

Configurational Information Structure: Evidence from Brazilian Portuguese*

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1. Introduction

One controversial and unresolved question regarding the interface between Syntax and Information Structure is whether topics are licensed in absolute or relative positions, that is, whether topics must occupy fixed topic-dedicated positions in the clausal spine or are licensed relative to other relevant Information Structure elements. This question is key to understanding how syntactic structures are mapped onto corresponding Information Structure configurations and has important consequences for the architecture of the grammar. In this paper, I will tackle that question from the point of view of subject topicalization in Brazilian Portuguese (BP), in particular through the scrutiny of the contrast between non-resumed and resumed versions of subject topics, such as (1B1) and (1B2), respectively, where the subscript AT indicates aboutness topicalization (which is the topic type I will be concerned with here).

- (1) A: O Pedro leu dez livros do Chomsky pra escrever o trabalho final.
'Peter read ten books by Chomsky to write the term paper.'

B1: *Já o João_{AT} não leu nenhum.*
JÁ the John not read none

B2: *Já o João_{AT}, ele não leu nenhum.*
JÁ the John he not read none
'As for *John_{AT}*, he didn't read any.'

The observation that subjects can be interpreted as topics is well documented in the literature on BP (see a.o. Pontes 1987, Kato 1989, Duarte 1995, Bastos-Gee 2011, Avelar & Galves 2011, and Nunes 2016) and here I will take advantage of it in order to shed light on the outstanding question regarding the licensing of topics noted above, by arguing that non-resumed and resumed subjects in BP occupy two distinct syntactic positions under the

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(i) [ForceP [TopP Topic [Top, Top⁰ [FocP Focus [Foc, Foc⁰ [TopP Topic [Top, Top⁰ [TP]]]]]]]]

3. Subjects as aboutness topics

The relevant subject *já o João* in both (1B1) and (1B2) plays the discourse role of aboutness topic, in the traditional sense of Reinhart (1981), by selecting the referent to be predicated about (or commented on). Assuming the tripartite topic typology from Bianchi & Frascarelli (2010) (aboutness-shifting, contrastive, and given topics), we can see that *já*-marked topics in BP unambiguously indicate a topic-shifting move. For instance, Speaker B in (1) shifts the conversation from being about Peter to being about John. The fact that John may be newly introduced as a topic by Speaker B (Speaker A may not even know that John was expected to read books) shows that it is not a given or familiar topic (but note the topic is still discourse-linked). Similarly, *já* cannot introduce a contrastive topic (in the sense of Büring 2003, 2016). Crucially, *já* can only introduce John as a topic if the comment about Peter (more precisely, the question under discussion) is resolved. If (4B) is intended to leave (4A) unresolved (a hallmark of contrastive topicalization), *já* is infelicitous (note that without *já* and appropriate intonation of contrastive topicalization, (4B) becomes acceptable). We can then safely conclude that when the discourse particle *já* is attached to a topic, it unambiguously indicates aboutness topicalization (see e.g. Miranda & Silva 2015 for other discourse-related uses of *já* in BP).

- (4) A: Quantos livros o Pedro leu pra escrever o trabalho final?
 ‘How many books did Peter read to write the term paper?’

B: #*Já o João*_{CT} não leu nenhum.
JÁ the John not read none
 ‘Now *John*_{CT} didn’t read any.’

Further evidence that *já o João* plays the same discourse role of aboutness topic in both (1B1) and (1B2) comes from the uniqueness of aboutness topics. Bianchi & Frascarelli (2010) have argued that aboutness topics are unique in English, Italian, and German (see the English example in (5)), while Bastos-Gee (2011) has independently argued this to be the case in BP as well, as is shown in (6) (see also Lacerda in prep.).

- (5) *[(As for) Jack, (as for) Jill, he married her last year.]
 (Bianchi & Frascarelli 2010: 63)

(6) a. **O livro*_{AT}, *a Maria*_{AT}, (foi) o João (que) comprou ele pra ela.
 the book the Mary (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*_{AT}, *o livro*_{AT}, (foi) o João (que) comprou ele pra ela.
 the Mary the book (was) the John (that) bought it for her
 ‘As for Mary, as for the book, (it was) John (who) bought it for her.’

