feature sharing" version of Agree, Agree between two unvalued occurrences of F turns the probe and the goal into two instances of the same F; if one of the two instances of the unvalued feature F undergoes Agree with a valued feature F later on, all three instances of F will share a value.

As discussed in chapter 3, a full account of the phenomenon depends on the distinction between three semantic classes of expressive content: abstract nouns, epithets, and swear words. The examples are given below.

(53) [A gracinha/ burra/ merda da modelo] fugiu.
The(FEM) little-grace/ donkey/ shit of-the(FEM) model vanished.
'That lazy/ wimp/ piece of shit of model vanished'

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The word *gracinha* 'little-grace' is an example of an abstract noun. Its original meaning is positive, but when it appears as an expressive word within a full TNP, it can only be interpreted ironically, as implying that the model is 'lazy, vain or snobbish'. The word *burra* 'female donkey' is an example of an epithet and in its expressive meaning it means 'stupid'; epithets can only be used to refer to humans. The word *merda* 'shit' is a swear word. Swear words can be used unrestrictedly to refer to humans, animals or objects. They can also be used in isolation to simply express emotional states.

One of the main differences between sentences of the type in (48) and sentences of the type in (49) above is that epithets such as *burra* 'female donkey' are allowed in (48), but not in (49). The relevant examples are given below. Recall that a similar constraint does not exist for expressive abstract nouns and swear words, which are possible in both configurations, as exemplified above in (49).

(54) [wh + epithet]

Que burra, essa modelo nova.

how stupid, this model new

'How stupid, this new model is.'

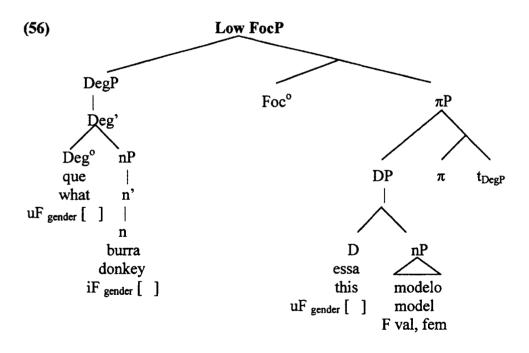
(55) [wh + epithet + bare N]

\*Que burra de modelo, essa moça nova. how stupid of model, this young-woman new 'What a stupid model, this new woman is.'

In (54) the epithet *burra* ' female donkey' agrees in feminine gender with *modelo* 'model' within the subject of the small clause. In (55) the epithet *burra* 'female donkey'

is a modifier of the bare singular noun within the predicate of the small clause, and the resulting sentence is unacceptable. As discussed in section 6 of chapter 3, the ban on epithets in (55) is not due to the syntactic configuration, but to lexical properties of the epithets. Epithets characterize people while bare nouns are used as reference to "kinds" of people and objects in BP (following Schmitt & Munn 1999 and Pires de Oliveira et al. 2006; contra Müller 2002). For this reason, epithets cannot be used to characterize a bare noun.<sup>8</sup>

What is interesting in the contrast between (54) and (55) above is how the epithet *burra 'donkey'* in (54) manages to agree with *modelo* 'model' within the subject. The relevant structure is shown in (56) below.



In chapter 3, I proposed that epithets such as *donkey* 'burra' have interpretable, unvalued gender. Regular nouns have interpretable, valued gender and determiners in general have uninterpretable, unvalued features. If we extend to DegP the assumptions

<sup>&</sup>lt;sup>8</sup> The judgments involving bare nouns are subject to speaker variation and this extends to the cases in (55).

made for other determiners (i.e. DegP has uninterpretable, unvalued gender), then we can account for the agreement between the epithet and the noun within the subject, using the same system that was adopted in chapter 3.

In the tree above, when  $Deg^{o}$  merges with nP, the unvalued gender feature of  $Deg^{o}$  scans its c-command domain for another instance of F; in this case, it finds another unvalued occurrence of the gender feature. Giving the "feature sharing" version of Agree I assume in this dissertation, Agree between two unvalued occurrences of F turns the probe and the goal into two instances of the same F. At this point of the derivation, they are both still unvalued, but they have become the same feature. If one of these two instances of the gender feature undergoes Agree with a valued gender feature, both instances above will share the same value. This is what happens when DegP moves to the spec-FocP, position, from where it c-commands the n<sup>o</sup> modelo 'model'. The unvalued gender feature of DegP scans its own c-command domain for another occurrence of the gender feature. The goal, the n within the subject of the small clause, has feminine value and the feature of the probe is replaced with the feature of the goal; the same holds for the gender feature of the epithet.

If this analysis is correct, it may be taken to provide evidence that DegP is a phrase of the phi-layer, since it enters into an agreement relation with it.<sup>9</sup>

Let us now turn our attention to the case of mixed exclamative constructions in (50), which has expressive content in both branches of the small clause. The following tree diagram shows the structure up to the level of the small clause.

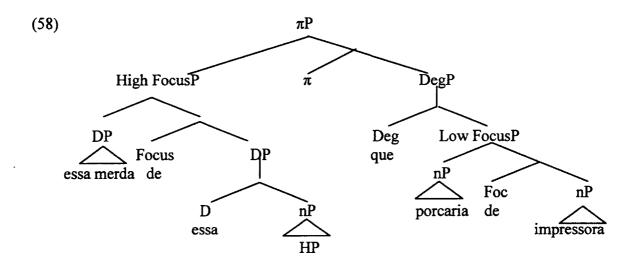
<sup>&</sup>lt;sup>9</sup> Notice that, although there languages in which complementizers can agree, BP is not one such language.

(57) [wh + expressive N + bare N] [expressive N + DP]

Que porcaria de impressora, essa merda dessa HP!

how rubbish of printer, this shit of-this HP

'What a rubbish of a printer, this piece of shit of a HP is!'



In the tree above, the subject is the full TNP *essa merda dessa HP* 'this piece of shit of an HP' and the predicate of the small clause is the wh-exclamative phrase *que porcaria de impressora* 'what a rubbish of a printer'. Recall that the structure above represents the position of base-generation of the wh-phrase, which moves to spec-FocP later in the derivation. The subject and the predicate branches of the small clause in (58) above have different structures, one containing the High FocusP and the other containing the Low FocusP. From this point on, I will discuss them separately.

The subject of the small clause shows the same properties as the full TNPs discussed in chapter 3, when they are definite and in an argumental position. These properties include gender and number agreement between the TNP containing the

expressive noun and the TNP with the regular noun. The property of definiteness "agreement" between the first and the second determiner is also present (See section 5.4 of chapter 3 for relevant discussion). Given these properties, I propose that the subject is a full TNP, in the sense that it can project the  $\omega$ -layer, including the high focus phrase; the DP containing the expressive content can move to spec-FocusP within the subject.

The predicate branch of the small clause is different because n is never preceded by its own determiner and Deg is the only determiner in this TNP. Therefore, the definiteness "agreement" is never attested. Since the predicate branch of a small clause in BP is never preceded by articles or demonstratives, I propose that the predicate of the small clause in wh-exclamative constructions is defective. It includes DegP (part of the phi-layer) > Low FocP > nP (part of the theta-layer), but it does not include the high  $\omega$ layer.

One piece of evidence in favor of the structure above, containing High FocusP in the subject and Low FocusP in the predicate, comes from expressive abstract nouns, which have literal and ironic interpretations. Expressive abstract nouns, such as *gracinha* 'little-grace', change their meaning depending on whether they are in the high focus projection or the low focus projection. In the high focus projection, they are interpreted ironically, meaning 'snobbish, vain or lazy', and their behavior is entirely parallel to that of the epithets (cf. section 2 of chapter 3). In the low focus projection, *gracinha* 'littlegrace' is interpreted as the positive property of being graceful. This difference in meaning can be used as a test to identify whether the expressive noun is in the high or low focus. The following examples show the results of the test.

- (59) Que gracinha de modelo, essa moça alta!what a little-grace of model, this young-woman tall'What a grace, this young tall woman is!'
- (60) ?Que moça alta, essa gracinha dessa modelo!what a young-woman tall, this little-grace of this model'What a tall young woman, this snobbish model!'

In (59) gracinha 'little-grace' is interpreted as a positive property of the tall model. Although (60) is slightly degraded, gracinha 'little-grace' is not interpreted as a positive property; it can only be interpreted ironically.

One final question related to reduced exclamatives that needs to be answered is why only exclamatives are reduced in the relevant sense. I have shown in example (2) above that BP does not allow reduced declaratives or interrogatives. The example in (61) is an example of a declarative.

(61) Essa mulher \*(é) muito alta.

This woman \*(is) very tall

'This woman is very tall'.

The answer to this question is related to the structure of the exclamative phrase as opposed to other predicate phrases. In section 3 I have suggested that DegP is one of the projections within the phi-layer and this idea was further elaborated in this section with evidence from the ban on epithets in some structures, but not others. If this assumption is correct, the only layer that is missing in the exclamative phrase within the small clause is the  $\omega$ -layer, i.e. it contains nP and NP ( $\theta$ -layer) and DegP (phi-layer). Notice now that, by projecting the High FocusP, the defective exclamative phrase becomes complete. This happens when High FocusP takes the small clause as its complement TNP internally.

The difference between the exclamative predicate in small clauses and other types of predicates, for instance, the declarative predicate in small clauses, is that the declarative predicate is not defective. To put it differently, the declarative predicate within a small clause is complete and it can project the nominal High FocusP. If that is the case, then the option of projecting High FocusP outside of the small clause is not available; consequently, reduced declarative small clauses are also not available.

The examples below provide evidence that both the subject and the predicate of declarative small clauses are full nominal phrases.

(62) Esse médico é [o irmão do João].

this doctor is the brother of-the John

'This doctor is John's brother'

(63) a. Esse gracinha desse médico é [o irmão do João].
this little-grace of-this doctor is the brother of-the John
'This snobbish doctor is John's brother'
b. Esse médico é [o gracinha do irmão do João].
this doctor is the little-grace of-the brother of-the John
'This doctor is John's snobbish brother'

The example in (62) shows for declarative sentences that both sides of the small clause can contain a regular determiner preceding the noun and the examples in (63)

show that both the subject and the predicate can contain expressive abstract nouns with ironic interpretation, which, as discussed above, provides evidence for High FocP in the TNP.

# 5. Conclusion

This chapter contributed to the overall discussion of the availability of discourse projections within the TNP by providing additional evidence for High and Low FocusP in the nominal  $\omega$ -layer. I compared regular exclamatives and a shorter version of exclamatives without the copula, which I referred to as reduced exclamative. Reduced exclamatives are self-sufficient TNPs, in which nominal High FocusP is present in the structure, with its head taking a small clause as its complement. I argued that the  $\omega$ -layer containing an exclamative phrase has to be the highest  $\omega$ -layer in the structure in BP and discussed tests involving embedding under factive predicates in order to show that BP does not allow embedded exclamatives at all. Additionally, I investigated mixed types of copular exclamatives, which provide evidence for High and Low FocusP.

#### Chapter 5

#### EXTRACTION

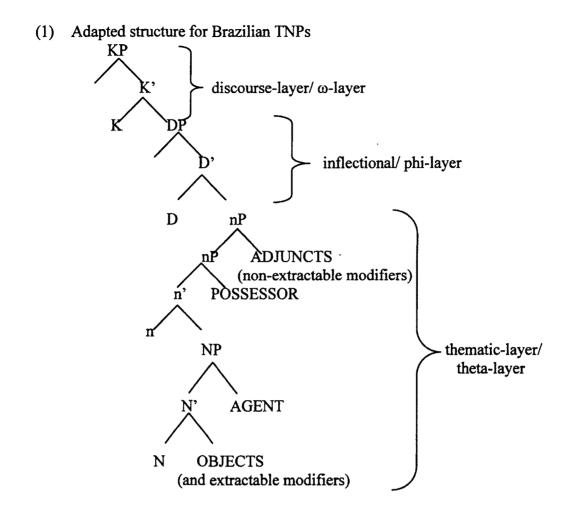
### 1. Introduction

In chapter 2 of this dissertation I investigated cases of movement to the nominal topic phrase and in chapters 3 and 4 I investigated cases of movement to the nominal focus phrases (high and low focus). In this chapter, I investigate in detail several cases of extraction out of the traditional nominal phrase (TNP) in regular configurations, where nominal TopicP and nominal FocusP are not projected.

Given the assumptions I made in chapters 1-4, KP is only present in the structure when its head has phonetic realization, i.e. when the pseudo-preposition de 'of' is present in the sentence, and for the most part, this corresponds to situations in which a TNP is embedded under another TNP. Since other phrases in the  $\omega$ -layer also do not have to be present, DP may, at times, be the topmost projection within the TNP and thus, be a phase (following Bošković 2010c where the highest projection within the TNP is a phase.) This assumption will be relevant in the discussion in this chapter, where I focus on argumentadjunct asymmetries and a definiteness effect (more precisely, the specificity condition.) I will also provide additional evidence for the low clausal focus projection in BP.

I will use a modified version of Ticio's 2003 structure, adopting only the modifications that are necessary to make it consistent with the general assumptions of this dissertation and to accommodate Portuguese-specific cases.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Most arguments and adjuncts of a noun are headed by the pseudo-preposition de 'of', which introduces various semantic relations such as theme, possessor, agent, part-whole, locative, material, time, partitive and kinship. I argued in the introduction and other chapters that de 'of' is, in fact, within the TNP, and it is the head of KP (or other projections in the nominal  $\omega$ -layer).



The first modification of Ticio's structure is that DP is part of the nominal  $\varphi$ layer, not part of the  $\omega$ -layer as originally proposed by Ticio 2003.

