

# PROBLEMS WITH THE A/A'-DICHOTOMY: EVIDENCE FROM RUSSIAN SCRAMBLING

Larissa Nossalik  
McGill University

One of the questions that have been preoccupying linguists who work on scrambling is what type of movement scrambling is. Is it A or A'-movement? There are no disputes in the literature when it comes to the status of long-distance scrambling, as all linguists agree on its A'-status. It is the status of clause internal (local) scrambling that is the subject of disagreement. On one hand, linguists such as Webelhuth (1989), Mahajan (1990), Miyagawa (1997, 2001, 2003) and Bailyn (1995, 2003a, 2003b, 2004) believe that local scrambling has a double nature, in that it is sometimes A-movement and sometimes A'-movement. On the other hand, linguists such as Grewendorf and Sabel (1999) as well as Müller and Sternefeld (1994) claim that clause internal scrambling, just like long-distance scrambling, is always A'-movement.

In the present paper, I will show that neither one of these approaches to local scrambling can account for Russian data. In fact, Russian scrambling data not only calls into question these accounts but also jeopardizes the validity of the A/A'-dichotomy itself, especially in the absence of formal definitions of A and A'-movement.

## 1. A/A'-dichotomy

Traditionally, the A/A'-dichotomy was “designed” to distinguish between case-driven movements such as passivization and raising, and non case-driven movements such as Wh-movement and topicalization. An A'-chain was defined as a chain with its head in an A'-position (neither a theta nor a case position), as in (1). This definition is still maintained in the current theory.

- (1) What<sub>i</sub> did John buy t<sub>i</sub>?

An A-chain was not only believed to be a chain with all its links in an A-position (a theta or a case position), which is the current view, but, more specifically, it was believed to be a chain with its tail in a theta but no case position and its head in a case but no theta position, as in (2).

- (2) a. This book<sub>i</sub> was coloured t<sub>i</sub> by children.  
b. John<sub>i</sub> seems to Mary [t<sub>i</sub> to be happy].

---

\* I would like to express my gratitude to my supervisors, Kyle Johnson and Lisa Travis, for the guidance, patience and support. I would also like to thank all the participants of the 2005 CLA conference for their inspiring comments and suggestions. This research was supported with grants from le Fonds Québécois de la Recherche sur la Nature et les Technologies.

However, once A-scrambling was allowed into the system the restrictive definition of an A-chain was abandoned, given that the position that hosts an A-scrambled element is neither a theta nor a case position. As a result, we can no longer distinguish an A-chain from an A'-chain by simply looking at whether or not the movement is into a case position. We are obliged to use the standard A/A'-diagnostics, i.e., binding, reconstruction, weak crossover (WCO) and parasitic gap (PG) diagnostics.

Unfortunately, as demonstrated in Nossalik (2005), the majority of the standard A/A'-diagnostics are unsuitable for Russian, due to the orientational properties of Russian anaphors and pronouns, and the restriction on backward anaphora. There are, however, two A/A'-diagnostics that are suitable for Russian: the reconstruction (for Condition C) and the WCO diagnostics. Intriguingly, these two diagnostics reveal contradictory results when it comes to local scrambling. Whereas the reconstruction diagnostic identifies Russian local scrambling as A'-movement, the WCO diagnostic classifies it as A-movement. But before we see how exactly these A/A'-diagnostics disclose the double status of Russian local scrambling, let me briefly discuss the previous research on scrambling, so we can see why it fails to account for the Russian facts.

## 2. Previous Research on the A/A'-status of Scrambling

Webelhuth (1989) was the first to point out the paradoxical behaviour of local scrambling. He noticed that in German local scrambling is ambiguous between A and A'-movement. Webelhuth's example in (3) demonstrates this ambiguity:

- (3) ? Peter hat die Gäste [ohne *pg* anzuschauen] einander t vorgestellt.  
 Peter has the guests without looking-at each other introduced-to.  
 'Peter introduced the guests to each other without looking at them.'