(Bastos-Gee 2011: 19)

Now, aboutness topics can in general co-occur with other kinds of topics as well as with sentential subjects (see references above and e.g. (14) below). If one is to hypothesize

that non-dislocated (non-resumed) *já o João* in Spec,TP in (1B1) does not have aboutness topic interpretation (but is instead a different kind of topic or just a regular subject), one would predict that a *já*-marked subject in Spec,TP should be able to co-occur with another *já*-marked dislocated topic. As (7B) shows, however, this prediction is not borne-out. I take the (utter) ungrammaticality of (7B) to indicate that *já o João*, be it in Spec,TP or in a higher position, has the role of aboutness topic in (1B1) as well as (1B2).

(7) A: O Paulo comprou o caderno pra Ana.
 ‘Paul bought the notebook for Ana.’

B: **Já o livro*_{AT}, *já o João*_{TOP} comprou ele pra Maria_F.
 JÁ the book JÁ the John bought it for-the Mary
 ‘As for *the book*_{AT}, *John*_{TOP} bought it for Mary_F.’

By observing elements other than subjects, we notice that *já*-marked aboutness topics must obligatorily appear in a sentence-initial position. In (8), the relevant topic is the direct object, whose canonical position is post-verbal. As the contrast between (8B1) and (8B2) shows, the object topic is only licensed when dislocated, that is, clearly in a derived position. (Note that in the presence of *já* in (8B2), the sentence not only does not have the intended interpretation, but is also ungrammatical.)

(8) A: O Pedro leu O Programa Minimalista pra escrever o trabalho final.
 ‘Peter read The Minimalist Program to write the term paper.’

B1: *Já o Barriers*_{AT}, ele não leu.
 JÁ the Barriers he not read

B2: *Ele não leu *já o Barriers*_{AT}.
 he not read JÁ the Barriers
 ‘As for *Barriers*_{AT}, he didn’t read it.’

With the above observations in mind, we can now see how the topicalization of subjects is the perfect testing ground to tease apart absolute-licensing and relative-licensing approaches, since the canonical position of subjects in BP is already sentence-initial. The question boils down to whether the sentence-initial requirement of *já* may be met in the canonical subject position or must involve further dislocation of the subject to a derived topic position. In that respect, the two approaches to the Syntax-Information Structure interface noted above clearly make different predictions regarding where *já o João* must or may be in (1B1) and (1B2) above.

In the Cartographic approach, *já o João* must be realized in a dislocated left-peripheral (topic-dedicated) position in both (1B1) and (1B2), the sole position that can license its informational role under this analysis (considering that *já o João* has the exact same topic role in both sentences). The two structures in (9) would then vary minimally, the relevant difference being in what occupies the canonical subject position (Spec,TP), namely an empty category, as in (9a), or an overt resumptive pronoun, as in (9b).

- (9) a. [TopP Já o João_i [TP *ec*_i não leu nenhum]] cf. (1B1)
 b. [TopP Já o João_i [TP *ele*_i não leu nenhum]] cf. (1B2)

In a non-cartographic, relative-licensing approach, the non-resumed subject topic in (1B1) may remain in Spec,TP, since in that position it already meets its interpretive requirements (namely, preceding a well-formed comment and the focus) — that is, no additional dislocation is needed for interpretive reasons. The relevant difference between (1B1) and (1B2) is then that the topic is in a derived position only in the latter, where the overt resumptive pronoun appears, as represented in (10).³

- (10) a. [TP Já o João [T' [XP não leu nenhum]]] cf. (1B1)
 b. [WP Já o João_i [TP *ele*_i não leu nenhum]] cf. (1B2)

The Cartographic approach relies on the local subject-to-topic movement depicted in (9a) for (1B1) and thus depends on direct evidence for it. This means that evidence against the local subject-to-topic movement (that is, the possibility of structure (10a) for sentence (1B1)) would then pose a problem for Cartography.