Another modification concerns the status of the nominal TopicP; for Ticio 2003, TopicP is the topmost projection within the Spanish nominal phrase. As discussed in chapters 1-4, the discourse layer within the TNP can be extended into KP, TopicP and FocusP, all of which are optionally projected. In the structure above, TopicP is not present; instead, KP appears as the topmost projection within the TNP. Notice, however, that KP is only present in TNPs embedded in TNPs. Notice also that the specifiers of the discourse projections are to the left, not to the right as in Ticio's 2003 (see chapter 1-4 for empirical evidence); however, I will keep Ticio's 2003 assumption (and references cited by her) that the specifiers of the thematic projections are to the right. I will return to this issue and discuss empirical evidence that this is the case for BP.

The organization of this chapter is as follows. In section 2 I discuss an asymmetry between arguments and adjuncts with regard to patterns of extraction. In section 3, I discuss a specificity effect.

### 2. Arguments versus adjuncts

In this section I discuss an asymmetry between arguments and adjuncts regarding the patterns of the extraction, which is the main topic of this section. Consider (2)-(3).

(2) a. Adjunct

Minha mãe encomendou[uma pintura com moldura dourada].My mother ordered[a painting with frame golden]

'My mother ordered a painting with golden frame.'

b. Argument

Minha mãe encomendou[uma pintura de crianças e flores].My mother ordered[a painting of children and flowers]'My mother ordered a painting of children and flowers.'

(3) a. Adjunct

\*Com o que minha mãe encomendou [uma pintura t]? With the what my mother ordered [a painting t] 'With what my mother ordered a painting?'

#### b. Argument

De que	minha mãe encomendou	[uma pintura t ]?
Of what	my mother ordered	[a painting t]

'What did my mother order a painting of?'

The sentences in (2)a-b) provide an example of a nominal adjunct and a nominal argument respectively; the examples in (3) show that extracting the adjunct is unacceptable while extracting the argument is acceptable. (Whenever necessary, I will use the term 'modifier' as a general term for either adjunct or argument.)

In order to account for the asymmetry in the extraction of arguments and adjuncts, I use the following version of the anti-locality condition.

(4) Anti-locality condition (Bošković 2005)

Each chain link must be at least of length 1, where a chain link from A to B is of length n if there are n XPs that dominate B, but no A.

Following a version of Bošković's 1994, 1997 and Saito and Murasugi 1999's condition on chain links, Bošković 2005 formulates the condition above, which blocks the movement from a position adjoined to the complement of x to spec-XP, because this movement is too local. One of the main reasons why Bošković 2010c adopted (4) was in fact to ban extraction of nominal adjuncts in languages that have DP. Consider (5).<sup>2</sup>

(5)  $\left[ DP \left[ D' D \left[ nP ADJUNCTS \left[ nP n \dots \right] \right] \right] \right]$ 

<sup>&</sup>lt;sup>2</sup> I modify Bošković's structure by assuming nP, and adjoining adjuncts to nP.

Given that DP is a phase in (5), being the topmost projection in TNP (see Bošković 2010c), the adjunct must move to spec-DP, due to the PIC, but this movement is too short, i.e. it violates (4). In the rest of this section, I will discuss in more detail empirical evidence for the asymmetry between arguments and adjuncts.

## 2.1. Basic cases of extraction

The generalization for the basic cases of extraction in BP is that classic arguments (possessors, agents and themes) and modifiers introduced by de 'of', which is the head K<sup>o</sup>, in (6)-(7) are extractable, while real PP-adjuncts introduced by prepositions such as *com* 'with', *sem* 'without' and *segundo* 'according to' in (8)-(12), are not.<sup>3</sup>

(6) Arguments

a. De quem <sub>possessor</sub>	o João entrevistou/	ofendeu/ chutou	vários irmãos?	
Of whom	the John interviewe	d/offended/ kicked	many brothers	
'who did John inte	erview/offend/kick mar	ny brothers of?'		
b. De quem <sub>possessor</sub>	o João destruiu	várias pinturas?		
Of whom	the John destroyed	many pictures		
'who did John destroy many pictures of?'				
c. De que <sub>object</sub>	o João destruiu	várias reproduções	?	
Of what	the John destroyed	many reproductions	S	
'What did John destroy many reproductions of?'				

<sup>&</sup>lt;sup>3</sup> This test is based on the tests applied by Ticio 2003, but I used classical transitive verbs, since in BP the type of the verb seems to play a role in the possibility of extraction of the PP modifier. Among others, I am avoiding verbs like 'to see', 'to buy' and 'to like' in BP because they allow a small clause secondary predication. It is possible that the different behavior of the prepositions with and without in BP and Spanish is due to the use of these verbs in Ticio's 2003 description of the Spanish patterns.

d. De quem <sub>agent</sub>	o João destruiu	várias pinturas?		
Of whom	the John destroyed	many pictures		
'who did John destroy many pictures of?'				

# (7) Other extractable modifiers

.

a. De que ano <sub>time</sub>	o João destruiu vários livros?
Of what year	the John destroyed many books
'Of what year did Johr	n destroy many books?'
Compare with:	o João destruiu vários livros de 1973.
	the John destroyed many books of 1973
	'John destroyed many books of 1973.'
b. De que lugar <sub>localive</sub>	o João entrevistou várias garotas?
Of what place	the John interviewed many girls
'From what place did l	John interview many girls?'
Compare with:	o João entrevistou várias garotas de Belém.
	the John interviewed many girls from Belém
	'John interviewed many girls from Belém.'

In (6), possessors, themes and agents can be extracted out of the TNPs just like their counterparts in Spanish. In (7), we can see that other modifiers introduced by *de* 'of' can also be extracted out of their TNP. These facts contrast with the results found for the PP-modifiers below.

- (8) \*Segundo quem o João destruiu um evangelho?
   According-to who the John destroyed a Gospel
   Compare with: o João destruiu um evangelho segundo São Paulo.
   the John destroyed a Gospel by Saint Paul
   'John destroyed a Gospel by Saint Paul.
- (9) \*Para onde o João destruiu várias estradas?

To where the John destroyed many roads?

- Compare with: o João destruiu várias estradas para São Paulo. the John destroyed many roads to São Paulo 'John destroyed many roads to São Paulo.'
- (10) \*Sem o que/ sem que peça de roupa o João entrevistou várias pessoas?
  Without what/ without which piece of clothes the John interviewed many people
  Compare with: o João entrevistou várias pessoas sem camisa.
  the John interviewed many people without T-shirt.
  'John interviewed many people without T-shirt'
- (11) \*Com o que/ com que tipo de auxilio o João entrevistou vários alunos?With what/ with what kind of support the John interviewed many students
  - Compare with: o João entrevistou vários alunos com auxílio financeiro. the John interviewed many students with financial support. 'John interviewed many students with financial support'

(12) \*Sobre que assunto o João destruiu vários livros?
About what topic the John destroyed many books
Compare with: o João destruiu vários livros sobre política. the John destroyed many books about Politics.
'John destroyed many books about Politics.'

The examples in (8)-(12) show that PP-modifiers cannot be extracted out of their TNPs.<sup>4</sup> The generalization is so robust that it is even possible to find minimal pairs, such as the following:

3) a. O João limpou [um evangelho [segundo São Marcos]/ [de São Marcos]]				
the John cleaned a gospel according-to St. Mark of St. Mark				
b. O João limpou [várias estradas [para Belém]/ [de Belém]]				
the John cleaned several roads to Belém of Belém				
c. O João limpou [vários livros [sobre Lingüística]/ [de Lingüística]]				
the John cleaned several books about Linguistics of Linguistics				
(14) a. [*Segundo quem]/ [de quem] o João limpou [um evangelho t ]?				
according-to who of who the John cleaned a gospel				
b. [*Para onde]/ [de onde] o João limpou [várias estradas t ]?				
to where of where the John cleaned several roads				
c. [*sobre o que]/[ de/do que] o João limpou [vários livros t ]?				
about the what of/of-the what the John cleaned several books				

<sup>&</sup>lt;sup>4</sup> Some of the examples in (8)-(12) may be acceptable under other readings, in which the PPs modify either the event or the subject. These readings are not relevant for my discussion.

In (13)-(14) only the modifiers headed by de 'of' can be extracted out of the TNP, even if the modifiers headed by other prepositions express similar semantic relations. The above facts thus show that the most important factor in the extraction out of the TNP in BP is the type of preposition: de-modifiers versus non-de modifiers.<sup>5</sup>

As discussed by Ticio 2003 for Spanish, among de-modifiers, there are semantic relations that are typically counted as semantic arguments, such as theme, agent and possessor, and there are other relations that are not typically counted as semantic arguments, such as location and time, among others. However, Ticio 2003 shows that although de-modifiers expressing other semantic relations are not semantic arguments strictly speaking, they are syntactic arguments, since they pass syntactic tests for arguments.<sup>6</sup> From this point on, I will refer to *de*-modifiers simply as arguments as opposed to non-de modifiers, which are adjuncts.

As discussed above, the asymmetry in the extraction of arguments and adjuncts discuss in this section results from the hierarchical structure proposed above and the antilocality condition. Adjuncts to nP cannot move to spec-DP, which is a phase, because the movement from the nP-adjoined position to spec-DP is too short. The relevant structure is repeated in (15) below for convenience.

(15)  $\left[ DP \left[ D' D \left[ nP ADJUNCTS \left[ nP n \dots \right] \right] \right] \right]$ 

(i)a. \*De que você riscou uma casa t?

- Of what you defaced a house t?
- you defaced a house of what? 'What is the building material, such that you defaced a house made of that material?'

(ii)a. \*De que você cozinhou uma gema t?

Of what you cooked a yolk t?

b. ??Você cozinhou uma gema de quê? you cooked a yolk of what?

<sup>&</sup>lt;sup>5</sup> There are certain *de*-modifiers that cannot be extracted out of the TNP. However, these cases are also not acceptable with wh-in-situ, which suggests that extraction is not the real issue, but wh-question formation. I will leave this open for further research.

b. ??Você riscou uma casa de quê?

<sup>&#</sup>x27;What is the thing, such that you cooked its yolk?'

<sup>&</sup>lt;sup>6</sup> One of Ticio's 2003 arguments that *de*-modifiers expressing other semantic relations are indeed syntactic arguments is that when such de-modifiers are further embedded in an island and extracted out of the island, we get only a subjacency violation, not an ECP violation, which means they are arguments, not adjuncts.

If this analysis is correct, we would expect the asymmetry to appear in other configurations that involve extraction of arguments and adjuncts, not only when they undergo wH-movement. In the next section, I discuss the case of a configuration in which discontinuous TNPs in BP provide additional evidence for the above analysis.

#### 2.2. Discontinuous WH-questions

Previous studies on wH-questions in Brazilian Portuguese (BP) have shown that this language allows both WH-movement and WH-in-situ in regular questions, i.e. nonecho questions (Mioto 2001, Grolla 2000, Zocca 2004, 2010, and Pires and Taylor 2007)<sup>7</sup>. This is exemplified in (16)-(17) below.<sup>8</sup>

- (16)O João destruiu[quantas reproduções dessa pintura]?the John destroyed[how-many reproductions of this picture]'How many reproductions of this picture did John destroy?'
- (17) [Quantas reproduções dessa pintura] o João destruiu?

[How-many reproductions of this picture] the John destroyed

'How many reproductions of this picture did John destroy?

In addition to these types of questions, BP also has discontinuous WHconstituents, such as (18)-(19) illustrated bellow.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> For studies on wH-questions that discuss the loss of the VS order in wH-questions, see Kato 1987, Duarte 1992, Lopes Rossi 1993 and Sikansi 1998.

<sup>&</sup>lt;sup>8</sup> All examples correspond to my own judgments, unless an indication of a different source is given.

<sup>&</sup>lt;sup>9</sup> For preliminary analyses of these constructions in terms of remnant movement, see Bastos 2006, 2007.

For an alternative analysis of such constructions as involving DP-adjunction to DP, see Avelar 2006.

- (18) Quantas reproduções o João destruiu, [dessa pintura]?
  How-many reproductions the John destroyed[of this picture]
  'How many reproductions of this picture did John destroy?'
- (19) o João destruiu [dessa pintura] quantas reproduções?
  the John destroyed [of this picture] how-many reproductions
  'How many reproductions of this picture did John destroy?'

In (18), the WH-word and the noun appear in the left periphery of the sentence, while an argument of the noun appears to the right of the verb. In (19), the argument precedes the WH-word and the noun. I will provide evidence that in this case the argument is not within the TNP.

I will also argue that the structure of constructions with discontinuous whconstituents in (19) is derived by remnant movement, where the argument of the noun moves out of the TNP, and then the remnant part of the TNP undergoes wh-movement to the clausal left periphery.

The paradigm discussed in section 2.1 for the possibilities of extraction of arguments out of their TNPs in BP correlates in an interesting way with the patterns of discontinuous wh-constructions. The following generalization expresses the relevant correlation:

(20) Discontinuous WH-questions are restricted to constructions with TNPs whose Ns are modified by arguments of N.

The general schema of the construction and the relevant data are the following:

#### (21) Schema: WH N ... ARGUMENT

(22) a. quantos irmãos o João entrevistou/ ofendeu/ chutou da Maria poss?
 how-many brothers the John interviewed/offended/ kicked of-the Maryposs
 'How many brothers of Mary did John interview/offend?'

b. quantas pinturas o João destruiu/ riscou desse colecionador<sub>poss</sub>? the John destroyed/ strikethrough of-this collector<sub>poss</sub> how-many pictures 'How many pictures of this collector did John destroy/ strikethrough?' c. quantas reproduções o João destruiu/riscou dessa pintura<sub>obi</sub>? how-many reproductions the John destroyed/ strikethrough of-this picture<sub>obi</sub> 'How many reproductions of this picture did John destroy/ strikethrough?' d. quantas pinturas o João destruiu/ riscou de Van Gogh<sub>agent</sub>? how-many pictures the John destroyed/ strikethrough of Van Goghagent 'How many pictures by Van Gogh did John destroy/ strikethrough?'

