

“SÓ”, “EXCLUSIVAMENTE” AND THEIR POSITIONS IN THE SENTENCE

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- **ABSTRACT:** In this paper, I examine some properties of higher and lower adverbs to suggest that the focusing *só* ‘only’ belongs to the first group. I argue that the behavior of exclusive *só* in Brazilian Portuguese is better explained on syntactic grounds, i.e. in terms of its position in the universal hierarchy. The key to arrive at this conclusion comes from the distribution of the focusing *exclusivamente* ‘exclusively’ which is also an exclusive adverb but behaves differently from *só* with respect to some syntactic properties which discriminate between lower and higher adverbs. I will show that Bever and Clark’s (2008) predictions that Semantics would be responsible for the asymmetries between quantificational adverbs and the exclusive *só* is not accurate inasmuch as exclusive *exclusivamente* ‘exclusively’, in Brazilian Portuguese, goes together with quantificational adverbs as far as some syntactic properties are examined.
- **KEYWORDS:** Focusing adverbs. Exclusive adverbs. Quantificational adverbs. Functional hierarchy. Cartography. Generative Syntax.

Introduction

Kayne’s (2005) “One Feature, One Head Principle” undoubtedly became one of the fundamental tenets of the cartographic endeavor in syntax. This principle captures the initial idea which has motivated cartographic studies in the Principles and Parameters theory from its first works in the nineties (CINQUE, 1994, 1995, [and especially] 1999; RIZZI, 1997): the assumption that the atoms of syntax should not be reduced to words or morphemes that generativists were used to representing in syntactic trees (e.g. vP, IP/TP, CP, etc. for the sentence; and DP for the nominal expression). The cartography project has shown that the IP/TP would actually consist of approximately 40 functional projections; and the CP zone would be formed by almost fifteen functional projections. Abney’s (1986), Szabolcsi’s (1987), Pollock’s (1989) and Beghelli and Stowell’s (1997) works should also be recognized as the major precursors of the cartography enterprise in Syntax. These works paved the way for the investigation of the small-forming units of syntactic structures and their main phrases.

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In this context, it is worth remembering Cinque's (1999) work, whose efforts focused on determining the position of different classes of adverbs, which constitute almost 40 classes, that would correspond – surprisingly (for that time) – to different classes of functional heads (also in the order of 40). In his seminal work, Cinque not only brought important contributions to the syntax of adverbs and the architecture of the clause – Cinque's theory offers an interesting approach to the generative *Middlefield*, which pays enormous attention to descriptions that typologists have been doing on languages from different families – but also brings two major theoretical and conceptual contributions to Generativism: (i) how one could understand the principles that would be shared by all languages (as inherited by Universal Grammar); and, related to (i), (ii) how one could explain the interesting issue of parametric variation – which, for him, is linked to Merge operations, i.e. external Merge (what is merged with morphophonological material and what gets unpronounced (MOURA, 2005)) and internal Merge (the different height, in the hierarchies, that displacements target in distinct languages).

If cartographic studies are on the right track, it is expected that not only those classes of adverbs described in Cinque (1999), but also focusing adverbs like *only*, *also*, *mainly*, etc. (which correspond to about five semantic (sub)classes) be rigidly ordered, i.e. that they occupy a fixed position in the universal hierarchy of functional elements in the clause.

This work brings a contribution to the cartographic endeavor, in the sense that it seeks to show, based on the syntactic distribution of a class of focusing adverbs – the exclusive AdvPs *só* 'only' and *exclusivamente* 'exclusively' in Brazilian Portuguese – that such adverbials not only are rigidly ordered with respect to other adverbs of the Cinque hierarchy but are also ordered among themselves.

Some syntactic properties of higher AdvPs are brought to light: (i) higher AdvPs cannot be recovered by the elliptical VP in Portuguese, (ii) they do not allow the extraction of their associated focus, (iii) they cannot appear in the sentence-final position. These properties are tested against focusing *só* 'only' to see whether it behaves as a higher or lower adverb. The conclusion is that *só* 'only' also occupies a position among higher adverbs.

The syntactic behavior of exclusive adverbs like *exclusivamente* – which surprisingly behaves as quantificational adverbs, and not as the focusing *só* (which, as will be seen in due time, belongs to another syntactic class in spite of its semantics) – leads us to suggest that there exists (at least) two positions for exclusive focusing adverbs, one among high adverbs and the other among low adverbs.

The obvious corollary of this duality is the acknowledgment that the different behaviors of exclusive and quantificational adverbs cannot be purely accounted

for on semantic grounds. Yet, it should find its explanation in the structure. What explains the different behavior of exclusive and quantificational adverbs is the position they occupy in the hierarchy. In other words the question is related to the architecture of the clause.

In the next section, I present Cinque’s (1999) cartographic approach to adverbs and clausal structure. Further, my attempt is to determine the position that *só* ‘only’ occupies among the adverbs of the Cinque hierarchy. Next, the syntactic properties of higher adverbs will be tested against those of focusing *só*. Then I will compare the properties of quantificational adverbs with those of focusing *só* ‘only’. Subsequently, I will discuss the syntactic behavior of lower adverbs, including the quantificational ones. As will be shown, higher adverbs behave like *só*. I further propose a position for the lower exclusive adverb *exclusivamente* ‘exclusively’. A general summary of the work will be presented in the penultimate section. In the last section, I will make the acknowledgments.

Theoretical framework

Based on the relative distribution of adverbs from different semantic classes in different languages, Cinque (1999) proposes that Chomsky’s (1986) IP (or “TP” in the minimalist tradition (CHOMSKY, 1995)) would actually correspond to the following functional distinctions:

(1) The Universal Hierarchy of Functional Projections of the IP (Cinque (1999, p.106), modified in Cinque (2006))

[*frankly* Mood_{SpeechAct} > [*surprisingly* Mood_{Mirative} > [*luckily* Mood_{Evaluative} > [*allegedly* Mood_{Evidential} > [*probably* Mod_{Epistemic} > [*once* T_{Past} > [*then* T_{Future} > [*perhaps* Mood_{Irrealis} > [*necessarily* Mod_{Necessity} > [*possibly* Mod_{possibility} > [*usually* Asp_{Habitual} > [*finally* Asp_{Delayed} > [*tendentially* Asp_{Predispositional} > [*again* Asp_{Repetitive(I)} > [*often* Asp_{Frequentative(I)} > [*willingly* Mod_{Volition} > [*quickly* Asp_{Celerative(I)} > [*already* T_{Anterior} > [*no longer* Asp_{Terminative} > [*still* Asp_{Continuative} > [*always* Asp_{Continuous} > [*just* Asp_{Retrospective} > [*soon* Asp_{Proximative} > [*briefly* Asp_{Durative} > [(?) Asp_{Generic/Progressive} > [*almost* Asp_{Prospective} > [*suddenly* Asp_{Inceptive} > [*obligatorily* Mod_{Obligation} > [*in vain* Asp_{Frustrative} > [(?) Asp_{Conative} > [*completely* Asp_{SgCompletive(I)} > [*tutto* Asp_{PlCompletive} > [*well* Voice > [*early* Asp_{Celerative(II)} > [(?) Asp_{Inceptive(II)} > [*again* Asp_{Repetitive(II)} > [*often* Asp_{Frequentative(II)} > ...

Unless an informational structure-related feature (Topic, Focus, etc.) has to be valued, the adverbs in (1) occupy a fixed position in the structure and do not move from the position where they are externally merged. Thus, adverbs are diagnostics for the movement of other constituents of the sentence (e.g. the V, auxiliaries, modals, V arguments, etc.).

To arrive at the Universal Hierarchy of clausal functional projections, Cinque (1999) first turns to transitivity tests, which involve adverbs from different classes. He takes combinations of two adverbs from different classes in the two possible relative orders (see (2-3)) to determine their position in the hierarchy.

- (2) a. AdvP_A > AdvP_B
 b. *AdvP_B > AdvP_A
- (3) a. AdvP_B > AdvP_C
 b. *AdvP_C > AdvP_B

By combining (2) and (3), it follows that AdvP_A precedes AdvP_B, which in turn precedes AdvP_C. Below, this mechanism is illustrated on the basis of English data involving four higher adverbs: *speech act*, *evaluative*, *evidential* and *epistemic* adverbs. The examples are taken from Cinque (1999, p.33).

