

On the absence of low focus movement in Brazilian Portuguese

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Abstract: A number of works have assumed the existence of so-called “low focus movement” in Brazilian Portuguese, that is, focus-driven movement to a sentence-internal, postverbal position (FocP) in the left periphery of vP, in line with what was proposed by Belletti (2004) for Italian. By analyzing novel evidence from ditransitive and *wh*-in situ constructions, I argue that the postulation of low focus movement in Brazilian Portuguese faces a number of empirical challenges and that, contrary to the literature, such operation is in fact unavailable in the language; in other words, postverbal focalization and *wh*-in situ are better analyzed as being truly in situ. As a consequence, I maintain that the clausal structure of Brazilian Portuguese does not include a low focus projection such as Belletti’s (2004) and that Rizzi’s (1997) Focus Criterion is not operative in the language. I finally discuss the consequences of those claims to the analysis of traditional left-peripheral focalization, which I maintain is not due to the need to satisfy the Focus Criterion, but is instead licensed when other semantic and/or pragmatic effects co-occur with focalization.

Key-words: Information structure, focalization, Focus Criterion, ditransitives, *wh*-questions.

1. Introduction

A number of works on Brazilian Portuguese (e.g., Quarezemin 2009, Armelin 2011, Kato 2013, Lacerda 2016, Cépeda & Cyrino 2020) have assumed the existence of “low focus movement” in this language, that is, focus-driven movement to a sentence-internal position in the left periphery of vP (in the so-called “low IP area” or “low left periphery”), in line with what was proposed by Belletti (2004) for Italian.¹ For example, the postverbal focalization of the direct object in (1B1) (indicated by the subscript F) is analyzed as involving movement of *só um computador* ‘only a computer’ to the specifier of a focus-designated projection FocP, located above vP and below TP, as is represented in (2a). Under that approach, sentence (1B1) is analyzed as the “low” counterpart of the “high” (i.e., left-peripheral) focalization seen in (1B2), represented in (2b).^{2,3}

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¹ See Bonan (2021) for an analysis of the phenomenon in other languages.

² Except where references are given, judgements of Brazilian Portuguese data are based solely on the author’s native speaker intuitions.

³ The verb is traditionally assumed to move to the TP domain in Brazilian Portuguese; verb traces are not represented throughout the paper for simplicity (see, e.g., Tescari Neto 2013 for relevant discussion).

- (1) A: O que o João comprou?
‘What did John buy?’
B1: O João comprou *só um computador*_F.
the John bought only a computer
B2: *Só um computador*_F o João comprou.
only a computer the John bought
‘John bought *only a computer*_F.’
- (2) a. [TP O João_i comprou [FocP *só um computador*_F [vP t_i [VP t_F]]]] *low focus*
b. [FocP *Só um computador*_F [TP o João_i comprou [vP t_i [VP t_F]]]] *high focus*

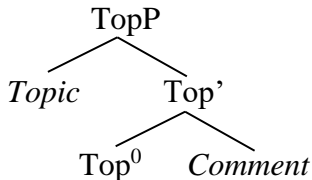
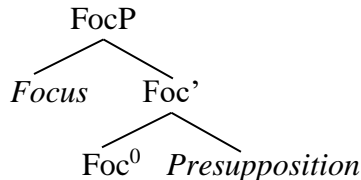
By analyzing novel evidence from two independent empirical domains (namely, ditransitive and *wh*-in situ constructions), I will argue in this paper that, contrary to what has been assumed, there is actually no “low” focus movement in Brazilian Portuguese. This will, in turn, be taken as evidence against the existence of a Belletti-style focus projection FocP in the periphery of vP in the language, and in favor of analyzing postverbal focalization and *wh*-in situ as being truly *in situ* (i.e., without an additional step of focus-driven movement). As a consequence, I will maintain that Rizzi’s (1997) Focus Criterion is not operative in Brazilian Portuguese and that focus fronting in this language cannot be tied to the (formal) licensing of focus interpretation.

The paper is organized as follows. In Section 2, I will briefly present Belletti’s (2004) original proposal of a “low left periphery” (i.e., topic and focus projections between TP and vP). In Section 3, I will show how Belletti’s low focus position has been resorted to in works on Brazilian Portuguese, first in the analysis of ditransitive constructions and then in the analysis of *wh*-in situ constructions. In Section 4, I will discuss novel evidence related to these two kinds of constructions and argue that they in fact do not involve low focus movement; that is, they involve focalization in situ. In Section 5, I will discuss the consequences of the claim that there is no low focus movement in Brazilian Portuguese for the analysis of traditional left-peripheral focalization in the language. Finally, Section 6 concludes the paper.

2. The “low left periphery”

In Rizzi’s (1997) seminal work, the traditional CP is split into the Force-Finiteness system seen in (3). In this so-called cartographic approach to information structure, topics and foci are licensed via Spec-head agreement in the specifier of topic- and focus-designated functional projections, as in (4), in accordance with the *Topic and Focus Criteria*, respectively, as stated in (5).

- (3) [ForceP [TOPP [FocP [TOPP [FinP [IP]]]]]] *Split CP* (Rizzi 1997: 297)

- (4) a.  b. 
(Rizzi 1997: 286–287)

- (5) *Topic and Focus Criteria* (Rizzi 1997: 287, adapted):
- a. A constituent endowed with a topic feature must end up in a Spec-head configuration with Top^0 .
 - b. A constituent endowed with a focus feature must end up in a Spec-head configuration with Foc^0 .

In compliance with the Topic Criterion in (5a), the fronted topic *il tuo libro* ‘your book’ in the Italian sentence (6a) is analyzed as occupying the specifier of the left-peripheral topic phrase seen in (6b). Similarly, in compliance with the Focus Criterion in (5b), the fronted focus in (7a) is analyzed as occupying the specifier of the left-peripheral focus phrase seen in (7b).

- (6) a. Il tuo libro, lo ho letto. *Topicalization*
 the your book CL have read
 ‘Your book, I have read it’
 b. $[\text{TopP} [\text{Il tuo libro}]_i [\text{IP lo ho letto } t_i]]$ (Rizzi 1997: 286, adapted)
- (7) a. IL TUO LIBRO ho letto (non il suo). *Focalization*
 the your book have read (not the his)
 ‘Your book I read (, not his).’
 b. $[\text{FocP} [\text{Il tuo libro}]_i [\text{IP ho letto } t_i]]$ (Rizzi 1997: 286, adapted)

In line with Rizzi (1997), Belletti (2004) suggests that “the area immediately above VP displays a significant resemblance to the left periphery of the clause” (p. 17), arguing that topic and focus projections may also be found in sentence-internal positions. Based on the structural position and the informational interpretation of postverbal subjects in Italian, the author proposes the structure in (8) for the language, where topic and focus projections may appear between IP and vP, in the so-called “low IP area” or “low left periphery”.⁴

- (8) $[\text{IP} [\text{TopP} [\text{FocP} [\text{TopP} [\text{vP}]]]]]$ (Belletti 2004: 25)

Postverbal subjects in Italian are argued by Belletti (2004) to be structurally low. One of the author’s arguments is seen in (9), which involves the licensing of the negative polarity item *alcun* ‘any’. As sentence (9a) shows, *alcun* can appear in object position, as it is properly licensed by the negation (i.e., by being c-commanded by it). Likewise, the postverbal subject in (9b) is also properly licensed, showing that it is located below IP (where the negation is), whereas the preverbal subject in (9c) is ruled out as a violation of NPI licensing.

⁴ The expression “low left periphery” in fact does not appear in Belletti (2004), but is used in many derived works. See Jayaseelan (2001) for a similar contemporary proposal for SOV languages (e.g., German, Malayalam).

- (9) a. Non conosco alcun linguista.
[not know any linguist]
‘I do not know any linguist.’
- b. Non parlerà alcun linguista.
[not speak.FUT any linguist]
[‘No linguist will speak.’]
- c. *Alcun linguista non parlerà.
[any linguist not speak.FUT]
[‘No linguist will speak.’] (Belletti 2004: 23)

Belletti (2004) further argues that postverbal subjects in Italian may be interpreted as either topics or foci, as is illustrated in (10B) and (11B), respectively. Assuming that the Topic and Focus Criteria in (5) above also hold of clause-internal (postverbal) elements, the author thus analyzes the subjects in (10B) and (11B) as occupying one of the corresponding topic or focus positions in (8).

- (10) A: Che cosa ha poi fatto Gianni?
[what thing has then done Gianni]
‘What has Gianni finally done?’
- B: Ha parlato, Gianni.
[has spoken Gianni]
‘He has spoken, Gianni.’ (Belletti 2004: 22)

- (11) A: Chi ha parlato?
[‘Who spoke?’]
- B: Ha parlato Gianni.
has spoken Gianni
[‘Gianni spoke.’] (Belletti 2004: 21)

In motivating the proposal of topic and focus projections in the periphery of vP, Belletti (2004) also argues that the clause-internal topic and focus positions are associated with intonational contours and interpretations that are different from their left-peripheral counterparts. In particular (for our purposes in this paper), while a focus in the left periphery of the sentence is necessarily contrastive/corrective and carries a special stress, the vP-peripheral focus is interpreted as new information. Thus, unlike the postverbal subject in (11B) above, the preverbal subject in (12B) is ruled out, as is the fronted direct object in (13B) — these contrasts are also argued to provide further evidence that focalized postverbal subjects are not located in a left-peripheral focus position (which is necessarily contrastive/corrective), but are rather in a structurally low focus position (in the periphery of vP).

- (12) A: Chi ha parlato?
‘Who has spoken?’
- B: #GIANNI ha parlato.
Gianni has spoken
‘Gianni has spoken.’ (Belletti 2004: 24)

- (13) A: Che cosa hai letto?
 ['What have you read?']
 B: #IL LIBRO ho letto (non il giornale).
 THE BOOK have read (not the newspaper)
 ['I have read THE BOOK (not the newspaper).'] (Belletti 2004: 24)

Having briefly presented Belletti's (2004) proposal of topic and focus projections in the periphery of vP in Italian, let us now move on to Brazilian Portuguese.

3. Low focus movement in Brazilian Portuguese

The postulation of topic and focus projections in the periphery of vP, such as the ones in (8) in the previous section, has been resorted to in a number of works on Brazilian Portuguese (see, e.g., Quarezemin 2009, Armelin 2011, Kato 2013, Lacerda 2016, Cépeda & Cyrino 2020). Without attempting a detailed analysis of (postverbal) topicalization in this paper (but see Lacerda 2020, 2021 for relevant discussion), in this section I will present two empirical domains that are representative of analyses that make use of so-called low focus movement to the periphery of vP (namely, ditransitive and *wh*-in situ constructions) and show how a Belletti-style low left periphery has been used in the literature in order to account for word-order variations in the postverbal area of Brazilian Portuguese.