(23) a. Quantos livros o João destruiu/ riscou de 1973?
how-many books the John destroyed/ strikethrough of 1973
'how many books of 1973 did John destroy/ strikethrough?'
b. Quantas garotas o João entrevistou de Belém?
how-many girls the John interviewed from Belém
'how many girls from Belém did John interview?'

The sentences in (22) show that arguments can remain on the right of the main verb far from the noun if the argument is a possessor, a theme or an agent of the N. The sentences in (23) show that this is also possible for other arguments introduced by de 'of'.

In both sets of data the sequence WH-N appears in the left periphery of the sentence. This contrasts with the results found for PP-adjuncts, as we can see below.

- (24) \*Que evangelho o João destruiu/ riscou segundo São Pedro?Which Gospel the John destroyed/ strikethrough by Saint Peter
- (25) \* Quantas estradas o João destruiu para São Paulo?how-many roads the John destroyed to São Paulo
- (26) \* Quantas pessoas o João entrevistou sem camisa?how-many people the John interviewed without T-shirt
- (27) \* Quantos alunos o João entrevistou com auxílio financeiro?how-many students the John interviewed with financial support
- (28) \* Quantos livros o João destruiu/ riscou sobre política?how-many books the John destroyed/ strikethrough about Politics

The adjuncts in (25)-(28) do not take part in constructions with discontinuous WHquestions. In short, discontinuous WH-questions are possible only when the modifier is an argument, i.e. only with the modifiers introduced by *de* 'of' in BP.

I analyze discontinuous WH-constituents such as (18) in BP as a result of two independent steps of movement. The first step is the movement of the argument out of the traditional nominal phrase [+WH]. I will show below that in this case the argument is not within the TNP. The linear order is obtained with V to I movement. The second step of movement is just a regular uncontroversial movement of a [+WH] TNP to the left periphery. (29) Step 1: a. [CP ... [V+I MODIFIER [KP WH N t<sub>MODIFIER</sub>]], or

b. [CP ... [V+I [KP WH N  $t_{MODIFIER}$ ] MODIFIER] Step 2: [CP [KP WH N  $t_{MODIFIER}$ ] ... [V+I MODIFIER  $t_{DP}$ ]

In the following sections, I argue against potential alternative analyses for the discontinuous WH-constituents and discuss evidence in favor of the Remnant Movement analysis presented above. I show that the WH-element and the N do not form a constituent on their own by comparing them to constructions with a small clause. Additionally, I show that there is a subset of discontinuous WH-constituents that could, at a first sight, be analyzed as Left Branch Extraction, and I argue against this possibility. After that, I introduce evidence for the first step of movement in (29).

#### 2.2.1. WH-N do not form a constituent on their own

Since the possibility of extraction is commonly used as a diagnostic for constituency, one could try to argue that the WH-element and the N form a constituent on their own, i.e. form a constituent to the exclusion of everything else. If that is the case, then in principle, it should be possible for them to move up together to the left periphery. Notice, however, that other tests for constituency, such as the pronominalization test, challenge that conclusion.

The examples (a) in (30)-(34) show sentences with WH-in-situ in BP. The examples (b) in (30)-(34) show that the WH-phrase in those sentences can be replaced by a pronoun as whole. The examples in (c) in (30)-(34) show that the possessor *a Maria*, the object *essa pintura* 'this picture', the agent *Van Gogh*, and the other arguments *de* 

1973 'of 1973', and *de Belém* 'from Belém' can all be replaced by pronouns. The examples (d) in (30)- (34) show that the sequences *quantos irmãos* 'how many brothers', *quantas reproduções* 'how many reproductions', *quantas pinturas* 'how many pictures', *quantos livros* 'how many books', *quantas garotas* 'how many girls' and *quantas casas* 'how many houses' can not be replaced by pronouns.

(30) a. O João entrevistou/ ofendeu/ chutou [quantos irmãos da Maria<sub>poss</sub>]?
 the John interviewed/offended/ kicked [how-many brothers of Mary<sub>poss</sub>]

'How many brothers of Mary did John interview/offend/ kick?'

b. O João entrevistou/ ofendeu/ chutou [eles]?

the John interviewed/offended/ kicked [them]

'did John interview/offend/ kick them?'

c. O João entrevistou/ ofendeu/ chutou [quantos irmãos dela]/?
the John interviewed/offended/ kicked [how-many brothers of-her]
'How many brother of her did John interview/offend/ kick?'

d. \*O João entrevistou/ ofendeu/ chutou [eles da Maria]?the John interviewed/offended/ kicked [them of Mary]

(31) a. O João destruiu/ riscou [quantas reproduções dessa pintura<sub>obj</sub>]?
the John destroyed/ strikethrough [how-many reproductions of this picture<sub>obj</sub>]
'How many reproductions of this picture did John destroy/ strikethrough?'

b. O João destruiu/ riscou [elas]?

the John destroyed/ strikethrough [them-fem]

'did John destroy/ strikethrough them?'

c. O João destruiu/ riscou	[quantas rep	roduções	dela]?
the John destroyed/ strikethrough	[how-many	reproductions	of-her]
'How many reproductions of it did	John destro	y/ strikethrougl	1?'
d. *O João destruiu/ riscou	[elas	dessa pintura]	?
the John destroyed/ strikethrough	[them-fem	of this picture	]
(32) a. O João destruiu/ riscou	[quantas pi	nturas	de Van Gogh <sub>agent</sub> ]?
the John destroyed/ strikethrough	[how-many	pictures	of Van Gogh <sub>agent</sub> ]
'How many pictures by Van Gogh	did John des	troy/strikethro	ough?'
b. O João destruiu/ riscou	[elas]		
the John destroyed/ strikethrough	[them-fem]		
'did John destroy/ strikethrough the	em?'		
c. O João destruiu/ riscou	[quantas pin	turas	dele]?
the John destroyed/ strikethrough	[how-many]	pictures	of-him]
'How many pictures of him did Joh	nn destroy/ st	rikethrough?'	
d. *O João destruiu/ riscou	[elas	de Van Gogh]	?
the John destroyed/ strikethrough	[them-fem	of Van Gogh]	
(33) a. O João destruiu/ riscou	[quantos li	vros de 197	3]?
The John destroyed/ strikethrough	[how-many	y books of 197	3]
'how many books of 1973 did John	n destroy/ stri	kethrough?'	
b. O João destruiu/ riscou	[eles]?		
The John destroyed/ strikethrough	[them-mas	c]	
'did John destroy/ strikethrough the			

c. O João destruiu/ risc	c. O João destruiu/ riscou		s livros	de então]?
The John destroyed/ st	trikethrough	[how-m	[how-many booksof then]	
'how many books of t	hen did John	destroy/ s	trikethrou	ıgh?'
d. *O João destruiu/ ris	scou	[eles	de	1973]?
The John destroyed/ st	rikethrough	[them-m	nasc of	1973]
(34) a. O João entrevistou	[quantas gai	rotas	de Belér	n]?
The John interviewed	[how-many	girls	from Be	lém]
'how many girls from	Belém did Jo	hn intervi	iew?'	
b. O João entrevistou	[elas]?			
The John interviewed	[them-fem]			
'Did John interview th	'Did John interview them?'			
c. O João entrevistou	[quantas ga	rotas	de <b>lá</b> ]?	
The John interviewed	how-many g	girls	from the	ere]
'how many girls from	there did Joh	n intervie	w?'	
d. *O João entrevistou	[elas	de Belér	n]?	
The John interviewed	[them-fem	from Be	lém]	

If the sequence WH-element + N were a constituent, then the pronominalization in the examples in (d) above should be possible. In the absence of an alternative explanation of why pronominalization is impossible, then these facts suggest that the sequence WH-N does not form a constituent on its own to the exclusion of the following modifier.

It is important to notice that pronominalization of the sequence WH-N is also not possible in the cases where the sequence WH-N is followed by a non-argument. For instance, the following data illustrate the behavior of adjuncts introduced by the prepositions *sem* 'without' and *com* 'with'.

As in the previous description, the (a) examples in (35)-(36) contain sentences with WH-in-situ in BP. The (b) examples in (35)-(36) show that the WH-phrase in those sentences can be replaced by a pronoun as whole. The (c) examples in show that *camisa* 'T-shirt' and *auxilio financeiro* 'financial support' can be replaced by pronouns. Exactly as in the case of arguments, the (d) examples in (35)-(36) show that the sequences *quantas pessoas* 'how many people' and *quantos alunos* 'how many students' cannot be replaced by pronouns.

(35) a. O João entrevistou/ ofendeu/ chutou [quantas pessoas sem camisa]?
the John interviewed/offended/ kicked [how-many people without T-shirt]
'How many people without T-shirt did John interview/offend/ kick?'

b. O João entrevistou/ ofendeu/ chutou [elas]?

the John interviewed/offended/ kicked [them]?

'Did John interview/offend/ kick them?'

c. O João entrevistou/ ofendeu/ chutou [quantas pessoas sem isso]?
the John interviewed/offended/ kicked [how-many people without it]
'How many people without it did John interview/offend/ kick?'

d. \*O João entrevistou/ ofendeu/ chutou elas sem camisa?the John interviewed/offended/ kicked them-fem without T-shirt

(36) a. O João entrevistou/ ofendeu/ chutou quantos alunos com auxílio financeiro?
the John interviewed/offended/ kicked how-many students with financial support
'How many students with financial support did John interview/offend/ kick?'

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b. O João entrevistou/ ofendeu/ chutou [eles]?the John interviewed/offended/ kicked [them]'Did John interview/offend/ kick them?'

c. O João entrevistou/ ofendeu/ chutou [quantos alunos com isso?]
the John interviewed/offended/ kicked [how-many students with it]
'How many students with it did John interview/offend/ kick?'

d. \*O João entrevistou/ ofendeu/ chutou eles com auxílio financeiro?
the John interviewed/offended/ kicked them-masc with financial support
'Did John interview/offend/ kick them with financial support?'

There are some interesting cases involving the sequence WH-N followed by a modifier introduced by *de* 'of' where we can actually find evidence for the status of the WH-N sequence as a single constituent. I argue, however, that this option does not come from the internal structure of the nominal phrase, but from the structure of some verb phrases. Some verbs that participate in these constructions are *ver* 'to see', *querer* 'to want', *gostar* 'to like', *comprar* 'to buy', *decorar* 'to decorate', among others. For instance, consider the sequence WH-N followed by an adjunct introduced by the prepositions *sem* 'without' and *com* 'with'.

(37) a. O João viu/quer/gosta de quantas pessoas sem camisa?
the John saw/want/likes of how-many people without T-shirt
'How many people without T-shirt did John see/want/like?'

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b. O João viu/ quer/gosta d(e) elas		sem camisa?		
the John saw/ want/likes of	them-fem	without T-shirt		
'Did John see/want/like them without T-shirt?'				

(38) a. O João viu/ quer/gosta de quantos alunos com auxílio financeiro?
the John saw/ want/likes of how-many students with financial support
'How many students with financial support did John see/want/likes?'
b. O João viu/ quer/gosta d(e) eles com auxílio financeiro?
the John saw/ want/likes of them-masc with financial support
'Did John see/want/likes them with financial support?'

In the cases above the sequence WH-N can be pronominalized. Evidence that this possibility comes from the structure of the verbs used in the constructions and not from the internal structure of the TNPs comes from the fact the pronominalization is not possible in (35)-(36) above. Since replacing the verb causes a change in the possibility of pronominalization, we can conclude that the verbs in (37)-(38) play a role in that possibility.

I suggest that the property that groups the verbs ver 'to see', querer 'to want', gostar 'to like', comprar 'to buy', decorar 'to decorate' in one natural class is related to their ability to take certain kinds of small clause secondary predications. To the best of my knowledge, it has never been noticed before that all these verbs are able to take as their complements the sequence [DP] [todo(a) N] 'DP entire N', as opposed to verbs like destruir 'to destroy', riscar 'to strikethrough', entrevistar 'to interview', ofender 'to offend' and chutar 'to kick'. The relevant data are the following.

(39)	a. O João viu/ quer/gosta de	[a Maria]	[toda profess	ora]
	the John saw/ want/likes of	the Mary	entire teacher	
	'John saw/ want/likes Mary ar	nd she was in a	teacher style'	
	b. O João viu/ quer/gosta de	[ela]	[toda profess	ora]
	the John saw/ want/likes of	her	entire teacher	
	'Did John saw/ want/like her a	nd she was in a	teacher style'	
(40)	a. O João comprou/ decorou	[uma casa]	[toda Idade N	Aedia]
	the John bought/ decorated	a house	entire Middle	Age
	'John bought/ decorated a hou	se and she was	(turned) in a M	fiddle Age style'
	b. O João comprou/ decorou	[ela]	[toda Idade N	/ledia]
	the John bought/ decorated	a house	entire Middle	Age
	'John bought/ decorated a hou	se and she was	became in a N	fiddle Age style'
(41)	*O João entrevistou/ ofendeu/	chutou	[a Maria]	[toda professora]
	the John interviewed/offended/	kicked	the Mary	entire teacher
	'John interview/offend/ kick N	fary and she wa	as in a teacher	style'

(42) \*O João destruiu/ riscou [uma casa] [toda Idade Media]
the John destroyed/ strikethrough a house and she was (turned) in a Middle Age style'

In the above example, the sequence *DP entire N* means a certain individual in Nstyle. For instance, in (39) *a Maria* 'Mary' is seen, wanted or liked when she is in a teacher-like style; in (40) *uma casa* 'a house' is bought or decorated in a Middle Age style. Verbs like *entrevistar* 'interview', *ofender* 'offend', *chutar* 'kick', *destruir*  'destroy', *riscar* 'strikethrough' in the examples (41)-(42) cannot take the sequence DP entire N as their complement. The possibility of taking the sequence DP entire N as a complement should be used as a test in BP to identify other verbs that belong to this group.

