Topicalization as Predication: The Syntax-Semantics Interface of Low Topics in Brazilian Portuguese

Renato Lacerda

1. Introduction

The majority of the works on topicalization in the generative literature deals with phenomena involving the (high) left periphery of the sentence, i.e. the CP area. However, topicalization has also been shown to occur in the (low) left periphery of vP (e.g. by Belletti 2004 for Italian). This paper expands the investigation of low topicalization by examining data from Brazilian Portuguese (BP). The idiosyncrasies of low topics in BP are revealed through the comparison of the CP and the vP area, for which I use minimal pairs like (1), where (a) illustrates a high topic and (b) illustrates a low topic.1,2 Although I mostly use adnominal PPs, adverbial elements and categories other than PPs are also possible as both high and low topics, as shown in (2). Throughout the paper, I make use of Topic projections represented in the clausal spine as in (3), which I adopt from Rizzi (1997) and Belletti (2004).3

(1) a. Do Kafka, o João resenhou só dois livros. High topic: CP area
the Kafka of-the John reviewed only two books
b. O João resenhou, do Kafka, só dois livros. Low topic: vP area
the John reviewed of-the Kafka only two books by Kafka.’

(2) a. Com pressa, (desesperadamente,) o João leu só dois livros. with hurry (desperately) the John read only two books
b. O João leu, com pressa, (desesperadamente,) só dois livros. the John read with hurry (desperately) only two books ‘John read only two books in a hurry (desperately).’

(3) [CP [H-TopP (high topic) [TP subject verb [L-TopP (low topic) [vP/AgroP object ] ] ] ] ] ]

I first show that low topicalization is significantly different from high topicalization, in the sense that the former only allows for a subset of the interpretations possible in the latter and crucially has a stricter discursive articulation of topic and comment. I then move onto a more specific asymmetry, which was previously unobserved: while a high topic does not impose any constraints on the scopal behavior of quantifiers generated within its comment, a quantifier generated under a (clause-mate) low topic cannot be interpreted in a position lower than the low TopP. In order to account for this fact, I propose that contrary to high topicalization, which operates over complete propositions (of type \(t\)), low topicalization (in BP at least) operates over unsaturated verbal predicates (of type \(<e,t>\)).

---

1 Translations will often be given in a non-topicalized form, where the topic appears underlined.
2 To the best of my knowledge, constructions like (1)b in BP were first noticed by Avelar (2006). This work, however, does not deal with the topicalhood of the moved elements, but rather focuses on the internal structure of the DP that they originate in.
3 Subject and verb are standardly assumed to move to the TP area in BP; see e.g. Tescari Neto (2013).

2. The interpretation of high and low topicalization

High topics in BP can be of a variety of types. They can have either aboutness-shift or contrastive interpretation and can be linked to a comment-internal position (connected topic) or not (strict hanging topic). Low topics are, however, more restricted. Thus (4) shows that a high but not a low topic can have aboutness interpretation, and (5) shows that a (strict) hanging topic is possible in the high but not in the low topic position.

(4) A: *Tell me something about the Renaissance fair.
       B: (N)a feira renascentista, eu vou levar o João.
       (in-)the fair renaissance I will take the John
       B': #Eu vou levar, na feira renascentista, o João.
           I will take in-the fair renaissance the John
           ‘I will take John to the renaissance fair.’

(5) a. Fruta, eu gosto de maçã.
      fruit I like of apple
b. *Eu gosto, fruta, de maçã.
      I like fruit of apple
      ‘As for fruits, I like apples.’

In other words, low topics must have contrastive interpretation and connected construal. In order to keep the comparison between high and low topics fair in what follows, I will restrict myself to cases of contrastive topicalization, which is appropriate in contexts where a set of alternatives is evoked (see e.g. Büring 2003 and references therein for the semantics and the prosody of contrastive topics).

2.1. High topics: H-topic > Comment

High topicalization is usually assumed to involve a bi-articulated structure in the discourse, where the topic is related to a comment, in a relation that is read off syntax. Rizzi (1997) proposed that the articulation of topic and comment is made via a Topic projection in the CP domain, which relates its specifier and its complement in the manner shown in (6). Usually, which is also the case in BP, the informational composition of the comment of a high topic may vary with respect to what is new (focus) and what is old (given) information. In other words, a high topic may be associated with a comment that is partially new, as in (7)a, or with a comment that is entirely new, as in (7)b. The first case is illustrated in (8): Sentence (a) can be felicitously followed by either (b), where the direct object is new/focus, or (c), where the verbal predicate is new/focus. The second case is illustrated in (9), where each alternative of the set of topics (oranges and limes) is associated with a different comment.

