

Corrective Contrast in Russian, in Contrast

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February 3, 2010

1 Introduction

This paper is concerned with corrective uses of contrastive markers, such as the Russian conjunction *a* and the English conjunction *but*, illustrated in (1) and (2), respectively. It is characteristic for these uses that some contextually salient proposition is explicitly negated in one conjunct (*John didn't go to Paris*), while the other conjunct (*to Berlin*) presents an element that should “replace” the wrong part of the negated proposition (*to Paris*). In German this function is unambiguously expressed by the conjunction *sondern*, (3), while in English and Russian it is only one of a whole range of uses of less specific connectives.

- (1) a. Oleg ezdil *ne* v Pariž, *a* v Berlin
Oleg went not to Paris but to Berlin
b. Oleg ezdil v Berlin, *a* *ne* v Pariž
Oleg went to Berlin but not to Paris

- (2) John didn't go to Paris, *but* to Berlin.

- (3) Hans ist nicht nach Paris *sondern* nach Berlin gefahren
Hans is not to Paris but to Berlin gone

This understanding of the term *correction* is common in typological literature (e.g. Malchukov, 2004; Mauri, 2008). To prevent terminological confusion, this notion should be distinguished from the *speech act* of correction in e.g. Asher and Lascarides (2003, pp. 345–350), such as the utterance (a) of speaker B in (4).

- (4) **A:** They gave Peter the new computer.
B: a. No, they gave JOHN the new computer.
b. No, they didn't give it to PETER, but to JOHN.

Of course, correction as the type of coordinative construction in (1)–(3) can be used to perform correction as a speech act, cf. (b) by speaker B in (4). One might even argue that from an evolutionary point of view this is the primary use of corrective coordination. However, both corrective coordination has other uses, and the correcting speech act can be done by other means—in any case they are quite different entities and it is only the first notion that this paper will deal with.¹

Apart from correction, the Russian conjunction *a* has other functions which all lie in the domain of contrast taken broadly. Work on *a* in Russian linguistics has mainly concentrated on these other functions of *a* (Kreidlin and Paducheva, 1974a,b; Sannikov, 1989; Fougeron, 1990; Uryson, 2002, among others), while the corrective function has usually been attributed to a fixed collocation *ne ... a* / *a ne* consisting of *a* and the negative particle *ne*, and was excluded from the general analyses of *a*. However, it is a common pattern across languages that the same marker is used for correction and for (one or other type of) contrast—the English *but* is another famous case—so a reduction of correction to a special case of contrast is an obvious thing to try. This is the goal of the present paper. It presents an attempt to derive the properties of the corrective uses of *a* from the general characteristics of *a* as a contrastive marker, the semantics and pragmatics of negation, and the properties of the context of use. [Contrast with English]

This paper is structured as follows. Section 2 takes a closer look at the cross-linguistic regularities in correction marking, particularly at the question which other functions from the contrast semantic space correction markers tend to have. Section 3 briefly recapitulates the theory of contrast from Jasinskaja and Zeevat (2008, 2009), while in section 4 that theory is applied to correction. Finally, section 5 presents the conclusions and discusses further questions raised by this study.

2 Correction marking across languages

Some languages do not mark correction at all, i.e. correction is expressed by simple juxtaposition of a negative and a positive conjunct, which is also an option in English: *John didn't go to Paris. He went to Berlin.* Other languages have dedicated markers of correction, i.e. markers that unambiguously express correction and nothing else, such as the German *sondern*, the Spanish *sino*, etc. Yet other languages use the same marker for correction and some other functions. Among those languages, correction is frequently coupled with functions that can be characterised as contrastive in one or another sense. Russian and English clearly belong to this group. This section will first present the most important distinctions

¹See Kasimir (2006) for detailed discussion of the terminological issue.

between various kinds of contrast that make it possible to adequately describe the similarities and differences between (the non-corrective uses of) the Russian *a* and the English *but*. Then the most relevant theoretical perspectives upon the emerging picture will be presented.

2.1 Non-corrective uses of correction markers

Adversative: The first group of uses includes at least two relevant subgroups. The first one covers the ‘prototypical’ instances of Lakoff’s (1971) *denial of expectation*, i.e. cases where the second conjunct denies some normal consequence of the situation presented in the first conjunct, as in (5), being short usually implies bad performance in basketball, but this expectation is denied. In English, this function is expressed by *but*, the same marker that is used for correction, while the Russian adversative marker is *no*, a different one from the correction marker *a*.

(5) John is short, but he is good at basketball.

The second subgroup includes the so-called *argumentative* uses of *but* and the Russian *no* (Anscombe and Ducrot, 1977). The argumentative function is fulfilled where the conjuncts *A* and *B* present an argument and a counterargument for a claim *C*. E.g. in (6), the fact that the ring is beautiful normally implies that we should buy it, but the fact that it is expensive implies that we shouldn’t.

(6) This ring is beautiful, but expensive.

There has been a lot of effort to reduce both types of use either to denial of expectation or to the argumentative function. The theory summarised in section 3 presupposes a reduction of the latter kind. In any case, the distinction is irrelevant for our present purposes, both subgroups together constitute one class of non-corrective uses that we will refer to as *adversative* following Malchukov (2004).

Contrastive comparison: This term taken from Blakemore (1987) will be used to describe the second group of cases, where the conjoined propositions are presented in a parallel fashion, so as to highlight the similarities and differences between them. There is no restriction to two conjuncts here, there can be three and more, as in (7). Crucially, the conjuncts must differ in *two* (or more) constituents, e.g. the subject and the object of liking in (7), leading to a contrastive topic-focus structure: *Oleg, Roma* and *Vera* are the contrastive topics, *football, basketball* and *tennis* are the contrastive foci. Contrastive comparison in the present sense corresponds closely to what is known in Russian linguistics as the *sopostavitel’noe znachenie* (‘comparative meaning’) of the conjunction *a* (Kreidlin and Paducheva, 1974b). Thus this function is conveyed in Russian by the same marker as is used

for correction, while English uses a simple additive marker *and*.

- (7) Oleg ljubit futbol, Roma basketbol, a Vera tennis
Oleg likes football Roma basketball and Vera tennis
Oleg likes football, Roma likes basketball, and Vera likes tennis.

Examples very similar to (7) also appear in the literature under labels such as *semantic opposition* (Lakoff, 1971), or *formal contrast* (Asher and Lascarides, 2003). These labels, as well as Blakemore's *contrastive comparison* were introduced originally to distinguish the uses of *but* in *John is tall, but Bill is small* from the proper adversative uses illustrated above. Indeed it seems possible to use *but* in the function we have just defined when the number of conjoined clauses is exactly two (Foolen, 1991). However, as will become clear presently, there is a subtle difference between those uses of *but* and *contrastive comparison* in our definition.

As a final terminological remark, it is not clear that the requirement of at least two points of difference between the conjuncts and the contrastive topic-focus structure plays any important role in the original definitions of *contrastive comparison* or *semantic opposition*. It does, however, in our definition, because this is the feature that licenses the use of *a* in Russian. If the conjuncts only differ along one dimension, as in *John did the dishes and went shopping*, where *did the dishes* and *went shopping* present distinct actions, but the actor is the same, a different conjunction is used in Russian—a simple additive marker *i* (see Jasinskaja and Zeevat, 2008, for detailed illustration).