Now, going back to our original problem with the data in (37)-(38), I propose that those sentences have a different structure from their counterparts in (35)-(36), i.e. in (37)-(38), the sequence WH-N forms a constituent to the exclusion of the following modifier. This is crucially different from all the other cases in that pronominalization is not possible. The structure for (37)-(38), where the verb takes a small clause ( $\pi$ P, following Bowers 2002 terminology), is shown in (43) below.

(43)  $[_{CP} ... [V [_{\pi P} [WH-N] [MODIFIER]]]$ 

The sequence WH-N is in one branch and the modifier is in the other branch. This structure makes the prediction that both [WH-N] and [MODIFIER] are extractable. If this prediction is borne out for the modifier side, this is strong evidence in favor of the small clause secondary predication structure, since I have shown that true PP-adjuncts are not extractable.

In fact, the prediction is born out.

(44) Sem o que o João viu/quer/gosta de as pessoas?
Without what the John saw/want/likes of the people Answer: Sem camisa.

Without T-shirt.

(45) Com o que o João viu/ quer/gosta de os alunos ?
With what the John saw/ want/likes of the students Answer: Com auxílio financeiro

With financial support.

The differences between the regular constructions in (30)-(36) and the constructions in (37)-(38) lead us to the conclusion that their syntactic structures are different. In (30)-(36), the WH-N sequence does not form a constituent on its own, while in (37)-(38) it does, since the verbs involved in these cases can take a small clause as their complement. Since the structures discussed in (37)-(38) do not represent, strictly speaking, a new pattern of internal structure of TNPs, I will not be concerned with them from now on.

### 2.2.2. Left Branch Extraction is banned from other structures

At first sight, one could try to analyze discontinuous WH-constituents as a case of Left Branch Extraction (LBE), which is the movement of the leftmost constituent of an NP. Constructions like (46) below do not have a configuration that would allows us to consider true LBE as a plausible analysis, since the WH-N sequence does not even form a constituent on its own. However, there is a subset of discontinuous WH-constituents, such as the examples in (47)-(48), that could meet the configuration of LBE.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> It is important to highlight that the constructions in (47)-(48) have a partitive interpretation, as in 'how many of the boys' instead of 'how many boys'. As discussed by Zocca (2010), it is not possible to split regular non-partitive wh-phrases that contain *quantos* in BP as opposed to its French counterpart *combien* de (Rizzi 1990, Obenauer 1984, Mathieu 2003, De Swart 1992, among many others), illustrated below.

<sup>(</sup>i) \*Quantos você leu (de) livros? (compare with (53)-(54)) BP

how-many you read of books

<sup>&#</sup>x27;How many books did you read?'

(46) Quantos irmãos o João entrevistou da Maria?
How-many brothers the John interview of Mary
'How many brothers of Mary did John interviewed?'

(47)	Quanto	o João ganhou	de dinheiro?
	How-much	the John earned	of money?
	'How much money did John earned?'		
(48)	Quantos	o Ioão entrevistou	dos meninos?

(48)	Quantos	o João entrevistou	dos meninos?
	How-many	the John interview	of-the boys?

'How many of the boys did John interview?'

The examples in (47)-(48) follow the schema [WH MODIFIER] in discontinuous partitive WH-constructions, and just like other WH-questions, they allow movement of the whole phrase or wh-in-situ, as shown in (49)-(50).

(49) a. Quanto de dinheiro o João ganhou?

How-much of money the John earned

'How much money did John earn?'

b. O João ganhou quanto de dinheiro?

the John earned how-much of money

'How much money did John earn?'

French

how-many have-you read of books 'How many books did you read?'

<sup>(</sup>ii) Combien as-tu lu de livres?

Although the partitive construction resembles the *combien de* construction in French, I argue later that the structure of the partitive construction is similar to that of discontinuous wh-questions, but with a null head.

(50) a. Quantos dos meninos o João entrevistou?
How-many of-the boys the John interviewed
'How many boys did John interview?
b. O João entrevistou quantos dos meninos?
the John interviewed how-many of-the boys
'How many boys did John interview?

There is, at least, one argument against analyzing constructions like (47)-(48) as Left Branch Extraction, and consequently, in favor of a unified account for all cases of discontinuous WH-constructions.

The argument comes from the fact that BP does not allow LBE in any other relevant construction. Actually, according to Boskovic 2010b, this is a more general property of DP-languages, which do not allow LBE, as opposed to languages that lack DP. The data in (51)-(52) exemplify moved WH-questions and WH-in-situ, while (53)-(54) illustrate the impossibility of extraction of the WH-word alone.<sup>11</sup>

(51) a. Quanto dinheiro o João ganhou?

How-much money the John earned

'How much money did John earn?'

- b. O João ganhou quanto dinheiro?
- the John earned how-much money

'How much money did John earn?'

<sup>&</sup>lt;sup>11</sup> Notice that (53)-(54) are different from the cases in (47)-(48), which are interpreted as partitive constructions due to the presence of the pseudo-preposition.

- (52) a. Quantos meninos o João entrevistou?
  How-many boys the John interviewed
  'How many boys did John interview?
  b. O João entrevistou quantos meninos?
  the John interviewed how-many boys
  'How many boys did John interview?
- (53) \*Quanto o João ganhou dinheiro?
  How-much the John earned money?
  'How much money did John earn?'
- (54) \*Quantos o João entrevistou meninos?
  How-many the John interviewed boys?
  'How many boys did John interview?'

Given that it is impossible to extract simple WH-phrases in (53)-(54), I take this as an indication that BP simply does not allow true LBE in general, including the cases of partitive phrases.

Discontinuous partitive wH-constructions can be simply accounted as remnant movement with the assumption that they have an empty noun head, as follows:

- (55)  $[_{DP} WH Ø_N MODIFIER]$
- (56) Step 1: [CP ... [V+I MODIFIER [DP WH  $Ø_N$  t<sub>MODIFIER</sub>]],

Step 2: [CP [KP WH  $Ø_N$  t<sub>MODIFIER</sub>] ... [V+I MODIFIER t<sub>DP</sub>]

In (55), the basic structure of partitive WH-constructions is given, and in (56), the two steps of the derivation of the discontinuous partitive WH-constructions under the remnant movement analysis are given. The only difference between them and the regular discontinuous WH-construction is that the former do not involve an empty head.

### 2.2.3. Low inversion is not internal arrangement in the TNP

One more argument against both LBE and the possibility of WH-N forming a constituent on their own is this: if discontinuous WH-questions involve movement of WH-N by themselves, leaving the modifier *in situ* untouched, the potential of a modifier for extraction out of the TNP should not play a role in the acceptability of discontinuous WH-questions. In other words, why would the ability to move out of the TNP be a requirement for the wellformedness of discontinuous WH-questions? Under the remnant movement analysis, the answer is straightforward: discontinuous WH-questions involve movement of the argument out of the TNP. This movement can, in principle, be to the right or to the left. In this section, I am concerned with the question on whether left movement of the modifier is possible.

One construction that can be taken as a piece of evidence for left movement of the modifier is the low inversion of the sequence WH-N and MODIFIER, such as the one below.

(57) o João destruiu/riscou
 desse colecionador quantas pinturas?
 the John destroyed/strikethrough of-this collector how-many pictures
 'How many pictures of this collector did John destroy/ strikethrough?'

- (58) o João destruiu/riscou dessa pintura quantas reproduções?
   the John destroyed/strikethrough of-this picture how-many reproductions
   'How many reproductions of this picture did John destroy/ strikethrough?'
- (59) o João destruiu/ riscou de Van Gogh quantas pinturas ?
  the John destroyed/ strikethrough of Van Gogh how-many pictures
  'How many pictures by Van Gogh did John destroy/ strikethrough?'
- (60) o João destruiu de 1973 quantos livros ?
  the John destroyed of 1973 how-many books
  'How many books of 1973 did John destroy ?'
- (61) o João entrevistou de Belém quantas garotas ?
  the John interviewed from Belém how-many girls
  'how many girls from Belém did John interview ?'

The arguments in (57)-(61) can precede the sequence WH-N. Low inversion is not an option for PP-adjuncts, as shown in (62)-(66), which shows that this construction is related to the potential for extraction of the modifier.

- (62) \*o João destruiu/ riscou segundo São Pedro que evangelho?
  the John destroyed/ strikethrough by Saint Peter Which Gospel
  'Which Gospel by Saint Paul did John destroy/ strikethrough?'
- (63) \*o João destruiu para São Paulo quantas estradas?
  the John destroyed to São Paulo how-many roads
  'how many roads to São Paulo did John destroy?'

- (64) \*o João entrevistou sem camisa quantas pessoas?
  the John interviewed without T-shirt how-many people
  'how many people without T-shirt did John interview?'
- (65) \*o João entrevistou com auxílio financeiro quantos alunos?
  the John interviewed with financial support how-many students
  'how many students with financial support did John interview?'
- (66) \*o João destruiu/ riscou sobre política quantos livros?
  the John destroyed/ strikethrough about Politics how-many books
  'how many books about Politics did John destroy/ strikethrough '

One important fact about low inversion is that it does not simply involve an internal rearrangement of the order of arguments within the TNP. Low inversion actually involves the movement of the argument out of the TNP. One piece of evidence for this claim comes from the distribution of adverbs. For instance, let us consider the distribution of the adverb *ontem* 'yesterday' in the following sentence.

(67) (ontem) o João (ontem) destruiu (ontem) várias casas (ontem)
(yesterday) the John (yesterday) destroyed (yesterday) many houses (yesterday)
'(yesterday) the John (yesterday) destroyed (yesterday) many houses (yesterday)'.

The example in (67) shows the possibilities for the placement of the adverb *ontem* 'yesterday' in BP. In addition to these possibilities, the adverb *ontem* 'yesterday' can appear in between the WH-N sequence and the argument, as shown below.

(68) o João destruiu/riscou quantas pinturas (ontem) desse the John
 destroyed/strikethrough how-many pictures (yesterday) of-this
 colector

'How many pictures of this collector did John destroy/ strikethrough yesterday?'

(69) o João destruiu/ riscou quantas reproduções (ontem) dessa
 the John destroyed/ strikethrough how-many reproductions (yesterday) of-this pintura?

picture

'How many reproductions of this picture did John destroy/ strikethrough yesterday?'

- (70) o João destruiu/ riscou quantas pinturas (ontem) de Van Gogh ?
  the John destroyed/ strikethrough how-many pictures (yesterday) of Van Gogh
  'How many pictures by Van Gogh did John destroy/ strikethrough yesterday?'
- (71) o João destruiu quantos livros (ontem) de 1973?
  the John destroyed how-many books (yesterday) of 1973
  'How many books of 1973 did John destroy yesterday?'
- (72) o João entrevistou quantas garotas (ontem) de Belém?
  the John interviewed how-many girls (yesterday) from Belém
  'how many girls from Belém did John interview yesterday?'

The possibility of placing the adverb *ontem* 'yesterday' in between the WH-N sequence and the modifier is only available for arguments, as in (68)-(77). The examples below show that adjuncts do not have this option.

(73) o João destruiu/ riscou que evangelho (\*ontem) segundo São
the John destroyed/ strikethrough which Gospel (yesterday) by Saint
Pedro?

Peter

'Which Gospel by Saint Paul did John destroy/ strikethrough(yesterday)?'

- (74) o João destruiu quantas estradas (\*ontem) para São Paulo?
  the John destroyed how-many roads(yesterday) to São Paulo
  'how many roads to São Paulo did John destroy(yesterday)?'
- (75) o João entrevistou quantas pessoas (\*ontem) sem camisa?
  the John interviewed how-many people(yesterday) without T-shirt
  'how many people without T-shirt did John interview(yesterday)?'
- (76) o João entrevistou quantos alunos (\*ontem) com auxílio financeiro?
   the John interviewed how-many students(yesterday) with financial support
   'how many students with financial support did John interview(yesterday)?'
- (77) o João destruiu/ riscou quantos livros (\*ontem) sobre política?
  the John destroyed/ strikethrough how-many books(yesterday) about Politics
  'how many books about Politics did John destroy/ strikethrough (yesterday)'

The impossibility of *ontem* 'yesterday' in between the WH-N sequence and adjuncts can be explained given that these modifiers do not move out of the TNP. This

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leads us to the conclusion that in the examples in (68)-(77) the intervening adverb indicates that movement of the modifier has taken place out of the TNP. I discuss the structure of these constructions in detail in section 2.2.4.

Now, going back to our cases of low inversion, if the adverb *ontem* 'yesterday' can intervene in between the sequence *MODIFIER*, *WH-N*, this means that the modifier has to be in a projection outside of the TNP. Consequently, the order *MODIFIER*, *WH-N* does not have to involve an internal reorganization of the TNP.

(78) o João destruiu/riscou desse colecionador (ontem) quantas the John destroyed/strikethrough of-this collector (yesterday) how-many pinturas?

## pictures

'How many pictures of this collector did John destroy/ strikethrough yesterday?'

(79) o João destruiu/ riscou dessa pintura (ontem) quantas
 the John destroyed/ strikethrough of-this picture (yesterday) how-many
 reproduções ?

reproductions

'How many reproductions of this picture did John destroy/ strikethrough yesterday?'