(6) TopP
    / \         / \        / \        / \   
   Topic  Top’  Comment  Top  Comment

(7) a. H-topic > [ (old) *(new) (old) ]Comment
    b. H-topic > [ *(new) ]Comment

4 For (high) topicalization in BP, see Pontes (1987) and Kato (1998), among many others.
5 For a classification of topics, see e.g. Frascarelli & Hinterhölzl (2007) and Bianchi & Frascarelli (2010).
6 It is true though that at some level the two (or more) alternative topics must be related, in a contextually salient way. It is thus hard to think of a context where (i) below would be pragmatically felicitous.
   (i) #Bananas, I usually eat with sugar, and this book, I will read tomorrow.
2.2. Low topics: Ground-comment > L-topic > Focus-comment

Before discussing the interpretive properties of low topicalization, it must be shown that the examples analyzed here do involve the low left periphery (of vP), rather than (a combination of) e.g. DP-internal movement or right-dislocation, which are possibilities independently attested in BP. First, note that in (10) the negative concord item *nenhuma pessoa* ‘no person’ is properly licensed by the sentential negation, which means it is in a low position. The fact that an adverb (e.g. *secretamente* ‘secretly’) can intervene between *dos Democratas* ‘of the Democrats’ and the (structurally low) direct object crucially shows that the topic moves out of the DP where it originates. Also, the topic being in between the negation and the negative concord item shows that it is located in the middle field of the sentence.

(11) There are several books by different authors on the table.
A: What did you do with the books by Kafka?
B: #Eu resenhei, do Kafka, todos os livros.
   I reviewed of-the Kafka all the books.
   ‘I reviewed all the books by Kafka.’
Students were expected to review a number of books by different authors.

A: Who reviewed the books by Kafka?

B: Eu resenhei, do Kafka, todos os livros.
I reviewed all the books by Kafka.

When both the verb and the subject are part of the common ground, low topicalization is possible: the question in (13)A can be felicitously answered by (13)B.

There are several books by different authors on the table.

A: How many books by Kafka did you review?

B: Eu resenhei, do Kafka, todos os livros.
I reviewed all the books by Kafka.

No such restriction arises with high topicalization: any of the questions in (14)A-A" can be felicitously answered by (14)B (which will have a different intonation for each case, depending on the relevant new information). Recall from (7) that the comment of high topics can be freely composed of new information (entirely or partially), unlike low topics.

What did you do with the books by Kafka?

A': Who reviewed the books by Kafka?

A": How many books by Kafka did you review?

B: Do Kafka, eu resenhei todos os livros.
I reviewed all the books by Kafka.

The new/focalized information associated with the contrastive low topic must be part of the lower portion of the comment, which I call focus-comment. This is the case in the felicitous (13)B above and (15)B-B' below, where each of John and Mary (the relevant answers to who in the question) is linked to one of the alternative fairs.

Have you decided who you’re taking to each fair (this week)?

B: Eu vou levar, na feira renascentista, o João (essa semana).
I will take John to the renaissance fair (this week).

B': Eu vou levar, na feira agrícola, a Maria (essa semana).
I will take Mary to the county fair (this week).

The discursive articulation of low topicalization can thus be summarized as in (16)a, with the informational composition detailed in (16)b: the ground-comment cannot contain new information, which must appear in the focus-comment.

a. Ground-comment > L-topic > Focus-comment


Not only does low topicalization have stricter pragmatic requirements than high topicalization, but it also imposes restrictions on the interpretation of other elements in the sentence. More specifically, in the next section I will show how the presence of topics affects the scope of quantifiers generated within their comments. The novel data presented in the next section bear on the main proposal of the paper that low topicalization operates over unsaturated verbal predicates of type <e,t>.
3. Scope interactions in high and low topicalization

In this section, I present a previously unobserved asymmetry between high and low topicalization involving scope; in particular, I show that quantifiers generated under topics have different scopal possibilities depending on whether the topic is in the CP or the vP area.