3.1. Ditransitive constructions

Topic and focus projections in the periphery of vP are employed in several works in accounting for ditransitive constructions in Brazilian Portuguese (see, e.g., Quarezemin 2009, Armelin 2011, Kato 2013, Cépeda & Cyrino 2020). The particular question of what underlies the alternations in the order of direct objects and indirect objects in the language was directly tackled in recent work by Cépeda & Cyrino (2020), who explicitly argue that the observed alternations are not due to the presence of the so-called double-object construction in the language (as in, e.g., English; see Larson 1988), but are rather the result of informationally-driven movements to topic- and focus-designated projections in the periphery of vP. The authors argue that the base order in Brazilian Portuguese is DO–IO (see also Scher 1996, Armelin 2011, Lacerda 2020, a.o.), and that the (non-canonical) IO–DO order is derivationally related to (i.e., derived from) the DO–IO order.⁵

Cépeda & Cyrino (2020) argue that the base order DO–IO is informationally unmarked, since it is “the default order for answering a general question with no topic-comment structure” (p. 109). As the dialogue in (14) shows, the DO–IO order is used in the context of a broad-focus (all-new information) sentence such as “what happened?”. In this case, the authors claim, both objects remain in situ (i.e., they do not move to the periphery of vP).

⁵ I refer the reader to the authors' work for arguments against the existence of the double-object construction in Brazilian Portuguese (a conclusion that I do not dispute).

(14) A: O que aconteceu?
‘What happened?’

B: A Olga deu uma maçã para o Mário.
the Olga gave an apple to the Mario
‘Olga gave an apple to Mario.’

(Cépeda & Cyrino 2020: 109, adapted)

With that in mind, the authors argue that the (non-canonical) IO–DO configuration is shaped by information structure. For example, sentence (15B), where the indirect object is discourse-given (i.e., “old”) information and the direct object is new information, is analyzed as involving movement of the indirect object past the direct object, as is represented in (16). Crucially (for our purposes here), the focalized direct object also moves to the periphery of vP, given that the authors assume with Belletti (2004) that postverbal focalization involves movement to the specifier of FocP in the periphery of vP (thus satisfying the Focus Criterion).

(15) A: O que a Olga deu para o Mário?
‘What did Olga give to Mario?’

B: A Olga deu para o Mário uma maçã.
the Olga gave to the Mario an apple
‘Olga gave an apple to Mario.’

(Cépeda & Cyrino 2020: 110)

(16) [TP A Olga_{subj} deu [TopP para o Mario_{top} [FocP uma maçã_{foc} [vP t_{subj} [VP t_{foc} [v' t_{top}]]]]]]

(Cépeda & Cyrino 2020: 112)

For the authors, even the base order DO–IO may involve movement of both objects to the periphery of vP, when only the indirect object conveys new information, as in (17). In this case, since the indirect object is assumed to move to Spec,FocP in the periphery of vP, the direct object must then move to Spec,TopP, as is represented in (18).

(17) A: Para quem a Olga deu uma maçã?
‘Who did Olga give an apple to?’

B: A Olga deu uma maçã para o Mário.
the Olga gave an apple to the Mario
‘Olga gave an apple to Mario.’

(Cépeda & Cyrino 2020: 112, adapted)

(18) [TP A Olga_{subj} deu [TopP uma maçã_{top} [FocP para o Mario_{foc} [vP t_{subj} [VP t_{foc} [v' t_{top}]]]]]]

(Cépeda & Cyrino 2020: 113)

In a similar fashion, when the indirect object is new information and the direct object is discourse-given information in the IO–DO order, a (vP-external) topic position under the focus position can be resorted to, as is done by Kato (2013) in analyzing the example in (19), represented in (20).

- (19) Eu dei *pro meu pai* esse CD, não pra minha mãe.
 I gave to my father this CD not to my mother
 ‘It was to my father that I gave this CD, not to my mother.’ (Kato 2013: 183)

- (20) [CP [TP Eu dei [FocP *pro meu pai*_{foc} [TopP esse CD_{top} [vP t_{subj} [VP t_{top} t_{foc}]]]]]]
 (Kato 2013: 183)

As we have seen in the examples above, the assumption of a periphery of vP as rich as the one proposed by Belletti (2004) (cf. (21), repeated from (8) above) can at first sight account for all attested permutations between direct objects and indirect objects, whatever their informational roles (topic or focus), since all logical possibilities are in principle derivable, as is schematically represented in (22).

- (21) [IP [TopP [FocP [TopP [vP]]]]] = (8) (Belletti 2004: 25)

- (22) a. [TP *subject verb* [TopP DO [FocP IO [TopP [vP [VP]]]]]]
 b. [TP *subject verb* [TopP [FocP DO [TopP IO [vP [VP]]]]]]
 c. [TP *subject verb* [TopP IO [FocP DO [TopP [vP [VP]]]]]]
 d. [TP *subject verb* [TopP [FocP IO [TopP DO [vP [VP]]]]]]

However, as we will later see in Section 4, the above system makes several wrong predictions about Brazilian Portuguese. Before presenting my arguments against the existence of focus movement to the periphery of vP in the language, I will now show how Belletti’s (2004) low focus position has been resorted to in order to also account for *wh*-in situ constructions in Brazilian Portuguese.

3.2. *Wh*-in situ constructions

As is well known, *wh*-movement has been traditionally argued to be akin to focus movement. As can be seen in Rizzi’s (1997) Italian examples in (23), whose judgments carry over to Brazilian Portuguese in (24), foci and *wh*-expressions are incompatible with each other in the left periphery. The sentences in (23) and (24) can then be ruled out based on the assumption that the relevant elements compete for the same focus position in the left periphery of the clause (namely, Spec,FocP) and thus cannot co-occur.

- (23) a. *A GIANNI che cosa hai detto (, non a Piero)?
 [to Gianni what thing have.2SG said not to Piero]
 ‘TO GIANNI what did you tell (, not to Piero)?’
 b. *Che cosa A GIANNI hai detto (, non a Piero)?
 [what thing to Gianni have.2SG said not to Piero]
 ‘What TO GIANNI did you tell (, not to Piero)?’ (Rizzi 1997: 291)

- (24) a. **Só pro João_F o que você disse?*
only to-the John what you said
b. **O que só pro João_F você disse?*
what only to-the John you said
'What did you say *only to John_F*?

In light of the above observation, and considering that Brazilian Portuguese is an “optional” *wh*-movement language, Kato (2013) argues that *wh*-expressions in situ in ordinary information-seeking questions in the language are not truly in situ, but are actually moved to a focus position in the low left periphery. The author notes that the intonational contour of a sentence like (25a) is similar to that of sentence (26), which has a postverbal subject, in that both are realized with a falling intonation — unlike echo questions, which have a rising intonation. Assuming with Belletti (2004) that postverbal subjects may occupy Spec,FocP in the periphery of vP, Kato (2013) then proposes the structure in (25b) for (25a), which she claims is in turn responsible for the falling intonation of the sentence (the author claims that only echo questions in the language involve true *wh*-in situ, which would in turn be responsible for the rising intonation).

- (25) a. Você viu quem? ↓
 you saw who
 [‘Who did you see?’]
 b. [TP Você_i viu [FocP quem_w [vP t_i [vP t_w]]]] (Kato 2013: 183, adapted)

- (26) Chegou a Maria. ↓
arrived the Maria
[‘Mary arrived.’] (Kato 2013: 184)

Assuming that *wh*-expressions “in situ” must in fact move to Spec,FocP in the periphery of vP, word-order alternations in the postverbal area in *wh*-in situ questions can then be accounted for by resorting to Belletti’s (2004) topic positions, be it below FocP, as in (27), or above it, as in (28), in the same manner we saw in the previous section for (declarative) ditransitive constructions.

- (27) a. João tinha restituído que livro para a Maria?
John had returned which book to the Mary
'Which book had John returned to Mary?'
- b. João tinha restituído [_{FocP} que livro_w [_{TopP} para a Maria_i [_{VP} [_{VP} t_w t_i]]]]
(Kato 2013: 183, adapted)

- (28) a. João tinha restituído para a Maria que livro?
John had returned to the Mary which book
'Which book had John returned to Mary?'
- b. João tinha restituído [_{TopP} para a Maria_i [_{FocP} que livro_w [_{VP} [_{VP} t_w t_i]]]]
(Kato 2013: 183, adapted)

While the postulation of a focus projection in the periphery of vP at first sight seems to appropriately handle cases like the ones we saw above, I will argue in the next section that assuming low focus movement in Brazilian Portuguese actually leads to a number of empirical

problems, of both overgeneration and undergeneration. What I propose to do here is to simply take a step back from Belletti's (2004) system — and its inherent necessity of placing foci in the specifier of a focus phrase — and test whether low focus movement is in fact available in the language.

4. Arguments against low focus movement

In this section, I will present and discuss novel evidence that refute the existence of low focus movement in Brazilian Portuguese. I will start with ditransitive constructions and then move on to *wh*-in situ constructions.

4.1. Ditransitive constructions

In order to make the case against low focus movement in Brazilian Portuguese, I will argue that the alternations observed in the order of internal arguments in the postverbal area cannot be accounted for if such operation is available in the language. I will show that low focus movement is in fact unattested in the language and that assuming it leads to both overgeneration and undergeneration, and will thus maintain the position that the cases where focus movement to the periphery of vP has been invoked in the literature on Brazilian Portuguese have been misanalyzed. Each subsection below will present an independent argument to that effect.

4.1.1. The IO_F–DO order and the right dislocation of the direct object

The first argument against low focus movement in Brazilian Portuguese comes from the possibility of deriving the (non-canonical) IO_F–DO order (where the indirect object is focalized) through right dislocation of the direct object, which I will argue is the correct analysis, rather than through movement of the indirect object past the direct object to the periphery of vP. Let us begin by noting that it is in principle possible to focalize the indirect object in both the DO–IO_F and the IO_F–DO orders, as the sentences in (29B1–B2) show. At first sight, the grammaticality of the IO_F–DO order in (29B2) suggests that focus movement (of the indirect object) to the periphery of vP is possible, creating the (purported) structure in (30).

- (29) A: Pra quem o João deu o Programa Minimalista?
 ‘Who did John give The Minimalist Program to?’
 B1: O João deu o Programa Minimalista só pra Maria_F. DO–IO_F
 the John gave the Program Minimalist only to-the Mary
 B2: O João deu só pra Maria_F o Programa Minimalista. IO_F–DO
 the John gave only to-the Mary the Program Minimalist
 ‘John gave The Minimalist Program *only to Mary_F*.’

- (30) O João deu [_{FocP} só pra Maria_F [_{vP} [_{VP} o Programa Minimalista t_F]]] *purported* (29B2)

Curiously, Quarezemin (2009), who observes the grammaticality of sentences such as (29B1–B2) above, also notes the ungrammaticality of sentence (31B) below, where the direct object is

indefinite.⁶ Under the assumption that the focalized indirect object moves to the low left periphery as in (30) above, (31B) should in principle have the exact same structure as (29B2); their different grammaticality status thus becomes a puzzle. It is important to note that the (in)definiteness of the direct object is orthogonal to the movement of the focalized indirect object across it. As (32) shows, the left-peripheral counterpart of (31B) is well-formed; that is, a focalized indirect object can indeed cross an indefinite direct object.

- (31) A: Pra quem o João deu um presente?
 ‘Who did John give a gift to?’
 B: ??O João deu só pra Maria_F um presente.
 the John gave only to-the Mary a gift
 ‘John gave a gift *only to Mary_F*.’

(Quarezemin 2009: 117, adapted)

- (32) Só pra Maria_F o João deu um presente t_F.
 only to-the Mary the John gave a gift
 ‘*Only to Mary_F* John gave a gift.’