4. A problem for Cartography

I will now argue that *já o João* is in different syntactic positions in (1B1) and (1B2); that is, whereas the resumed version in (1B2) involves a topic in a higher left-peripheral position, the non-resumed version in (1B1) involves a subject interpreted as an aboutness topic in its canonical subject position. The paradigm in (11) in fact shows that there is no subject-to-topic movement in (1B1) and that the subject topic is in its canonical position (Spec,TP). In (11), the interaction between *já*-marked subject topics and *wh*-elements has a direct effect in the (otherwise optional) appearance of the resumptive pronoun. Note that BP is a language where *wh*-elements may optionally be fronted or stay in situ (see e.g. DeRoma 2011). If a *wh*-object is fronted, as in (11B1), the subject topic *já o João* cannot follow the *wh*-object *o que* ‘what’. The subject topic must be realized in a higher position, preceding the *wh*-object, and necessarily be resumed by a pronoun, as the contrast between the acceptable (11B2) and the unacceptable (11B3) shows. Importantly, the fronted *wh*-object provides overt evidence that the subject topic is in a derived position in (11B2) and (11B3), where resumption becomes obligatory. Note that if the *wh*-object is realized in situ, no issue arises and resumption remains optional (i.e., a *wh*-object in situ has no effect on the optionality of the pronoun).⁴

³ Under this approach, the nature of WP is immaterial.

⁴ The paradigm in (11) additionally sheds light on the nature of *wh*-in situ in BP, in that it suggests that there is no covert *wh*-movement. If the *wh*-element moved covertly in (11B4), (11B4) should have the same bad status as (11B1) and (11B3), *wh*-movement of the object being impossible in the absence of an overt subject resumptive pronoun in this paradigm.

(11) A: O Pedro leu dez livros do Chomsky pra escrever o trabalho final.
 ‘Peter read ten books by Chomsky to write the term paper.’

B1: *O que *já o João*_{AT} leu?

what JÁ the John read

B2: *Já o João*_{AT}, o que ele leu?

JÁ the John what he read

B3: ?**Já o João*_{AT}, o que leu?

JÁ the John what read

B4: *Já o João*_{AT} leu o quê?

JÁ the John read what

B5: *Já o João*_{AT}, ele leu o quê?

JÁ the John he read what

‘As for *John*_{AT}, what did he read?’

The state of affairs shown in (11) is precisely what is expected if local subject-to-topic movement is not available in BP. In fact, several authors have independently argued that in many languages movement of a subject to the left periphery cannot proceed via Spec,TP (see e.g. Lasnik & Saito 1992, Erlewine 2016, Bošković 2016, Messick 2020). The facts presented above show that the same holds for BP. If *já o João* in (11B2) and (11B3) cannot reach the left periphery via movement, it must be base-generated in that position (an independently available option). The question then becomes what occupies the canonical subject position in those structures. If subject-to-topic movement is not available, the purported empty category in (9a) above (repeated below in (12)) and in (13a) cannot be a trace. Note also that BP is not a traditional *pro*-drop language, in the sense that null referential pronouns are not available in subject position here (see e.g. Duarte 1995, Ferreira 2000). Therefore, the purported *ec* in (12) and (13a) cannot be a Spanish-like *pro* either. In the absence of other empty categories that could fill the canonical subject position, an overt resumptive pronoun is the only possibility, as in (13b), and the only grammatical option thus surfaces as (11B2).