- (4) Speech act adverbs (*honestly*) > Evaluative adverbs (*unfortunately*):
 a. Honestly I am unfortunately unable to help you.
 b. *Unfortunately I am honestly unable to help you.
- (5) Evaluative adverbs (*fortunately*) > Evidential adverbs (*evidently*):
 a. Fortunately, he had evidently had his own opinion of the matter.
 b. *Evidently he had fortunately had his own opinion of the matter.
- (6) Evidential adverbs (*clearly*) > Epistemic adverbs (*probably*):
 a. Clearly John probably will quickly learn French perfectly.
 b. *Probably John clearly will quickly learn French perfectly.

Transitivity tests have also been applied to functional heads (in various languages) by Cinque. (7), for instance, presents auxiliary verbs in English and Spanish, which have been considered core categories of Inflection (IP):

- (7) a. These books *have been being read* all year. (CINQUE, 1999, p. 57)
 b. Esos libros *han estado siendo leídos* todo el año. (= 7a)

In (7), *have* (a) and *han* (b) lexicalize the head of Tense; *been* (7a) and *estado* (7b), the perfect aspect; *being* (7a) and *siendo* (7b), the progressive; the lexical verb, given the passive construction, derivationally lexicalizes Voice (*read*, in (a); *leídos*, in (7b)). Given (7), we can infer the following partial ordering (cf. 7'):

- (7') Tense > Asp_{Perfect} > Asp_{Progressive} > Voice ... (> V) (CINQUE, 1999, p.57)

Since adverbs and functional heads match (each other) in terms of number, relative order and semantic classes, it is possible to propose that adverbs are an

integral part of the functional structure of the clause. This is precisely one of the innovations Cinque (1999) brings to the theory of grammar.

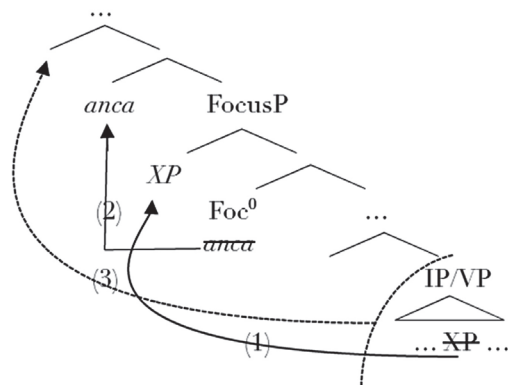
Since the past active participle can occupy a position to the right and to the left of each one of the low adverbs in Italian, Cinque suggests that there would be only one head between each two adverbs, an argument in favor of its proposal for the location of AdvPs in Spec (CINQUE, 1999).

What about focusing adverbs?

Despite its empirical and conceptual coverage, Cinque’s (1999) universal hierarchy presented in (1) is not equipped with dedicated positions for focusing AdvPs of distinct semantic classes. Yet, Cinque (1999, 2004) recognizes that they can be treated along the lines of Bayer (1996) and Kayne (1998).

Munaro (2012) also provides a “cartographic” treatment of focusing adverbs by taking them to be merged as the head of one of the peripheral focus projections (in the CP area or in the lower IP area (i.e. in the vP)). In Munaro’s account, which also follows Kayne (1998), the focusing adverb attracts the focus to its Spec (this is represented by step (1) in figure 1, below), followed by the movement of the focusing adverb to the head immediately above (see step (2) in the figure), and, subsequently, by the movement of the remnant (see (3) in figure 1).

Figure 1 – Munaro and Kayne’s treatment of focusing adverbs



Source: Made by the author.

Attractive by its simplicity – as focalization by adverbs actually reflects the (more) general process of focalization (with the focusing adverbs occupying the head of one of the two focus projections) –, Munaro’s proposal apparently does not

provide a structural reason for the existence of a hierarchy of different semantic classes of focusing adverbs, given the fact that it assumes only two positions (in the CP and vP domains) for these adverbs, regardless of their (semantic) class.

Recent advances in the Cartography Project (CINQUE; RIZZI, 2010) and references cited there) lead us to ask the following question: “which position(s) do different (semantic) classes of focusing adverbs occupy in terms of functional hierarchies?” One way to approach the syntax of focusing adverbs in line with the cartographic enterprise would be by recognizing that each one of the different classes of these AdvPs would have a distinct position of Merge, in line with the “One Feature, One Head Principle” (KAYNE, 2005). This strong view will be the one assumed here.

The following data suggest that different classes of focusing AdvPs are also rigidly ordered among each other and with respect to the other adverbs of the Cinque hierarchy:

- (8) a. O Mané até só falaria inglês se precisasse.
The Mané even only would-speak English if he-had to
'Mané would even only speak English, if he had to'
- b. *O Mané só até falaria inglês se precisasse.
- (9) a. ?He'd even only speak English, if he had to.
- b. *He'd only even speak English, if he had to. (KAYNE, 1998, p.162)
- (10) a. Ti ho chiesto di leggere anche solo un capitolo. [Italian – G. Cinque, p.c.]
You I-have asked to read even only a chapter
'I've asked you to read even only a chapter'
- b. *Ti ho chiesto di leggere solo anche un capitolo.
- (11) a. Ion manânce (chiar) si numai pâine. [Romeno – A. Bleotu, p.c.]
Ion eat even only bread
'Ion even only eats bread'
- b. *Ion manânce (chiar) numai si pâine.
- (12) a. [lian₁ mohuoke zheme miren de yuyan_{F1}]₁ ye zhiyou₂ zhangsan_{F2} zai yanjou t₁
even Mohawk so attractive DE language YE only Z. Prog study
'Only₂ Zhangsan_{F2}¹ is studying even, such a fascinating language as Mohawk_{F1}.'
- b. *zhiyou₂ zhangsan_{F2} [lian₁ mohuoke zheme miren de yuyan_{F1}]₁ ye zai yanjou t₁.
(^{OK}lian>zhiyou ; *zhiyou>lian [Chinês (SHU, 2011, p. 124)]

¹ The indexes F₁ and F₂ refer to the focusing adverbs which have scope over the constituents numbered as 1 and 2, respectively. Notice that in Chinese the scope relation among the focusing adverbs must be captured by Syntax. Thus, there is a pre-*Spell-Out* movement of a portion of the clause, indicated by the index “i”, which contains the modifier 1 and the focus F₁. To the present discussion, it is important to point out that the surface ordering “[1 F₁]₁ [2 F₂] ... t₁” exactly reflects an underlying hierarchy where Adv₁ > Adv₂ (the same ordering seen in (8-11)).

- (13) a. Chulsu-nun yeksi tansunhl uss-ess-ul kussita [Korean]
C. -TOP also merely/only smile-past-EPIST
'Chulsu also only smiled'
b. Chulsu-nun tansunhl *(,) yeksi uss-ess-ul kussita. (Sung Yun Cho, pers. communication)
- (14) a. ta shuobuding zhi qu-guo xinjiapuo. [Chinese (SHU, 2011, p.160)]
he maybe only go-Exp Singapore
'He has maybe only been to Singapore.'
b. *ta zhi shuobuding qu-guo xinjiapuo
he only maybe go-Exp Singapore
a'. Ele talvez só foi para Cingapura. (= 14a,b) [Brazilian Portuguese]
b'. *Ele só talvez foi para Cingapura.²
- (15) a. O José come provavelmente só arroz.
The José eats probaby only rice
'José probably only eats rice'
b. *O José come só provavelmente arroz.
- (16) a. O Mané só já limpou o banheiro.
The Mané only already cleaned the bathroom
'Mané only already cleaned the bathroom'
b. *O Mané já só limpou o banheiro.
- (17) a. Ha solo già mangiato la pasta. [Italian]
(S/he-)had only already eaten the pasta
'S/he had only already eaten pasta'
b. *Ha già solo mangiato la pasta. (Guglielmo Cinque, pers. communication)

(8-17) suggests the following template:

- (18) (i) provavelmente/talvez > só > já
probably/perhaps > only > already
(ii) também > só
even > only

² One of the anonymous reviewers considers only marginal, but not ungrammatical, the sentence given in (i.b):

- (i) a. Ele talvez só tenha ido à padaria.
He perhaps only had gone to the bakery
'He perhaps only had gone to the bakery'
b. ?Ele só talvez tenha ido à padaria.

For me, (i.b) is ungrammatical, unless *só* 'only' is "prosodically marked". For the purposes of this work, in the production of grammaticality judgment tests, it is necessary to create "reliable minimal pairs", that is, sentences with 'flat intonation'. If the adverb *só* 'only' in (b) is prosodically marked, (b) no longer forms a minimal pair with (a) and both sentences have to be excluded from the data.

For the sentences given in (8-17), it is important to remember that, in the Cartographic tradition, the adverbs under consideration occupy the position of specifiers at the sentence level. Thus, for a given AdvP like *probably*, for instance, it is assumed to always occupy [Spec, Mod_{Epistemic}P] – except in the cases of homonymy for which the same lexical form is merged in more than one position with different semantic specifications for each distinct position –. Thus, *provavelmente* ‘probably’ (see 19a,b,c) always occupies the same position in the sentence structure. The same is true of *só* ‘only’.