In (3) the locally scrambled element *die Gäste* binds the anaphor *einander*, revealing its A-properties, and, at the same time, licenses a parasitic gap in the manner adverbial *ohne anzuschauen*, revealing its A'-properties. To account for the observed paradox, Webelhuth proposes to treat local scrambling as movement to a mixed A/A'-position.

Mahajan (1990), on the basis of data from Hindi, argues that although it is true that local scrambling exhibits properties of both A and A'-movement, it never does so simultaneously. Mahajan postulates two different types of local scrambling, one A and the other A', with distinct landing sites for each. This analysis allows him to discard Webelhuth's mixed A/A'-position.

Saito (1992) and Miyagawa (1997) show that in Japanese local scrambling is also double in nature, in that it sometimes behaves as A-movement and sometimes as A'-movement. Similarly to Mahajan (1990), they explain this paradoxical behaviour of local scrambling by assuming two different landing sites, one for A-scrambling and one for A'-scrambling.

Bailyn (1995, 2003a, 2003b, 2004) extends Mahajan's, Saito's and Miyagawa's claim to Russian. He argues that Russian has two distinct types of clause-internal scrambling, "inversion" and "dislocation", where the former represents A-movement and the latter A'-movement. As will be demonstrated in the next section, Bailyn's analysis, however, is unsupported by the Russian data.

The last contribution to the study of scrambling that I would like to mention in the present section is that by Grewendorf and Sabel (1999) and Müller and Sternefeld (1994) who claim that in German scrambling in general, regardless of its locality status, is an instance of A'-movement. In order to defend their claim, they propose to reject some of the traditional A/A'-diagnostics as irrelevant. In particular, they propose to reject the WCO diagnostic on the grounds that in German even a classical instance of A'-movement, such as Wh-movement, does not induce the WCO effect.

One of the questions that the present paper attempts to answer is whether any of these approaches to scrambling is able to explain the double nature that, as we will see shortly, the two types of Russian local scrambling exhibit. But before we look at Russian scrambling, let me briefly discuss some grammatical properties of Russian that will be relevant to the analysis presented in section 4.

### 3. The Structure of Russian

Russian is a language with “free” word order. Thus, a simple transitive sentence permits essentially all possible surface variants: (S-V-O, S-O-V, V-S-O, V-O-S, O-V-S and O-S-V). However, in the present paper I will only address two of these constructions, namely O-S-V and O-V-S, which, along with the underlying S-V-O order, are constructions with neutral intonation, (i.e., the sentences with these word orders bear no emphatic stress but rather have neutral, i.e., falling, sentential intonation).<sup>1</sup> Following Bailyn (1995, 2003a, 2003b, 2004), I will refer to the movement that yields O-S-V word order as dislocation and to the movement that yields O-V-S word order as inversion. It should be noted that Russian inverted constructions normally have what is called a narrowly focused reading - a reading in which only a sentence-final constituent is focused (King 1995).<sup>2</sup>

When it comes to anaphors and pronouns I assume that in Russian, just like in English, their distribution is mediated by standard Binding Theory (BT). Notably though, the Governing Category (GC) of a Russian anaphor is larger than that of an English anaphor and corresponds to the minimal finite clause containing it (Progovac 1992, Rappaport 1998).

Bearing these grammatical properties of Russian in mind let us next determine what type of movement different syntactic types of Russian scrambling represent by applying the two valid A/A'-diagnostics, i.e., the reconstruction (for Condition C) and the WCO diagnostics.

---

<sup>1</sup> The status of scrambling in emotive sentences, e.g., V-S-O, V-O-S, S-O-V is a topic for further research.

<sup>2</sup> To reflect this specific information structure of Russian inverted sentences, I will translate them into English using cleft construction. For instance, the Russian sentence in (i) will correspond to the English sentence in (ii):

- (i) Mašu ljubit Petja.  
Masha-ACC loves Petja-NOM
- (ii) It is Petja who loves Masha.

#### 4. Applying the valid A/A'-diagnostics to Russian

##### 4.1 The Reconstruction (for Condition C) Diagnostic

One of the diagnostics that are applicable in Russian is the reconstruction A/A'-diagnostic and specifically, reconstruction for Condition C of the BT.