Foolen's tests: The third relevant type of contrast does not have any widely accepted label of its own and has rarely been distinguished as a special function, or use, or meaning of contrastive conjunctions. It is very similar to contrastive comparison in that the conjoined propositions also have to differ along two dimensions. However, along one of those dimensions the values should not just be different, but in some sense opposite, e.g. the antonyms in (8), the positive vs. negative polarity in (9).

- (8) John is tall, but Bill is small.
(9) John likes football, but Bill doesn't.

The opposition can also be pragmatic in nature, as in (10) where one conjunct confirms and the other denies a contextually salient proposition. The contextual tests in (10) and (11) were introduced by Foolen (1991) to argue that *but* in all its uses involves a denial of expectation, as in (10). If both conjuncts confirm the expectation, *and* must be used, cf. (11). Whether or not we want to subscribe to

	CONTR. COMPARISON	OPPOSITION	ADVERSATIVE
Russian	<i>a</i>		<i>no</i>
English	<i>and</i>	<i>but</i>	

Table 1: Russian and English contrast markers

Foolen’s reduction of *but* to denial of expectation, his tests do draw the crucial distinction between contrastive comparison and the type of contrast in question. Perhaps it would be best to reserve the term *opposition* for this type of contrast.

- (10) **A:** John and Peter both live in Amsterdam, don’t they?
B: No. John lives in Amsterdam, but (??and) Peter lives in Rotterdam.
- (11) **A:** John and Peter don’t live in the same place, do they?
B: No. John lives in Amsterdam, and (??but) Peter lives in Rotterdam.

Thus opposition in the present sense is expressed by *but* in English. It should be obvious that the “oppositeness” of the conjuncts implies that there can be only two, which is in accordance with *but*’s restriction to two conjuncts.

In contrast, Russian uses *a* in this function, the same marker as for contrastive comparison, and not the same as for denial of expectation. Apparently, the parallel presentation and the contrastive topic-focus structure turns out to be decisive for the choice of conjunction.

Finally, this section can be summarised as shown in Table 1. Apart from correction, the Russian conjunction *a* marks contrastive comparison and opposition, while the English *but* marks opposition and adversative contrast. Thus both the Russian *a* and the English *but* are markers of contrast, but they mark different types of contrast.

2.2 Typological theories of correction

Why is correction often marked in the same way as contrast? And why does Russian use a contrastive comparison marker for correction, while English uses an adversative? In this section we take a brief look at typological theories that bear on these questions.

A well-established approach to describing multifunctionality patterns of grammatical markers across languages is based on *conceptual*, or *semantic maps*. This approach has also been applied to correction and contrast marking; we will review two recent proposals in this framework: Malchukov (2004) and Mauri (2008). The definition of semantic maps assumed in those studies is most closely related to Haspelmath’s (2003) version, according to which a semantic map is a contigu-

ous graph, whose nodes represent the possible functions of a certain group of markers, such as those defined in the previous section. In cases where more than one function is expressed by the same marker, the approach is neutral with respect to the question whether those functions constitute different *senses* of that marker, which is then polysemous or homonymous, or whether those functions are just different *uses* of a marker with a single abstract meaning. The main criterion in the choice of functions for the nodes of a semantic map is cross-linguistic comparison: it should be possible to represent the meaning of each relevant marker in every particular language as a subset of the nodes in the map. If the meanings of two markers in two languages are equivalent, they are mapped to the same set of nodes; if the meanings are different, the sets of nodes must be different, too. Thinking of CONTRASTIVE COMPARISON, OPPOSITION and ADVERSATIVE as nodes of a semantic map, it becomes clear that having OPPOSITION separate from both other nodes is important to express the difference between the Russian and English contrastive conjunction systems, cf. Table 1.

The arcs of a semantic map connect most “closely related,” or most “similar” functions. Which functions are closely related is again a matter of cross-linguistic comparison. The main claim of the semantic map approach is that multifunctional markers do not express arbitrary subsets of possible functions, but only functions that are closely related. A semantic map gives an adequate description of the universal² arrangement of functions based on their relatedness iff for every marker in every language the set of functions expressed by that marker constitutes a *contiguous* subgraph of the map.³ The arcs also have a diachronic interpretation: a marker can only acquire a new function that is immediately connected to one it already has, and cannot “jump” over functions in between. This is a direct consequence of the contiguity requirement, though occasionally it can create exceptions to contiguity at a synchronic level, i.e. if marker *A* acquires a new function formerly covered by marker *B*, it can split *B*’s subgraph into two unconnected parts. The theoretical status of such exceptions is a matter of debate [references].

Finally, let’s consider the place of correction in relation to contrast in the semantic maps proposed by Malchukov (2004) and Mauri (2008), shown in figures 1 and 2. Malchukov’s function ADVERSATIVE is the same in all relevant respects as our notion of the adversative function. The function CONTRASTIVE, however, corresponds roughly to Lakoff’s (1971) semantic opposition, and thus conflates

²[Remark by Laura Janda.]

³The present formalization of semantic maps as graphs does not necessarily reflect precisely the general use of the term, or even the version presented in Haspelmath (2003). In particular, it disregards any issues related to representation in two- or three-dimensional space and makes ‘similarity’ of functions a purely categorical notion. Two functions either are immediately connected or not. This simplified view of the semantic maps geometry is, however, consistent with the way they are applied to contrast and correction in the studies reviewed in this section.

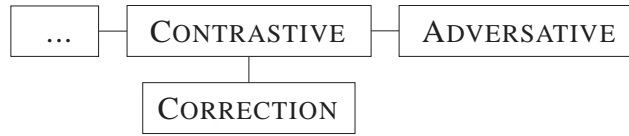


Figure 1: Correction in Malchukov's (2004) semantic map



Figure 2: Correction in Mauri's (2008) semantic map

	CORRECTION	CONTRASTIVE	ADVERSATIVE
Russian	<i>a</i>		<i>no</i>
English	<i>but</i>		
		<i>and</i>	

Table 2: Russian and English marking patterns in Malchukov's map

	OPPOSITION	CORRECTION	COUNTEREXPECTATIVE
Russian	<i>a</i>		<i>no</i>
English	<i>and</i>	<i>but</i>	

Table 3: Russian and English marking patterns in Mauri's map

our present notions of contrastive comparison and opposition. Mauri's OPPOSITION, in turn, corresponds closely to our contrastive comparison (not to our opposition!), while opposition in our sense and the adversative function are conflated under the label COUNTEREXPECTATIVE.⁴ Thus, Malchukov's claim is that whenever a contrast marker is used for correction it should be the same marker as is used to connect sentences with contrastive topic-focus structure, no matter whether the conjuncts are 'opposite' or just distinct along two dimensions (both being part of the CONTRASTIVE function). Mauri's map amounts to (almost) the same claim. Although contrastive comparison is separated from opposition in our sense (the latter being part of COUNTEREXPECTATIVE), CORRECTION is placed between them, and thus can share markers with either of them.

Although both maps are consistent with the Russian and English correction marking patterns, i.e. they do not create non-contiguous marking regions, cf. tables 2 and 3, they leave space for improvement in at least two respects that will

⁴The '...' node in both figures stands for a set of functions including plain additive and temporal conjunction, i.e. functions covered by the non-contrastive uses of *and* in English and the conjunction *i* in Russian.