- (19) a. O José provavelmente só comeu arroz.
 The José probably only ate rice
 ‘José probably only ate rice’
 b. O José provavelmente comeu só arroz.
 The José probably ate only rice
 ‘José probably ate only rice’
 c. O José comeu provavelmente só arroz.
 The José ate probably only rice
 ‘José ate probably only rice’

Some empirical facts support the contention that, even in cases like (19c) – which hides an interesting ambiguity briefly described below –, the adverb is still merged in the extended projection of the verb and does not enter the derivation as an adjunct of the DP. The discussion of the verbal ellipsis phenomenon in Portuguese (cfr. the sentences in (36-39) and related text) should help us understand why those theories arguing that an adverb can be directly adjoined to a DP may not be correct. If the adverb cannot be recovered by the elliptical VP (in VP ellipsis constructions), that amounts to saying that the AdvP cannot be an adjunct of the DP. That is a good reason for completely abandoning the possibility of free and direct adjunction of AdvPs to DPs and other constituents of the clause.

Furthermore, (19c) and similar sentences are ambiguous in both Brazilian (BP) and European Portuguese (EP) (see TESCARI NETO (2013) chapter 5). In one reading, the adverb in (c) may only modify the DP (as seen by the paraphrase in (19c’), below). In the other possible reading the adverb in (c) modifies all the VP as well (given the acceptability of (19c’’)).

- (19) c’. O José comeu provavelmente só arroz, não feijão.
 The José ate probably only rice, not bean (narrow scope)
 ‘José probably only ate rice, not beans’
 c’’. O José comeu provavelmente só arroz, não bebeu leite.
 The José ate probably only rice, not drink milk (wide scope)
 ‘José probably only ate rice, he didn’t drink milk’

Where is the adverb *só* ‘only’ located in the Cinque hierarchy?

Bever and Clark (2008) and Shu (2011) recognize that focusing adverbs are classified into the following semantic classes (see the table below):

exclusives: only, just, merely, ...
non-scalar additives: too, also, ...
scalar additives: even
particularizers: in particular, for example,...
intensives: really, totally,...
minimizing downtoners: kind of, barely, hardly,...
maximizing downtoners: at most, at best, at the maximum,...

As previously stated, considering the seven classes of focusing adverbs mentioned in the above table, the paper only investigates the position of exclusive adverbs with respect to the other AdvPs of the Cinque hierarchy. At the end of the work, I will show that these adverbs actually correspond to two distinct syntactic classes – which are realized in two different and non-adjacent projections – due to their distinct position in the hierarchy. This fact explains their different behavior regarding a range of syntactic properties.

From Cinque’s (1999) work, it is known that habitual adverbs (*solitamente* ‘usually’) precede presuppositional negation (*mica*), which in turn precedes *più* (‘more’):

(20) *solitamente* > *mica* > *già* > *più* ... (CINQUE, 1999, p.6)

If one considers the position of focusing *só* ‘only’ with respect to the adverbs in (20) (cfr. (21) and (23)), they get the (partial) picture shown in (22) and (24):

- (21) a. Non ha mica solo mangiato la pasta. [Italiano]
Not Aux NEG only eaten the pasta
‘He hasn’t only eaten pasta’
b. *Non ha solo mica mangiato la pasta. (G. Cinque, personal communication)
- (22) ... *solitamente/usually/geralmente* > ‘*mica*’ > *solo/only/só* > *già/already/já* ...
- (23) a. Lui ha solo completamente distrutto una cosa, la sua casa. [Italian]
He has only completely destructed one thing, the his house
‘He only has completely destructed one thing: his house’
b. *Lui ha completamente solo distrutto una cosa, la sua casa. (G. Cinque, pers. com.)

Since *completamente* ‘completely’ is a VP adverb, i.e. it is located above vP, we can add the generalization in (24):

(24) *solo/só/only* may be located in the lower zone of the IP, but still above the vP.

Given the transitivity relations discussed above, there is one intriguing question to ask in the present context: where is *só/solo/only* located among the adverbs of the Cinque hierarchy? The data presented above and the sentences in (25-26), below, suggest that the focusing adverb *só* ‘only’ occupies a position in between the high adverbs and the low adverbs in the hierarchy in (1) (see, for this, (27)).

(25) T_{Anterior} *já/already/già*:

A: – O que o José já limpou?

What that the José already cleaned

‘What has José already cleaned?’

B: – Ele só já limpou a casa.

He only already cleaned the house

‘He’s only already cleaned the house’

B’: – *Ele já só limpou a casa.

(26) Asp_{Continuative} *ainda/still/ancora*:

a. *Ele ainda só não limpou a casa.

He still only not cleaned the house

‘He hasn’t only cleaned the house yet’

b. Ele só ainda não limpou a casa.

(27) *solitamente/usually* (Asp_{Habitual}) > *mica* (presuppositional negation) > *solo/only* (Foc_{Exclusive}) > *já/già/already* (T_{anterior}) > *ainda/ancora/still* (Asp_{Continuative})

By applying transitivity tests involving *só* ‘only’ and the adverbs located near the habitual aspect, one can specify the position occupied by *só* ‘only’ in the hierarchy of IP adverbs. *Só* ‘only’ must necessarily follow the tardive aspect adverb *finalmente* ‘finally’, the predispositional aspect adverb *tendencialmente* ‘tendentially’ and the repetitive aspect adverb *novamente* ‘again’ (cf. 28a-c, respectively).

(28) a. *O José só finalmente perdeu a cabeça.

The José only finally lost the head

‘José only finally lost his head’

a’. O José finalmente só perdeu a cabeça.³

The José finally only lost the head

‘José has finally only lost his head’

³ For one of the reviewers, after much insistence, the sentence (ia) below – which forms a legitimate minimal pair with (ib), as defined in note 2) – is not ungrammatical, but only marginal:

- b. *O José só tendencialmente perde a cabeça do nada.
The José only tendentially lost the head out of nowhere
- b'. O José tendencialmente só perde a cabeça do nada.
The José tendentially only loses the head out of nowhere
'José tendentially loses the head out of nowhere'
- c. *O José só novamente perdeu a cabeça.
The José only again lost the head
'José has only again lost his head'
- c'. O José novamente só perdeu a cabeça.
José has again only lost the head

Regarding the frequentative (28d,d'), the volitional (28e,e') and the celerative (28f,f') adverbs, it seems that it is not possible to establish a relative order between each one of them with respect to the adverb *só* 'only':

- (28) d. O José só frequentemente perde a cabeça (não raramente!)
The José only frequently loses the head (not rarely!)
'José only frequently loses his head'
- d'. O José frequentemente só perde a cabeça.
- e. O José só voluntariamente fez a tarefa.
The José only willingly did the homework
'José only willingly did the homework'
- e'. O José voluntariamente só fez a tarefa.
- f. O José só rapidamente lava a louça.
The José only quickly does the dishes
'José only quickly does the dishes'
- f'. O José rapidamente só lava a louça.

-
- (i) a. ?O João finalmente só fez a capa do trabalho.
The João finally only did the title page of the paper
'João has finally only finished the title page of the paper'
 - b. *O João só finalmente fez a capa.

For me, even (i(a)) is grammatical. However, it is worth observing that, in spite of the fact that both sentences present some level of degradation in the referee's judgment, his/her feelings on the differences between (a) and (b) are very clear, as the symbols "?" and "*" before them would suggest: (a) is less degraded than (b), the latter considered completely ungrammatical by the reviewer.

In the present context, it is important to bring to the discussion the sentence given in (ic), which has also been provided by the referee.