First, note that the base sentence in (17), without topicalization, is ambiguous in that the quantified expression *duas pessoas dos Democratas* ‘two people of the Democrats’ can have either wide or narrow scope with respect to the matrix verb *negou* ‘denied’. Sentence (17) is thus compatible with both scenarios described below. Scenario 1, where there are two (specific) people of the Democrats that the president denied to have hired, evokes the scopal relation $2 > \text{deny}$. Conversely, in scenario 2, where the negation falls over the number of Democrats hired by the president, the scopal relation evoked is $\text{deny} > 2$.

(17) O presidente negou ter contratado duas pessoas dos Democratas.

‘The president denied to have hired two people of the Democrats.’ $2 > \text{deny}; \text{deny} > 2$

(18) Scenario 1: The president says, “I hired many people among the Republicans and many people among the Democrats. But I did not hire John, Peter, and Mary, among the Republicans, and Bill and Sue, among the Democrats.”

(19) Scenario 2: The president must fill the positions for the Office of Human Rights. For that office, it is the law that the president cannot hire more than one person of his own party. One senator believes that Obama did not meet his obligation, and says, “Obama should be prosecuted. He hired two Republicans, which conforms to the law, but he also hired two people among the Democrats, which is illegal.” The president replies, “I did not hire two Democrats!”

Now let us examine whether the scopal relations are affected when topicalization takes place in (17). In (20), where *dos Democratas* is a high topic, nothing changes in the scopal possibilities between the matrix verb *negou* and the embedded quantifier *duas pessoas*: the sentence is equally ambiguous and thus compatible with both scenario 1 and scenario 2. Each interpretation is associated with a different intonation, in the same manner as (17): surface scope is achieved by a less marked intonation, whereas inverse scope is achieved with a rising intonation on the quantifier.

(20) Dos Democratas, o presidente negou ter contratado duas pessoas.

‘The president denied to have hired two people of the Democrats.’ $2 > \text{deny}; \text{deny} > 2$

Crucially, when topicalization is low, as in (21), the sentence becomes infelicitous in scenario 2, although still compatible with scenario 1. In other words, the embedded object quantifier *duas pessoas* must take wide scope over the matrix lexical negation *negou* (the sentence therefore only allows for one of the two intonations alluded to above, namely the one where the quantifier receives a rising intonation). The fact that inverse scope is the only possibility here is particularly interesting, considering that BP is otherwise a language that favors surface scope (i.e. inverse scope, when possible at all, is associated with a special intonation).

(21) O presidente negou ter contratado, dos Democratas, duas pessoas.

‘The president denied to have hired two people of the Democrats.’ $2 > \text{deny}; *\text{deny} > 2$

Furthermore, in (22), where there are two quantifiers within the focus-comment, both have to be interpreted in a higher position. Whereas the scopal relation $\forall > 2 > \text{forget}$ is available, the scopal relation $\text{forget} > \forall > 2$ is not (sentence (22) thus has the reading in which for every student $x$, there are two books by Kafka that $x$ forgot to review, but not the reading in which the students had to review two books by Kafka each and they forgot to do so).

(22) Furthermore, in (22), where there are two quantifiers within the focus-comment, both have to be interpreted in a higher position. Whereas the scopal relation $\forall > 2 > \text{forget}$ is available, the scopal relation $\text{forget} > \forall > 2$ is not (sentence (22) thus has the reading in which for every student $x$, there are two books by Kafka that $x$ forgot to review, but not the reading in which the students had to review two books by Kafka each and they forgot to do so).
(22) Os alunos esqueceram de resenhar, do Kafka, dois livros cada um (esse semestre). The students forgot to review two books by Kafka each (this semester)."

It should be noted that this restriction is clause-bound: the quantifier in the embedded clause of (23) can (in fact, must) be interpreted under negou (i.e. within its CP), despite the low topic in the matrix.

(23) In all of his recent speeches on TV, the president has denied something. O presidente negou, no pronunciamento de ontem, que ele contratou duas pessoas dos Democratas. "In his speech yesterday, the president denied that he hired two people of the Democrats."

Based on these data, I conclude that a quantifier cannot be interpreted under a clause-mate low topic in BP. In other words, QR cannot target a position under a clause-mate low topic, a rather puzzling state of affairs, considering that high topics disregard the scopal relations within their comments. The question is why this asymmetry arises, i.e. why low topics have such an effect in scopal relations.