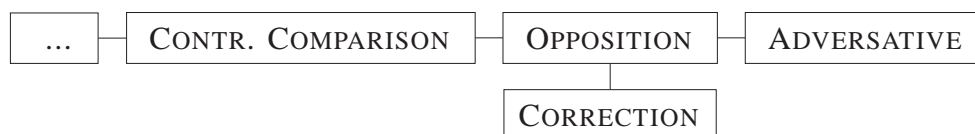


Figure 3: Correction and opposition in a semantic map

be of interest to us. First, both maps do not cleanly delineate the functions of different contrast markers *within* Russian and English systems. Since Malchukov lumps together contrastive comparison and opposition, the subtle difference in the usage of the English *and* and *but* observed by Foolen (1991) is not reflected by the map. Mauri’s map, in turn, creates the wrong impression that the only difference between the Russian and the English systems is “on whose side” CORRECTION is. This is because Mauri follows Foolen in regarding opposition as a special case of denial of expectation and does not separate it from her COUNTEREXPECTATIVE function. However, Foolen’s reductionist approach, which might be useful in finding a single abstract meaning for the English *but*, is not very helpful in constructing a semantic map. As was pointed out above, another difference between the English and the Russian systems is in marking opposition, cf. table 1: in Russian both correction and opposition are coupled with contrastive comparison in *a*, whereas in English they are both coupled with the adversative in *but*. One might formulate a stronger hypothesis based on these observations, namely that CORRECTION is only related to OPPOSITION in our sense. A semantic map that suggests itself is shown in figure 3.⁵ This map represents our (preliminary) answer to the question why Russian uses a contrastive comparison marker for correction, while English uses an adversative. Whenever a contrast marker is recruited for correction, it should be an OPPOSITION marker. Since in Russian OPPOSITION is coupled with CONTRASTIVE COMPARISON in *a*, the same marker is used for CORRECTION. Since in English OPPOSITION is coupled with the ADVERSATIVE function in *but*, CORRECTION is also expressed by *but*.

The second problem has to do with a general feature of the semantic map approach. Semantic maps only represent claims about the existence of relationship between two functions, but not about the nature of that relationship. This is the central question to be addressed in this paper: What makes CORRECTION and contrast, especially the OPPOSITION type of contrast so closely related? To make this relationship explicit we will make use of the analytic tools of formal semantics. Only if it can be shown that CORRECTION is a special case of OPPOSITION (or another type of contrast expressed by the Russian *a*) and only if the realisa-

⁵As will be shown in section 5 this semantic map is falsified once we consider a broader selection of languages, but it is consistent with the Russian and English data, so we will stick to it for the time being.

tion of *a*'s corrective function (of all other possible realisations of opposition) can be predicted from context, can we talk about corrective uses of a general contrastive *a*, rather than a special corrective 'meaning' of *a*. In order to answer this question, the next section presents a theory of contrast from our previous work, and section 4 integrates correction into that theory.

3 A theory of contrast

The first assumption underlying the theory developed in Jasinskaja and Zeevat (2009) is that discourse normally sticks to the same topic, tends to continue talking about the same objects and events.⁶ The introduction of new referents, all kinds of forward movement and change must therefore be marked. Additivity is one of the linguistic categories that serve this purpose. Following Zeevat and Jasinskaja (2007), additive markers, such as *also* and *and* in English, signal that the semantic objects they connect pertain to the same discourse topic, i.e. the same question under discussion, but give *distinct* answers to that question.⁷ Thinking of questions in terms of Hamblin alternatives (Hamblin, 1973), the answers *John snores* and *Mary snores* to a question like *Who snores?*—{John snores, Mary snores, Bill snores, ...}—are distinct, whereas *John snores* and *John and Mary snore*, or *Mary snores* and *my sister snores*, if Mary happens to be my sister, are not. Distinctness of question alternatives also plays a central role in the definitions of information-structural contrast (e.g. Rooth, 1992), and as will be shown, of contrast as a discourse relation, as well.

Second, the central claim of our proposal is that various additive, adversative and contrast markers can also indicate the *type of question* that their conjuncts give distinct answers to. The question types relevant for the description of the English and Russian conjunction systems differ according to two main parameters: the number and the type of question variables. In terms of the number of variables, the most important distinction is between single and multiple variable questions, which corresponds to the number of dimensions in which the question alternatives differ. The canonical cases are single (*Who snores?*, cf. above) vs. multiple *wh*-questions, e.g. *Who likes what?*, *Who gave what to whom?*, etc., respectively.⁸ In the most general form, the *x* notation is used to refer to a single variable, \vec{x} for an

⁶See e.g. Givón (1983), as well as Zeevat (2006) and Jasinskaja (2007) for an application of this idea to discourse relations.

⁷This is an implementation of the old idea that the structural and/or semantic similarity and relatedness of the conjuncts of *and* has to do with them sharing a topic (e.g. Lakoff, 1971).

⁸The term 'multiple (variable) question' is not intended to refer to arbitrary conjunctions of questions, e.g. *What did you buy and is it edible?* Although multiple variable questions can normally be represented as a conjunction of single variable questions (see examples below), the reverse does not generally hold.

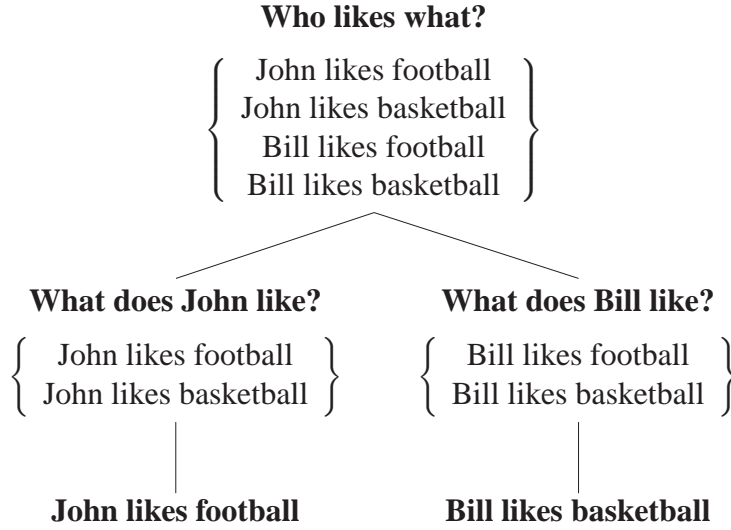


Figure 4: A $\langle \vec{x}, y \rangle$ -question

unspecified number of variables (a tuple of one or more), and $\langle \vec{x}, y \rangle$ for multiple variables (a tuple of two or more). Variable types can be thought of in montagovian terms: t for truth value, e for entity, plus various compound types, including propositions— p , or $\langle s, t \rangle$. In natural language, single variable questions of type t (x_t -questions) are the normal y/n -questions like *Does John snore?*, represented by two alternatives which differ in polarity {John snores, John doesn’t snore}. What we usually refer to as *wh*-questions, are questions over variables of types other than t . For certain *wh*-words these types can be more closely specified, e.g. *why*-questions ask for propositions (x_p) or event descriptions ($x_{\langle E, t \rangle}$, assuming that E stands for eventuality as a subsort of entity). Finally, certain *wh*-words can also specify a third parameter—the relation in which the variable stands to the rest of the question, e.g. for *why* this is a causal relation in a broad sense including causality at the level of events, relations between a statement and a supporting argument, as well as between a speech act and a justification for performing it (Sweetser, 1990). The x_{why} notation will be used to indicate both the variable type and the relation specified by *why*.