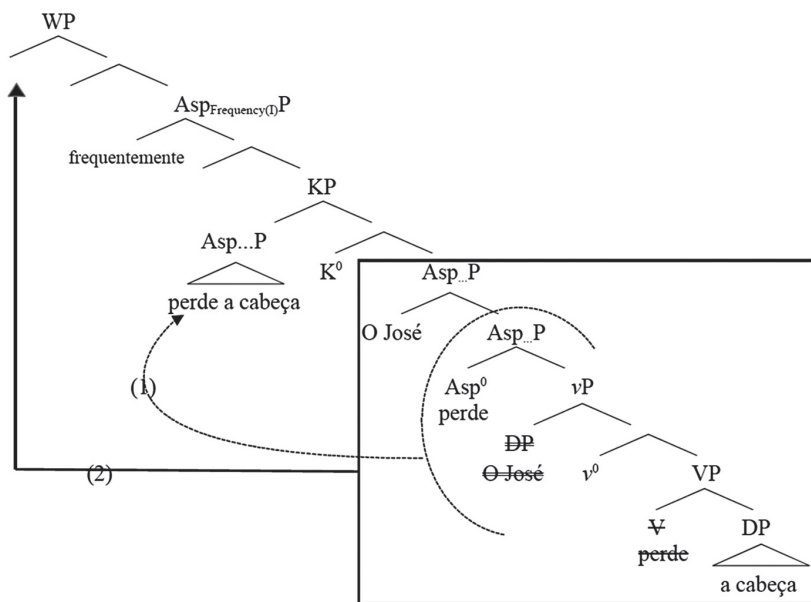
- (i) c. O João finalmente fez só a capa.
The João finally did only the title page
'João has finally finished only the title page'

For the theoretical and methodological purposes of this study, sentences like (ic) should be disregarded for one reason: (ic) does not form a minimal pair with (ib), given the fact that the adverbs in (ic) are not in contiguity. The contiguity is extremely important here – whether the AdvP is before an auxiliary or even the lexical verb or if the AdvPs is before one of the arguments of the V – because the movement of the remnant can mask the ordering of the adverbs, creating the illusion that it is not possible to establish a rigid and fixed order among them. For this reason, it is necessary that AdvPs be contiguous.

- g. O José só já lavou a louça.
 The José only already did the dishes
 'José only already did the dishes'
 g'. */??O José já só lavou a louça.

This free ordering is apparent but not real. If one assumes Kayne's (1998) analysis of focusing adverbs (see Tescari Neto (2013)), they can infer that, after the attraction of the constituent under the scope of *só* 'only', the other adverb may or may not move to the left as part of the remnant, creating the impression that it is not possible to establish a rigid and fixed order between the two adverbs. See Fig. 2, 3 and 4 below, where Fig. 2 corresponds to what is common to the derivations of all these sentences; Figure 3 (see further in the text) corresponds to the final steps of the derivational history of (28d,e,f) and Fig. 4 (even further in the text) to the derivation of (28d',e',f'). However, the fact that *só* 'only' necessarily has to precede *já* 'already' (cfr. (28g,g')) is an important piece of evidence to the idea that *só* 'only' occupies a rigid, fixed position in the hierarchy, necessarily after *novamente* 'again' (cf. (28c,c')).

Figure 2 – The first steps in the derivation of (28d, d'; e, e'; f, f')



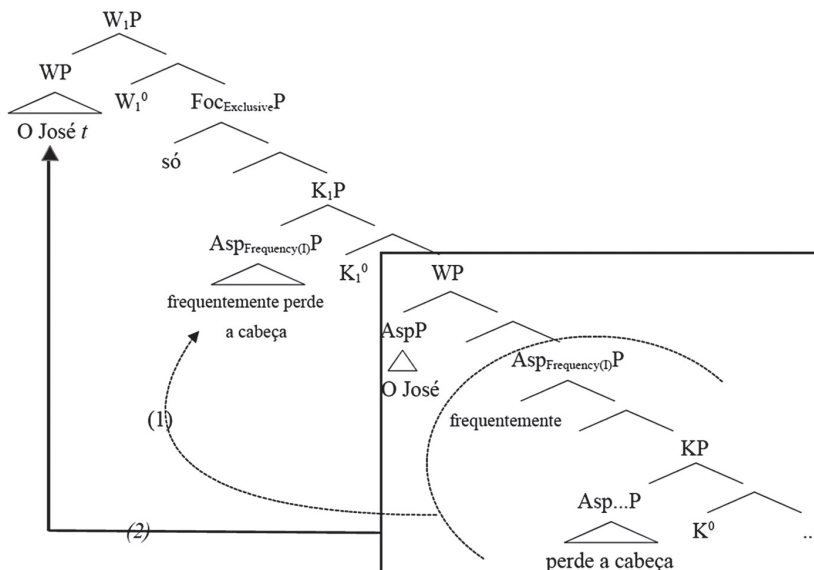
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As suggested in Figure 2 (see also the footnote 3), before the Merge of the frequentative adverb in the specifier of the corresponding functional projection

(according to the Cinque hierarchy), a probing head K^0 attracts to its specifier the constituent under the scope of the frequentative adverb, along the lines of Kayne (1998) (see the step indicated as (1) in Fig. 2). After the movement of the constituent to be focalized, the adverb enters the derivation in the specifier immediately above, following the Cinque hierarchy. After that, remnant movement takes place (see the step indicated as (2) in Fig. 2), thus restoring the previous order. The movement of the remnant creates the illusion that there was no movement. These steps are common to derivational history of all instances of (28d/d' -f/f').

To derive the sentences where *só* precedes the other adverb, the steps of the derivation would basically be the same: if the scope of the adverbs is assigned in Narrow Syntax through movement (KAYNE, 1998; TESCARI NETO, 2013), before the Merge of *só*, a probing head attracts to its specifier the constituent – containing the adverb *frequentemente/voluntariamente/rapidamente* – which bears the focus feature, followed by the Merge of *só* 'only' in the specifier on the left and by remnant movement (see Figure (3) below).

Figure 3 – The ordering *só* plus AdvP

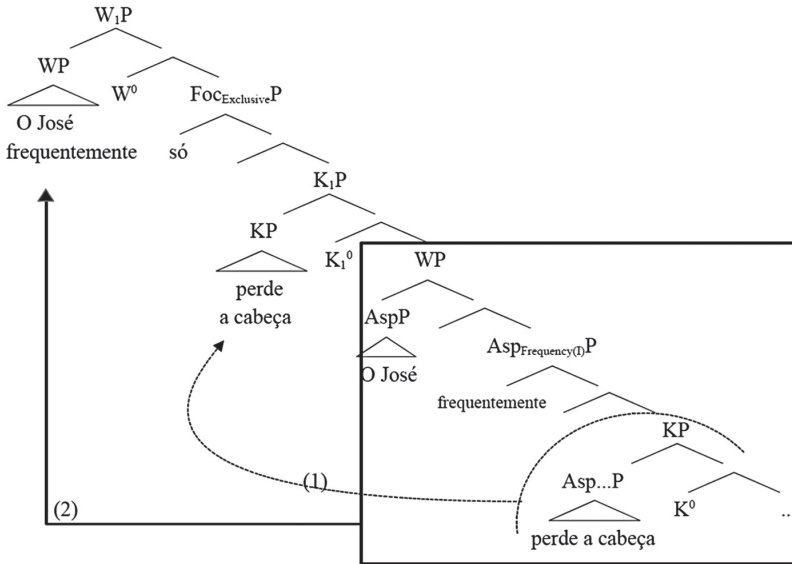


Source: Made by the author.

In those cases where *frequentemente/voluntariamente/rapidamente* precedes *só*, the first steps of the derivation are the same as those described in Fig. 2. The difference has to do with the material which will be moved to the specifier of

the probing head⁴ and with the material moved as remnant: the former will not contain the adverb *frequentemente/voluntariamente/rapidamente* which will be moved as part of the latter, thus, again, creating the illusion that it is not possible to establish a rigid and fixed order between the focusing *só* ‘only’ and the adverb *frequentemente/voluntariamente/rapidamente*. (see Figure (4) below).

Figure 4 – The derivation of the order AdvP⁵ – *só*



Source: Made by the author.

⁴ In Kayne (1998), this probing head would be lexicalized by the focusing adverb which, after the movement of the focus to its specifier, would also raise and adjoin to the head above. The modification made here – which keeps Kayne’s original idea and the same derivational process – departs only partially from his analysis: here, the probing head is not filled by the adverb but by an unpronounced head, in Portuguese. As noted by Tescari Neto (2013), there is (morphosyntactic) evidence for the assumption of this probing head in Syntax, whenever a scope-inducing/focus-sensitive element (focusing adverbs, higher adverbs, etc.) enters the derivation. Shu (2011, p.132) mentions the existence of an ‘agreement marker’ *cai*, in Chinese, which may appear with a focusing adverb in that language. The indexes F_1 and F_2 indicate the focus of the associated focusing adverb bearing the same index.

- (i) *Chinese* (SHU, 2011, p.132)
 A: – zhangsan changchang mai xigua
 ‘Zhangsan often buys watermelons.’
 [B: – bu. ta zhi(you)₁ [ouer₂]_{F1} cai mai xigua_{F2}.
 no he only sometimes CAI buy watermelon
 ‘No. He only₁ buys watermelons₂ [occasionally]_{F1}.’