(80) o João destruiu/ riscou de Van Gogh (ontem) quantas the John destroyed/ strikethrough of Van Gogh (yesterday) how-many pinturas?

pictures

'How many pictures by Van Gogh did John destroy/ strikethrough yesterday?'

- (81) o João destruiu de 1973 (ontem) quantos livros ?
  the John destroyed of 1973 (yesterday) how-many books
  'How many books of 1973 did John destroy yesterday?'
- (82) o João entrevistou de Belém (ontem) quantas garotas ?
  the John interviewed from Belém (yesterday) how-many girls
  'how many girls from Belém did John interview yesterday?'

In all the examples above with low inversion, it is possible for the adverb *ontem* 'yesterday' to occur in between the sequence *MODIFIER*, *WH-N*. I conclude from this result that the modifiers have moved out of their TNPs in the examples above.

## 2.2.4. Discontinuous WH-in-situ and left movement of the modifier

In the last section, I showed that low inversion constructions involve left movement of the modifier out of the TNP. In this section, I show that even discontinuous WH-in-situ example, such as the one in (83) below, are derived by left movement of the modifier.

(83) o João destruiu/riscou quantas pinturas (ontem) desse
 the John destroyed/strikethrough how-many pictures (yesterday) of-this
 colector

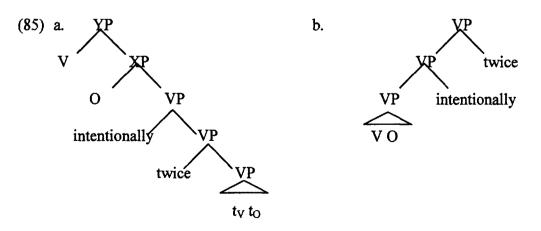
'How many pictures of this collector did John destroy/ strikethrough yesterday?'

In order to show that, I use tests for scope interaction of the adverbs *twice* and *intentionally*. These tests were used by Bošković 1997, Stjepanović 1999 and Reglero 2004 to identify whether arguments move out the VP in languages like Serbo-Croatian and Spanish.

The format of test is the following. Under the assumption that height determines scope, Pesetsky 1989 and Andrews 1983 take scope interaction as evidence for left adjunction of the adverbs to the VP in ((84)a) and right adjunction of the adverbs to the VP in ((84)b), since the sentence in ((84)a) means that John performed two events of intentional knocking. The sentence in ((84)b) means that John had an intention of doing a double-knocking on the door.

- (84) a. John [[[knocked on the door] intentionally] twice] twice> intentionally
  - b. John [intentionally [twice [knocked on the door]]] intentionally> twice

Bošković 1997 uses this as a test for movement of elements out of the VP in SC. The prediction is that if the verb and arguments move out of the VP, then a sentence with the linear order S-V-O-intentionally-twice will be ambiguous. The structures in (85) illustrate this.



In Bastos 2005, I used this test to show that internal arguments of the verb move out of the VP in BP.<sup>12</sup>

(86) Transitive: V-DO

O João beijou a Maria intencionalmente duas vezes.

The John kissed the Mary intentionally twice

'John kissed the Mary intentionally twice'

twice > intentionally: OK

intentionally > twice: OK

The sentence in (86) has the order SVO-intentionally twice and still it is ambiguous, which shows that the arguments move out of the VP.

It should be noted, however, that the adverb *intentionally* can modify *twice* directly. Notice, however, that the ambiguity persists even if the linear order is *twice intentionally*. In this case, the issue of *intentionally* modifying *twice* should not arise.

(87) Transitive: V-DO

O João chutou a Maria duas vezes intencionalmente.

The John kicked the Mary twice intentionally

'John kicked the Mary twice intentionally'

twice > intentionally: OK

intentionally > twice: OK

Given that these adverbs mark the border of the VP, I intend to use them to determine whether modifiers can undergo leftward movement out of the TNPs. The

<sup>&</sup>lt;sup>12</sup> The judgments are my own and from three other informants.

following sentence with discontinuous WH-question in situ and its declarative version provides evidence for leftward movement.

(88) a. o João riscou que pintura (ontem) desse colecionador acidentalmente the John strikethrough which picture (yesterday) of-this collector accidentally duas vezes?

twice

'How many pictures of this collector did John accidentally twice strikethrough yesterday?'

b. o João riscou **uma pintura** (ontem) **desse colecionador** acidentalmente the John strikethrough one pictures (yesterday) of-this collector accidentally duas vezes.

twice

'How many pictures of this collector did John accidentally twice strikethrough yesterday?'

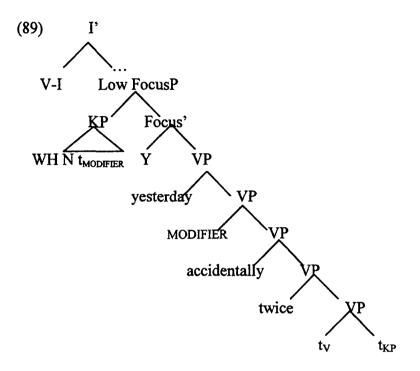
twice > intentionally: OK

intentionally > twice: OK

In the sentences above, the presence of the adverb *ontem* 'yesterday' shows that the modifier has moved out of the TNP, as discussed before. The adverbs *acidentalmente* 'accidentally' and *duas vezes* 'twice' mark the border of the VP and the sentence is ambiguous. Given that the reading in which *acidentalmente* 'accidentally' takes scope over *duas vezes* 'twice' is available, I conclude that the modifier has undergone leftward movement outside of the TNP.

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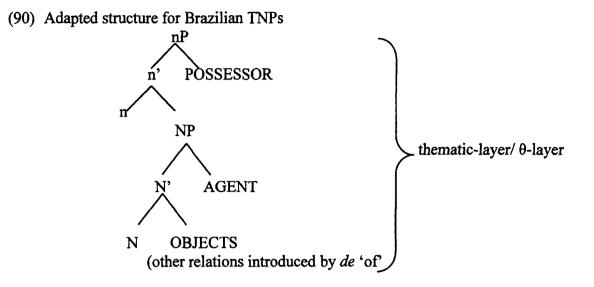
The following derivation illustrates the intended meaning. (I assume that the wh KP moves here to the low clausal focusP.)



The above facts lead us to conclusion that discontinuous WH-in-situ can be derived by left movement of the modifier out of the TNP. However, the facts above do not exclude the possibility that in some cases, rightward modifier movement is also allowed.

#### 2.3. Multiple arguments

In this section, I describe cases of WH-movement out of TNPs with two modifiers of the same noun in BP by re-applying classic tests in the literature (Cf. Cinque 1980, Torrego 1987, Giorgi and Longobardi 1991, Ormazabal 1991, Müller 1997, Ticio 2003, among many others). The goal of this section is to provide an additional argument for the remnant movement analysis proposed above. For convenience, I repeat the relevant part of structure.



The following data show the results of a binding test, which was originally used by Giorgi and Longobardi 1991 in their study of binding relations among nominal modifiers in Italian. I use examples from BP, but the facts are the same across Romance languages.

(91) A pintura [theme de ele mesmo<sub>i</sub>] [agent de Portinari<sub>i</sub>]

the picture of himself of Portinari

(92) \*A pintura [theme delei ] [agent de Portinarii ]

the picture of-him of Portinari

In (91) *Portinari* can co-refer with *ele mesmo* 'himself' (in fact, independently of the linear order in which the agent and the theme appear.) *Ele mesmo* 'himself' is subject to Principle A. Given the acceptability of (91) we may conclude that the agent ccommands the theme and that the two are in the same binding domain. In (92) *Portinari*  cannot co-refer with *ele* 'him'. *Ele* 'him' is subject to Principle B; so then, the unacceptability of (92) confirms the previous conclusions that the agent c-commands the theme and that they are in the same binding domain.<sup>13</sup>

Consider now the case in which the theme is an R-expression and the agent is anaphor or pronoun.

(93) a. \*A pintura [theme de Portinari<sub>i</sub>] [agent de ele mesmo<sub>i</sub>]

the picture of Portinari of himself

(94) a. \*A pintura [agent delei ] [theme de Portinarii ]

the picture of-him of Portinari

The conclusion from these results is that the agent c-commands the theme, but the theme does not c-command the agent.

In the presence of three modifiers, we get the following results.

- (95) A pintura [theme de ele mesmo<sub>i/\*j</sub>] [agent de Portinari<sub>i</sub>] [possessor do colecionador<sub>j</sub>]
   the picture of himself of Portinari of-the collector
   'the collector's picture of himself'
- (96) A pintura [theme dele\*i/j/l] [agent de Portinarii] [possessor do colecionadorj]
  the picture of-him of Portinari of-the collector
  'the collector's picture of him'

The theme and the agent are in the same binding domain, therefore the coreference between *ele mesmo* 'himself' and *Portinari* is acceptable, but not the co-

<sup>&</sup>lt;sup>13</sup> The sequence in (92) is good with a parenthetical reading (*a pintura dele, i.e. de Portinari* 'his picture, i.e. de Portinari'), which is not relevant for the point made above.

reference between *ele mesmo* 'himself' and *o colecionador* 'the collector'. For the same reason, the co-reference between *ele* 'him' and *Portinari* is not possible, but the co-reference between *ele* 'him' and *o colecionador* 'the collector' is.

If the agent is not present in the structure, then the binding domain includes the possessor. The results are shown in (97) and (98).

- (97) A pintura [theme de ele mesmoi ] [possessor do colecionadori ]
  the picture of himself of-the collector
  'the collector's picture of himself'
- (98) \*A pintura [theme delei ] [possessor do colecionadori]
   the picture of-him of-the collector
   'the collector's picture of him'

The results above show that in the absence of an agent, *o colecionador* 'the collector' can co-refer with *ele mesmo* 'himself' in (97), but not with *ele* 'him' in (98). One can conclude that the possessor c-commands the theme and that they are in the same binding domain here.

To summarize the results found so far, evidence from binding shows that the hierarchy among arguments is possessor>agent>theme.

#### 2.3.1. Two arguments in basic cases of extraction

The extraction data confirm this hierarchy, given that extraction of a hierarchically lower argument across a hierarchically higher argument would be blocked

by the locality condition. (See Cinque 1980, Torrego 1987, Giorgi and Longobardi 1991, Ormazabal 1991, Müller 1997, Ticio 2003, among many others).

The following examples show the results of the extraction tests.

(99)	a. Ele destruiu	[vários livros	[de Albert Einste	in] <sub>ag</sub>	[do João] <sub>poss</sub> ]	
	He destroyed	[several books	[by Albert Einste	in] <sub>ag</sub>	[of John] <sub>poss</sub> ]	
	'He destroyed several of John's books by Albert Einstein'					
	b. Ele destruiu	[vários livros	[de física] <sub>obj</sub>	[do Jo	ão] <sub>poss</sub> ]	
	He destroyed	[several books	[of Physics] <sub>obj</sub>	[of Joł	m] <sub>poss</sub> ]	
	'He destroyed several of John's books of Physics'					

(100)a. * [de quem]	ele destruiu	(vários livro	S	t <sub>ag</sub>	[do João] <sub>poss</sub>	"]?
Of whom	he destroyed	[several boo	ks	t <sub>ag</sub>	[of John] <sub>poss</sub>	]
b. * [De que]	ele destruiu	[vários livro	s	t <sub>obj</sub>	[do João] <sub>poss</sub>	,]?
Of what	he destroyed	[several boo	ks	t <sub>obj</sub>	[of John] <sub>poss</sub>	]
(101)a. [de quem]	ele destruiu	[vários livros	[de	Albert Ein	stein] <sub>ag</sub>	t <sub>poss</sub> ]?
Of whom	he destroyed	[several books	[by	Albert Ein	stein] <sub>ag</sub>	t <sub>poss</sub> ]
b. [De quem]	ele destruiu	[vários livros	[de	fisica] <sub>obj</sub>		t <sub>poss</sub> ]?
Of quem	he destroyed	[several books	[of	Physics] <sub>obj</sub>		t <sub>poss</sub> ]

As in other Romance languages, in BP the presence of a possessor blocks the extraction of the object or agent, as we can see in (100). But, the presence of the object or agent does not affect the extraction of a possessor, as we can see in (101).

As for the interaction of agents and objects, the results are the following.

(102)Ele destruiu	[vários livros	[de física] <sub>obj</sub>	[de A]	lbert Einstein] <sub>ag</sub> ]	
He destroyed	[several books	[of Physics] <sub>obj</sub>	[by A	lbert Einstein] <sub>ag</sub> ]	
'He destroyed several books by Albert Einstein of John'					
(103). *[Do que]	ele destruiu	[vários livros	t <sub>obj</sub>	[de Albert Einstein] <sub>ag</sub> ]	
Of what	he destroyed	[several books	t <sub>obj</sub>	[by Albert Einstein] <sub>ag</sub> ]	

. [De quem]	cic destituit		[uc insida]obj tagj	
By whom	he destroyed	[several books	[of Physics] <sub>obj</sub> t <sub>ag</sub> ]	

Indrigg livrog

[de física] ...

+ 1

The presence of an agent blocks the extraction of the object, but presence of an object has no effect on the extraction of an agent, as we can see in (103).

# 2.3.2. Two arguments in discontinuous TNPs

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Interesting supporting data for the remnant movement analysis proposed above can be obtained by combining the patterns of extraction discussed in the previous section and the case of discontinuous WH-questions in BP. The predictions made by the remnant movement analysis are the following: the modifier that can stay to the right of the main verb is the extractable one, which means that: a. a possessor should be able to stay to the right of the main verb if its TNP has an agent or an object; b. an agent should be able to stay to the right of main verb if its TNP has an object; and c. no other combinations should be possible.