The classical additive conjunctions like the English *and* and the Russian *i* express additivity with respect to some unspecified kind of question, $\text{ADD}(\vec{x})$. The Russian *a* is also additive, but imposes an additional restriction that the question addressed by its conjuncts be a multiple variable question, $\text{ADD}(\langle \vec{x}, y \rangle)$. In this case additivity implies distinct instantiations of *all* the variables, e.g. to double *wh*-questions (*Who likes what?*) the conjuncts must give doubly distinct answers e.g. *John likes football* vs. *Bill likes basketball*, cf. figure 4.

Crucial to our analysis of the relationship between the Russian *a* and the En-

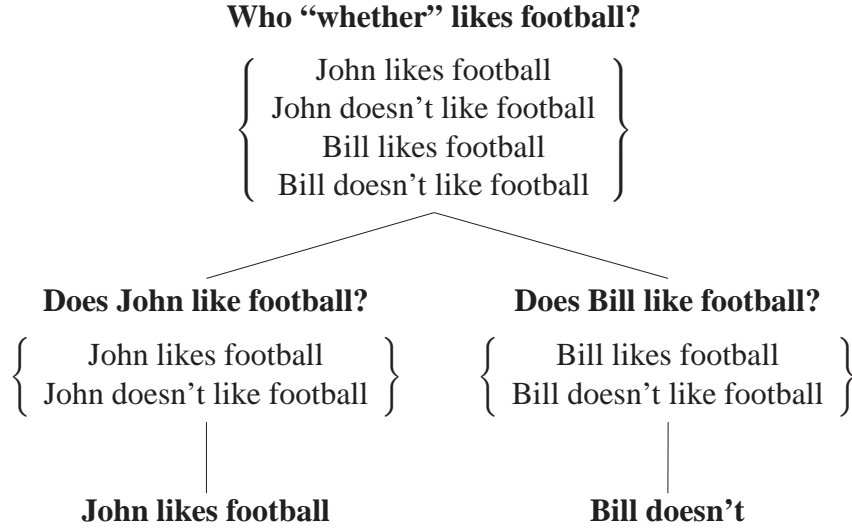


Figure 5: A $\langle \vec{x}, y_t \rangle$ -question

English *but* is the fact that a special case of $\langle \vec{x}, y \rangle$ -questions is constituted by $\langle \vec{x}, y_t \rangle$ -questions, i.e. multiple variable questions whose one variable ranges over truth values as in a *y/n*-question, see figure 5.⁹ English and Russian (probably as well as other natural languages) cannot express this type of question by a simple interrogative sentence, the best gloss one could give to the set of alternatives shown in figure 5, is *Who “whether” likes football?* In English, one can express this question either by conjoining a number of *y/n*-questions, as in figure 5, or by conjoining two *wh*-questions *Who does and who doesn't like football?* For the rest, the analogy between $\langle \vec{x}, y_t \rangle$ -questions and standard multiple *wh*-questions is obvious, cf. figures 4 and 5. We propose that the English *but* conjoins distinct answers to a $\langle \vec{x}, y_t \rangle$ -question, $\text{ADD}(\langle \vec{x}, y_t \rangle)$. Previous accounts of contrast as a discourse relation (and *but* as its marker) have introduced negation as an essential part of its definition (e.g. Knott and Sanders, 1998; Kehler, 2002). Umbach (2004, 2005) has formulated this generalization in terms of (implicit) question answering: one conjunct of *but* has to *confirm* and the other has to *deny* a related contextually salient question, cf. (12a) and (12b).

(12) **A:** Does John like football and does Bill like football, too?

- B:** a. [Yes] John likes football, *but* [no] Bill doesn't.
b. [Yes] John likes football, *and* [yes] Bill does, too.

Our analysis is just a further generalization of Umbach's. The two *y/n*-questions

⁹We take it as a fact that a question can have at most one variable of type *t*, so $\langle \vec{x}, y_t \rangle$ means in practice that all the variables except y_t are normal *wh*.

answered by the conjuncts of *but* in (12a) are the result of splitting a double $\langle x, y_t \rangle$ -question, where the x -variable ranges over John and Bill, cf. figure 5. The switch in polarity is once again a consequence of the distinctness of answers to the yes/no part of the question.

In turn, a special case of $\langle \vec{x}, y_t \rangle$ -questions is constituted by *why-y/n*-questions, $\langle x_{why}, y_t \rangle$ in terms of variable types. E.g. *Why “whether” should we buy this ring? — [Why should we buy this ring?] It is beautiful, but [why shouldn’t we buy this ring?] it is expensive.* This question type is signalled in Russian by the conjunction *no*, $\text{ADD}(\langle x_{why}, y_t \rangle)$. English does not have a special marker, so the less specific marker *but* is normally used.

In sum, both proper additive and contrast markers in Russian and English express an additive relation between their conjuncts, i.e. distinctness of answers to a question, while the question types they associate with constitute an implicational hierarchy, each of the relevant types discussed is a special case of another type:

$$(13) \quad \underset{\text{no}}{\text{ADD}(x_{why}, y_t)} \Rightarrow \overset{\text{but}}{\text{ADD}(\vec{x}, y_t)} \Rightarrow \underset{a}{\text{ADD}(\vec{x}, y)} \Rightarrow \overset{\text{and}}{\underset{i}{\text{ADD}(\vec{x})}}$$

For the sake of readability, less technical terminology will be used in the rest of the paper. We will refer to $\langle \vec{x}, y_t \rangle$ -questions as *wh-y/n* and use the term ‘double *wh*’ for double variable questions that do not have a t -type variable. Double (variable) questions are thus a supertype of double *wh* and double *wh-y/n*. We will mainly talk about double questions assuming that the extension to multiple questions in general is trivial.

The third assumption of our theory is that all the features listed in (13) must be marked (in one way or another) whenever possible. This leads to the effect known as *blocking*. For instance, *and* does not specify the question type, so in principle it should be possible to use it with *wh-y/n*-topics. However, since marking the topic type is obligatory, one is forced to use *but* whenever a *wh-y/n*-topic is addressed. This means that in practice *and* can only be used with non-*wh-yn* topics, or otherwise, the use of *and* with *wh-yn* topics is *blocked* by *but*.