The fact that it is a manipulation of (the definiteness of) the direct object, rather than the focalized indirect object, that causes a change in grammaticality between (29B2) and (31B) suggests then that the relevant restrictions on the IO_F–DO order are in fact to blame on the direct object. In other words, the relevant question here is not why the focalized indirect object cannot *precede* the (non-focal) indefinite direct object in (31B), but in fact why the indefinite direct object cannot *follow* the focalized indirect object.

The answer to that question, I maintain, is that sentence (29B2) above is not derived in the manner of (30), with low focus movement, but rather through right dislocation of the direct object, which in Brazilian Portuguese is a kind of topicalization. If that is the case, we get the correct result that it is the interpretive properties of the direct object, rather than those of the indirect object, that constrain the IO_F–DO order, since it is the direct object that undergoes an interpretation-driven operation under this alternative analysis.

In order to make the case for the above hypothesis, let us first look at a prototypical case of right dislocation in Brazilian Portuguese, namely, that of transitive subjects. As is well-known, the language does not allow postverbal subjects in transitive constructions, ruling out VSO and VOS orders where the subject is sentence-internal (see, e.g., Kato 2000, Lacerda 2016). An apparent VOS order can however be constructed when the transitive subject is resumed from previous discourse, a case which allows both the canonical structure in (33B1) and the right dislocation configuration in (33B2), where *o João* is pronounced with the characteristic falling intonation (i.e., deaccenting is obligatory).⁷ That (33B2) indeed involves right dislocation (i.e., topicalization) of *o João* (rather than a sentence-internal subject) is corroborated by the fact that the grammatical subject (i.e., in Spec,TP) can be realized by an overt (resumptive) pronoun, as in (33B3).

⁶ Quarezemin’s (2009) original example does not include the exhaustive particle *só* ‘only’. I introduced *só* in (31B) in order to make the comparison with the high focalization in (32) fair, since high focalization requires an additional interpretive effect (exhaustivity being one example thereof) in order to be licensed, as will be discussed in Section 5. It is important to make it clear that focalization itself in Brazilian Portuguese does not require the presence of a focus-sensitive particle, though focus reading is certainly facilitated by it.

⁷ Brazilian Portuguese is not a prototypical null subject language and does not have referential null subjects (see, e.g., Ferreira 2000), so the sentence in (33B2) must (arguably) involve a trace of *o João* in Spec,TP.

Additionally, the absence of a Principle C effect in (33B2–B3) can be taken to show that *o João* is not in a low subject position; that is, *o João* is in a right-dislocated (topic) position.

- (33) A: Quantos livros o João leu?
 ‘How many books did John read?’
 B1: O João leu três livros.
 the John read three books
 B2: Leu três livros, o João.
 read three books the John
 B3: Ele leu três livros, o João.
 he read three books the John
 ‘John read three books.’

Right dislocation in Brazilian Portuguese is usually analyzed as a kind of topicalization operating on discourse-given (i.e., old) information. Silva (2015), for instance, argues that the function of right-dislocated subjects in Brazilian Portuguese is to simply resume the current topic of the conversation (from previous discourse). As such, we can verify that newly-introduced topics resist structures such as (33B2–B3) above, as is seen in (34B2–B3).

- (34) A: O João leu três livros.
 ‘John read three books.’
 B1: O Pedro leu só dois livros.
 the Peter read only two books
 B2: #Leu só dois livros, o Pedro.
 read only two books the Peter
 B3: #Ele leu só dois livros, o Pedro.
 he read only two books the Peter
 ‘Peter read only two books.’

As a consequence of being a kind of topicalization that targets discourse-given information, right dislocation in Brazilian Portuguese is ruled out with elements that are not good discourse-given topics.⁸ As is shown in (35B2), indefinite subjects, which are usually not good at resuming discourse-given referents, produce considerably degraded results when right-dislocated.⁹

⁸ Following the tradition of Reinhart (1981) and Heim (1982), which analyze topics as entities around which the common ground is organized (see also Krifka 2008), I assume that the “ideal” topic is a definite, referential element and that the more an element deviates from those properties, the less of a good topic it is.

⁹ Arguably, indefinites are not good at resuming topical referents (which is the function of right dislocation in Brazilian Portuguese) because once the (discourse-new) referents introduced by indefinites become known (i.e., when they count as discourse-given), they usually become definite, as in (i) below.

(i) O João comeu uma maçã. A/*Uma maçã estava deliciosa.
 the John ate an apple the/an apple was delicious
 ‘John ate an apple. The/*an apple was delicious.’

In Brazilian Portuguese, when an indefinite DP is controlled to perform a mere topic-resuming function, even left dislocation produces a (very) degraded result when compared to the acceptable left dislocation of a definite DP (cf. (iiB1–B2)), while right dislocation of an indefinite DP is ruled out (cf. (iiB3–B4)). Needless to say, indefinite DPs may be able to perform other topic functions, which is beyond the point here (see, e.g., Lacerda 2020 for discussion of different types of topics in Brazilian Portuguese).

- (35) A: Qual livro algum/um aluno leu?
 ‘Which book did some/a student read?’
 B1: Algum/um aluno leu o *Dom Casmurro*.
 some/a student read the *Dom Casmurro*.
 B2: ??Leu o *Dom Casmurro*, algum/um aluno.
 read the *Dom Casmurro* some/a student
 ‘Some/a student read *Dom Casmurro*.’

Even worse results are produced by the right dislocation of non-referential expressions, such as quantified DPs. As such, the transitive subjects *nenhum aluno* ‘no student’ in (36), *nada* ‘nothing’ in (37), and *tudo* ‘everything’ in (38) are all excluded from the right dislocation configurations in the B2 examples (in the examples involving negative quantifiers, note that the presence or absence of sentential negation is immaterial).

- (36) A: Qual livro nenhum aluno leu?
 ‘Which book didn’t any student read?’
 B1: Nenhum aluno leu o *Dom Casmurro*.
 no student read the *Dom Casmurro*.
 B2: ?*[(Não) leu o *Dom Casmurro*, nenhum aluno.]
 (not) read the *Dom Casmurro* no student
 ‘No student read *Dom Casmurro*.’
- (37) A: Qual atitude nada justifica (em sala de aula)?
 ‘Which attitude doesn’t anything justify (in the classroom)?’
 B1: Nada justifica mau comportamento.
 nothing justifies bad behavior.
 B2: *[(Não) justifica mau comportamento, nada.]
 (not) justifies bad behavior nothing
 ‘Nothing justifies bad behavior.’

-
- (ii) A: Você estava me dizendo algo sobre um professor.
 ‘You were telling me something about a teacher.’
 B1: (Eu estava dizendo que) o professor, ele deu uma prova muito difícil.
 (I was saying that) the teacher he gave a exam very hard
 B2: ??[(Eu estava dizendo que) um professor, ele deu uma prova muito difícil.]
 (I was saying that) a teacher he gave a exam very hard
 ‘(I was saying that) the/a teacher, he gave a very hard exam.’
 B3: (Eu estava dizendo que) (ele) deu uma prova muito difícil, o professor.
 (I was saying that) (he) gave a exam very hard the teacher
 B4: *[(Eu estava dizendo que) (ele) deu uma prova muito difícil, um professor.]
 (I was saying that) (he) gave a exam very hard a teacher
 ‘(I was saying that) he gave a very hard exam, the/a teacher.’

- (38) A: De qual atitude tudo depende (em sala de aula)?
 ‘Which attitude does everything depend on (in the classroom)?’
 B1: Tudo depende de bom comportamento.
 everything depends of good behavior.
 B2: *Depende de bom comportamento, tudo.
 depends of good behavior everything
 ‘Everything depends on good behavior.’

In light of the above observations regarding right dislocation of subjects in Brazilian Portuguese, we can then predict that in ditransitive constructions in the language, the IO_F–DO order will face similar restrictions if it is constructed through right dislocation of the direct object, as I maintain here, rather than through low focus movement of the indirect object. In other words, how good or bad the IO_F–DO order will be judged depends on how amenable to discourse-given topicalization the direct object is in each case, just like in the case of right-dislocated subjects discussed above. We already saw at the beginning of this section that the IO_F–DO order with an indefinite direct object is degraded when compared to a definite one; the relevant examples are repeated below in (39).

- (39) a. ??O João deu só pra Maria_F um presente. = (31B)
 the John gave only to-the Mary a gift
 ‘John gave a gift *only to Mary_F*.’
 b. O João deu só pra Maria_F o Programa Minimalista. = (29B2)
 the John gave only to-the Mary the Program Minimalist
 ‘John gave The Minimalist Program *only to Mary_F*.’

That the IO_F–DO order depends on the interpretive properties of the direct object, rather than the indirect object, is in fact confirmed by the test with quantified DPs. Contrary to the definite direct object in (29B2)/(39b) above, quantified direct objects resist right dislocation and lead the IO_F–DO order to unacceptability. In (40), for example, the indirect object *pra Maria* ‘to Mary’ can be focalized in the presence of the negative direct object *nenhum livro* ‘no book’ only in the base DO–IO_F order, but not in the IO_F–DO order. Expectedly, the bare quantifier *nada* ‘nothing’ in (41B2) produces an even worse sentence than (40B2) in the IO_F–DO order, as does the bare quantifier *tudo* ‘everything’ in (42B2).

- (40) A: Pra quem você não deu nenhum livro?
 ‘Who did you give no book to?’
 B1: Eu não dei nenhum livro só pra Maria_F.
 I not gave no book only to-the Mary
 B2: ?*Eu não dei só pra Maria_F nenhum livro.
 I not gave only to-the Mary no book
 ‘I didn’t give any book *only to Mary_F*.’

- (41) A: Pra quem você não deu nada?
 ‘Who did you not give anything to?’
 B1: Eu não dei nada só pra Maria_F.
 I not gave nothing only to-the Mary
 B2: *Eu não dei só pra Maria_F nada.
 I not gave only to-the Mary nothing
 ‘I didn’t give anything *only to Mary_F*.’
- (42) A: Pra quem você deu tudo?
 ‘Who did you give everything to?’
 B1: Eu dei tudo só pra Maria_F.
 I gave everything only to-the Mary
 B2: *Eu dei só pra Maria_F tudo.
 I gave only to-the Mary everything
 ‘I gave everything *only to Mary_F*.’

Just like in (31B) above with an indefinite direct object, one cannot try to salvage the possibility of low focus movement by blaming the ungrammaticality of sentences (40B2)–(42B2) on the fact that the focalized indirect object crosses a quantified direct object on its way to the low left periphery, as in (43), which would presumably give rise to some intervention effect. As is the case in (32) above, the left-peripheral counterparts of (40B2)–(42B2) are all well-formed; (44)–(46) show that no intervention effect is at stake here. Therefore, we can conclude that if low focus movement were available in Brazilian Portuguese, the structure in (43) should be allowed for sentences like (31B), (40B2), (41B2) and (42B2), predicting them to be all grammatical, contrary to fact.

- (43) *[_{TP} subject verb [_{FocP} IO_F [_{VP} [_{VP} DO t_F]]]] *low focus movement (unavailable)*
- (44) Só pra Maria_F eu não dei nenhum livro t_F. cf. (40B2)
 only to-the Mary I not gave no book
 ‘I didn’t give any book *only to Mary_F*.’
- (45) Só pra Maria_F eu não dei nada t_F. cf. (41B2)
 only to-the Mary I not gave nothing
 ‘*Only to Mary_F* I didn’t give anything.’
- (46) Só pra Maria_F eu dei tudo t_F. cf. (42B2)
 only to-the Mary I gave everything
 ‘*Only to Mary_F* I gave everything.’