Let us consider the results for the interaction between the possessor and the agent first.

- (104)\*[Quantos livros t<sub>agent</sub> [do João]<sub>poss</sub>] ele destruiu [de Albert Einstein]<sub>ag</sub>
  [how-many books t<sub>agent</sub> [of John]<sub>poss</sub>] he destroyed [by Albert Einstein]<sub>ag</sub>
  'How many of John's books by Albert Einstein he destroyed?'
- (105) [Quantos livros [de Albert Einstein]<sub>ag</sub> t<sub>poss</sub>] ele destruiu [do João]<sub>poss</sub>
  [how-many books [by Albert Einstein]<sub>ag</sub> t<sub>poss</sub>] he destroyed [of John]<sub>poss</sub>
  'How many books by Albert Einstein of John he destroyed?'

In (104), the argument *de Albert Einstein* 'by Albert Einstein' appears to the right of the main verb, and the sequence WH-N ARGUMENT *quantos livros do João* 'how many books of John' appears in the left periphery. The resulting sentence is unacceptable. In (105), the argument *do João* 'of John' appears to the right of the main verb, and the sequence WH-N ARGUMENT *quantos livros de Albert Einstein* 'how many books by Albert Einstein' appears in the left periphery. In this case, the resulting sentence is acceptable. Under the remnant movement analysis, this difference is straightforwardly explained, since possessors are extractable in the presence of agents, but not the other way around.

The following results concerning the interaction between possessors and themes also confirm the proposed analysis.

- (106)\*[Quantos livros t<sub>obj</sub> [do João]<sub>poss</sub>] ele destruiu [de Física]<sub>obj</sub>
  [how-many books t<sub>obj</sub> [of John]<sub>poss</sub>] he destroyed [by Physics]<sub>obj</sub>
  'How many Physics books by Albert Einstein he destroyed?'
- (107) [Quantos livros [de Física]<sub>obj</sub> t<sub>poss</sub>] ele destruiu [do João]<sub>poss</sub>
   [how-many books [by Physics]<sub>obj</sub> t<sub>poss</sub>] he destroyed [of John]<sub>poss</sub>

'How many Physics books by Albert Einstein he destroyed?'

In (106), the argument *de Física* 'of Physics' appears to the right of the main verb, and the sequence WH-N ARGUMENT *quantos livros do João* 'how many books of John' has WH-moved to the left periphery. The resulting sentence is unacceptable. In (107), the argument *do João* 'of John' appears to the right of the main verb, and the sequence WH-N ARGUMENT *quantos livros de Física* 'how many books Physics' has WHmoved to the left periphery. Now, the resulting sentence is acceptable. The explanation for these asymmetries under the remnant movement analysis is very similar to the one presented for the possessor-agent case, i.e. possessors are extractable in the presence of objects, but not the other way around.

Finally, I consider the interaction between agents and objects.

- (108)\*[Quantos livros t<sub>obj</sub> [de Albert Einstein]<sub>ag</sub>] ele destruiu [de física]<sub>obj</sub>
  [how-many books t<sub>obj</sub> [by Albert Einstein]<sub>ag</sub>] he destroyed [of Physics]<sub>obj</sub>
  'How many Physics books of John he destroyed?'
- (109) [Quantos livros [de física]<sub>obj</sub>  $t_{AG}$ ] ele destruiu [de Albert Einstein]<sub>ag</sub> [how-many books [of Physics]<sub>obj</sub>  $t_{AG}$ ] he destroyed [by Albert Einstein]<sub>ag</sub> 'How many books of Physics of John he destroyed?'

As we can see in (108), the argument *de Física* 'of Physics' appears to the right of the main verb, and the sequence wh-N argument *quantos livros de Albert Einstein* 'how many books of Albert Einstein' has WH-moved to the left periphery. The resulting sentence is unacceptable. In (109), the argument *do João* 'of John' appears to the right of the main verb, and the sequence WH-N ARGUMENT quantos livros de Albert Einstein 'how many books by Albert Einstein' has WH-moved to the left periphery. And now, the resulting sentence is acceptable. The explanation for these differences is similar to the possessor-agent and possessor-object cases, i.e. agents are extractable in the presence of objects, but not the other way around. The patterns of extraction with more than one argument thus provide strong support for the remnant movement analysis.

#### 2.4. Final remarks of the section

In this section I showed that different cases of extraction, including discontinuous sequences in BP, are subject to an argument-adjunct asymmetry. To the extent that my analysis is successful, it provides evidence for the anti-locality condition. Furthermore, after careful investigation of different kinds of inversion in the TNP and discontinuous phrases, I concluded that none of those cases involve internal movement within the TNP. My conclusion is that moving phrases do not "stay" in the specifier of the TNP. I have also provided another case of movement to the low focus position within the clause.

# 3. Definiteness effect

In this section, I study the definiteness effect in the Brazilian TNP. I show that in contrast to TNPs moved out of TNPs, TNP-internal movement is not subject to the definiteness effect. I will argue that the definiteness effect (see also chapter 3) results from a "freezing effect" while the lack of definiteness effects with the definite article reflects the existence of two types of definite articles in BP, strong and weak, a distinction that has been proposed for other Romance languages.

In many languages, including English and Spanish, determiners such as the demonstrative *that/this* and the definite article *the* block the movement of an argumental phrase out of a TNP. The same type of movement is allowed when the determiner is an indefinite, quantifier or numeral.<sup>14</sup>

Brazilian Portuguese also exhibits the definiteness effect in question formation, but only for the demonstrative *esse/aquele* 'that/this'. Definite articles seem not to exhibit the definiteness effect in this specific case.

(110) Demonstratives:

\*De quem você rasgou [essa/aquela foto t<sub>i</sub>]?

Of whom you tore [this/that picture t<sub>i</sub>]

"Who is the person such that you tore apart this picture of him?"

(111) Definite article, Indefinite, quantifier and numeral:

De quem	você rasgou	[a/ uma/	muitas/	várias/ quatro foto(s) t <sub>i</sub> ]?
Of whom	you tore	[the/ a/	many/	several/ four picture t <sub>i</sub> ]
'Who is the person such that you tore apart his picture?'				

The standard interpretation of these facts is that the wh-phrase can cross the determiners in (111), but its movement is blocked by the demonstrative, causing the

<sup>&</sup>lt;sup>14</sup> The relevant example in English is given below.

<sup>(</sup>i) a. \*Who did you see [the/that picture of t ]?

b. Who did you see [a/many/ several/ three picture(s) of t ]?

As for Spanish, Torrego 1987, Ticio 2003, among others have noticed that in Spanish, the definite article shows a "partial" definiteness effect, i.e. it blocks the extraction of possessors and agents, but not the extraction of themes. Ticio 2003 makes use of the distinction between strong and weak definite articles to account for these difference, following a prominent view in Romance literature (Cf. Torrego 1987, Ormazabal 1991, Vernaud and Zubizarreta 1992, Longobardi 1994, among others). In Ticio's 2003 system, strong definite articles are base-generated in D<sup>o</sup> and induce the definiteness effect, and weak definite articles are base-generated in Agr<sup>o</sup>, and do not induce the definiteness effect. The reason why strong definite articles are never selected when the modifier of the noun is a theme modifier is not clear in Ticio's analysis (2003: 99), but the analysis accounts for the distribution correctly.

unacceptability. This interpretation of the facts is challenged by the following data involving topic and focus movement within the TNP in (112) and (113), which should be compared to the extraction data repeated in (114).

(112)Double topic

```
[TopicP [DP A cidadezinha]<sub>i</sub> [Topic<sup>o</sup> Topic<sup>o</sup> [DP essa pintura famosa t<sub>i</sub> ]]] minha mãe<sub>F</sub>
the little-city, this picture famous my mother<sub>F</sub>
(que) pintou.
```

(that) painted

'As for the little city, as for this picture of it (it was) my mother (that) painted it'.

(113)Expressive content

Eu despedi	[FocusP [DP essa gracinha] <sub>i</sub> [Focus	de [ <sub>DP</sub>	essa modelo $t_i$ ]
I fired	this little-grace	of	this modelo]

'I fired that snobbish model'

#### (114)Demonstratives:

*[FocusP [de quem] <sub>i</sub>	[₽ você rasgou	$[DP t_i [D' essa/aquela foto t_i]?$
of whom	you tore	this/that picture t <sub>i</sub> ]

'Who is the person such that you tore apart this picture of him?'

We have seen in chapter 2 of this dissertation that in multiple topic constructions an argumental nominal phrase moves to spec-TopicP within the traditional TNP. In other words, the example in (112) does not involve TopicP recursion in the clausal  $\omega$ -layer, but a single clausal TopicP; the topicalized DP moves within the larger TNP, as indicated in (112). Notice that in (112) above the moved phrase crosses a demonstrative and this causes no violation. Similarly, we have seen in chapter 3 that the nominal phrase containing expressive content moves to spec-FocusP within the traditional TNP. In (113), a phrase containing expressive content, which undergoes TNP-internal focus movement, crosses a demonstrative and this causes no violation either. These two cases contrast with the extraction out of TNP in (114), which causes a violation.

Significantly, it is not the case that TNP-internal movement never displays the definiteness effect, as shown below by the contrast between (115)-(116).

(115)Double topic construction: C, A of B (see chapter 2)

A caneca, essa flor do fundo, (foi)  $ONTEM_F$  (que) minha mãe the mug, this flower of-the bottom, (was) YESTERDAY<sub>F</sub> (that) my mom pintou ela.

painted her.

'As for the mug, as for this flower of the bottom, it was yesterday that my mom painted it'

(116)Double topic construction: C, A of B (see chapter 2)

\*A caneca, a flor desse fundo, (foi) ONTEMF (que) minha mãe the mug, the flower of-this bottom, (was) YESTERDAYF (that) my mom pintou ela.

painted her.

'As for the mug, as for the flower of this bottom, it was yesterday that my mom painted it'

In (115) the TNP *a caneca* 'the mug' can move across the DP that contains the demonstrative and this causes no violation while in (116) the TNP *a caneca* 'the mug' cannot move across the DP that contains the demonstrative. What is the difference between (115), which allows crossing, and (116), which does not allow crossing? While both constructions involve TNP-internal topicalization, as discussed in chapter 2, there is an important difference between these examples: in (116) the TNP *a caneca* 'the mug' moves out of the lower TNP that contains the demonstrative while in (115) the TNP *a caneca* 'the mug' moves across the demonstrative but remains within the  $\omega$ -layer of the minimal TNP that contains the demonstrative. The structures below, discussed in detail in chapter 2, illustrate this.

(117)  $[T_{opicP} [DP A caneca]_i [T_{opic}, Topic^{\circ} [DP essa flor [KP t_i de [DP o fundo t_i]]]]]$ the mug this flower of the bottom,

(118)\* [ $_{TopicP}$  [ $_{DP}$  A caneca]<sub>i</sub> [ $_{Topic}$ , Topic<sup>o</sup> [ $_{DP}$  a flor [ $_{KP}$  t<sub>i</sub> de [ $_{DP}$  esse fundo t<sub>i</sub> ]]]]] the mug the flower of- this bottom,

The generalization for this type of definiteness effect is that it is not crossing the demonstrative that causes the violation, but crossing the full TNP boundary where the TNP is the minimal TNP that dominates a demonstrative. Notice that the size of the TNP does not matter. In (116) the topmost projection of the TNP is KP and in (114) the topmost projection of the TNP is DP, as discussed in chapter 2.

To account for the paradigm described above, I propose that this type of definiteness effect results from a "freezing effect", which, in its turn results from the definiteness "agreement" discussed in chapter 3. In section 5.4 of chapter 3, I proposed

that there is a feature, the definiteness feature [+/- def], which is present in the projections within  $\omega$ -layer. This Def feature is shared by discourse heads and determiners as a result of Agree. In the case of Focus<sup>o</sup>, I argued that the value of Def can be either positive or negative, and that when two different D<sup>o</sup>s agree with Focus<sup>o</sup>, the definiteness "Agreement" is established. So, the suggestion is that in the example in (113), the moving TNP does not induce a violation by crossing the demonstrative; but in fact, the moving TNP does undergo Agree with Focus<sup>o</sup> and shares the same value of Def as the DP containing the demonstrative (as discussed in chapter 3, demonstratives are compatible only with +Def).

It would be natural to extend this proposal to TopicP in (112); then, the moved TNP in Spec-TopicP also agrees with Topic<sup>o</sup>, sharing the Def feature.

Once agreement is established between a moved TNP and the head of its host position as described above, this moved TNP is now frozen in that position, and it cannot undergo further movement, which is true for both moved topics and moved expressive content. This is often referred to as the "freezing effect". I will adopt here the formulation of the freezing effect given by Bošković 2007, 2008a and 2008b.

(119)A moved phrase can undergo agreement with a head H only once.

(Adapted from Bošković 2008a: 18)

With the additional assumption that whatever the highest projection within the TNP is, (in (118) it is KP and in (114) it is DP), it also has the [+def] feature in the relevant configuration, one can explain the definiteness effect in the following terms. Consider (118). When the moving phrase *a caneca* 'the mug' undergoes the intermediate

step of movement to the phase edge, it undergoes Agree with the head  $K^{\circ}$ , which has the [+def] feature. Notice that KP is a phase, since it is the topmost projection in this TNP. *A* caneca 'the mug' is then frozen in this position, as discussed above.