Finally, the fourth assumption concerns the function of *no* and *but* in answers to *why-y/n*-questions. Distinct answers to a *why-y/n*-question give an argument and a counterargument for a claim or suggestion, but it is always the one expressed by the second conjunct that wins (Anscombe and Ducrot, 1977). Thus *no*- and *but*-conjunctions do not only resolve a *why-y/n*-question *Why “whether” should we buy this ring?* but also the single *y/n*-question, whether we should buy it:

- (14) a. The ring is expensive, but it is beautiful. (We will buy it)
 b. The ring is beautiful, but it is expensive. (We will not buy it)

The last terminological remark concerns the various uses of the term *topic*. *Discourse topics* are explicit or implicit questions addressed by utterances in discourse. We will also use the term *contrastive*, or *sentence topic* to refer to a designated constituent of a sentence which can be marked in a number of standard ways such as fronting and prosodic prominence. We largely adopt Büring's (2003) view on the relationship between contrastive and discourse topics. First of all, contrastive topics come into play when some kind of double variable question is under discussion. Which of the variables gets instantiated in the answer by the contrastive topic and which by the focus depends on how the double question is split into single variable questions. The focus is the instantiation of the variable that remains a variable in both the double question and its single variable subquestion, e.g. *what* in figure 4, and the *y/n*-variable in figure 5. The contrastive topic corresponds to a variable in the double question, but gets instantiated in the subquestion, e.g. *who* in both figure 4 and figure 5, i.e. *John* and *Bill* are the contrastive topics.

4 Correction as a type of contrast

This section will present an argument for the claim that both OPPOSITION (15) and CORRECTION (16) are realisations of a WH-Y/N strategy. At first glance these realisations look very different: (15) shows a contrastive topic-focus pattern, with a WH-type topic and polarity focus, realised in Russian by a focal stress on the finite verb both in the positive and in the negative polarity focus; in contrast, (16) has focal stress on the instantiations of the WH variable, while a contrastive topic seems to be missing altogether.

(15) a. Oleg KURIT, a Roma ne KURIT.
Oleg smokes but Roma not smokes
 Oleg smokes, but Roma doesn't.

b. Oleg ne KURIT, a Roma KURIT.
Oleg not smokes but Roma smokes
 Oleg doesn't smoke, but Roma does.

(16) a. Kurit OLEG, a ne ROMA.
smokes Oleg but not Roma

b. Kurit ne OLEG, a ROMA.
smokes not Oleg but Roma

Moreover, Russian corrections obligatorily contain *constituent negation* [reference], i.e. the negative particle *ne* appears immediately before the constituent to be corrected, cf. *ne Roma*, *ne Oleg* 'not Roma', 'not Oleg' in (16). The stan-

dard assumption is that sentences with constituent negation of the form *not X P* presuppose that some object has property *P* (Borschev et al., 2006), i.e. their meaning is similar to that of the English negated clefts: *It is not John who smokes*. In contrast, *sentential negation* is expressed by the negative particle appearing immediately before the finite verb, e.g. *ne kurit*, lit. ‘not smokes’ in (15). Sentential negation is possible in opposition sentences, but it cannot introduce the negative conjunct in corrections.

The goal of this section is to show, on the one hand, that all these structural differences fall within the range of options in addressing a WH-Y/N discourse topic, and on the other hand, that they correlate with precisely those functional features that make out the difference between the OPPOSITION and the CORRECTION function. We will start with an overview of logical possibilities in how a WH-Y/N topic can be addressed in section 4.1. Section 4.2 singles out one subtype of opposition sentences which bears the closest resemblance to correction in terms of those logical possibilities. The functional differences between the members of such minimal pairs are formulated. The last two sections relate those functional differences to sentential vs. constituent negation (section 4.3) and differences in information structure (section 4.4).

4.1 Topic and focus in WH-Y/N

There are always two ways to address a double question like *Who ate what?* You can go by people, or you can go by food. In the first case, the double question *Who ate what?* is split up into a series of single variable questions like *What did John eat?*, *What did Bill eat?*, etc., where the *who*-variable is instantiated by different persons from the relevant domain. In the second case, the double question is split up into subquestions *Who ate the beans?*, *Who ate the carrots?*, etc. According to Büring (2003), the choice between these two strategies determines which constituent is marked as contrastive topic and which one as focus: contrastive topic is the variable that is instantiated in the subquestion, i.e. people when you go by people, and food when you go by food; the focused constituent corresponds to the *wh*-variable in the subquestion.

Applying the same idea to WH-Y/N-questions we also get two possible strategies. Suppose the question is *where “whether” John went*. If we go by the locations instantiating the *where* variable, the question is split up into a series of *yes/no*-questions: *Did John go to Paris?*, *Did John go to Berlin?*, etc., as shown in figure 6. In this case *to Paris*, *to Berlin*, etc., are contrastive topics ([...] _T), while the polarity is the focus ([...] _F), which surfaces as the focal stress on the auxiliary verb *did* or *didn’t*. This is the structure underlying the classical examples of OPPOSITION such as (9).

The other possibility is to instantiate the *yes/no* variable first, which splits up

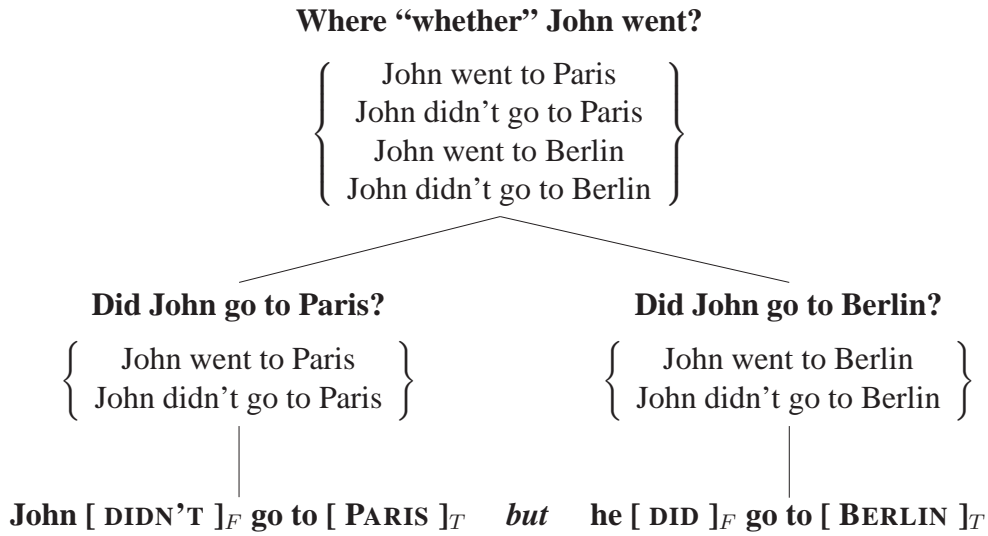


Figure 6:

the WH-Y/N-question into two *wh*-questions, one addressing the positive part of the question and the other addressing the negative part, e.g. *Where did John go?*, *Where didn't John go?*, cf. figure 7. In this case, the polarity would be marked as contrastive topic, and the answers to the *where*-question as focus.

Apparently, in English contrastive topics and foci can be marked just by intonation: topics receive a type B and foci a type A pitch accent [references], which includes topics *in situ* that linearly follow the focus, as in figure 6. In German, there is a constraint that a topic must be followed by at least one focus in the same sentence (Büring, 1997). In a sentence like that in figure 6 this can be achieved by topic fronting: *[Nach Paris]_T ist er [nicht]_F gefahren, aber [nach Berlin]_T [schon]_F*. Russian is more like German in this respect: accented contrastive topics have to precede foci; the melodic form of the pitch accent in turn is a less reliable cue to the topic/focus distinction than word order. There is a lot of variation in the form of the topic and focus accents (see Mehlhorn and Zybatow, 2000, for a convincing illustration), and one and the same accent can mark both topic and focus depending on the context (Kodzasov, 1996, p. 198). Therefore in the examples discussed below the first accented constituent will always be assumed to be the topic, and the second the focus, unless explicitly indicated otherwise.