The contrasts discussed above regarding definite DPs, on the one hand, and indefinite and quantified DPs, on the other hand, allow us to conclude that in Brazilian Portuguese the IO_F–DO order is actually derived through right dislocation of the (discourse-given) direct object, as represented in (47), and crucially not through movement of the focalized indirect object past the

direct object to the low left periphery, as has been assumed in the literature, ultimately providing evidence that this operation is not available in the language.¹⁰

(47) *subject verb* [_{VP} [_{VP} *ec*_i IO_F]] DO_i *right dislocation*

To conclude this section, it is important to emphasize that in a theory that derives the IO_F–DO order through low focus movement of the indirect object, the semantic restrictions observed on the direct objects remain a puzzle, whereas in a theory that analyzes it as involving the topicalization of the direct object, the observed restrictions are accounted for, as in the analysis proposed here. In order to try to salvage the low focus movement analysis, however, one could alternatively argue that the observed restrictions follow not from the right dislocation of the relevant direct objects, but instead from limitations on movement of the direct objects to the topic position located below FocP in Belletti’s (2004) low left periphery, as in (48).¹¹ While it is true that a (e.g.) quantified DP is ruled out in a topic position, nothing must force a direct object (especially a quantified DP) to have a topic feature and thus move to Spec,TopP. In other words, the IO_F–DO_Q order is only excluded in the alternative “low topic” analysis if movement of DO_Q to Spec,TopP is obligatory, creating the bad structure in (48).

(48) **subject verb* [_{FocP} IO_F [_{TopP} DO_Q [_{VP} [_{VP} *t*_Q]]]] *IO_F–DO_Q correctly ruled out

With topicalization not being obligatory, a quantified direct object (without a topic feature) must be able to remain in situ in both analyses; that is, DO_Q should not have to move to Spec,TopP or be right dislocated. In the “low topic” analysis, a quantified direct object that remains in situ incorrectly derives the unacceptable IO_F–DO_Q order, combined with low focus movement of IO_F past DO_Q, since the structure in (49) should be grammatical. In the right dislocation analysis defended here, on the other hand, a quantified direct object in situ correctly derives the acceptable DO_Q–IO_F order, combined with IO_F focalized in situ, as in (50a). If DO_Q is right-dislocated (i.e., topicalized), the ungrammatical structure in (50b) correctly rules out the unacceptable IO_F–DO_Q order.¹²

(49) *subject verb* [_{FocP} IO_F [_{VP} [_{VP} DO_Q]]] *IO_F–DO_Q incorrectly ruled in

(50) a. *subject verb* [_{VP} [_{VP} DO_Q IO_F]] DO_Q–IO_F correctly ruled in
b. **subject verb* [_{VP} [_{VP} *ec*_Q IO_F]] DO_Q *IO_F–DO_Q correctly ruled out

Having seen how the postulation of low focus movement in Brazilian Portuguese leads to overgeneration in IO_F–DO constructions, let us now see how DO–IO_F constructions face an undergeneration problem under the assumption that low focus movement is available in the language.

¹⁰ The precise structure of right dislocation is immaterial to the present argument.

¹¹ I thank an anonymous reviewer for bringing this point to my attention.

¹² See Lacerda (2020) for extensive discussion of sentence-internal topics in Brazilian Portuguese and arguments against a cartographic analysis of topics in the low left periphery of this language.

4.1.2. The DO–IO_F order and the non-topics forced to be in Spec,TopP

As we just saw in the previous section, focalization of the indirect object is possible in the base order DO–IO_F. Under the assumption that the focalized indirect object must move to Spec,FocP in the low left periphery, the DO–IO_F order necessarily requires the movement of the direct object to an even higher position, more precisely, Spec,TopP above FocP. This is the analysis proposed by Cépeda & Cyrino (2020) for sentence (51), for example, whose structure is given in (52).

- (51) A Olga deu uma maçã *para o Mário_F*.
 the Olga gave an apple to the Mario
 ‘Olga gave an apple to Mario.’ (Cépeda & Cyrino 2020: 112)

- (52) [TP A Olga_{subj} deu [TopP uma maçã_{top} [FocP para o Mário_{foc} [vP t_{subj} [VP t_{foc} t_{top}]]]]]
 (Cépeda & Cyrino 2020: 113)

Even putting aside the pressing question of why the second movement (topicalization of the direct object) should be obligatory in the event of the first movement (focalization of the indirect object), the assumption that the DO–IO_F order requires the second movement quickly leads to undergeneration. Let us first ponder about sentence (51) itself. Cépeda & Cyrino (2020) assume that the topicalization in question is one based on the (discourse-)given status of the relevant element (in this case, *uma maçã* ‘an apple’). However, as we saw in the previous section (cf. the discussion of (31B) and (35B2)), indefinite DPs resist right dislocation, which is a kind of topicalization that operates exclusively on discourse-given referents, with the function of resuming the current discourse topic (Silva 2015; see footnote 9). Therefore, the obligatory (discourse-given) topicalization of the indefinite *uma maçã* in (51) already raises a red flag; if such topicalization is not possible, (51) cannot be derived in the authors’ analysis.¹³

Confirming that the DO–IO_F order cannot involve the obligatory topicalization of the direct object is the fact that the order is also grammatical with direct objects that are clearly not good topics, such as the quantified DPs of the previous section. The relevant sentences are repeated in the (a) examples of (53)–(55) below, together with their underivable structures that assume low focus movement in (b).

- (53) a. Eu não dei nenhum livro *só pra Maria_F*. cf. (40)
 I not gave no book only to-the Mary
 ‘I didn’t give any book *only to Mary_F*.’
 b. *Eu não dei [TopP nenhum livro_i [FocP *só pra Maria_F* [vP [VP t_i t_F]]]]
- (54) a. Eu não dei nada *só pra Maria_F*. cf. (41)
 I not gave nothing only to-the Mary
 ‘I didn’t give anything *only to Mary_F*.’
 b. *Eu não dei [TopP nada_i [FocP *só pra Maria_F* [vP [VP t_i t_F]]]]

¹³ Sentence (51) can in principle be derived as (52) in the authors’ analysis if *uma maçã* has contrastive topic interpretation, since this kind of topicalization can target indefinites. However, this possibility is orthogonal to the present argument, given that (51) does have a reading where *uma maçã* is interpreted as mere given information, which I claim is underivable in the authors’ analysis.

- (55) a. Eu dei tudo só pra Maria_F. cf. (42)
 I gave everything only to-the Mary
 ‘I gave everything *only* to Mary_F.’
 b. *Eu dei [_{TopP} tudo_i [_{FocP} só pra Maria_F [_{vP} [_{vP} t_i t_F]]]]

In order to try to salvage low focus movement in the analysis of (51) and (53a)–(55a), one would have to assume that the direct objects move to a position other than Spec,TopP, thus modifying Belletti’s (2004) original shape of the low left periphery. However, there remains the challenge of explaining why movement of the direct object becomes obligatory in the event of focalization of the indirect object, other than to get the linear order right (i.e., DO–IO_F). Crucially, note that if the purported movement of the relevant direct objects does not take place here, the IO_F–DO order is erroneously derived and ruled in (we already saw in the previous section that the IO_F–DO order is bad with indefinite and quantified direct objects; see (31), (40)–(42)).¹⁴

In the absence of a principled explanation of the extra movement (of the direct object) required under the assumption of low focus movement (of the indirect object) in the DO–IO_F order, the grammaticality of sentences (51) and (53a)–(55a) can therefore be taken as evidence against the existence of low focus movement in Brazilian Portuguese.¹⁵

4.1.3. (A)symmetries between left-peripheral and postverbal foci

In this section, I will show that postverbal foci in Brazilian Portuguese do not behave as one would expect if there were two distinct focus positions in the sentence (i.e., one high and one low), in light of Belletti’s (2004) claims about Italian data. Recall from Section 2 that Belletti (2004) argues that the clause-internal (postverbal) focus position in Italian is interpreted as new information, as in (56), which is ruled out in the left-peripheral (preverbal) focus position, as in (57). The left-peripheral focus position in Italian is reserved for contrastive foci, as in Rizzi’s (1997) example in (58). In Italian, therefore, there is an asymmetry between the high and the low focus positions with respect to the type of focus that is licensed in each position.

¹⁴ Note that the property that unifies the relevant indefinite and quantified direct objects here is a negative one, namely their inability to be topicalized (as discourse-given), which makes it hard to pinpoint the reason of the purported *obligatory* movements on a single reason and to associate them with a single landing position in a modified version of Belletti’s low left periphery.

¹⁵ Constructions where the direct object is focalized are not discussed since they do not provide any particular argument against low focus movement in Brazilian Portuguese, in the context of the present discussion. For the sake of completeness, I will simply show how the DO_F–IO and IO–DO_F structures would be generated under the current assumptions. In both cases, shown in (i) and (ii) below, respectively, the relevant focalized direct object remains in its canonical position. In the DO_F–IO order, shown in (i), both objects remain in their base positions; in the IO–DO_F order, shown in (ii), the indirect object is topicalized in a position at the edge of vP (agnostically labeled XP). See Lacerda (2020, 2021) for extensive discussion on these constructions and related issues.

- (i) a. O João deu dois livros_F pra Maria. DO_F–IO
 the John gave two books to-the Mary
 ‘John gave *two books*_F to Mary.’
 b. [_{TP} o João deu [_{vP} [_{vP} dois livros_F pra Maria]]]
 (ii) a. O João deu pra Maria dois livros_F. IO–DO_F
 the John gave to-the Mary two books
 ‘John gave Mary *two books*_F.’
 b. [_{TP} o João deu [_{XP} pra Maria_{TOP} [_{vP} [_{vP} dois livros_F t_{TOP}]]]]

- (56) A: Chi ha parlato? = (11)
 [‘Who spoke?’]
 B: Ha parlato Gianni.
 has spoken Gianni
 [‘Gianni spoke.’] (Belletti 2004: 21)
- (57) A: Chi ha parlato? = (12)
 ‘Who has spoken?’
 B: #GIANNI ha parlato.
 Gianni has spoken
 ‘Gianni has spoken.’ (Belletti 2004: 24)
- (58) IL TUO LIBRO ho letto (non il suo). = (7a)
 the your book have read (not the his)
 ‘Your book I read (, not his).’ (Rizzi 1997: 286)

Belletti’s (2004) analysis is based on the (tacit) assumption of a “strong” version of the cartographic approach, which strives for a one-to-one correspondence between structural positions and informational interpretations — recall from Section 2 that Belletti (2004) takes the asymmetry observed in (56)–(58) as an argument for the postulation of two different focus positions in Italian. Brazilian Portuguese, however, does not exhibit an asymmetry of the sort seen in (56)–(58) and therefore poses a problem for the strong version of the cartographic approach. In this language, both focus types are equally available in either the left periphery or clause-internally. The dialogues in (59) show that new information focus is licensed both in a postverbal position, as in (59B1), and in the left periphery, as in (59B2), the two B sentences being interchangeable in the context of A, as far as the type of focus is concerned. Likewise, the dialogues in (60) show that contrastive focus is also licensed in either position, again with the two B sentences being interchangeable in the context of A.