{def[ ]} {+def}

 $[T_{opicP} [T_{opic}, T_{opic}, T_$ 

the mug the flower of- this bottom,

It is important to highlight that the value [+def] of K<sup>o</sup> is shared with the demonstrative, head of D<sup>o</sup> (as discussed in chapter 3, demonstratives are compatible only with +Def.) In other words, K<sup>o</sup> only has a [+def] feature when D<sup>o</sup> has a [+def] feature. If D<sup>o</sup> does not have a [+def] feature, I suggest that K<sup>o</sup> has no value for the definiteness feature; without intermediate feature-checking, successive cyclic movement can pass through spec-KP.

Similar considerations can be extended to the case of definite articles. The only difference is that there are two types of definite articles in BP, as discussed in section 5.4 in chapter 3. The strong definite article behaves as demonstratives with respect to the Def feature and induces the definiteness effect, while the weak definite article does not induce the definiteness effect. Due to the availability of this derivation, the sentence in (111) with the definite article is acceptable.

# 4. Conclusion

(120)

In this chapter I investigated extraction of arguments and adjuncts out of the TNP. I examined a number of cases involving discontinuous nominal phrases, and argued that none of them involve either internal movement within the TNP or Left Branch Extraction, instead, they are generated by remnant movement. In the course of the discussion I provided evidence for the existence of a low clausal focus phrase in BP. I also investigated the definiteness (i.e. specificity) effect that arises with extraction out of demonstrative and definite TNPs, arguing that this is an instance of a more general freezing effect.

### REFERENCES

- Abels, Klaus. 2003. Successive Cyclicity, Anti-locality and Adposition Stranding. Doctoral dissertation, University of Connecticut, Storrs.
- Abney, Steven. 1987. The English noun phrase in its sentential aspect, Massachusetts Institute of Technology.
- Aboh, Enoch Oladé. 2004. Topic and Focus within D. Linguistics in the Netherlands 21:1-12.
- Adger, David and Gilian Ramchand. 2003. Predication and equation. *Linguistic Inquiry* 34, 325 359.
- Anderson, Mona. 1979. Noun Phrase Structure, University of Connecticut: Doctoral dissertation.
- Andrews, A. 1983. A Note on the Constituent Structure of Modifiers. Linguistic Inquiry 14: 695-697.
- Aoun, J. & L. Choueiri. 2000. Epithets. Natural Language and Linguistic Theory 18, 1-39.
- Aoun, J., L. Choueiri & N. Hornstein. 2001. Resumption, Movement and Derivational Economy. *Linguistic Inquiry* 32, 371-403.
- Avelar, Juanito. 2006. Adjuntos adnominais preposicionados no português brasileiro, Universidade Estadual de Campinas: Doctoral dissertation.
- Bastos, Ana C. 2001. Fazer, eu faço! Topicalização de constituintes verbais em português brasileiro. Master's thesis, Universidade de Campinas.

- Bastos, Ana C. 2003. Constituintes verbais como tópicos em português brasileiro. Letras de Hoje. Porto Alegre: v.38, n.1, p.237 - 249.
- Bastos, Ana C. 2005. The structure of ethical constructions and the constraint on coreference in Brazilian Portuguese. Ms. Storrs: University of Connecticut.
- Bastos, Ana C. 2006. Discontinuous Wh-constituents in Brazilian Portuguese. In: Herdan, Simona and Rodríguez-Mondoñedo, Miguel (eds). University of Connecticut Working Papers in Linguistics. Storrs, vol. 14, p. 1-26.
- Bastos, Ana C. 2007. Discontinuous Wh-constituents in Brazilian Portuguese. In: Camacho, José et al. Romance Linguistics 2006: Selected papers from the 36th Linguistics Symposium on Romance Languages. New Brunswick, vol. 287, p. 29-42.
- Bastos, Ana C. 2008. Presupposition and Focus in a subclass of exclamative constructions in Brazilian Portuguese. 38th Linguistic Symposium on Romance Languages, April 4-6, University of Illinois at Urbana-Champaign.
- Bastos, Ana C. 2008. The Brazilian-style of the multiple subject constructions. In: Fujii, Tomohiro and Kawamura, Tomoko (eds). Nanzan Linguistics: Special Issue 3. Nagoya-Japan, vol. 2, p. 17-34.
- Bastos-Gee, Ana C. 2009a. Nominal Exclamatives and the hypothesis of a Nominal Force Phrase. The 2009 Linguistic Society of America Annual Meeting, Jan 8-11. San Francisco, CA.
- Bastos-Gee, Ana C. 2009b. Topicalization of verbal projections in Brazilian Portuguese. In: Nunes, Jairo. Minimalist Essays on Brazilian Portuguese Syntax. John Benjamins.

- Bastos-Gee, Ana C. 2011. On Exclamatives with a Bothering Inference. In: Buesa-Garcia, Carlos (eds). University of Connecticut Working Papers in Linguistics. MIT Press.
- Bejar, S. 2003. Phi-syntax: A theory of agreement. Doctoral dissertation, University of Toronto.
- Belletti, A. 2004. Aspects of the low IP area. In L. Rizzi, ed., *The Structure of CP and IP*, 16-51. Oxford: Oxford Univ. Press.
- Benincà, P. 2001. The position of Topic and Focus in the left periphery. In G. Cinque &
  G. Salvi, eds., CurrentStudies in Italian Syntax. Essays offered to Lorenzo Renzi, pp. 39-64. Oxford: North Holland.
- Benincà, P. and C. Poletto. 2004. Topic, Focus and V2: Defining the CP sublayers. In L. Rizzi, ed., *The Structure of CP and IP*, pp. 52-75. Oxford: Oxford Univ. Press.
- Bennis, Hans, Corver, Norbert, and Den Dikken, Marcel. 1998. Predication in Nominal Phrases. *The Journal of Comparative Germanic Linguistics* 1:85-117.
- Bernstein, Judy B. 1997. Demonstratives and Reinforcers in Romance and Germanic Languages. *Lingua* 102:87-113.
- Bernstein, Judy B. 2001. Focusing the "right" way in Romance determiner phrases. *Probus* 13:1-29.
- Bošković, Željko. 1994. ECP, Spec-Head Agreement, and Multiple Wh-Movement in Overt Syntax, in S. Avrutin, S. Franks, and L. Progovac (eds.) Formal Approaches to Slavic Linguistics: The MIT Meeting, 1993, 119-144. Michigan Slavic Publications, Ann Arbor.
- Bošković, Željko. 1997. Fronting Wh-Phrases in Serbo-Croatian, in S. Franks and M.
  Lindseth (eds.) Formal Approaches to Slavic Linguistics: The Indiana Meeting, 1995,
  86-107. Michigan Slavic Publications, Ann Arbor.

- Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP, Studia Linguistica 59, 1-45.
- Bošković, Željko. 2007. On the locality and motivation of Move and Agree: An even more minimal theory, Linguistic Inquiry 38, 589-644.
- Bošković, Željko. 2008a. On Successive Cyclic Movement and the Freezing Effect of Feature Checking. In J. Hartmann, V. Hegedus, H. van Riemsdijk (eds.) Sounds of Silence: Empty Elements in Syntax and Phonology, 195-233.Elsevier North Holland/Amsterdam.
- Bošković, Željko. 2008b. On the operator freezing effect, Natural Language and Linguistic Theory 26, 249-287.
- Bošković, Željko. 2009. Unifying first and last conjunct agreement, Natural Language and Linguistic Theory 27, 455-496.
- Bošković, Željko. 2010a. Conjunct-sensitive agreement: Serbo-Croatian vs Russian, In G.
  Zybatow, P. Dudchuk, S. Minor, and E. Pshehotskaya (eds.) Formal Studies in Slavic
  Linguistics. Proceedings of Formal Description of Slavic Languages 7.5, 31-47.
  Frankfurt am Main: Peter Lang.

Bošković, Željko. 2010b. On NPs and clauses. Ms. University of Connecticut.

Bošković, Željko. 2010c. Phases beyond clauses. Ms. University of Connecticut.

- Bošković, Željko. 2011. On unvalued uninterpretable features. Proceedings of NELS 39.
- Bouchard, D. 1981. An alternative to wh-movement in French relative clauses. In: W.W. Cressey and D.J. Napoli (eds.) Linguistic Symposium on Romance Languages: 9. 216-226.

Bowers, J. 2002. Transitivity. Linguistic Inquiry 33, 183-224.

- Bresnan, Joan. 1972. Theory of complementation in English syntax, Massachusetts Institute of Technology.
- Brody, Michael. 1997. Perfect chains. In Elements of grammar, ed. Liliane Haegeman, 139-167. Dordrecht: Kluwer Academic Publishers.
- Câmara Jr., Joaquim Mattoso. 1984. Estrutura da língua portuguesa. 14. ed. Petrópolis, Vozes.
- Chomsky, Noam. 1970. Remarks on Nominalization. In *Readings in English Transformational Grammar*, 184-221. Waltham, Massachusetts: Ginn.

Chomsky, Noam. 1986. Barriers. Cambridge, Massachusetts: MIT Press.

Chomsky, Noam. 1995. The minimalist program. Cambridge, Massachusetts: MIT Press.

- Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. In Step by step: Essays on minimalist syntax in honor of Howard Lasnik, 89-156: MIT Press.
- Chomsky, Noam. 2001. Derivation by Phase. In Ken Hale: A Life in Linguistics, 1-52. Cambridge, Massachusetts: MIT Press.
- Chomsky, Noam. 2004. Beyond Explanatory Adequacy. In Structures and Beyond: The Cartography of Syntactic Structures, 104-131. Oxford: Oxford University Press.

Chomsky, Noam. 2005. On phases. Ms. Cambridge, Massachusetts, MIT.

- Cinque, Guglielmo. 1980. On extraction from NP in Italian. Journal of Italian Linguistics 5:47-99.
- Cinque, Guglielmo. 1999. Adverbs and functional heads: a cross-linguistic perspective. New York: Oxford University Press.
- Citko, Barbara. 2008. Small clauses reconsidered: Not so small and not all alike. Lingua 118: 261-295.

- De Swart, H. 1992. Intervention Effects, Monotonicity and Scope. Paper presented at Semantics and Linguistic Theory.
- Den Dikken, M. 1995. Copulas. Paper presented at GLOW 18, Tromsø, Ms. Vrije Universiteit Amsterdam/HIL.
- Den Dikken, Marcel den. 2006. Relators and linkers: The syntax of predication, Predicate Inversion, and copulas. Cambridge, MA: MIT Press.
- Di Tullio and Saab. 2006. Dos classes de epitetos en el español. Unpublished.
- Di Tullio, A. and Suñer, A. 2004. Los 'nombres de cualidad' en la estructura del SD. Presented at the XXIV Congrès International de Linguistique et de Philologie Romanes (CILPR). Aberystwyph, August 1-6.
- Dobrovie-Sorin Carmen, Tonia Bleam and M.Teresa Espinal. 2006. Bare Nouns, Number and Types of Incorporation. In Nondefinites and Plurality, ed. by Svetlana Vogeleer and Liliane Tasmowski, 51-81, Amsterdam: John Benjamins.
- Doron, Edit.1983. Verbless predicates in Hebrew. Unpublished doctoral dissertation, University of Texas, Austin.
- Drubig, Hans Bernhard. 1994. Island Constraints and the Syntactic Nature of Focus and Association with Focus. In Arbeitspapiere des Sonderforschungsbereichs 340: Sprachtheoretische Grundlagen der Computerlinguistik, Vol. 51. TiibingenlStuttgart.
- Drubig, Hans Bernhard. 1998. Focus and connectedness: Towards a typology of focus constructions. Unpubl. ms., University of Tübingen.
- Drubig, Hans Bernhard. 2003. Toward a typology of focus and focus constructions. Linguistics 41, 1-50.

Duarte, M. E. L. 1992. A Perda da Ordem V(erbo) S(ujeito) em Interrogativas Qu- no Português Brasileiro. Delta, 8, pp-37-52.

Eid, Mushira. 1983. The Copula Function of Pronouns. Lingua 59: 197-207.

- Elliot, Dale E. 1974. Toward a grammar of exclamation. Foundations of Language 11:231-246.
- Español-Echevarría, M. 1997. Two aspects of the sentential syntax of N/A of a N DP's: predicate raising and subject licensing. In: A. Schwegler, B. Tranel and M Uribe-Exteberría (eds.) Romance Linguistics: Theoretical perspectives. Amesterdam: John Benjamins.
- Espinal, M. Teresa. 2010. Bare Nominals in Catalan and Spanish. Their Structure and Meaning. Lingua 120: 984-1009.
- Fassi Fehri, Abdelkader. 1980. Some complement phenomena in Arabic, the complementizer phrase hypothesis and the Non-Accessibility Condition. In Analyse/ Théorie, 54-114. Université de Paris VIII, Vincennes.
- Fiengo, R. and J. Higginbotham. 1981. Opacity in NP. Linguistic Analysis 7: 347-373.
- Fiqueiredo Silva, M. C. 1996. A posição sujeito no português brasileiro. Campinas: Ed.da UNICAMP, p. 37-86.
- Frampton, John, and Sam Gutmann. 2000. Agreement is feature sharing. Ms. Northeastern University. Boston. http://www.math.neu.edu/ling/pdffiles/agrisfs.pdf.
- Frampton, John, Sam Gutmann, Julie Legate, and Charles Yang. 2000. Remarks on derivation by phase. Ms. Northeastern University and MIT. Boston and Cambridge, Mass. http://www.math.neu.edu/ling/pdffiles/remdbp.pdf.