Thus, I take *cai*, when it appears with a focusing adverb, to be the probing head associated with the focus. As such, *cai* attracts the focus, in this case *ouer* ‘sometimes’ to its Spec, followed by the Merge of its associated focusing adverb, namely, *zhi(you)*. In Brazilian Portuguese, this probing head is silent.

⁵ One could ask why the same expedient used for *frequentemente* can no longer be used with *já* ‘already’. That is, whether the movement of the remnant drags along the adverb *só* ‘only’ or not, thus producing two possible

The data presented so far show that *só* ‘only’ occupies a position between Asp_{Repetitive(l)} ‘again’ and Asp_{Frequentative(l)} ‘frequently’ (see (29) below). Hence, it would only be a higher adverb. There are some syntactic properties of higher AdvPs that are also valid for *só* ‘only’, as we are going to see in the next sections.

(29) [*frankly* Mood_{SpeechAct} > [*luckily* Mood_{Evaluative} > [*allegedly* Mood_{Evidential} > [*probably* Mod_{Epistemic} > [*once*

Some syntactic properties of higher adverbs

In the literature on adverbs, there is some confusion regarding their syntactic status: if they are high/sentential/IP adverbs or low/VP adverbs. The confusion increases even more when a ‘high’ adverb has scope over a verbal argument (see the discussion on the data in (19c,c’,c’), above). Such confusion is very clear in a language like BP where a high adverb can be linearized in different positions in the sentence:

- (30) (Provavelmente) o Brasil (provavelmente) ganhará (provavelmente) a Copa do Mundo
 (probably), Brazil (probably) will-win (probably) the World Cup

The position of the adverb between the V and the DP-complement (“ganhará provavelmente a Copa...”) seems to be problematic to formal theories, according to which *provavelmente* ‘probably’ occupies a higher position the IP space (it is traditionally adjoined to the IP – see JACKENDOFF, 1972). This apparent problem stems from the fact that one cannot derive the appearance of the adverb in between the verb and its complement by simply moving the V across *provavelmente* ‘probably’, given the ungrammaticality of (31):

- (31) *O João mente provavelmente
 The João tells-lies probably
 ‘João probably tells lies’

orders. For the time being, there seems to be no answer to this question. However, from the viewpoint of a strong cartographic line – which is the one assumed here –, this unique behavior of the adverbs in (28d,d’:e,e’:f,f’), *frequentemente* ‘frequently’ included, is highly revealing: the adverbs in (28d-f), which are located below *só* ‘only’ (cfr. (29)) in the hierarchy, can move or not to the left of *só* as part of the remnant, whereas *já* ‘already’ and the AdvPs located below cannot. This different behavior of the adverbs in (28) with respect to *só* and *já* suggests the existence of syntactic operations (internal Merge (‘displacement’), in this case) which are only available to some adverbs belonging to a certain portion of the hierarchy. At first sight, there is no semantic explanation for the distinct behavior of the adverbs in (28d-f) with respect to *já* regarding the possibility of being part of the remnant or not: the adverbs in (28d-f) include aspectual AdvPs (*frequentemente* ‘frequently’ and *raramente* ‘rarely’) and a volitive adverb (*voluntariamente* ‘willingly’); *já* ‘already’ is a tense adverb in Cinque (1999). Thus, the answer must be found in the structure, i.e. in the position occupied by the adverb in the hierarchy. These facts would suggest that there is no alternative to Cartography.

As shown by Cinque (1999), the active past participle cannot move across high adverbs in Italian. Tescari Neto (2013) discussed the test presented by Cinque, suggesting that its validity is absolute if one only takes unergative verbs such as *mentir* 'to lie'. This is so because unergative verbs undoubtedly lack internal arguments. Hence, as we have already pointed out, the appearance of the lexical verb to the left of the adverb in sentences like (32) is the result of the movement of the remnant containing the V.

- (32) O Eduardo comeu provavelmente o bolo.
The Eduardo ate probably the cake
'Eduardo probably ate the cake'

Although for Cinque (1999) the syntactic status of an adverb (i.e. if it is a sentential AdvP, taking under its scope/being adjoined to the IP, or a VP adverb) appears to be of little relevance, the author classifies them into two big groups, each one including adverbs from different classes, i.e. from different projections of the hierarchy. One is the group of high adverbs and the other that of low AdvPs. Being "high" not only means that the adverb is merged in a high position in the Middlefield, but also that it cannot be linearized on the right of the active past participle in Italian. Conversely, being "low" means that the AdvP enters the derivation in a medial-low position in the Middlefield. In this case, it can appear to the right of past participle. In the sequence, I present some syntactic properties mentioned in Tescari Neto (2013) as being common to those adverbs called high AdvPs by Cinque (sentential adverbs in the general literature). These properties are crucial for the present argumentation as they help us showing that the AdvP *só* 'only' behaves as a high adverb, while quantificational AdvPs and, surprisingly, the exclusive AdvP *exclusivamente* 'exclusively' behaves like low AdvPs.

The *first property* has to do with the impossible appearance of a high adverb in the sentence-final position. High adverbs can only appear sentence-finally if de-accented (BELLETTI, 1990; CINQUE, 1999; ERNST, 2002; LAENZLINGER, 2002; TESCARI NETO, 2013). Note that (33a,a') are ungrammatical: the high adverb appears in the sentence-final position, but it is not prosodically marked (flat intonation for these sentences). (33c,c') are grammatical: the low adverb can appear in the sentence-final position. The appearance of a high AdvP in the sentence-final position is only possible if it is de-accented (cfr. (33b,b') where the comma tries to capture in the writing the fact that the sentence adverb is de-accented). (33a,b,c) are sentences from Italian whose correspondents in Portuguese are given in (33a',b',c').

- (33) a. *Gianni mente probabilmente
 G. tells-lies probably
 'G. tells lies probably'
- a'. *O Pedro mente provavelmente.
 Pedro tells-lies probably
 'P. tells lies probably'
- b. Gianni mente, provavelmente.
 G. tells-lies, probably
- b'. O Pedro mente, provavelmente.
 Pedro tells-lies, probably
- c. Gianni mente sempre/bene/ancora.
 G. tells-lies always/well/still
 'G. always/well/still tells lies'
- c'. O Pedro mente sempre/bem/ainda
 Pedro tells-lies always/well/still

Remember that the AdvP *só* 'only', according to the transitivity tests already applied here, occupies a position among the higher adverbs in the Middlefield. Concerning the first property, it also behaves exactly as *provavelmente* 'probably':

- (33) e. *O Pedro mente só.
 The Pedro tells-lies only
 'Pedro only tells lies'
- e. O Pedro mente, só

The *second property* has to do with the ability that low AdvPs have in allowing the extraction of the constituent modified by them. High AdvPs do not have this ability. Given the "Critical Freezing" (RIZZI, 2004), the constituent modified by a high adverb cannot be extracted (BEVER; CLARK, 2008; TESCARI NETO, 2013):

- (34) a. O Pedro comprou provavelmente uma BMW.
 The Pedro bought probably a BMW
 'Pedro probably bought a BMW'
- b. *O que_i o Pedro comprou provavelmente t_i?
 What_i the Pedro bought probably t_i?
 'What did Pedro probably bought?'

It is important to note that ungrammaticality of (34b) is related to the reading where the adverb takes scope over the *wh*-constituent *o que* 'what', which has been extracted in that sentence. It is not related to the interpretation where the adverb modifies the VP. (34a) and (34b) are ambiguous. The paraphrases in (34a', a'") illustrate the two possible readings for (34a). This ambiguity has already been mentioned at the beginning of this section.

- (34) a'. O Pedro comprou provavelmente uma BMW, não um Fusca. (narrow scope)
 The Pedro bought probably a BMW, not a Volkswagen Beetle
 'Pedro probably bought a BMW, not a Volkswagen Beetle'
- a". O Pedro comprou provavelmente uma BMW, não alugou um carro (wide scope)
 the Pedro bought probably a BMW, not rent a car
 'Pedro probably bought a BMW, he didn't rent a car'

If one considers the reading where the adverb in (34b) has wide scope, i.e. scope over the VP (as paraphrased in (34a') to (34a)), (34b) may be considered grammatical. For the purposes of this study, it is crucially important to exclude this wide scope reading (namely, the scope over the VP). This is so because such reading should always be possible, given that the adverb is necessarily found in a position higher than the landing site of the V (which cannot raise past high AdvPs, as already mentioned in the discussion of (31) and (33)).