4. Topicalization as “predication”

In order to account for the scopal restriction presented in the previous section, I propose an account based on the semantic type of the relevant elements. In particular, I propose that low topics operate over unsaturated verbal predicates, contrary to high topics, which are commonly assumed to operate over complete propositions (of type $t$). This amounts to saying that the complement of L-Top cannot be of type $t$. I then hypothesize that the VP selected by L-Top is of type $<e,t>$. In other words, the asymmetry discussed above is a consequence of the two (i.e. high and low) Top heads differing in their semantic composition. While H-Top relates a topic (of type $\alpha$) to a proposition of type $t$, L-Top relates a topic (of type $\alpha$) to a verbal predicate of type $<e,t>$ (to be saturated later on by the subject), as in (24) and (25).

(24) $\text{H-Top}_P \, t$

High topic $\alpha$ \quad $\text{H-Top}^* \, <\alpha,t>$

\quad $\text{H-Top} \, <t,\alpha,t>> \quad TP \, t$

(25) $\text{L-Top}_P \, <e,t>$

Low topic $\alpha$ \quad $\text{L-Top}^* \, <\alpha,et>$

\quad $\text{L-Top} \, <e\alpha,et>> \quad \text{vP} \, <et>$

We can now go back to (21), where duas pessoas must take scope over negou. Observe in (26) that the quantifier cannot target the embedded VP, for it is of type $<e,t>$; it must then raise (at least) as far as the first projection of type $t$ available (since QR is standardly taken to target positions of type $t$), namely the (saturated) matrix VP. Once duas pessoas is adjoined to the VP where negou is interpreted, its wide scope is accounted for (the semantically vacuous movement of negou to T is not represented here).

---

8 Or even something of a higher order. For instance, Krifka (2001) suggests that aboutness topics are speech acts on their own, conjoined to another speech act (their comments). See Bianchi & Frascarelli (2010) and references therein for a discussion of the distinction between aboutness and contrastive (high) topics regarding what they operate over.

9 Notice that if the quantifier could adjoin to PartP or XP, it would be able to move from under the topic and still be under the scope of ‘denied’. Given that this interpretation is ruled out, I conclude that these projections are not possible targets of QR. This remains to be deduced and will be left for future research.
Given the selectional requirement of the low Top head proposed above, one might wonder whether it is structurally a sister to VP, rather than to vP, as in (27)a. I contend that this is not the case, (27)b being the correct structure (on a par with Belletti 2004 for Italian). As shown in (28), whose structure is given in (29), a subject-related quantifier floated in Spec,vP reveals the position of the low topic (as well as of the direct object) as being above vP (see Lacerda 2012, to appear) (cf. also (22) above). I therefore conclude that the low Top head is merged with vP(AgroP), rather than with VP.10

(27)

a. \[ TP \ [vP \ [L-TopP \ [VP \ ]] \\]

b. \[ TP \ [L-TopP \ [vP \ [VP \ ]] \\]

(28) Os alunos doaram, **do Kafka**, dois livros cada um pra biblioteca.

The students donated of-the Kafka two books each one to-the library

‘The students donated two books by Kafka each to the library.’

(29) \[ TP the students donated \ [L-TopP of-the Kafka\m [vP/AgroP [two books \tm \k [vP each one ti [VP tk to-the library ] ] ] ] ] ]

The above analysis has an interesting consequence: Given that vPs are usually complete propositions, the selectional requirement of L-Top noted above can only be fulfilled if the saturation of vP is not done upon completion of vP, but later in the derivation (more concretely, the subject cannot be interpreted vP-internally in the presence of a low topic). This can be accomplished if the subject is allowed to be interpreted higher than the low topic, namely in its surface position (Spec,TP) — which anyway should be the case in (30)a, where **cada editor** ‘each editor’ binds the pronoun sua ‘his’ contained in the topic PP. Under the current proposal, reconstruction of the subject to its position under the topic should in fact be impossible. An argument that this is indeed the case is provided by (30)b, where binding of the topic into the subject/agent is attempted. That **cada** ‘each’ can bind out of the topic PP is shown by (30)c, where it successfully binds the possessive pronoun in object position. Such binding is, however, not possible (under reconstruction) in (30)b, as expected under the current analysis.