- (59) A: Pra quem o João deu um presente? *new information focus*
 ‘Who did John give a gift to?’
 B1: O João deu um presente só pra Maria_F.
 the John gave a gift only to-the Mary
 B2: Só pra Maria_F o João deu um presente.
 only to-the Mary the John gave a gift
 ‘John gave a gift *only to Mary_F*.’
- (60) A: O João deu um presente pra todas as crianças. *contrastive focus*
 ‘John gave a gift to all the children.’
 B1: Não, não. O João deu um presente só pra Maria_F.
 no no the John gave a gift only to-the Mary
 B2: Não, não. Só pra Maria_F o João deu um presente.
 no no only to-the Mary the John gave a gift
 ‘No, no. John gave a gift *only to Mary_F*.’

With respect to focus types (i.e., informational interpretations), what we find in Brazilian Portuguese is symmetry where one would (arguably) expect asymmetry, if we were to model this language based on what Belletti (2004) proposed for Italian. With respect to the syntactic licensing of (purportedly) dislocated elements, on the other hand, we may in fact find asymmetry where we one would expect symmetry. In particular, some elements that can be focalized in the left periphery of the sentence are simply ruled out in (what would be) the low left periphery.

Let us observe the contrast between (40B2) and (44) above, repeated below in (61). Given that *nenhum livro* ‘no book’ in (61B1) cannot be a topic and it is not focalized, it is fair to assume that it remains in situ.¹⁶ In its turn, *só pra Maria* ‘only to Mary’ should be allowed to move to Spec,FocP in the low left periphery and generate the IO_F–DO order, as discussed in Section 4.1.1. However, (61B1) is unexpectedly ruled out, while movement of the focalized indirect object to the (high) left periphery in (61B2) is perfectly acceptable. (If anything, considering Belletti’s 2004 proposal, the new information focus in question should be ruled out in the left periphery and acceptable in the postverbal position, but we get just the opposite in (61).)

- (61) A: Pra quem você não deu nenhum livro?
 ‘Who did you give no book to?’
- B1: ?*Eu não dei só pra Maria_F nenhum livro. cf. (40B2)
 I not gave only to-the Mary no book
- B2: Só pra Maria_F eu não dei nenhum livro. cf. (44)
 only to-the Mary I not gave no book
 ‘I didn’t give any book *only to Mary_F*.’

It is important to emphasize that the asymmetry between (61B1) and (61B2) is not a matter of available interpretations, but a matter of grammatical well-formedness, which is unexpected if low focus movement is available in the syntax of the language. In other words, the purported movement to the low left periphery in (61B1) leads not mere pragmatic infelicity/oddity, but to ungrammaticality. This state of affairs is replicated in (62), where the direct object is the idiomatic minimizer *um tostão furado* ‘a dime’ (lit. ‘a pierced buck’), which cannot be topicalized.¹⁷ Given that the direct object is not focalized here, it is fair to assume that it remains in situ. As was the case in (61), focalization of the indirect object *só pro João* ‘only to John’ is possible in situ (cf. (62B1)) and in the left periphery (cf. (62B2)), but ruled out in what would be Spec,FocP in the low left periphery (cf. (62B3)), which is unexpected if low focus movement is an option here.

¹⁶ Recall the discussion of example (14) above in Section 3.1, where Cépeda & Cyrino (2020) argue that informationally unmarked elements may remain within vP, a claim that I do not dispute.

¹⁷ I thank Jairo Nunes (p.c.) for bringing this test to my attention.

- (62) A: Pra quem o avô não deixou um tostão furado (no testamento)?
 ‘Who didn’t the grandfather leave a dime to (in his will)?’
 Lit. ‘Who didn’t the grandfather leave a pierced buck to (in his will)?’
- B1: O avô não deixou um tostão furado só pro João_F.
 the grandfather not left a buck pierced only to-the John
- B2: Só pro João_F o avô não deixou um tostão furado.
 only to-the John the grandfather not left a buck pierced
- B3: *O avô não deixou só pro João_F um tostão furado.
 the grandfather not left only to-the John a buck pierced
 ‘The grandfather didn’t leave a dime only to John_F.’
 Lit. ‘The grandfather didn’t leave a pierced buck only to John_F.’

In conclusion, left-peripheral and postverbal foci in Brazilian Portuguese do not behave as if two distinct focus positions were available, in that they may exhibit symmetry where asymmetry is expected and asymmetry where symmetry is expected, considering Belletti’s (2004) original proposal. Under that approach, a one-to-one correspondence between structural positions and different types of foci is assumed, which is not observed in the Brazilian Portuguese data discussed above. The attested patterns can, however, be captured by dispensing with the assumption that there are two potential targets of focus movement in the language.

4.1.4. Focus interpretation in situ

In the previous sections, we discussed a number of sentences which provide evidence against the postulation of low focus movement in Brazilian Portuguese and which can be accounted for if the relevant focalized elements remain in situ. To end our discussion on ditransitive constructions, I will now provide one piece of evidence that further corroborates the conclusion that postverbal foci can be licensed within vP (i.e., without being in a focus-designated position).

Let us look at (63). As in many other examples discussed in previous sections, sentence (63B) cannot involve the topicalization of *algo* ‘something’, since it is a (non-D-linked) bare indefinite.¹⁸ This restriction therefore shows that *algo* remains in its base position in (63B), providing evidence for a structure along the lines of (64), where the indirect object is focalized in situ, within the vP.

- (63) A: Pra quem cada professor deu algo?
 ‘Who did each teacher give something to?’
- B: Cada professor_i deu algo só pro seu_i melhor aluno_F.
 each teacher gave something only to-the his best student
 ‘Each teacher_i gave something only to his_i best student_F.’

- (64) Focus in situ (within vP): ✓
 [TP Cada professor_i deu [vP [vP algo [v’ só pro seu_i melhor aluno_F]]]]

¹⁸ As a bare indefinite, *algo* also precludes the IO_F–DO order, as in (i); see discussion in Section 4.1.1 above.

- (i) A: Pra quem o professor deu algo?
 ‘Who did the teacher give something to?’
- B: *O professor deu só pra Maria_F algo.
 the teacher gave only to-the Mary something
 ‘The teacher gave something only to Mary_F.’

The crucial point here is that the indirect object contains a possessive pronoun bound by the subject, which means that it must be c-commanded by it. What that means is that, in the absence of focus movement to the low left periphery, the high left periphery cannot be invoked either. A derivation such as (65), which resorts to left-peripheral focalization of *só pro seu melhor aluno* ‘only to his best student’, followed by remnant movement of the TP (arguably to a left-peripheral topic position), is doomed to disrupt the necessary c-command relation between the subject and the possessive pronoun in the indirect object, preventing the binding relation from obtaining and incorrectly ruling out the available bound-pronoun reading (the only available reading, in fact).¹⁹

(65) *Left-peripheral focalization + remnant movement: ✗*

*[_{TopP} [_{TP} Cada professor_i deu algo t_F]_{TP} [_{FocP} *só pro seu_i melhor aluno_F* [_{Foc'} t_{TP}]]]

In light of the discussion of ditransitive constructions in the previous sections, further corroborated by the analysis of sentence (63B), the conclusion that we are left with is that focus interpretation in Brazilian Portuguese is indeed possible without movement of the relevant element to a focus-designated position. This is what one would naturally expect in a language where the canonical order S–V–DO–IO allows the focalization of any of its sub-constituents — while the context in (66) shows that the S–V–DO–IO order in (66B) is used in a broad-focus scenario, sentence (66B) could also function as the answer to any of the questions in (67), with the appropriate focal stress in the relevant element in each case. In a nutshell, the fact that focalization never requires the rearrangement of the canonical order in Brazilian Portuguese would be very surprising if focalization always triggered overt movement in the language.

- (66) A: O que aconteceu?
 ‘What happened?’
 B: O João deu um presente pra Maria.
 the John gave a gift to-the Mary
 ‘John gave a gift to Mary.’

- (67) A1: O que o João fez?
 ‘What did John do?’
 A2: Quem deu um presente pra Maria?
 ‘Who gave a gift to Mary?’
 A3: O que o João deu pra Maria?
 ‘What did John give to Mary?’
 A4: Pra quem o João deu um presente?
 ‘Who did John give a gift to?’

With foci being consistently licensed in situ in Brazilian Portuguese, we can then conjecture that the focus licensing mechanism in this language is based on a property of the focalized element itself (which could be implemented by means of a focus feature, for instance) and not based on specific positions of the clause (via the Focus Criterion, as in the cartographic approach). Having thus shown that postverbal focalization in ditransitive constructions in Brazilian Portuguese is truly

¹⁹ Even if the structure in (65) were created only at LF, the problem would remain.

in situ and does not involve low focus movement, I will in the next section argue that the behavior of *wh*-in situ constructions further corroborate this claim.

4.2. *Wh-in situ constructions*

Continuing our discussion of the absence of low focus movement in Brazilian Portuguese, let us now probe into constructions where the relevant focalized element is a *wh*-expression. I will argue that there is no *wh*-movement to the periphery of vP and that *wh*-in situ is really in situ, contrary to Kato's (2013) proposal.

4.2.1. *Persistence of the ditransitive problems*

To start, I will show that the problems discussed in Section 4.1 for ditransitive constructions all carry over to *wh*-in situ constructions when the relevant focus is a *wh*-expression. First, note that similar to the restrictions observed in Section 4.1.1 for the IO_F–DO order, the IO_{WH}–DO order is acceptable with a definite, referential direct object in (68b), but becomes considerably degraded with a non-referential direct object, such as the negative quantified DP in (69b) — thus suggesting that the IO_{WH}–DO order is derived through right dislocation (i.e., topicalization) of the direct object rather than through low *wh*-movement of the indirect object to the periphery of vP.

- | | | | |
|------|----|---|----------------------|
| (68) | a. | Você deu o Programa Minimalista <i>pra quem</i> ? | DO–IO _{WH} |
| | | you gave the Program Minimalist to who | |
| | b. | Você deu <i>pra quem</i> o Programa Minimalista? | IO _{WH} –DO |
| | | you gave to who the Program Minimalist | |
| | | ‘Who did you give The Minimalist Program to?’ | cf. (29) |
| (69) | a. | Você não deu nenhum livro <i>pra quem</i> ? | DO–IO _{WH} |
| | | you not gave no book to who | |
| | b. | ?*Você não deu <i>pra quem</i> nenhum livro? | IO _{WH} –DO |
| | | you not gave to who no book | |
| | | ‘Who didn’t you give any book to?’ | cf. (41) |

With respect to the DO–IO_{WH} order in (68a) and (69a), note that under the assumption of low *wh*-movement, in both sentences the direct object would be required to move above the *wh*-expression, as discussed in Section 4.1.2, thus maintaining the problem that non-topics should appear in a topic position, as represented in (70). It is important to emphasize that non-topical direct objects should not be expected to move to a topic position and should thus be allowed to stay in situ here, creating the IO_{WH}–DO order; however, non-topical direct objects are precisely the troublemakers for the IO_{WH}–DO order, as we saw above.