- Fukui, N. 1986. A Theory of Category Projection and its Applications. PhD dissertation, MIT.
- Galves, C. 1993. O enfraquecimento da concordância no Português Brasileiro. In
  Roberts, Ian & Kato, Mary (orgs.) *O Português Brasileiro: uma viagem diacrônica*.
  Campinas, Ed. Unicamp.
- Galves, C. 1998. Tópicos e sujeitos, Pronomes e Concordância no Português Brasileiro. Cadernos de Estudos Lingüísticos, Campinas, (34): 19-31.
- Giorgi, A. & G. Longobardi. 1991. The syntax of Noun Phrases. Cambridge Studies in Linguistics 57. Cambridge, Cambridge University Press.
- Grimshaw, Jane. 1979. Complement selection and the lexicon. Linguistic Inquiry 10(2):279–326.
- Grohmann, K. Kleanthes. 2000. Prolific peripheries: a radical view from the left. College Park: University of Maryland dissertation.
- Grohmann, Kleanthes K. and Liliane Haegeman. 2003. Resuming Reflexives.

Proceedings of the 19th Scandinavian Conference of Linguistics. Nordlyd 31.1:46-62.

- Grolla, E. B. 2000. A Aquisição da Periferia Esquerda da Sentença em Português Brasileiro. Dissertação de Mestrado, IEL/Unicamp, Campinas, SP.
- Grosz, Patrick. 2011. On the grammar of optative constructions. Massachusetts Institute of Technology: Doctoral dissertation.
- Haegeman, Liliane. 2004. DP-Periphery and Clausal Periphery: Possessor Doubling inWest Flemish. In Peripheries: Syntactic Edges and their Effects, 211-240. Dordrecht,The Netherlands: Kluwer Academic Publishers.

- Heycock, C. 1993. Syntactic Predication in Japanese. Journal of East Asian Linguistics 2. 167-
- Heycock, C. and Lee, Y.-S. 1989. Subject and Predication in Korean and Japanese. Ohak Yon'gu / Language Research 25. 775-791.
- Horrocks, G. and M. Stavrou. 1985. Bounding theory and Greek syntax: evidence for whmovement in NPs. Ms. St. John's College, Cambridge.
- Huddleston, Rodney and Geoffrey Pullum. 2002. The Cambridge Grammar of the English Language. Cambridge University Press.
- Ilari, R. 1986. Perspectiva funcional da frase portuguesa. Doctoral dissertation. Campinas, Brazil. Ed. Unicamp.
- Kato, M. 1987. Inversão da Ordem SV em Interrogativas no Português: Uma Questão Sintática ou Estilística?. Delta, 3, n. 2, pp. 243-252.
- Kato, M. 1993. Recontando a História das Relativas em uma Perspectiva Paramétrica. In:
  I. Roberts & M. Kato (orgs.) Português Brasileiro Uma Viagem Diacrônica.
  Campinas: Editora da Unicamp.
- Kato, M. 1998. Tópicos como Alçamento de Predicados Secundários. In Cadernos de Estudos Lingüísticos (34):67-76.
- Kato, M. 2007. Free and dependent small clauses in Brazilian Portuguese. Delta, v. 23, p. 85-111.
- Kato, M. 2008. Optional Prepositions in Brazilian Portuguese. 38<sup>th</sup> Linguistic
   Symposium on Romance Languages, University of Illinois at Urbana-Champaign, 4-6/4/08.

- Kato, M. A. & E. Raposo. 1996. European and Brazilian word order: questions, focus and topic constructions. In Aspects of Romance Linguistics (C. Parodi, A. C.Quicoli, M. Saltarelli & M. L. Zubizarreta, eds), pp. 267-277. Washington: Georgetown U. Press.
- Kato, M. and Nunes, J. 2009. A uniform raising analysis for standard and non-standard relative clauses in Brazilian Portuguese. In: Nunes, Jairo. Minimalist Essays on Brazilian Portuguese Syntax. John Benjamins.

Kehdi, Valter. 1990. Morfemas do português. São Paulo: Ática, Série Princípios.

- Koizumi, M. 1994. Nominative Objects: The Role of TP in Japanese. In Koizumi M. and
  H. Ura (eds.), Formal Approaches to Japanese Linguistics 1: MIT Working Papers in Linguistics 24. 211-230.
- Kornfeld, L and A. Saab. 2005. Hacia una tipología de las anáforas nominales en español.Ms., University of Buenos Aires and Universidad Nacional del Comahue.
- Kornfeld, L. 2005. Formación de palabras en la sintaxis desde la perspectiva de la Morfología Distribuida. Doctoral dissertation. University of Buenos Aires.
- Lacerda, R. 2011. Todos os quantificadores têm cada um as suas particularidades. In: VII Congresso Internacional da ABRALIN, 2011, Curitiba-PR. Anais do VII Congresso Internacional da ABRALIN. p. 3701-3712.
- Laka, Itziar M. 1990. Negation in syntax: On the nature of functional categories in syntax. Doctoral dissertation, MIT.
- Lees, Robert. 1960. The Grammar of English Nominalizations. Doctoral dissertation, MIT.
- Lobato, Lucia M. P. 1986. Sintaxe gerativa do Português. Da Teoria padrão à teoria da regência e ligação. Belo Horizonte, Vigília.

- Longobardi, G. 1994. Reference and proper names: A theory of N movement in syntax and logical form. *Linguistic Inquiry* 25(4), 609-665.
- Lopes Rossi, M. A. F. 1993. Estudo Diacrônico sobre as interrogativas do português. In:
   Roberts, I. and Kato, M. A. Português Brasileiro: uma viagem diacrônica. Ed.
   Unicamp.
- López, Luis and Susanne Winkler. 2000. Focus and Topic in VP-anaphora Constructions, Linguistics 38, 623-664.
- Macambira, José Rebolças. 1987. A estrutura morfossintática do português. 5. ed. São Paulo: Pioneira.
- Macambira, José Rebolças. 1992. Português Estrutural. São Paulo: Pioneira.
- Mathieu, Eric. 2003. The Mapping of Form and Interpretation: The Case of Optional Wh-Movement in French. *Lingua* 114:1090-1132.
- Mioto, Carlos. 2001. Sobre o sistema CP no português Brasileiro. Curitiba, Revista Letras, 56:97-140.
- Moro, Andrea. 1997. The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure. Cambridge: Cambridge University Press.
- Moro, Andrea. 2000. Dynamic Antisymmetry, MIT Press, Linguistic Inquiry Monograph 38.
- Müller, A. 1997. A gramática das formas possessivas no português do Brasil. [The grammar of possessive forms in Brazilian Portuguese] Doctoral dissertation. Campinas, Brazil: IEL/Unicamp. Manuscript
- Müller, A. 2002. The Semantics of Generic Quantification in Brazilian Portuguese. PROBUS, 14. 279-298.

- Obenauer, H. 1984. On the Identification of Empty Categories, *The Linguistic Review*, 4, 153-202.
- Oda, Toshiko. 2004. Exclamatives and negative islands. Paper presented at Chicago Linguistics Society.
- Ogawa, Yoshiki. 2001. A Unified Theory of Verbal and Nominal Projections. Oxford: Oxford University Press.
- Ormazabal, Javier. 1991. Asymmetries on wh-movement and some theoretical consequences. Ms., Storrs: University of Connecticut.
- Pereltsvaig, Asya. 2001. On the Nature of Intra-clausal Relations: A Study of Copular Sentences in Russian and Italian. Unpublished doctoral dissertation, McGill University, Montreal.

Pesetsky, D. 1989. The Earliness Principle. Ms., MIT, Cambridge, Mass.

- Pesetsky, D. and E. Torrego. 2007. The syntax of valuation and the interpretability of features. In Phrasal and clausal architecture, ed. by S. Karimi, V. Samiian, and W. Wilkins, 262–294. Amsterdam: John Benjamins.
- Pires de Oliveira, R., F. Santolin and R. Taveira da Cruz. 2006. Bare Singular: Evidence from Brazilian Portuguese. EVELIN.ms.
- Pires, Acrísio and Heather Taylor. 2007. Romance Languages: Structure, interfaces, and microparametric variation, ed. Pascual Masullo. Amsterdam: John Benjamins.
- Pollock, Jean-Yves. 1989. Verb Movement, UG and the Structure of IP. Linguistic Inquiry 20:365-424.
- Pontes, E. 1987. O Tópico no Português do Brasil. Campinas, Pontes.

- Potts, Chris. 2005. Expressive content as conventional implicature. Proceedings of the Thirty-Third Annual Meeting of the North East Lingusitic Society. BookSurge Publishing, December 7.
- Rapoport, Tova. 1987. Copular, nominal and small clauses: A study of Israeli Hebrew. Doctoral dissertation, MIT.
- Raposo, E. 1997. Toward a Unification of Topic Constructions. Ms. University of California, Santa Barbara.
- Reglero, Lara. 2004. A'-dependencies in Spanish and Basque. Doctoral dissertation, Uconn.
- Riqueros, José. 2011. Spanish nominal extraction and the concept of phase. Ms. University of Connecticut.
- Rizzi, L. 1997. The fine structure of left periphery. In L. Haegeman (ed.) *Elements of Grammar*: 281-337. Kluwer Academic Publishers.

Rizzi, Luigi. 1990. Relativized Minimality. Cambridge, Mass.: MIT Press.

- Rodríguez-Mondoñero, M. 2005. Cyclic linearization in the DP domain. Ms, Uconn. Term paper for 325.
- Rothstein, Robert. 1986. Equation and AscrTPtion: the Nominative/Instrumental Opposition in West Slavic, in Case in Slavic, ed. Richard D. Brecht and James S. Levine (Columbus, OH: Slavica, 1986), pp. 312-22.
- Rudin, Catherine. 1988. On multiple questions and multiple wh-fronting. Natural Language and Linguistic Theory 6: 445-501.
- Saab, Andrés. 2006. Concordancia ad sensum y elipsis nominal en español: Un análisis morfosintáctico. Unpublished.

Saito, M. 1982. Case Marking in Japanese: a Preliminary Study. Ms., MIT.

- Saito, Mamoru, and Keiko Murasugi. 1999. Subject predication within IP and DP. In *Beyond* principles and parameters, ed. by Kyle Johnson and Ian Roberts, 167-188. Dordrecht: Kluwer.
- Sánchez, Liliana. 1996. Syntactic Structure in Nominals: A comparative study of Spanish and Southern Quechua, University of Southern California: Doctoral dissertation.
- Saraiva, M. E. F. 1997. Buscar menino no colégio: a questão do objeto incorporado em Português. Campinas, Pontes.
- Schmitt, C. & A.Munn. 1999.Against the Nominal Mapping Parameter: Bare nouns in Brazilian Portuguese. *Proceedings of NELS* 29.
- Selkirk, E. 1977. Some remarks on noun phrase structure. In: P. Culiver, T. Wasow and Akmajian (eds.), Formal Syntax. New York: Academic Press, 285-316.
- Sikansi, N. S. 1998. Interrogativas Q- do português brasileiro moderno: quadro geral. Cadernos de Estudos Linguísticos. Ed. Unicamp, n. 34, pp. 119-129.
- Stjepanović, Sandra. 1999. What do second position cliticization, scrambling and multiple wh-fronting have in common? Doctoral dissertation, Uconn.
- Stowell, Timothy. 1981. Origins of Phrase Structure, Massachusetts Institute of Technology.
- Suñer, A. 1990. La predicación secundaria en español. Doctoral dissertation. Universidad Autónoma de Barcelona.
- Szabolcsi, Anna. 1987. Functional categories in the Noun Phrase. In Approaches to Hungarian, ed. István Kenesei: JATE, Szeged.

- Takahashi, C. 1994. Case, Agreement, and Multiple Subjects: Subjectivization in Syntax and LF. in Akatsuka, N. (ed.), Japanese/Korean Linguistics 4. Stanford: CSLI. 394-411.
- Takahashi, C. 1996. Multiplicity, Optionality and Constraints on the Distribution of Nominative Case in Japanese. PhD dissertation, Cornell University.
- Takezawa, K. 1987. A Configurational Approach to Case-Marking in Japanese. PhD dissertation, University of Washington.
- Tarallo, Fernando. 1983. Relativization Strategies in Brazilian Portuguese. Doctoral dissertation. University of Pennsylvania.
- Tateishi, K. 1991. The Syntax of 'Subjects'. PhD dissertation, University of Massachusetts.
- Tellier, C. and D. Valois. 1995. Agreement and Extraction out of DPs. Proceedings of WCCFL, 14: 525-540.
- Ticio, M. Emma. 2003. On the structure of DPs, University of Connecticut: Doctoral Dissertation.
- Torrego, Esther. 1987. On empty categories in nominals. Ms. University of Massachussetts, Boston.
- Ura, H. 1994. Varieties of Raising and the Feature-Based Bare Phrase Structure Theory: MIT Occasional Papers in Linguistics 7.
- Ura, H. 1996. Multiple Feature-Checking: A Theory of Grammatical Function Splitting. PhD dissertation, MIT.
- Ura, H. 1999. Checking Theory and Dative Subject Constructions in Japanese and Korean. Journal of East Asian Linguistics 8. 223-254.

- Ura, H. 2000. Checking Theory and Grammatical Functions in Universal Grammar. Oxford: Oxford University Press.
- Uriagereka, Juan. 2001. Adjectival clues. In 5th Hispanic Linguistics Symposium. University of Illinois at Urbana-Champaign.
- Vergnaud, Jean-Roger and Maria Luisa Zubizarreta. 1992. The Definite Determiner and the Inalienable Constructions in French and English. Linguistic Inquiry 23:595-652.
- Zanuttini, Rafaella, and Portner, Paul. 2003. Exclamative Clauses: At the Syntax-Semantics Interface. Language 79:39-81.

Zocca, Cynthia. 2004. And the wh- goes where? Ms. University of Connecticut.

Zocca, Cynthia. 2010. Divide et Impera – Separating Operators from their Variables, University of Connecticut: Doctoral dissertation.