The exclusion of (34b), repeated below –

- (34) b. *O que_i o Pedro comprou provavelmente t_i?
 What_i the Pedro bought probably t_i?
 'What did Pedro probably bought?'

for which it is to be borne in mind, again, that the relevant reading involves modification of the extracted constituent by the AdvP and not modification of the whole VP –, serves as a criterion to distinguish between high and low AdvPs, since only the constituent modified by a low adverb can be extracted. As I will show later, the constituent modified by a low adverb can be extracted with no risk for the grammaticality of the sentence. From now on, for the cases of extraction to the left periphery, only the narrow scope reading will be taken into account.

Returning to the second property, whereby constituents under the scope of a high adverb cannot be extracted, the same pattern described above for the adverb *provavelmente* 'probably' is also valid for the focusing adverb *só* 'only': the focus associated with *só* cannot be extracted (JACKENDOFF, 1972; KAYNE, 1998; BEVER; CLARK, 2008; TESCARI NETO, 2013) (see (34) and (35b)):⁶

⁶ The following data present an adverb being linearized between the subject and the lexical verb. The post-Pollockian tradition understands that adverbs occupy fixed positions and that the other constituents move in the sentence. Since adverbs occupy fixed positions, they are reliable diagnostics for movements.

- (i) a. O Pedro provavelmente compraria melões.
 The Pedro probably would-buy melons
 'Pedro would probably buy lemons'
- b. O que o Pedro provavelmente compraria? (^{OK}wide scope; *narrow scope)
 What the Pedro probably would-buy
 'What would Pedro probably buy?'

- (35) a. *Mary_i, he only likes x_i. (BEVER; CLARK, 2008, p.160)
 b. O Pedro comprou só uma BMW.
 The Pedro bought only a BMW
 'Pedro only bought a BMW'
 c. *O que (que) o Pedro comprou só t?
 What (that) the Pedro bought only t
 'What has Pedro only bought t?

The *third property* of higher adverbs states that they cannot be recovered by the elliptical VP in Portuguese (TESCARI NETO, 2013), since they occupy a position above the landing site of the V (on its movement to INFL):

- (36) O Pedro comprou provavelmente uma BMW e a Maria também comprou [-].
 The Pedro bought probably a BMW and the Mary also bought [-]
 'Pedro probably bought a BMW and so did Mary'
 [-]: *bought probably a BMW
 [-]: bought a BMW

In the present context, it is necessary to discriminate between what actually is the syntactic phenomenon of VP ellipsis in Portuguese and other syntactic constructions involving the deletion of constituents, such as 'stripping'. For a correct understanding of the phenomenon, it is also necessary to distinguish VP ellipsis in English from VP ellipsis in Portuguese. Sentences like (37) are clear examples of stripping, which is different from VP ellipsis:

Even (ia) is ambiguous. In one reading, the adverb can take scope over everything following it (see the paraphrase (ia')). This reading resembles what is referred to here as 'the wide scope reading' or scope over the VP. The other possible reading is the one where the adverb has scope only over the most embedded constituent (cfr. paraphrase (ia'')), a typical case of 'narrow focus' (CHOMSKY, 1971).

- (i) a'. O Pedro provavelmente compraria melões, não (os) pediria emprestado.
 The Pedro probably would-buy melons, not (them) would-ask-borrow
 'Pedro would probably buy melons, he wouldn't borrow them'
 b'. O Pedro provavelmente compraria melões, não maçãs.
 The Pedro probably would-buy melons, not apples
 'Pedro would probably buy melons, not apples'

The ambiguity is preserved in the sentence where the constituent is *wh*-extracted (ib): *provavelmente* 'probably' may have scope over either the entire VP (formed in this case by the verb plus the unpronounced copy of the *wh*-extracted constituent) or only over the *wh*-extracted constituent. For me, only the reading where the adverb has wide scope (i.e. scope over the VP) is possible. If one has in mind the reading where the adverb has scope over the extracted constituent (as in (ib') above), such reading should be ungrammatical. In the examples shown in the sequence, the reader will realize that, in the formulation of the test, we prefer locating the adverb on the right of the lexical verb, as in (34a) and (35b). This is only a methodological choice motivated by the fact that the speakers consulted prefer the narrow scope reading in declaratives where the adverb is found between the verb and its complement (as in (34a) and (35b)). Likewise, speakers tend to prefer the 'wide scope reading' for (ia), above. This is only a question of preference, as these sentences are always ambiguous.

- (37) O Pedro provavelmente comprou uma BMW e a Maria também [-].
 The Pedro probably bought a BMW and the Mary too
 'Pedro probably bought a BMW and so did Mary'

(37) differs from real cases of VP ellipsis given that, as already known of syntacticians working on BP, stripping cannot appear within an island (CYRINO; MATOS, 2002) (see (37')). On the other hand, VP ellipsis is possible within islands (see (36')).

- (37') *O Pedro provavelmente comprou uma BMW quando a Maria também [-].
 Pedro probably bought a BMW when Maria also [-].
 'Pedro probably bought a BMW when Maria also bought a BMW'

- (36') O Pedro comprou provavelmente uma BMW quando a Maria também comprou [-]
 The Pedro bought probably a BMW when the Maria also bought [-]
 'Pedro probably bought a BMW when Maria also did [-]

Since Matos's (1992) work on elliptical constructions in Portuguese, it is known that one of the points that distinguish the VP ellipsis phenomenon in (European and Brazilian) Portuguese from the same phenomenon in English is the fact that the lexical verb can license VP ellipsis in Portuguese, but not in English. That explains the reason for the ungrammaticality of (38a), from English, and the grammaticality of the Portuguese sentence in (38b).

- (38) a. *John starts reading that book and Mary starts [-], too. ((18) em Cyrino e Matos (2002, p.183))
 b. O João começou a ler aquele livro e a Maria também começou [-]. (= (38a))
 The João started to read that book and the Maria also started
 'João started reading that book and so did Maria [-]'

The ungrammaticality of (38a) is justified in terms of the absence of verb movement to, say, INFL in English (POLLOCK, 1989). The presence of a constituent endowed with a [+V] feature in INFL is a necessary condition for the VP ellipsis phenomenon. As English has no V movement to INFL, elliptical constructions are possible only if an auxiliary or a modal verb is present in the numeration. This verb is directly merged in INFL, and, from that position, it can license the ellipsis of the VP in English (see (38c), below).

- (38) c. John is reading that book and Mary is [-], too

(Brazilian and European) Portuguese exhibits V movement to INFL (CYRINO; MATOS, 2002; MATOS; CYRINO, 2001; CYRINO, 2013). Once the lexical verb is in INFL, it can license the deletion of all constituents c-commanded by it (say,

& Clark's data are only epiphenomenal: the focusing adverb *only* is just a high adverb. Therefore, it behaves like other high adverbs with respect to the extraction possibilities, the recovering in VP-ellipsis, and the impossible appearance in the sentence-final position (this latter property was not mentioned in Bever and Clark). Unlike higher adverbs – here included the exclusive focusing *só/only* –, quantificational AdvPs, being merged in lower positions, have an opposite behavior with respect to these properties. The conclusion reached at the penultimate section will be that the differences between exclusive and quantificational adverbs cannot be simply reduced to a semantic problem: in fact, the reason is structural and related to the position the adverb occupies in the hierarchy.

1. WH-Extraction: While quantificational adverbs allow the extraction of the constituent associated to them (cfr. (40a, 41a)), focusing *só/only* does not allow such extraction (cfr. (42a, 43a) whose paraphrase cannot be extended to (42, 43) respectively):

- (40) *What* do you think Kim *always* gives his mother? (= 41) (BEVER; CLARK, 2008, p.165)
- a. 'What is the thing such that Kim gives that thing and nothing else to his mother?'
 - b. 'What do you think that Kim gives his mother and no one else?'
- (41) O que você acha que o José sempre deu para a sua mãe? (= 40)
- a. Qual é a coisa que o José (sempre) deu aquela coisa e nada mais para a sua mãe?
 - b. O que você acha que o José (sempre) deu para a sua mãe e para ninguém mais?
- (42) *What* do you think Kim *only* gives his mother? (= 43)
- a. *What is the thing such that Kim gives that thing and nothing else to his mother?
 - b. What do you think Kim gives his mother and noone else?
- (43) O que você acha que o José só deu para a mãe dele? (= 42)
- a. *Qual é a coisa que o José só deu aquela coisa e nada mais para a mãe dele?
 - b. O que você acha que o José só deu para a mãe dele e para ninguém mais?

2. Focalization: Contrastive focalization involves movement to the left periphery, i.e. to a dedicated position in the CP domain (see, for instance, Miotto's (2001) work on the Brazilian Portuguese split CP domain). Note that the interpretation given to (44a) in (44a') is grammatical, i.e. the focus associated with the frequentative adverb can be extracted. *Só*'only', on the other hand, does not allow the extraction of its associated constituent (see the paraphrase of (44b) in (44b')).