The last remark concerning our application of Büring's approach is that unlike Büring and more in line with Hamblin (1973) we assume that the alternative set of a *yes/no*-question contains both a positive and a negative alternative. Assuming that the alternative set of a question is partitioned by the alternative sets of its subquestions, this gives us that double *wh*-*yes/no*-questions also contain both positive and negative alternatives, cf. figures 6 and 7. If they only contained positive

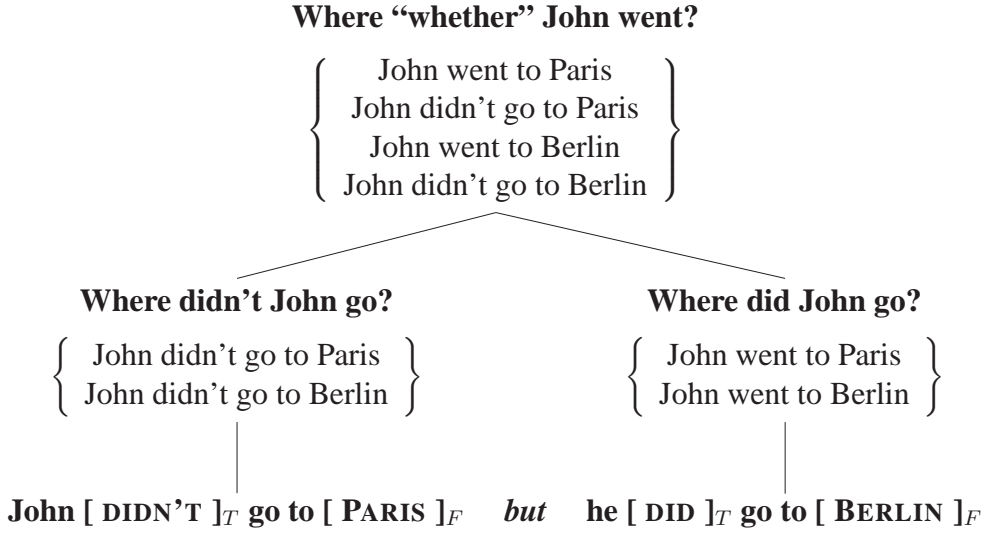


Figure 7:

alternatives, then the *wh*-yes/no-question *Where “whether” John went?* would be indistinguishable from the single *wh*-question *Where did John go?* There are various semantic reasons for keeping *yes/no*-questions to just the positive alternative and one might even argue that double *wh-whether* interrogative sentences do not exist precisely because the alternative set containing both positive and negative alternatives is not a legitimate semantic object, while its positive subset is indistinguishable from the single *wh*-question. However, *wh*-yes/no-questions as pragmatic objects, i.e. as issues to be interested in, certainly do exist and are distinct from single *wh*-questions. In the first case, both the positive and the negative extension of the question predicate *P* (for the question *who “whether” P?*, e.g. $\lambda x[\text{John went to } x]$ in the present example) must be explicitly named. If some object is not named one may conclude that it is not relevant, but not that it is not *P*. In the second case, only the positive extension is asked for, while for the remaining relevant objects ‘not *P*’ is inferred by the process of exhaustive interpretation (e.g. Schulz and van Rooij, 2006). Thus, including the negative alternatives gives us a representational handle on this pragmatic distinction (even if it does not *per se* explain it).

4.2 Corrections vs. oppositions with Y/N-topics

The main claim we would like to put forward is that corrections (17b)/(18b) have the same underlying QUD structure as oppositions with Y/N-topics (17a/18a), i.e. they both address an overarching *wh*-yes/no-question, which is split up by polarity as in figure 7. The assertive propositional content of the conjuncts in both cases

is the same: one conjunct states that it is not the case that John went to Paris, so it provides an answer to the question where John did not go; the other conjunct states that he went to Berlin, which is an answer to where John went.¹⁰

- (17) a. John [DIDN'T]_T go [to PARIS]_F, but he [DID]_T go [to BERLIN]_F.
 b. John didn't go [to PARIS]_F, but [to BERLIN]_F.

- (18) a. Oleg [ne EZDIL]_T [v PARIŽ,]_F
Oleg not went to Paris
 a [EZDIL]_T [v BERLIN.]_F
but went to Berlin
 b. Oleg ezdil ne [v PARIŽ,]_F a [v BERLIN.]_F
Oleg went not to Paris but to Berlin

The functional differences between the two versions (a) and (b) lie in the domain of presuppositions and/or implicatures. The Russian sentence (18a) is rather marked, presumably because it can only be felicitously used in a context where *going* and *not going* to different places has been at issue. It seems to presuppose that there is a place that Oleg did not go to, and another place that he did go to, and specifies the first one to be Paris and the second to be Berlin. Its English counterpart (17a) might sound less marked, but with really heavy contrastive topic accentuation on the auxiliaries it seems to have similar presuppositions.

In contrast, (17b)/(18b) only presupposes that John (Oleg) went somewhere. On the other hand, it presents an instance of replacive negation [reference to Jacobs]. That is, the first conjunct negates that on a particular occasion John went to Paris, while the second conjunct states that on *that* occasion, in *that* event of going to a place, John went to Berlin rather than Paris. We might refer to this property as *replacivity*, which is the most important distinctive feature of corrections among other kinds of contrast. Notice that in the (a) versions going to Paris and going to Berlin are treated as distinct possibilities, while in the corrections there is only one relevant occasion of going somewhere and it can either be to Paris, or to Berlin.

We have been using the term ‘presuppose’ in a rather non-technical sense here. In the following two sections we will make more precise assumptions about the nature of the ‘presuppositions’ involved and the linguistic means that contribute those presuppositions. Our discussion will concern primarily the Russian examples, which can partly, though only partly, be generalised to the English case.

¹⁰Since corrections have no contrastive topics, this contradicts Büring's (2003) claim that the presence of a strategy—a double question split up into single variable questions—is a sufficient condition for contrastive topic marking. This claim will be questioned in section 4.4.

4.3 Negation and its presuppositions

Our first assumption concerning negation will be that it ‘presupposes’ in a certain weak sense the proposition it negates. This is not the traditional, strong notion of presupposition which requires the presupposed material to be entailed by the context. It is enough that that material is somehow suggested, a possibility that could be entertained by someone on the basis of the current information state. Horn (1989) calls it ‘supposition’, others have used the term ‘weak presupposition’ (Zeevat, 2008). It is a general characteristics of the pragmatics of overt negation that reflects the fact that one would never say that *John didn’t go to Paris* unless it were somehow possible that John would go to Paris. This is equally true for English and Russian negation.