The observation that this diagnostic brings out is that only A'-movement, as opposed to A-movement, obligatorily reconstructs, feeding Condition C. This is exemplified by the English sentences in (4), where only A'-movement, being able to reconstruct, yields an ungrammatical sentence that violates Condition C.

- (4) a. A-movement:  
Pictures of John<sub>i</sub> seem to him<sub>i</sub> [t to be on sale].
- b. A'-movement:  
\* It's [pictures of John<sub>i</sub>] that he<sub>j</sub> sells t.

The question now is whether this generalization also holds in Russian. In other words, is there a contrast between A and A'-movement in Russian that can only be explained in terms of the ability or inability of a moved element to reconstruct? The answer to this question is yes. Thus, the ungrammaticality of (5b) results from a Condition C violation, where at LF the pronoun *on* improperly binds *Ivana* which reconstructs to its base-generated position.

- (5) a. A-movement:  
Novye družja Ivana<sub>j</sub> kazutsja emu<sub>i</sub> [t<sub>i</sub> umnymi].  
[New friends of-Ivan]-NOM seem him-DAT smart.  
'New friends of Ivan seem to him to be smart.'
- b. A'-movement:  
\* Kakogo iz družej Ivana<sub>j</sub> on<sub>i</sub> priglasil  
[Which among friends of-Ivan]-ACC he-NOM invited  
v gosti t<sub>i</sub>?  
over.  
'Which friends of Ivan did he invite over?'

Importantly, the grammaticality contrast between the A and A'-movements in (5) allows us to use the reconstruction diagnostic to test the A/A'-status of Russian scrambling.

Let us begin our exploration of the Russian scrambling data by considering, first, the ungrammatical examples of local and long-distance dislocation in (6b) and (6c):

- (6) a. S-O-V: Underlying structure:  
\* On<sub>i</sub> často vstrečael novyx znakomyx [Ivana]<sub>j</sub>.  
He-NOM often meets [new acquaintances of-Ivan]-ACC.  
'He often meets Ivan's new acquaintances.'

- b. O-S-V: Dislocation:
- \* Novyx znakomyx [Ivana]<sub>i</sub> on<sub>i</sub> vstrečae<sub>t</sub> často.<sup>3</sup>  
[New acquaintances of-Ivan]-ACC he-NOM meets often.  
'The new acquaintances of Ivan, he meets often.'
- c. O-...-S-V: Long-Distance Scrambling:
1. Out of a non-finite clause:
    - \* Novyx znakomyx [Ivana]<sub>i</sub> on<sub>i</sub> prikazal Maše  
[New acquaintances of-Ivan]-ACC he-NOM ordered Masha-DAT  
[PRO]<sub>k</sub> priglasit' v gosti imenno zavtra.  
to-invite over precisely tomorrow.  
'He ordered Masha to invite over new acquaintances of Ivan exactly tomorrow.'
  2. Out of a finite clause past an embedded antecedent:
    - \* Novyx znakomyx [Ivana]<sub>i</sub> ja xoču, čtoby on<sub>i</sub>  
[New acquaintances of-Ivan]-ACC I-NOM want that he-NOM  
priglasil v gosti t imenno zavtra.  
invites over precisely tomorrow.  
'I want that he invites over the new acquaintances of Ivan exactly tomorrow.'
  3. Out of a finite clause past a matrix antecedent:
    - \* Novyx znakomyx [Ivana]<sub>i</sub>, on<sub>i</sub> xočet, čtoby  
[New acquaintances of-Ivan]-ACC he-NOM wants that  
ja priglasila t v gosti imenno zavtra.  
I-NOM invite over precisely tomorrow  
'He wants that I invite over the new acquaintances of Ivan exactly tomorrow.'

The ungrammaticality of these sentences suggests that a scrambled constituent in both local and long distance dislocated constructions reconstructs to its base-generated position, producing an ungrammatical construction as in (6a), which violates Condition C. According to the reconstruction A/A'-diagnostic, this means that in Russian local and long-distance dislocation are both instances of A'-movement.