- | | | | |
|------|----|---|-----------|
| (70) | a. | Você deu [TopP o Programa Minimalista _i [FocP <i>pra quem</i> _w [vP [VP t _i t _w]]]] | cf. (68a) |
| | b. | *Você não deu [TopP nenhum livro _i [FocP <i>pra quem</i> _w [vP [VP t _i t _w]]]] | cf. (69a) |

As we saw in Section 4.1.3, the high left periphery and the (purported) low left periphery of Brazilian Portuguese do not exhibit the expected asymmetry with respect to the focus type licensed in each area. As we see in (71), the same type of *wh*-expressions (i.e., information-seeking,

corresponding to new information focus in declarative sentences) is equally possible either in the left periphery or in a postverbal position. Likewise, (72) shows that echo questions are also possible in either construction (see, e.g., Kato 2013, 2019 for relevant discussion).

- (71) a. *Pra quem o João deu um presente?* *information-seeking*
 to who the John gave a gift
 b. *O João deu um presente pra quem?* *information-seeking*
 the John gave a gift to who
 ‘Who did John give a gift to?’ cf. (59)
- (72) A: *O João deu um presente pro Papa.*
 ‘John gave a gift to the Pope.’
 B1: *PRA QUEM o João deu um presente?!* *echo question*
 to who the John gave a gift
 B2: *O João deu um presente PRA QUEM?!* *echo question*
 the John gave a gift to who
 ‘WHO did John give a gift to?!’

Finally, with low focus movement unavailable in (73), as discussed in Section 4.1.4, the *wh*-expression cannot resort to a high focus position either, which provides evidence for the possibility of *wh*-licensing truly in situ, as in (74a). The purported derivation in (74b), where *pra qual aluno* ‘to which student’ moves to a left-peripheral focus position, followed by remnant movement of TP (to account for the linear order), is doomed to disrupt the necessary c-command relation between the subject (a strong distributive quantifier) and the *wh*-expression necessarily distributed over by the quantifier. We can therefore conclude that *wh*-licensing is possible without movement to a focus position (see, e.g., DeRoma 2011 for additional evidence and relevant discussion).

- (73) *Cada professor deu algo pra qual aluno?* cf. (63)
 each teacher gave something to which student
 ‘Which student did each teacher give something to?’
- (74) a. [TP Cada professor deu [vP [vP algo [v' *pra qual aluno*]]]]
 b. *[TopP [TP Cada professor deu algo t_w]TP [FocP *pra qual aluno*_w [Foc' tTP]]]

Needless to say, the problems discussed above are not exclusive of ordinary ditransitive constructions, as much as they are revealed by them. For example, the issue of non-topics being forced to appear in a purported topic position (cf. (70) above) is also present in (75), where the (mono-)transitive verb *pesar* ‘to weigh’ selects for a non-referential direct object, which cannot be topicalized.²⁰ As such, sentence (75a) cannot be derived in the manner of (75b), which resorts to low *wh*-movement. Similarly, the direct object in (76a) is part of an idiomatic expression and for that reason cannot be topicalized either, showing that the derivation in (76b) is unavailable.

²⁰ I thank Jairo Nunes (p.c.) for bringing this test to my attention.

- (75) a. O João pesava cinquenta quilos quando?
 the John weighed fifty kilos when
 ‘When did John weigh fifty kilos?’
 b. *O João pesava [_{TopP} cinquenta quilos [_{FocP} quando [_{VP} [_{VP}]]]]
- (76) a. O João tem uma queda por quem?
 the John has a fall for who
 ‘Who does John have a crush on?’
 Lit. ‘Who does John have a fall for?’
 b. *O João tem [_{TopP} uma queda [_{FocP} por quem [_{VP} [_{VP}]]]]

As is the case with (73) above, an alternative derivation resorting to left-peripheral *wh*-movement followed by remnant movement of the TP is also ruled out for sentences like (75a) and (76a). Observe that in (77)–(78) the distributive relation between the subject quantifiers and the *wh*-expressions is well-formed, which would not be the case under a remnant movement analysis, since the necessary c-command relation would be disrupted in the same manner as above. It must then be the case that the relevant *wh*-expressions do not undergo *wh*-movement and are licensed in situ.

- (77) Cada criança pesou cinquenta quilos em qual data?
 each child weighed fifty kilos in which date
 ‘On which date did each child weigh fifty kilos?’
- (78) Cada menino tem uma queda por qual menina?
 each boy has a fall for which girl
 ‘Which girl does each boy have a crush on?’

In conclusion, we saw above that replacing the relevant foci by *wh*-expressions does nothing to salvage low focus/*wh*-movement with respect to the problems discussed in Section 4.1. Next, we will see that the analysis of *wh*-in situ constructions in Brazilian Portuguese involving low *wh*-movement also brings additional problems of its own.

4.2.2. *Pied-piping and sub-extraction*

Let us now look into the problem posed by the paradigm in (79) for the assumption that *wh*-in situ is moved to a low focus position, as in (e.g.) Kato’s (2013) analysis. In the sentences in (79), the *wh*-expression in question is *de que autor* ‘by which author’, which is a sub-constituent of the direct object *um livro de que autor* ‘a book by which author’. Sentence (79a) shows that fronting of the whole direct object with pied-piping of the *wh*-expression is possible, whereas (79b) shows that fronting of the *wh*-expression alone (i.e., sub-extraction without pied-piping) is also possible.

- (79) a. Um livro *de que autor* o João resenhou (ontem)?
a book of which author the John reviewed (yesterday)
b. *De que autor* o João resenhou um livro (ontem)?
of which author the John reviewed a book (yesterday)
c. O João resenhou um livro *de que autor* (ontem)?
the John reviewed a book of which author (yesterday)
d. *O João resenhou *de que autor* um livro (ontem)?
the John reviewed of which author a book (yesterday)
‘John reviewed a book *by which author* (yesterday)?’

Now consider the structures in (80). If sentence (79c) above (the crucial *wh*-in situ case) involved movement of the whole direct object to a low focus position (i.e., low movement with pied-piping), as in (80c), it would be the low counterpart of (79a), represented in (80a). Crucially, given the acceptability of (79b), represented in (80b), an analysis like Kato’s (2013) predicts that (79d) (i.e., low sub-extraction without pied-piping), represented in (80d), should also be acceptable, as the low counterpart of (79b). That prediction is, however, not borne out; the structures in (80c–d) are therefore taken to be unavailable.

- (80) a. [_{FocP} [Um livro *de que autor*]_i [_{TP} o João resenhou [_{vP} [_{vP} *t_i*]]]]
b. [_{FocP} [*De que autor*]_i [_{TP} o João resenhou [_{vP} [_{vP} [um livro *t_i*]]]]]
c. [_{TP} O João resenhou [_{FocP} [um livro *de que autor*]_i [_{vP} [_{vP} *t_i*]]]]
d. *[_{TP} O João resenhou [_{FocP} [*de que autor*]_i [_{vP} [_{vP} [um livro *t_i*]]]]]

The gap in the paradigm in (79) above therefore remains unaccounted for if low *wh*-movement to a focus position in the periphery of vP is available in Brazilian Portuguese. If conversely sentence (79c) involves a *wh*-expression truly in situ (since there is no low *wh*-movement in the language), sentence (79d) is correctly ruled out, as the sub-extracted *wh*-PP has no position to move to in the periphery of vP.

4.2.3. Preposition stranding

Another problem for the low *wh*-movement analysis concerning sub-extraction of *wh*-expressions in Brazilian Portuguese is seen in cases of preposition stranding. As is well-known, Brazilian Portuguese is not a prototypical preposition stranding language, whence the ungrammaticality of (81a–b) with simple functional prepositions. However, in cases of complex (e.g., spatial) prepositional phrases, as in (82), preposition stranding may be allowed (cf. (82c)).²¹

- (81) a. **Quem* você deu o livro pra?
who you gave the book to
‘Who did you give the book to?’
b. **Quem* você está rindo de?
who you are laughing of
‘Who are you laughing at?’

²¹ On the correlation between richness of structure in prepositional phrases and the availability of preposition stranding, see Bošković (2014).

- (82) a. O carro passou por cima do quê?
 the car passed through top of-the what
 b. Por cima do *quê* o carro passou?
 through top of-the what the car passed
 c. *O que* o carro passou por cima?
 the what the car passed through top
 ‘What did the car run over?’

Taking the (albeit restricted) availability of preposition stranding in Brazilian Portuguese to our advantage, we can test for the availability of low *wh*-movement in the language in the same manner we did in the previous section. If (82a) involves movement of the spatial PP to a low focus position (as the low counterpart of the high pied-piping in (82b)), the availability of (82c) (i.e., fronting of the *wh*-expression alone, stranding the preposition) leaves room for the availability of (83a) below, whose purported structure is given in (83b). Sentence (83a) is however ungrammatical, contrary to the above prediction. As a conclusion, sentence (82a) cannot have the structure in (84a) and is better analyzed as involving the relevant PP in situ, as in (84b).

- (83) a. *O carro passou (d)o *que* por cima?
 the car passed (of-)the what through top
 ‘What did the car run over?’
 b. *[TP O carro passou [_{FocP} (d)o *que*_w [_{VP} [_{VP} por cima t_w]]]]
- (84) a. *[TP O carro passou [_{FocP} por cima do *quê*_w [_{VP} [_{VP} t_w]]]] cf. (82a)
 b. [TP O carro passou [_{VP} [_{VP} por cima do *quê*]]]

We have thus seen that *wh*-fronting and *wh*-in situ constructions do not pattern alike with respect to the possibility of preposition stranding in Brazilian Portuguese, which lends additional support for analyzing *wh*-in situ in the language as being truly in situ and without involving low *wh*-movement. Coupled with the many empirical challenges faced by the low focus movement analysis discussed in Section 4.1 involving (declarative) foci in ditransitive constructions, the data discussed in this section involving *wh*-in situ constructions provide further evidence for the claim that there is no low focus movement in Brazilian Portuguese and that focus interpretation can be licensed in situ; that is, no focus movement is required to formally license focus interpretation of postverbal elements in the language. That being the case, contrary to what has been traditionally assumed in the literature on Brazilian Portuguese, there is not a focus-designated position in that area of the clause and Belletti’s (2004) FocP should therefore not be resorted to in the language.

The possibility of focalization being done in situ in Brazilian Portuguese suggests that focus fronting, which does happen in the language, cannot in its turn be triggered by the formal licensing of focus interpretation; that is, focus fronting cannot be a formal result of the Focus Criterion (Rizzi 1997), since, as we saw, postverbal foci provide evidence that the criterion does not hold in the language.²²

²² There is evidence that focalization in situ in Brazilian Portuguese does not involve (covert) LF-movement either (this language would thus be similar to European Portuguese in that respect; see Costa 2000). As is well-known, *wh*-expressions in Brazilian Portuguese can be licensed in situ even within islands (unlike in, e.g., French; see DeRoma 2011 for an analysis of *wh*-in situ that does not involve LF-movement). The conversation in (i) shows that, just like *wh*-in situ, both new information and contrastive foci in situ can also be licensed within an (adjunct) island (that is,

The observations made above regarding postverbal focalization in Brazilian Portuguese therefore call us to rethink focus fronting in the language. To conclude the paper, I will in the next section briefly suggest a way to reanalyze focus fronting and point out the direction of future research.