Of particular interest to us is the distinction between *sentential* and *constituent* negation. In Russian, sentential negation is invariably expressed by the negative particle *ne* immediately preceding the finite verb. It has received a lot of attention in linguistic literature especially because it licenses the genitive of negation, as well as negative polarity (negative concord) items [references]. For all our present purposes it expresses plain logical negation. For convenience, we will assume *ne* to denote $\lambda P \lambda Q [Q(\lambda x \neg P(x))]$ where P is a property that stands for the meaning of the VP, and Q a quantifier denoted by the argument (typically, the subject) that still needs to be supplied to make it a full proposition.¹¹ Accordingly, the weak presupposition it introduces is simply $Q(P)$. For example in (19), Q is $\lambda P [P(Oleg)]$ and P is *smoke* which gives us $\neg smoke(Oleg)$ for the assertive meaning of the sentence, and $smoke(Oleg)$ for its weak presupposition.

- (19) Oleg ne kurit
 Oleg not smokes
 Oleg doesn’t smoke.

In contrast, constituent negation is marked by the particle *ne* appearing in front of the constituent that is negated, cf. (20), which can be (almost) any constituent: quantificational and referential DPs, PPs, etc., and in particular also VPs. Normally, the negated constituent receives focal stress.

- (20) a. ne [OLEG]_F kurit
 not Oleg smokes
 b. kurit ne [OLEG]_F
 smokes not Oleg
 It is not Oleg that smokes.

¹¹It is immaterial for the present discussion whether the given logical type is basic for the Russian negative particle, or the result of syntactically or semantically motivated abstraction operations on a lower basic type.

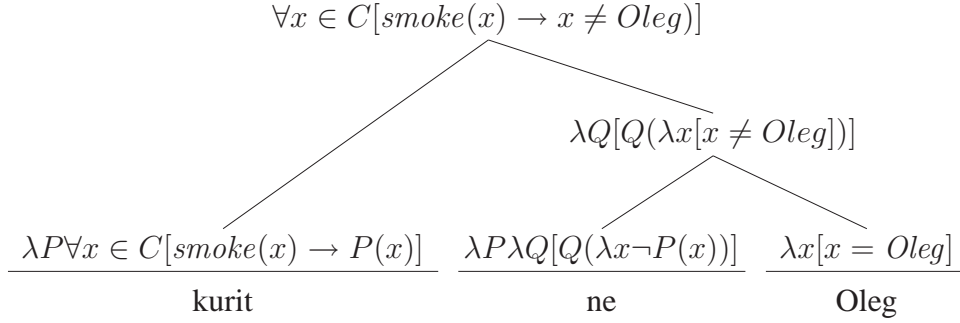


Figure 8: Semantic composition for a sentence with constituent negation, (20b)

Russian constituent negation has received much less attention from linguists. It is typically assumed to presuppose the positive part of the sentence, e.g. (20) presupposes that someone smokes (Borschev et al., 2006). In fact, a stronger assumption seems justified: Russian sentences with constituent negation have roughly the same semantics as e.g. the English negated specificational (pseudo)cleft sentences, i.e. *It is not Oleg that smokes*, or *Who smokes is not Oleg*.

The first approximation of how this meaning is composed is shown in figure 8. Negation applies to the property of being Oleg ($\lambda x[x = Oleg]$) associated with the negated DP, and takes the quantifier *who smokes* ($\lambda P \forall x \in C[smoke(x) \rightarrow P(x)]$) associated with the fronted verb *kurit* as its second argument. Simplifying again, the positive part of the sentence *kurit* ‘who smokes’ is represented as a universal quantifier.¹² Its domain restriction C depends on the context of utterance and realises the idea that only relevant individuals that smoke are concerned—individuals that smoke on a particular, highly activated occasion. Notice that the same semantics is assigned to constituent and sentential negation,¹³ all the difference comes from the meanings associated with rest of the sentence—the negated and the positive parts. We assume that these differences are accounted for by whatever syntactic operations are responsible for the marked word order and accentuation, and especially for the position of the negative particle in sentences with constituent negation. However, no details of the syntactic analysis will be discussed.

As far as presupposition is concerned, first of all, the fronted verb *kurit*, just

¹²It is more common to treat free relatives, which participate in pseudocleft constructions, as definites, or *maximal* individuals (Jacobson, 1995; Rullmann, 1995). Notions like maximality, however, implicitly involve universal quantification.

¹³This is partly due to the wide scope of the quantifier Q over negation, which in turn only takes scope over the predicate P in our definition. In other words, P represents the negated and Q the positive part of the sentence. This might not be general enough to account for all possible readings of sentences with sentential negation. Certainly, a more general and principled analysis can be provided in the future.

like a free relative *who smokes* (and Fregean definites), introduces an existential presupposition that someone smokes ($\exists x[\text{smoke}(x)]$). This accounts for the intuitions of (Borshev et al., 2006). Second, negation weakly presupposes what it negates, i.e. in the present case it is the meaning of a positive (pseudo)cleft *It is Oleg that smokes* or *Who smokes is Oleg*: $\forall x \in C[\text{smoke}(x) \rightarrow x = \text{Oleg}]$. Notice that this can also be paraphrased as *only Oleg smokes*, which is equivalent to saying that *Oleg* is an exhaustive answer to the question *Who smokes?* In other words, a sentence with constituent negation like (20) presupposes that the question *Who smokes?* has previously been answered exhaustively by *Oleg* (or that this answer was expected or possible).

Finally coming back to corrections, our last assumption will be that the semantics of the positive conjunct has the same sort of built in exhaustivity characteristic of cleft constructions, e.g. in (21) the underlying structure of the second conjunct of *a* is the same as that of the first and it means $\forall x \in C[\text{smoke}(x) \rightarrow x = \text{Roma}]$, i.e. *It is Roma who smokes* or *Who smokes is Roma*, or *Only Roma smokes*.¹⁴

- (21) Kurit ne OLEG, a ROMA.
 smokes not Oleg but Roma
 Not Oleg, but Roma smokes.

The result is summarized in (22). The fact that *Oleg* and *Roma* are competing *exhaustive* answers to the question *Who smokes?* creates the replacivity effect that distinguishes corrections and makes these answers mutually exclusive. Obviously, *Oleg smokes* and *Roma smokes* (no exhaustivity) are compatible statements, while *It is Oleg who smokes* and *It is Roma who smokes* (exhaustive) are incompatible, so if the first happens to be suggested by the context it can only be *replaced* by the second.

- (22) a. Presupposition of the negative conjunct: $\forall x \in C[\text{smoke}(x) \rightarrow x = \text{Oleg}]$
 b. Negative conjunct: $\forall x \in C[\text{smoke}(x) \rightarrow x \neq \text{Oleg}]$
 c. Positive conjunct: $\forall x \in C[\text{smoke}(x) \rightarrow x = \text{Roma}]$

¹⁴This assumption can be motivated by parallelism between the contrasted items, which ultimately boils down to assuming that exhaustivity is already contained in the topic question. That is, the *wh*-yes/no-question in corrections is construed as $?y?\xi\forall x \in C[\text{smoke}(x) \rightarrow \xi(x = y)]$, where *y* is the *wh*-variable ranging over Oleg, Roma, etc., and ξ is the *yes/no*-variable that takes negation (\neg) or an identity function as its values. In other words, the question is *Who is it not who smokes and who is it who smokes?* However, exhaustivity itself needs to be constrained by a topic question, and a cleft sentence like *It is (not) John who smokes* requires a question of the form *Who smokes?*, so one would have to assume that, for instance, the positive conjunct in (21) is both an answer to *Who is it who smokes?* and *Who smokes?* In principle, there is no reason why one and the same sentence should not have more than one discourse topic, but a principled theory that constrains this set of topics still needs to be developed.