- (44) a. Fishsticks, I believe Kim *always* buys. (BEVER; CLARK, 2008, p.165)
- a'. 'I believe that Kim *always* buys fishsticks and nothing else'
 - b. Fishsticks, I believe Kim *only* buys.
 - b'. '*I believe that Kim buys fishsticks and nothing else.'

Again, quantificational AdvPs behave differently from focusing *só/only*, which, in turn, behaves like a high adverb, as we are going to see.

3. AdvP fronting: Quantificational adverbs allow the displacement of another AdvP modified by them (see (45) and the paraphrase in (45a')).

- (45) a. *On Sunday*, I thought you *always* went to the store.
a'. 'I thought that you went to the store on Sunday and no other day'

The adverb *só* 'only', on the other hand, does not allow the fronting of an AdvP modified by it (see the paraphrase of (45b) in (45b')), which shows that (45b) cannot receive the interpretation where "On Sunday" is fronted).

- (45) b. *On Sunday*, I thought you *only* went to the store.
b'. '*I thought that you went to the store on Sunday and no other day'

As will be discussed in the next section, high adverbs do not allow the fronting of the AdvP modified by them.

Low adverbs behave as quantificational AdvPs; high adverbs as *só* 'only'

In this section, it will be shown that the polarization in two major groups should not be "quantificational adverbs" versus "focusing *só/only*" – as suggested in Bever and Clark (2008) – but, rather, "high adverbs" versus "low adverbs". Selecting two points on a continuum, where focusing *only* would be placed on one end and quantificational adverbs on the other, is only part of the whole story. Focusing *only* is just a representative of the class of high adverbs; quantificational adverbs are representatives of the so-called low adverbs, i.e. those adverbs that are merged in medial/lower positions in the Middlefield. Hence, Bever & Clark's polarization (*only* vs. adverbs of quantification) is reductive. To argue against them, it will be shown that there is a class of exclusive adverbs that behaves as low adverbs and not as exclusive *only*, which occupies, as previously seen, a higher position in the Middlefield. The motivation is structural and it is related to the position of the adverb in the hierarchy.

1. Focalization: high adverbs behave like focusing *só/only*, i.e. they do not allow the extraction of the constituent under their (narrow) scope. Thus, (46) is ungrammatical if the adverb has narrow scope. Yet, the constituent modified by a low adverb (47) can be moved to the left:

- (46) *Carne assada_i, eu acredito que o José come provavelmente t_i (, não fritura)...
 Pot roast_i, I believe that José eats probably t_i (, not fried meal)...
 'Pot roast, I believe that José probably eats (, not fried meal)'
- (47) Carne assada_i, eu acho que o José come *ainda/frequentemente/rapidamente/ etc.* t_i (, não fritura).
 Pot roast_i, I believe that José eats *still/frequently/rapidly/etc.* t_i (not fried meal).
 'Pot roast, I believe that José still/frequently/rapidly/etc. eats (not fried meal).'

2. Adjunct fronting : Adjuncts cannot be fronted too if they are associated with a high adverb (48). When associated with a low adverb, their movement is possible (49):

- (48) **De domingo*_i que eu achava que você fosse às compras provavelmente t_i , não um outro dia.
 On Sundays_i that I thought that you were shopping probably t_i , not another day
 'On Sundays I thought you were probably shopping, not another day'
- (49) *De domingo*_i que eu achava que você fosse às compras *ainda/frequentemente/ etc.* t_i , não um outro dia.
 On Sundays_i that I thought you were shopping *still/frequently/etc.* t_i , not another day
 'On Sundays I thought you were still/frequently/etc. shopping, not another day'

3. Cleft sentences: Cleft structures also involve movement to the left periphery. Hence, it is only possible to cleave the constituent modified by a low adverb (51). The constituent modified by a high adverb (50) cannot enter these structures.

- (50) **Uma Skol*_i é que eu acho que o Zé bebia provavelmente t_i . (não uma Brahma)
 A Skol_i is what I think that José used-to-drink probably t_i (not a Brahma)
 'A Skol is what I think José used to drink probably (not a Brahma)'
- (51) *Uma Skol* é que eu acho que o Zé bebia *frequentemente/ainda* t_i . (não uma Brahma)
 A Skol_i is what I think José used-to-drink frequently/still t_i (not a Brahma)
 'A Skol is what I think José used to drink frequently/still (not a Brahma)'

4. Wh-extraction: It is also possible to *wh*-extract the constituent under the scope of a low adverb (53). The one associated to a high adverb can never be extracted (52).

- (52) *O que_i você acha que o José deu provavelmente t_i para a mãe dele?
 What_i you think that the José gave probably t_i to his mother?
 'What do you think that José probably gave to his mother?'

- (53) O que_i você acha que o José deu frequentemente/ainda/etc. t_i para a mãe dele?
 What_i you think that the José gave frequently/still/etc. t_i to his mother?
 'What do you think José frequently/still/etc. gave to his mother?'

5. Relative clauses: Since relativization also involves movement to CP, it is also a bone fide test to discriminate between high and low adverbs. Low adverbs allow the relativization of the constituent modified by them (see (55)), whereas high adverbs react to such extraction (cf. (54)).

- (54) *Eu vi a menina_i que o João beijou provavelmente t_i (não a outra).
 I saw the girl_i that the João kissed probably t_i (not the other).
 'I saw the girl_i João probably kissed t_i (not the other girl).'

- (55) Eu vi a menina_i que o João beija frequentemente/ainda/etc. t_i.
 I saw the girl_i that the João kissed frequently/still/etc. t_i (not the other).
 'I saw the girl_i João frequently/still/etc. kissed t_i (not the other girl).'

So far, I have shown that exclusive adverbs (*só/only*) behave like high adverbs with respect to the extraction possibilities of the constituent they modify. High adverbs and focusing *só/only* do not allow the extraction of the constituent modified by them. If semantics were responsible for the asymmetries that put focusing *only* on the one side and quantificational adverbs on the other, we should not find cases of exclusive adverbs that also behave like quantificational adverbs regarding, for instance, the extraction of the constituent modified by them to the left periphery. This is what will be shown in the next section. The conclusion is that what Bever & Clark thought should receive a semantic explanation should actually receive a structural (i.e. syntactic) explanation.

Actually, there are two positions for exclusive adverbs

The interesting fact that one and the same sentence can have two exclusive focusing adverbs in BP, namely *só* 'only' and *exclusivamente* 'exclusively', respectively) suggests the existence of two distinct positions for this class:

- (54) A Mara só tinha limpado exclusivamente o banheiro (não tinha lavado a sala/
 não a cozinha).
 Mara only had cleaned exclusively the bathroom (not had washed the room/the
 kitchen)
 'Mara had only cleaned exclusively the bathrom (she hadn't washed the room/
 the kitchen')

Exclusivamente ‘exclusively’ seems to be an option, in BP, to fill the lower position. Some speakers never recover *só* ‘only’ in VP ellipsis (cfr. (37), repeated as (55) below).

- (55) O Pedro comeu só arroz e a Maria também comeu [-].
 The Pedro ate only rice and the Maria too ate [-]
 a. [-]: *ate only rice
 b. [-]: ate rice

Curiously, but not surprisingly, speakers of this group do recover the focusing adverb *exclusivamente* ‘exclusively’:

- (56) O Pedro comeu exclusivamente arroz e a Maria também comeu [-].
 The Pedro ate exclusively rice and the Maria too ate [-]
 ‘Pedro exclusively ate rice and Maria did too [-]’
 a. [-]: ate exclusively rice
 b. [-]: ate rice

In their grammar, the constituent associated with the focusing adverb *exclusivamente* ‘exclusively’, unlike the one associated with *só* ‘only’, can be extracted:

- (57) O que_i que o Pedro comeu exclusivamente t_i?
 What_i that the Pedro ate exclusively t_i?
 ‘What did Pedro exclusively ate?’

Thus, there is good reason to defend the existence of two syntactic positions for exclusive adverbs (a high position, between the higher adverbs of the Cinque hierarchy, and a low one, which has *exclusivamente* ‘exclusively’ behaving as a low AdvP).

Further evidence in favor of a lower position for exclusive adverbs comes from the phenomenon of verb movement in BP. Judging by Galves (1994), V movement is mandatory to the left of the adverb *completamente* ‘completely’ in BP:

- (58) a. O João acabou completamente o seu trabalho.
 The João finished completely the his work
 ‘João completely finished his work’
 b. *O J. completamente acabou o seu trabalho.