(30) a. \[ [Cada editor]\k publicou, de sua\k autoria, só dois livros. \]
each editor published of his authorship only two books

‘Each editor published only two books of his (own) authorship.’

b. \[ *Seu\k editor publicou, de [cada autor]\k, só dois livros. \]
his editor published of each author only two books

‘His editor published only two books by each author.’

c. \[ O editor publicou, de [cada autor]\k, seu\k melhor livro. \]
the editor published of each author his best book

‘The editor published the best book by each author.’

Another prediction concerning the interpretation of quantifiers that are overtly under low topics is that, contrary to examples like (21) above, if a category of type \( t \) is present between the low topic and a higher scope-bearing element \( X \), the sentence will have room for scope ambiguity between the quantifier \( Q \) and the scope-bearing element \( X \) (as schematized in (31) below). Such cases would provide additional support for the hypothesis that quantifiers have wide scope in the relevant examples discussed above because they seek a proper QR landing site (which happens to be at a position higher than L-TopP).

(31) \[ [<t> X \ldots [<t> \ldots [L-TopP \ low topic [ \ldots Q \ldots ]] ] ] ] X>Q; Q>X

10 I remain uncommitted to whether the direct object moves to an outer specifier of vP or to the specifier of an independent projection such as AgroP.
The schema above is in fact the abstract representation of the example in (32).\textsuperscript{11} Significantly, here both the reading $3 \nrightarrow \text{not}$ and the reading $\text{not} \rightarrow 3$ are possible. The structure in (33)a (after QR) leads to the interpretation that three beers (a, b, and c) were such that John did not drink them, whereas the structure in (33)b (after QR) gives rise to a “not even three” reading, i.e. John did not get to the third beer.\textsuperscript{12} Crucially, the reading that would arise if the quantifier were raised to vP is missing, as expected under the current analysis: (32) is odd with a (flat) reading of the sort “it is not the case that” — which, in addition to the other readings, is possible in (34), with high topicalization. In fact, (34) can be felicitously followed by (35), whereas (32) cannot. In sum, (32) has two possible landing sites for três cervejas (NegP and TP) and has two interpretations, whereas (34) has three possibilities of QR (NegP, TP, and vP) and accordingly has three interpretations.

(32) \textit{In a beer party, with many different beers from several countries.}
O João não bebeu, da Itália, três cervejas.
the John not drank of-the Italy three beers
‘John didn’t drink three beers from Italy.’

(33) a. $\text{[AgrsP John} \ [\text{NegP} \ 3 \text{ beers}] \ [\text{<t>\text{not} \ [TP drank \ [L-TopP \ from \ Italy \ [<e,t>\text{vP t3}]]]]}]$  

b. $\text{[AgrsP John} \ [\text{NegP} \ \text{not} \ [TP 3 \text{ beers}] \ [\text{<t>\text{TP drank \ [L-TopP \ from \ Italy \ [<e,t>\text{vP t3}]]]]}]$  

(34) \textit{Da Itália, o João não bebeu três cervejas.}
of-the Italy the John not drank three beers
‘John didn’t drink three beers from Italy.’

(35) Na verdade, o João só trouxe três cervejas da Itália.
in truth the John only brought three beers of-the Italy
‘In fact, John merely brought three beers from Italy.’

Finally, I would like to address and rule out one possible confound, namely that the quantifiers in the relevant examples above have wide scope because they are focalized. Contrastive topics are indeed associated with a focalized element, as discussed in the literature (see e.g. Büring 2003 and Wagner 2012). However, I argue that the focus nature of these quantifiers is not what determines their scope. First, observe that the subject of raising predicates can be independently focalized, as shown in (36) (the same holds for passives, not shown here). However, in the presence of low topicalization, as in (37)a, the (focalized) quantifier cannot move to subject position, but must stay in its original position, as in (37)b (recall from section 2.2 that the ground-comment cannot contain new information, which prevents an element containing new/focus information from moving to subject position).

(36) Só cinco livros do Kafka parecem ter chegado (ontem).
only five books of-the Kafka seem to have arrived (yesterday)
‘Only five books by Kafka seem to have arrived (yesterday).’

only five books seem to have arrived of-the Kafka (yesterday)
‘Only five books by Kafka seem to have arrived (yesterday).’

b. Parecem ter chegado, do Kafka, só cinco livros (ontem).
seem to have arrived of-the Kafka only five books (yesterday)
‘There seem to have arrived only five books by Kafka (yesterday).’