(12) [_{TopP} Já o João_i [_{TP} *ec*_i não leu nenhum]] = (9a)

(13) a. [_{TopP} Já o João_i [_{WhP} o que_w [_{TP} *ec*_i leu t_w]]] cf. (11B3)

b. [_{WP} Já o João_i [_{WhP} o que_w [_{TP} ele_i leu t_w]]] cf. (11B2)

The contrast between (11B2) and (11B3) is replicated in (14B1)–(14B2). Here, left dislocation of the contrastive topic *o Barriers* further forces *já o João* to precede *o Barriers*, given that aboutness topics must independently precede contrastive topics (see Bianchi & Frascarelli 2010, Lacerda in prep.); unsurprisingly, resumption is again obligatory. Interestingly, note that the contrastive topic *o Barriers*, by being a direct object, does not require resumption, as referential null objects (contrary to subjects) are available in the language (see Ferreira 2000, Nunes 2011) (the same effect is observed in (8) above), movement also being a possibility in this case.

- (14) A: A Maria não leu nem O Programa Minimalista nem o Barriers.
 ‘Mary read neither The Minimalist Program nor Barriers.’

B1: **Já o João*_{AT}, o Barriers_{CT} leu_F.
 Já the John the Barriers read

B2: *Já o João*_{AT}, o Barriers_{CT} ele leu_F.
 Já the John the Barriers he read
 ‘As for *John*_{AT}, he did_F read Barriers_{CT}.’

The obligatoriness of resumption in the cases above thus works as a safe diagnostic: Whenever there is overt evidence that the subject topic is in the left periphery (for instance when it precedes a moved *wh*-object or another topic), there must be a resumptive pronoun. We can then conclude that the lack of a resumptive pronoun in the relevant example (1B1) indicates that the subject topic stays in Spec,TP. Therefore, non-resumed and resumed subject topics occupy distinct syntactic positions, despite having the same informational role of aboutness topic. Crucially, these observations are problematic for Cartography, for under this approach the non-resumed subject *já o João* in (1B1) must be in the same fixed syntactic position as its resumed counterpart in (1B2), namely Spec,(aboutness)TopP, which is not supported by the data. On the other hand, under non-cartographic, relative-licensing approaches, subject-to-topic movement is not required, since the canonical subject position already allows for the interpretive requirements of aboutness topicalization to be met.⁵ What is crucial is that under relative-licensing approaches, dislocation of the subject to a fixed topic position is not a necessity (in the particular case of BP, we have seen that such clause-internal movement is actually impossible).

With respect to the question posed at the outset — how syntactic structures are mapped onto corresponding Information Structure configurations —, we can conclude that the distribution of subjects with aboutness topic interpretation in BP favors an approach where there is no one-to-one correspondence between fixed syntactic positions and informational roles. I will conclude this section by briefly showing how we can address that question under Neeleman & van de Koot’s (2008) Mapping system, given the BP data discussed in this paper.

Neeleman & van de Koot (2008) propose a relative-licensing analysis of Dutch scrambling where the *topic-comment* relationship is read off (independently available) syntactic structures by mapping rules in the Information Structure component. Crucially, these rules are written based on relative informational roles rather than fixed syntactic positions. The well-formedness of the *topic-comment* articulation is thus evaluated based on the relative position of a topic XP and its associated comment, such as N2 in the Mapping Rule in (15).

⁵ Aboutness topics must be associated with a comment, which is usually assumed to be a semantic object no smaller than a full proposition (see Reinhart 1981, Bianchi & Frascarelli 2010). Given the widely assumed predicate-internal subject hypothesis, the node that the subject is merged with (T’) includes a trace/copy of the subject itself (in Spec,vP), thus being a fully-saturated proposition and therefore a valid comment.

What we see in this language is that the same informational role (namely, aboutness topic) can be licensed in multiple syntactic positions, which is at odds with traditional Cartographic assumptions, which postulate a one-to-one correspondence between syntactic positions and informational roles. In its strongest form, a Cartographic approach assigns each topic type a specific topic projection in the clausal spine (in particular, this is the case in Bianchi & Frascarelli 2010, which I took as a point of departure here). Brazilian Portuguese, as I showed here based on the aboutness topic interpretation of subjects (and also do elsewhere based on other Information Structure phenomena; see Lacerda 2019, in prep.), poses serious challenges to that traditional view.

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