Hence, it is expected that the exclusive adverb *exclusivamente* ‘exclusively’ – or *só* ‘only’ (if there is a lower *só* in some grammar of BP) for those who also accept its recovering in VP ellipsis structures – occupies a position above Asp_{SingCompletive(t)} since *exclusivamente* ‘exclusively’ can precede the V in BP:

- (59) a. (?)A Mara exclusivamente usa Q-boa para limpar o banheiro.
The Mara exclusively uses Q-boa to clean the bathroom
'Mara exclusively uses Q-boa to clean the bathroom'
b. A Mara usa exclusivamente Q-boa para limpar o banheiro.

Note that (59b) is undoubtedly more acceptable than (59a) which is not ungrammatical, nonetheless. The fact that (59a) is acceptable to some extent leads us to conclude that only the lower exclusive adverb necessarily occupies a position to the left of *completamente* 'completely', which, as shown in (58), has to appear to the right of V, i.e. V must move past it.

Exclusivamente 'exclusively' has to follow *brevemente* 'briefly' (Asp_{Durative}) (60), *quase* 'almost' (Asp_{Prospective}) (61), *repentinamente* 'suddenly' (Asp_{Incoative(II)}) (62), *obrigatoriamente* 'obligatorily' (Mood_{Obligation}) (63), *em vão* 'in vain' (Asp_{Frustrative}) (64), which, by turn, precedes the completive *completamente* 'completely' in the hierarchy:

- (60) a. A Mara brevemente exclusivamente usa Q-boa para limpar o banheiro.
The Mara briefly exclusively uses Q-boa to clean the bathroom
'Mara briefly exclusively uses Q-boa to clean the bathroom'
b. *A Mara exclusivamente brevemente usa Q-boa para limpar o banheiro.
- (61) a. A Mara quase exclusivamente usa Q-boa para limpar o banheiro.
The Mara almost exclusively uses Q-boa to clean the bathroom
'Mara almost exclusively uses Q-boa to clean the bathroom'
b. *A Mara exclusivamente quase usa Q-boa para limpar o banheiro.
- (62) a. A Mara repentinamente exclusivamente usa Q-boa para limpar o banheiro.
The Mara suddenly exclusively uses Q-boa to clean the bathroom
'Mara suddenly exclusively uses Q-boa to clean the bathroom'
b. *A Mara exclusivamente repentinamente usa Q-boa para limpar o banheiro.
- (63) a. A Mara obrigatoriamente exclusivamente usa Q-boa para limpar o banheiro.
The Mara obligatorily exclusively uses Q-boa to clean the bathroom
'Mara obligatorily exclusively uses Q-boa to clean the bathroom'
b. *A Mara exclusivamente obrigatoriamente usa Q-boa para limpar o banheiro.
- (64) a. A Mara em vão exclusivamente usa Q-boa para limpar o banheiro.
The Mara in vain exclusively uses Q-boa to clean the bathroom
'Mara in vain exclusively uses Q-boa to clean the bathroom'
b. *A Mara exclusivamente em vão usa Q-boa para limpar o banheiro.

As far as the lower position of the so-called exclusive adverb is concerned, the data presented in this section lead us to conclude that it is located between the frustrative aspect (lexicalized by the adverb *em vão* 'in vain') and the completive

aspect (*completamente* ‘completely’), in accordance with the template given in (64’).

(64’) ... [*obligatorily* Mod_{Obligation} > [*in vain* Asp_{Frustrative} > [**exclusively/only** Foc_{Exclusive(II)} /
 [(?) > [*completely* Asp_{SgCompletive} > ...

Therefore, there is good reason to propose a lower position to Merge an exclusive adverb too. In this use, the exclusive *exclusivamente* ‘exclusively’, unlike the high adverb *só* ‘only’, is recovered by the elliptical VP – as are the other low adverbs (cfr. (65-66)). It can also appear in the sentence-final position (as is the case for low adverbs) (cp. (67a) and (67b)) and allow the extraction of the constituent under its scope (wh-fronting (68a,b), cleft-sentences (69a,b)).

(65) O Pedro limpou o banheiro cuidadosamente e a Maria também limpou [-].

The Pedro cleaned the bathroom carefully and the Maria too cleaned [-]

‘Pedro cleaned the bathroom carefully and so did Maria’

a. [-]: cleaned the bathroom carefully; b. [-]: cleaned the bathroom

(66) O Pedro limpou exclusivamente o banheiro e a Maria também limpou [-].

The Pedro cleaned exclusively the bathroom and the Maria too cleaned [-]

‘Pedro exclusively cleaned the bathroom and so did Maria [-]

a. [-]: cleaned exclusively the bathroom; b. [-]: cleaned the bathroom

(67) a. O Pedro limpou o banheiro exclusivamente.

The Pedro cleaned the bathroom exclusively

‘Pedro exclusively cleaned the bathroom’

b. O Pedro limpou o banheiro cuidadosamente.

The Pedro cleaned the bathroom carefully

(68) a. O que_i o Pedro limpou exclusivamente t_i?

Whati the Pedro cleaned exclusively ti?

‘Whati did Pedro cleaned exclusively ti?’

b. O quei o Pedro limpou cuidadosamente ti?

Whati the Pedro cleaned carefully ti?

‘Whati did Pedro cleaned carefully ti?’

(69) a. Foi o banheiro_i que o Pedro limpou exclusivamente t_i.

It was the bathroom_i that the Pedro cleaned exclusively ti

b. Foi o banheiro_i que o Pedro limpou cuidadosamente ti

It was the bathroom_i that the Pedro cleaned carefully ti

(65-69) show that the exclusive adverb actually behaves as a low adverb, given its syntactic properties. If the interpretation of Bever & Clark was correct, one would expect that, because of its semantics, the exclusive adverb *exclusivamente* ‘exclusively’ should behave as its “relative”, the exclusive *só* ‘only’. I have shown

that what is at stake is actually the position that the elements occupy in the structure. Low adverbs (whether quantificational or not (including the exclusive focusing *exclusivamente* 'exclusively')) share a set of syntactic properties: (i) they can appear in the sentence-final position, (ii) the constituent they modify can be extracted, (iii) they are recoverable by the elliptical VP. Such properties are not shared by high adverbs and focusing *só* 'only'.

In guise of conclusion

Were Semantics responsible for the asymmetries Bever and Clark (2008) observed when comparing quantificational adverbs and exclusive adverbs, one should expect the same pattern for both exclusive adverbs, *só* 'only' and *exclusivamente* 'exclusively' independently of their position.

The proposal has the advantage of explaining the same set of data discussed by Bever and Clark. Besides that, it can also explain why focusing *só* 'only' behaves as other high adverbs (in their focusing use).

Furthermore, the unexpected behavior of the low exclusive adverb (*exclusivamente* 'exclusively') is also accounted for by the cartographic analysis presented here by means of a sole structural analysis.

All in all, the paper offers some contribution to studies on the cartography of syntactic structures, when it shows that there are clear differences in the syntactic behavior of constituents by only considering the position that these elements occupy in the hierarchy (i.e. the position where they are externally merged). Saying that what is responsible for the asymmetries that set apart high adverbs (including *só* 'only') and low adverbs (quantificational adverbs and the exclusive *exclusivamente* 'exclusively' included) is the position of these items in the hierarchy does not mean that semantic explanations should be ignored. It only shows the work developed by syntax.

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TESCARI NETO, Aquiles. “Só”, “exclusivamente” e suas posições na sentença. *Alfa*, São Paulo, v.59, n.3, p.557-588, 2015.

- *RESUMO: Neste artigo, examino algumas propriedades de advérbios altos e baixos para mostrar que o focalizador só pertence ao primeiro grupo. Sugiro que o comportamento do advérbio de exclusão só no Português do Brasil é melhor explicado do ponto de vista da Sintaxe, isto é, em termos da sua posição na hierarquia universal. A pista para chegar a tal conclusão vem da distribuição do focalizador exclusivamente, que também é um advérbio de exclusão, mas se comporta de forma diferente em relação a só no que diz respeito a algumas propriedades sintáticas que põem de um lado os advérbios altos e de outro os baixos. Mostro que a previsão de Bever and Clark (2008) de que a Semântica seria responsável pelas assimetrias entre os advérbios quantificacionais e o exclusivo só não é correta, na medida em que o focalizador de exclusão exclusivamente, no Português do Brasil, compartilha propriedades sintáticas com advérbios quantificacionais.*
- *PALAVRAS-CHAVE: Advérbios. Advérbios focalizadores de exclusão. Advérbios quantificacionais. Hierarquia funcional. Cartografia. Sintaxe Gerativa.*

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