5. Consequences for left-peripheral focalization

If the claim made in the previous section that focus movement is not necessary for the licensing of focus interpretation in Brazilian Portuguese is correct, we are left with the question of what is behind focus fronting in the language, which is possible and at first sight seems to take place interchangeably with focalization in situ, as is illustrated in (85), repeated from (59) above.²³

- (85) A: Pra quem o João deu um presente? = (59)
 ‘Who did John give a gift to?’
 B1: O João deu um presente *só pra Maria_F*.
 the John gave a gift only to-the Mary
 B2: *Só pra Maria_F* o João deu um presente.
 only to-the Mary the John gave a gift
 ‘John gave a gift *only to Mary_F*.’

To the best of my knowledge, not a single case is found in the language where failure to front a focus leads to unacceptability, as far as the licensing of focus interpretation is concerned. On the other hand, cases where focus fronting leads to unacceptability can indeed be found, as in (86)–(87) below. In (86B1–B2), all that is at stake regarding the focalized element *um carro* ‘a car’ is its introduction as new information ((86A) being a simple information-seeking question); here, the focalized element is acceptable in situ but pragmatically odd when fronted. In fact, Quarezemin (2009) shows (through a multiple-choice experiment) that marking the focus in the prosody alone (keeping the canonical order) is the preferred option by speakers to indicate new information focus.

without LF-movement to the matrix CP). See Lacerda (2020) for additional independent evidence that focalization in situ in Brazilian Portuguese does not involve covert movement.

- (i) A: O Pedro saiu depois que a Maria conversou *com quem?*
 the Pedro left after that the Mary talked with who
 ‘Peter left after Mary talked *to whom?*’
 B: O Pedro saiu depois que a Maria conversou *com o João_F*. *new information*
 the Pedro left after that the Mary talked with the John
 ‘Peter left after Mary talked *to John_F*.’
 C: Não, não. O Pedro saiu depois que a Maria conversou *com o Ricardo_F*. *contrastive*
 no no the Pedro left after that the Mary talked with the Richard
 ‘No, no. Peter left after Mary talked *to Richard_F*.’

The grammaticality of (iA–C) above additionally argues against the remnant movement analysis of focalization in situ, as discussed in the text, given that the relevant *wh*-/focalized expressions cannot move out of the island to the matrix CP.

²³ See Santos (2003) and Nunes & Santos (2009) for evidence that focus fronting in Brazilian Portuguese is derived by movement and relevant discussion.

- (86) A: No fim, o que o João comprou?
 ‘What did John buy in the end?’
 B1: Ele acabou comprando *um carro_F*, no fim das contas
 he ended.up buying a car in-the end of-the counts
 B2: #*Um carro_F* ele acabou comprando, no fim das contas.
 a car he ended.up buying in-the end of-the counts
 ‘He ended up buying *a car_F*, after all.’

Similar remarks also apply to the context in (87), involving contrastive focalization. In (87B1–B2), all that is at stake regarding the focalized element is its introduction as contrastive information, and again the focus is better off unmoved.²⁴

- (87) A: O João comprou uma motocicleta.
 ‘John bought a motorcycle.’
 B1: (Não, não.) Ele acabou comprando *um carro_F*.
 no no he ended.up buying a car
 B2: (Não, não.) #*Um carro_F* ele acabou comprando.
 no no a car he ended.up buying
 ‘(No, no.) He ended up buying *a car_F*.’

So the question in our hands now is what distinguishes cases like (85B2) above, where focus fronting is perfectly acceptable, from cases like (86B2) and (87B2), where focus fronting is unacceptable/infelicitous. Incidentally, the good case (85B2) involves one thing that the odd cases (86B2)–(87B2) do not, namely, the presence of the focus-sensitive particle *só* ‘only’, which indicates that the focus in question is exhaustive. In more general terms, (85B2) involves an additional interpretive factor that operates on top of focalization, rather than simple focalization alone. In light of that observation, I would like to put forth and explore the hypothesis that focus fronting in Brazilian Portuguese is licensed when focalization (be it new information or contrastive) is accompanied by additional interpretive effects of semantic and/or pragmatic nature. Under this view of left-peripheral focalization, the research agenda is thus to identify which interpretive factors make focus fronting possible in the language (and ultimately explain why). In an attempt to kick off that enterprise, I will first discuss some semantic effects (Section 5.1) and some pragmatic effects (Section 5.2) that allow focus fronting in Brazilian Portuguese.

²⁴ I am of course excluding cleft constructions, which are known to operate on (contrastively) focalized elements, as illustrated in (i) below, since this paper is concerned with focalization in the canonical order and variations thereof. Given that (contrastive) foci exist outside of cleft constructions and that cleft constructions do not exist without (contrastive) foci, it is fair to conclude that focus movement in cleft constructions such as (i) below is triggered by a necessity of the additional structure introduced by the cleft construction, not by a necessity of the focus itself (which, again, can very well exist outside of clefts).

- (i) A: O João comprou uma motocicleta.
 ‘John bought a motorcycle.’
 B: (Não, não.) Foi *um carro_F* que ele acabou comprando.
 no no was a car that he ended.up buying
 ‘(No, no.) It was *a car_F* that he ended up buying.’

5.1. Semantic effects

Let us start our discussion by making a brief excursus to Hungarian, a language that has been traditionally assumed to have focus-driven movement, as is well-known. Having previously argued that focus movement in the language is formally triggered by focus (Horvath 1986, 1995), Horvath (2010) revisits the problem and proposes that the operation is in fact triggered by exhaustivity, not by mere focus interpretation. In her own words, “[s]o-called focus movement (as instantiated in Hungarian) is actually EI-Op(erator) [*Exhaustive Identification Operator*; RL] movement.” (p. 1358). While exhaustive foci must be fronted in Hungarian, non-exhaustive foci must appear in situ, the author argues, as in the contrast between (88A) and (89A) below. That the fronting of *Jánost* in (88A) indicates an exhaustive answer is shown in the reply by speaker B, who must first challenge the exhaustivity of speaker A’s statement (by denying it) in order to add *Marit* to the answer.

- (88) Q: ‘Who did they call up?’
 Speaker A: [JÁNOST] hívták fel.
 John-ACC called-3PL up
 ‘They called up JOHN.’
 Speaker B: Nem igaz. MARIT is felhívták.
 not true Mary-ACC also up-called-3PL
 ‘Not true. They also called up MARY.’
 Compare:
 B’: #Igen. És (felhívták) MARIT is.
 yes and up-called-3PL Mary-ACC also
 ‘Yes. And (they called up) MARY too.’ (Horvath 2010: 1359)

Conversely, in (89A) the answer to *where* in the question (i.e., *az interneten* ‘on the internet’) is given as an example of a place where one can find information about the train schedule. As such, the non-exhaustive focus in situ allows for the expansion of the answer (by adding *vagy telefonon* ‘or also by phone’).

- (89) Q: Hol tudhatnám meg a vonatok menetrendjét?
 where know-can-COND-1SG PERF.PRT the trains’ schedule-POSS-ACC
 ‘Where could I find out about the train schedule?’
 A: Megtudhatod (például) AZ INTERNETEN
 PERF.PRT.-know-can-2SG for example the internet-on
 (vagy TELEFONON is).
 or phone-on also
 ‘You could find out about it (for example) on the internet (or also by phone).’
 (Horvath 2010: 1356)

We can then borrow Horvath’s (2010) general idea that a particular semantic operation enables focus fronting in Hungarian and adapt it to Brazilian Portuguese. Let us then see some concrete examples. First, as we saw in the example (85) above, repeated below in (90), the presence of the exhaustive particle *só* ‘only’ makes focus fronting possible in the language. Unlike what happens in Hungarian, though, where movement of exhaustive foci is obligatory, fronting of exhaustive

foci in Brazilian Portuguese is optional (the presence of the exhaustive particle *só* ‘only’ thus being obligatory to indicate exhaustivity). What matters for our current discussion is crucially that (90B2) does not involve (new information) focalization alone, but rather focalization and exhaustivity combined.

- (90) A: Pra quem o João deu um presente? cf. (85)
 ‘Who did John give a gift to?’
 B1: O João deu um presente *só pra* *Maria_F*.
 the John gave a gift only to-the Mary
 B2: *Só pra* *Maria_F* o João deu um presente.
 only to-the Mary the John gave a gift
 ‘John gave a gift *only to Mary_F*.’

Another semantic operation that licenses focus fronting in Brazilian Portuguese is the introduction of scalarity, as is done by focus-sensitive particles such as *até* ‘even’ and *nem* ‘not even’, as in (91) and (92), respectively. Crucially, the scalar implicatures introduced by the relevant particles apply in addition to (and independently of) the informational import of the focalized element, and without that additional interpretive effect, focus fronting would not be pragmatically licensed. Note also that, as is the case with exhaustivity, focus fronting is not required for the introduction of scalarity (which is done by the particles themselves).

- (91) A: Pra quem o João deu um presente?
 ‘Who did John give a gift to?’
 B1: O João deu um presente *até pra* *Maria_F*.
 the John gave a gift even to-the Mary
 B2: *Até pra* *Maria_F* o João deu um presente.
 even to-the Mary the John gave a gift
 ‘John gave a gift *even to Mary_F*.’
- (92) A: Pra quem o João não deu um presente?
 ‘Who didn’t John give a gift to?’
 B1: O João não deu um presente *nem pra* *Maria_F*.
 the John not gave a gift not.even to-the Mary
 B2: *Nem pra* *Maria_F* o João deu um presente.
 not.even to-the Mary the John gave a gift
 ‘John didn’t give a gift *even to Mary_F*.’

To cite one last example of semantic nature, we can see in (93) that the addition of specificity to an indefinite DP can also make focus fronting felicitous in Brazilian Portuguese. In (93B2), the focalized indefinite DP *dois livros* ‘two books’ is interpreted as specific and can thus be focalized in the left periphery. The specific property of the direct object is evidenced by the continuation, where the two books are individually identified; without the continuation, (93B2) would be pragmatically odd (with the intended interpretation). Again, focalization in situ is also possible.

- (93) A: Quais/Quantos livros o João leu?
 ‘Which/How many books did John read?’
 B1: O João leu *dois livros*_F: *Emma e Orgulho e Preconceito*.
 the John read two books Emma and Pride and Prejudice
 B2: *Dois livros*_F o João leu: *Emma e Orgulho e Preconceito*.
 two books the John read Emma and Pride and Prejudice
 ‘John read *two books*_F: *Emma and Pride and Prejudice*.’

We have seen above (for the sake of exemplification) three semantic effects (namely, exhaustivity, scalarity, and specificity) that are independent of focalization (i.e., they can also apply to non-focal elements) and independent of movement (i.e., they can also take place with the relevant elements in situ), but when combined with focalization may license focus fronting in Brazilian Portuguese, which, as we saw, is not permitted in the absence of additional interpretive effects such as those. Let us now move on to other interpretive effects of a more pragmatic nature.

5.2. Pragmatic effects

One pragmatic effect that licenses focus fronting in Brazilian Portuguese is *D-linking* (in the sense of Pesetsky 1987, 2000). Let us first look at (94), where no D-linking is involved. Sentence (94A) is a simple information-seeking question; as such, the focus in the answer is better off in its canonical position if no other interpretive effects are present, which makes (94B1) felicitous and (94B2) infelicitous. Note that the entire direct object *um livro do Chomsky* ‘a book by Chomsky’ is new information, as it answers the non-D-linked *wh*-expression *o que* ‘what’.