The idea to derive replacivity and mutual exclusiveness of the conjuncts in corrections from the assumption that the conjuncts represent exhaustive answers to the same question has been previously developed by Kasimir (2006) in her account of the German *sondern*. Our proposal implements the same idea, except that if Kasimir makes exhaustivity of the conjuncts a presupposition conventionally associated with *sondern*, in our case it is not part of the semantics of the Russian *a*, but is contributed by constituent negation, which is obligatory in corrections.

English corrections are rather more problematic because they do not seem to contain any linguistic device with which exhaustivity could be associated by convention. Of course, there is pragmatic exhaustivity—a default operation with roughly the same effect as that of a cleft construction or the particle *only*. However, pragmatic exhaustivity applies to non-corrections just as much as it does to corrections. For example, (23a) is a correction: the background assumption negated by the sentence is that John would go only to Paris, but he went to Berlin instead (replacivity). In contrast, (23b) is not a correction: John could have gone to Berlin and Paris, or to neither place, so it is not the case that John went to Berlin *instead* of Paris (Umbach, 2004, pp. 171–173). If pragmatic exhaustivity were responsible for the replacivity effect in the correction (23a), why is (23b) not replacive? The only superficial difference between (23a) and (23b) is that *but* connects terms in (23a) and sentences in (23b). Whether this difference can be related in a systematic way to exhaustivity remains an issue for further investigation.

- (23) a. John didn't go to PARIS, but to BERLIN.
 b. John didn't go to PARIS, but he went to BERLIN.

4.4 Why corrections have no contrastive topics

In the last section it was shown how the properties of corrections in Russian, in particular replacivity, can be derived from the properties of constituent negation used in correction sentences. In this section, we look again at the differences between corrections and oppositions with *yes/no*-topics, and present some (as yet very tentative) ideas on the question of why corrections, unlike oppositions, do not have contrastive polarity topics.

According to Büring (2003), not only is contrastive topic accentuation a signal that the sentence addresses one in a series of single variable questions dominated by a double question, but it is also obligatory in case the discourse topic has these characteristics.¹⁵ So far we have tacitly rejected the latter of these two statements, now it is time to say so explicitly: the view that corrections address double *wh*-

¹⁵To be more precise, topic marking in Büring's theory is only obligatory when the strategy is implicit, i.e. the single variable subquestions are not uttered, but just presupposed by the speaker. Since we only deal with implicit strategies here

yes/no-topics split up by polarity can only be maintained if this type of discourse strategy is a necessary, but not a sufficient condition for contrastive topic marking. What is then a sufficient condition? What is needed in addition to the discourse strategy to license topic accentuation and how would it explain the difference between corrections and oppositions?

The first hypothesis that we will make is that there is a preference for contrastive topics that are also given, contextually activated and talked about. For Büring's example (24) it implies that if Fred and Mary were previously mentioned and are talked about, one would prefer to go by people making Fred and Mary the contrastive topic as in (24a). In contrast, if the talk is about food, so the beans and the eggplant were mentioned or are accessible via a bridging inference then it might be better to go by food and choose the structure in (24b).¹⁶

- (24) a. [Fred]_T ate [the beans]_F, [Mary]_T ate [the eggplant]_F .
 b. [Fred]_F ate [the beans]_T, [Mary]_F ate [the eggplant]_T .

This is not to suggest that the notions of givenness, referent activation or aboutness topic should be conflated with the notion of contrastive topic. Rather, just like subjecthood, definiteness and animacy are distinct notions which tend to fall together—subjects are definite and animate most of the time (Aissen, 2003; Zeevat and Jäger, 2002)—different varieties of topic tend to be aligned in a similar way. That is, there is perhaps no categorical requirement that contrastive topics be also aboutness topics or given, but an optimisation process prefers sentences with given contrastive aboutness topics.

Our second hypothesis in light of the first is that polarity values make bad topics. Although we have seen that in Büring's theory they are just as good contrastive topics as they are foci, one has to admit that they make little sense as aboutness topics or as entities subject to activation in memory. *Ceteris paribus*, splitting by the *wh*-variable (25b), which makes a usual term the contrastive topic, is always preferred to splitting by the *yes/no*-variable (25a). In fact, what seems like a *yes/no*-topic in (25a) is most probably something bigger—perhaps, an open proposition of *Oleg not going* vs. *Oleg going* somewhere. These are entities that can be activated and talked about. This would explain why (25a) is only appropriate in a context where *Oleg not going* and *Oleg going* somewhere (and not just *yes* and *no*) are somehow activated or salient (cf. discussion in section 4.2).

¹⁶This would also account for the following example discussed by Büring (2003, p. 530):

- (i) What did the pop stars wear?
 c. The FEMALE_{CT} pop stars wore CAFTANS_F.
 d. # The FEMALE_F pop stars wore CAFTANS_{CT}.

[??? assumptions about what is topic.]

Büring's pop stars example.

- (25) a. Oleg [ne EZDIL]_T [v PARIŽ,]_F
Oleg not went to Paris
 a [EZDIL]_T [v BERLIN.]_F
but went to Berlin
 b. Oleg [v PARIŽ]_T [ne EZDIL,]_F
Oleg to Paris not went
 a [v BERLIN]_T [EZDIL.]_F
but to Berlin went

In corrections, the instantiations of the *wh*-variable, presumably, cannot be topic because they have to be focus in order to feed the right variable and restriction to exhaustivity, pragmatic or encoded in a cleft-like construction, which is responsible for the replacivity effect, cf. section 4.3. Without that a correction is not a correction. Making the topic “bigger” than just the *yes/no*-variable as in (25a) is also problematic because it is not clear what extra material it could include. Assuming that the negative topic should contain at least something that falls within the scope of negation (such as the *going* in (25a)), the only candidate in (26) is the property $\lambda x[x = \textit{Paris}]$, but that, again, is the focus.

- (26) Oleg ezdil ne [v PARIŽ,]_F a [v BERLIN.]_F
Oleg went not to Paris but to Berlin

Finally, if polarity on its own cannot function as a proper topic that combines properties of contrastive, aboutness and given topics, we are left without a constituent that qualifies for contrastive topic accentuation.

Of course, this explanation of the absence of contrastive topics in corrections is much too sketchy to be conclusive, but once it is worked out it would be a considerable step in showing that the properties of the corrective uses of contrast markers like *a* in Russian follow naturally from the general contrastive function of those markers plus other characteristics of correction sentences, such as constituent negation, exhaustivity, etc. Then there is no need to treat *not ... but* in English or *ne ... a / a ne* in Russian as a fixed collocation, but simply as *not* plus *but*.

5 Some conclusions, and lots of outlook

[Correction in the contrast semantic map. Correction as a special case of WH-Y/N. Our approach makes the relationships between functions in a semantic map explicit.]

[Carla’s discussion of replacivity, vs. distinct possibilities and correction vs. adversative (Umbach, 2004). The discussion of (27) vs. (17a):]

(27) John didn't go [to PARIS]_F, but he went [to BERLIN]_F.

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