\textsuperscript{11} For the position of NegP in BP, see e.g. Mioto (1992) and Martins (1997). Mioto first proposed that NegP in BP should be outside TP, and Martins argued that it is located between two projections of a split IP, which I assume here (this also accounts for the position of the subject).

\textsuperscript{12} I assume that the “not even” reading arises when the negation immediately scopes over três cervejas ‘three beers’, i.e. when três cervejas raises as in (33)b, with no interveners between não and três cervejas.
Interestingly, the focus-comment can actually move to the higher part of the clause — but only if it has an independent reason (other than focus) to do so. In (38)a, the relevant element is a wh-DP, moved to (the matrix) CP by virtue of its wh-feature (note that, as (38)b shows, low topicialization is also compatible with wh-elements in situ). 13 Being in the CP-domain, the fronted wh-DP is outside the ground-comment and therefore can be (or refer to) new information. 14 By now, it goes without saying that no such restriction arises with high topicialization. The sentence in (39) is thus well formed.

(38)  
a. *Quantos livros parecem ter chegado, do Kafka, (ontem)?*  
how many books seem to have arrived of the Kafka (yesterday)  
‘How many books by Kafka seem to have arrived (yesterday).’

b. Parecem ter chegado, do Kafka, (ontem) *quantos livros (ontem)?*  
seem to have arrived of the Kafka (yesterday) how many books (yesterday)  
‘There seem to have arrived only five books by Kafka (yesterday).’

(39) *Do Kafka, só cinco livros parecem ter chegado (ontem).*  
of the Kafka only five books seem to have arrived (yesterday)  
‘There seem to have arrived only five books by Kafka (yesterday).’

I take the data above to indicate that focus is not the relevant factor to explain the idiosyncratic behavior of quantifiers generated under a low topic. 15 Rather, the impossibility of QR under a low topic follows from a semantic requirement, namely that the low Top head selects for a complement of type <e,t>, with the consequence that the first possible landing site of QR is necessarily above the low TopP. Such idiosyncrasy of low topicialization may shed light on the deeper question of why a language would allow for topicialization in multiple areas of its clausal spine. The reason is that H-Top and L-Top are not identical in their properties, which is reflected in their semantic (type) selection as well as in their impact on the mapping of sentences with topicialization from syntax to the semantico-pragmatic interface.

5. Final remarks

This paper highlighted the importance of including a contrastive analysis between different areas of the clause in the study of topicialization as an interface phenomenon. A number of idiosyncrasies of topicialization in the low left periphery (of vP) came to light when it was compared to the high left periphery (of CP). It was shown that whereas high topics do not impose any restrictions on the informational composition of their comments (with respect to what is new or old information), low topics clearly distinguish the functions of the two portions of the comment (ground- and focus-comment), which challenges the traditional discursive articulation of Topic > Comment.

Beyond characterizing the topics themselves, I also addressed the question of how topics may affect the behavior of other elements in the sentence. More specifically, I investigated what the possible QR landing sites are for quantifiers generated under topics. A puzzling (and previously unnoticed) contrast arose: the complement of the low Top head (in the cases addressed here, vP) ceases to be a possible target of QR, whereas no such restriction arises with high topicialization. In order to account for that, I proposed that Brazilian Portuguese has two different Top heads, H-Top and L-Top, which select for complements of different semantic types: t and <e,t>, respectively. Low topicialization can thus be viewed as a kind of “predication”, in the sense that it relates a topic α to an unsaturated verbal predicate.

The analysis proposed here thus contributes to filling in the bridge between the syntax and the semantics/pragmatics of topicialization. It also shows that the comparison between the CP and the vP areas is crucial in that respect.

13 For discontinuous wh-elements in BP, see Avelar (2006) and Bastos-Gee (2011).
14 These data suggest that the TP/VP area and the CP area may constitute independent pragmatic domains for the computation of old and new information. In particular, the low topic cannot be preceded by new information in its own domain (TP), but can be preceded by new information in a separate domain (CP). The hypothesis that there is a bipartite pragmatic articulation in the clause, as well as what it follows from (e.g. phases), is left for future research.
15 Also, recall that in (22) both quantifiers (one of which is not focalized) have to be interpreted in a higher position.
References


Wagner, Michael. 2012. Contrastive topics decomposed. *Semantics & Pragmatics* 5, Article 8, 1-54. Available at http://dx.doi.org/10.3765/sp.5.8