- (94) A: No fim, o que o João comprou?
 ‘What did John buy in the end?’
 B1: Ele comprou *um livro do Chomsky*_F.
 he bought a book of-the Chomsky
 B2: #*Um livro do Chomsky*_F ele comprou.
 a book of-the Chomsky he bought
 ‘He bought *a book by Chomsky*_F.’

In (95), on the other hand, the question in (95A) includes a D-linked *wh*-expression, namely *qual livro* ‘which book’ and establishes in the common ground that John was expected to buy a book. Now, in addition to focalization in situ of the D-linked DP *um livro do Chomsky* ‘a book by Chomsky’ in (95B1) (where only *do Chomsky* is new information), focus fronting is also possible in (95B2).²⁵

²⁵ It is important to show that, as far as information structure and question-answer congruence are concerned, the whole direct object *um livro do Chomsky* ‘a book by Chomsky’ counts as a focus in (95), even though only the PP *do Chomsky* ‘by Chomsky’ is new information. As (i) below shows, the question in A asks for an entity and not a property, which can be answered by a DP but not by a PP.

- (95) A: Eu sei que o João foi na livraria hoje cedo. Qual livro ele comprou?
 ‘I know that John went to the bookstore this morning. Which book did he buy?’
 B1: Ele comprou um livro *do Chomsky_F*.
 he bought a book of-the Chomsky
 B2: Um livro *do Chomsky_F* ele comprou.
 a book of-the Chomsky he bought
 ‘He bought a book *by Chomsky_F*.’

Though many semantic and pragmatic effects seem to license focus fronting in Brazilian Portuguese, as we just saw, perhaps the most salient and notable factor is *unexpectedness*, given that this pragmatic effect can in fact easily co-occur with the other interpretive effects mentioned above. A number of authors (e.g., Zimmermann, 2008; Zimmermann & Onea, 2011; Cruschina 2012; Bianchi, Bocci, & Cruschina, 2016; Carella, 2016; Authier & Haegeman, 2019) have pointed out that in other Romance languages (at least some instances of) focus fronting can be interpreted as involving unexpectedness on the part of the speaker (which is sometimes referred to as *mirative focus*; see Cruschina 2012). For example, Bianchi, Bocci, & Cruschina (2016) analyze unexpectedness (in mirative focus) in terms of likelihood, in that the expressed proposition is less likely than alternative propositions in a given context. As is illustrated in the Italian example in (96), fronting of *un anello di diamanti* ‘a diamond ring’ conveys the import that the gift given by John to Mary is unexpected, that is, less likely than other alternative gifts.

- (96) Gianni è innamorato pazzo di Maria. Pensa un po’... *Un anello di diamanti*
 John is in-love mad with Maria think a little a ring of diamonds
 le ha regalato!
 to-her.CL has given
 ‘John is madly in love with Mary. Guess what! He gave her *a diamond ring!*’
 (Bianchi, Bocci, & Cruschina 2016: 14)

In Brazilian Portuguese as well, unexpectedness in focus fronting is often realized in contexts of surprise or exclamation; as such, an example equivalent to the Italian one in (96) above is also attested in this language, as is seen in (97).²⁶

-
- (i) A: Eu sei que o João foi na livraria hoje cedo. Qual livro ele comprou?
 ‘I know that John went to the bookstore this morning. Which book did he buy?’
 B1: Um livro *do Chomsky*.
 a book of-the Chomsky
 ‘A book by Chomsky.’
 B2: #Do Chomsky.
 of-the Chomsky
 ‘By Chomsky.’

²⁶ It has been argued in the literature that mirative focus fronting may be associated with syntactic properties that distinguish it from other instances of focus fronting. For example, Cruschina (2012) argues that mirative focus fronting and contrastive focus fronting in Italian target different positions in the left periphery of the sentence and that mirative focus fronting, unlike contrastive focus fronting, must be adjacent to the verb and is subject to a root restriction (see also Bianchi, Bocci, & Cruschina, 2016; see Costa & Martins 2011 for related issues on contrastive focus fronting in European Portuguese). To the extent that I could test so far, no syntactic consequences can be observed to differentiate focus fronting with and without the unexpectedness effect in Brazilian Portuguese (other than a root restriction for unexpectedness). For that reason, I remain agnostic for the moment as to whether focus fronting conveying

- (97) O João está muito apaixonado pela Maria. Adivinha só: *um anel de diamante*_F
 the John is very in.love for-the Mary guess only a ring of diamond
 ele deu pra ela!
 he gave to her
 ‘John is madly in love with Mary. Guess what! He gave her *a diamond ring*_F!’

As was mentioned above, unexpectedness can be combined with the other interpretative effects mentioned earlier in this section in Brazilian Portuguese. The contexts below show how unexpectedness can co-occur with exhaustivity in (98), scalarity in (99), specificity in (100), and D-linking in (101) (recall that these effects can also license focus fronting in this language in the absence of the unexpectedness import).

- (98) A: O João tem tomado todos os remédios direitinho?
 ‘Has John been taking all the medicines correctly?’
 B: *Só o comprimido*_F o João tomou hoje! Acredita?
 only the pill the John took today believe
 ‘*Only the pill*_F John took today! Can you believe it?’
- (99) A: O João tem tomado todos os remédios direitinho?
 ‘Has John been taking all the medicines correctly?’
 B: Nem o comprimido o João tomou hoje! Acredita?
 not.even the pill the John took today believe
 ‘*Not even the pill*_F did John take today! Can you believe it?’
- (100) A: No fim o João encontrou algum amigo pra ir no cinema com ele?
 ‘In the end did John find any friends to go to the movies with him?’
 B: *Quatro amigos*_F ele encontrou: *a Ana, a Beatriz, o Carlos, e o Diego*.
 four friends he found the Ana the Beatriz the Carlos and the Diego
 ‘*Four friends*_F he found: Ana, Beatriz, Carlos, and Diego.’
- (101) A: Eu sei que o João foi na livraria hoje cedo. Qual livro ele comprou?
 ‘I know that John went to the bookstore this morning. Which book did he buy?’
 B: Um livro *do Paulo Coelho*_F ele comprou! Acredita?
 a book of-the Paulo Coelho he bought believe
 ‘A book *by Paulo Coelho*_F he bought! Can you believe it?’

Finally, the use of minimizers further confirms that unexpectedness licenses focus fronting in Brazilian Portuguese. Observe the contrast between (102) and (103) below. The question in (102A) is a simple information-seeking one; thus, fronting of the new information focus *nada* ‘nothing’ in (102B1) (with no special intonation or interpretive effect added) is ruled out as pragmatically infelicitous, while the focalization in situ in (102B2) is well-formed and felicitous.

unexpectedness in Brazilian Portuguese should be syntactically analyzed as a separate operation, as is done for Italian in the works cited above.

- (102) A: No fim, o que o João comprou?
 ‘What did John buy in the end?’
 B1: #*Nada*_F ele comprou.
 nothing he bought
 ‘*Nothing*_F did he buy.’
 B2: Ele não comprou *nada*_F.
 he not bought nothing
 ‘He didn’t buy *anything*_F.’

Now, if the context sets up an expectation that John was supposed to buy something, emphatic minimizers such as *nadica de nada* and *coisa nenhuma* ‘nothing at all’ can be employed to give a negative answer, as in (103). As the answers are given as a surprise or exclamation (with the appropriate intonation), focus fronting becomes acceptable, as in (103B1–B2), on a par with focus in situ, as in (103B3–B4).

- (103) A: Você disse que o João foi no mercado hoje cedo. O que ele comprou?
 ‘You said that John went to the market this morning. What did he buy?’
 B1: *Nadica de nada*_F ele comprou! Saiu de casa à toa.
 nothing of nothing he bought left from house in vain
 B2: *Coisa nenhuma*_F ele comprou! Saiu de casa à toa.
 thing none he bought left from house in vain
 ‘*Nothing at all*_F did he buy! He left the house in vain.’
 B3: Ele não comprou *nadica de nada*_F! Saiu de casa à toa.
 he not bought nothing of nothing left from house in vain
 B4: Ele não comprou *coisa nenhuma*_F! Saiu de casa à toa.
 he not bought thing none left from house in vain
 ‘He didn’t buy *anything at all*_F! He left the house in vain.’

In all the relevant examples above, the interpretive effects at stake apply in addition to (and independently of) the informational import of focalization. Considering that focalization (with regards to its import in discourse of introducing new or contrastive information) does not depend on the presence of such additional semantic/pragmatic effects to be licensed (i.e., focalization can exist without them), and considering that effects of that sort are in fact required to license focus fronting in Brazilian Portuguese, we can then conclude that focus fronting in the language is not (formally) motivated by the licensing of focus interpretation.

As a consequence, the mere existence of focus fronting in Brazilian Portuguese cannot be taken as evidence for the validity of the Focus Criterion (Rizzi 1997) in the language; on the contrary, upon closer scrutiny, focus fronting can be argued not to be motivated by it. Coupled with the observations made in Section 4 regarding postverbal focalization, the data discussed in this section therefore provide further evidence for the view that (both new information and contrastive) foci can be syntactically licensed and interpreted (*qua* informational objects) in situ, in clause-internal positions (as in, e.g., Rooth’s 1985 system, where all foci are interpreted in situ).

Crucially without the need to appeal to the Focus Criterion, the full characterization of focus fronting in Brazilian Portuguese must therefore look for generalizations in the realm of the semantic and pragmatic effects that can be shown to license it, some examples of which we saw above, most notably unexpectedness. By their very nature, it is not surprising that interpretive

effects such as the ones illustrated here are related to the CP (i.e., the so-called “discourse domain” of the clause), which is targeted by focus fronting. It is thus the connection between each of these interpretive effects and the left-peripheral focus position that one must seek to fully characterize focus fronting in Brazilian Portuguese at the syntax-discourse interface.

6. Final remarks

Contrary to what the literature on Brazilian Portuguese has traditionally assumed, I argued in this paper that this language does not have the operation often referred to as “low focus movement” and, as such, does not have a focus-designated position in the periphery of vP, unlike what was proposed by Belletti (2004) for Italian under cartographic assumptions. Based on several tests with novel data from two independent empirical domains (namely, ditransitive and *wh*-in situ constructions), I argued that postverbal focalization in Brazilian Portuguese is better analyzed as taking place in situ, that is, without an additional step of formally-driven focus movement removing focalized elements from their canonical positions.

Based on that discussion, I concluded that Rizzi’s (1997) Focus Criterion is not operative in Brazilian Portuguese, since the syntactic licensing of focus interpretation in this language cannot be tied to the movement of focalized elements to the specifier of a focus-designated projection such as FocP — in particular, not a clause-internal one such as Belletti’s (2004). That conclusion was further strengthened by the scrutiny of focus fronting, which, despite involving overt movement, cannot be argued to be responsible for the licensing of focus interpretation, since foci are never required to be fronted in the language. Instead, as we saw, focus fronting seems to be contingent on the presence of other semantic and/or pragmatic effects that are independent of the (formal) licensing of focus interpretation — a view that I believe opens a new, promising avenue of research for the phenomenon in the language.

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