How about inversion? Intriguingly, in Russian inverted sentences are marginally acceptable:

---

<sup>3</sup> Adding a final adverb makes given word order more available even in the absence of the relevant context. Therefore, in what follows all examples of dislocation contain a final adverb.

(7) O-V-S: Inversion:

- a. ? Novyx znakomyx [Ivana]<sub>i</sub> často vstrečaeť on<sub>i</sub>.<sup>4</sup>  
 New acquaintances of-Ivan-ACC often meets he-NOM.  
 'It is he who often meets the new acquaintances of Ivan.'
- b. ? Novyx znakomyx [Ivana]<sub>i</sub> často vstrečaeť Ivan<sub>i</sub>.  
 New acquaintances of-Ivan-ACC often meets Ivan-NOM.  
 'It is Ivan who often meets the new acquaintances of Ivan.'

Does this marginal acceptability of (7a) and (7b) indicate that inversion is an instance of A-movement? In other words, is it the lack of reconstruction that is responsible for the marginal grammaticality of the sentences in (7)? On the basis of the data in (8), I will claim that the answer to this question is no. Thus, if we modify the grammatical sentences in (7) so that the subject *on* or *Ivan* occupies a non-final non-focused position, then the inverted construction suddenly becomes unacceptable (with coindexation), as shown in (8). Hence, it is the focusing of the subject and not the inability of the scrambled object to reconstruct that renders the sentences in (7) grammatical.<sup>5</sup>

- (8) a. \* Novyx znakomyx [Ivana]<sub>i</sub> predstavil on<sub>i</sub>  
 [New acquaintances of-Ivan]-ACC introduced he-NOM  
 predsedatelju-DAT.  
 to-Chairman.  
 'It is to the Chairman that he introduced new acquaintances of Ivan.'
- b. \* Novyx znakomyx [Ivana]<sub>i</sub> predstavil Ivan<sub>i</sub>  
 [New acquaintances of-Ivan]-ACC introduced Ivan-NOM  
 predsedatelju-DAT.  
 to-Chairman.  
 'It is to the Chairman that Ivan introduced new acquaintances of Ivan.'

<sup>4</sup> It is quite odd in Russian to have a pronoun in a sentence-final focused position. For comparison, in (7b) I provided an example with a full NP instead of the pronoun. Still, having two identical coindexed NPs within a single sentence sounds unnatural, although acceptable:

(iii) ?Sestra Ivana<sub>i</sub> kažetsja novym znakomym Ivana<sub>i</sub> [t krasivoj].  
 Sister of-Ivan-NOM seem [new acquaintances of-Ivan]-DAT beautiful.  
 'Ivan's sister seems to new acquaintances of Ivan to be beautiful.'

<sup>5</sup> Why focusing of the subject makes (7) acceptable is beyond the scope of the present investigation. It may well be that these sentences are reanalysed by Russian speakers as the right-dislocated construction in (iv):

(iv) Novyx znakomyx [Ivana]<sub>i</sub> často vstrečaeť on<sub>i</sub>, Ivan<sub>i</sub>.  
 [New acquaintances of-Ivan]-ACC often meets he-NOM, Ivan-NOM.  
 'It is he, Ivan, who quite often meets the new acquaintances of Ivan.'

The ungrammaticality of the examples in (8), just like the ungrammaticality of the sentences in (6b) and (6c), results from a Condition C violation, created by the reconstruction of the scrambled NP *novyx znakomyx Ivana* at LF.

On the basis of the ungrammatical data in (8), I conclude that Russian inversion, just like dislocation or long-distance scrambling, is an instance of A'-movement. The reconstruction A/A'-diagnostic, thus, illustrates that Russian scrambling, contrary to Bailyn's (1995, 2003a, 2003b, 2004) claim, is A'-movement across the board; inversion, dislocation and long-distance scrambling simply being different realizations of it.

In the next subsection we will turn to the WCO A/A'-diagnostic in an attempt to confirm the results of the reconstruction diagnostic.

## 4.2 The WCO Diagnostic

It has been claimed in the literature that the presence versus absence of the WCO effect can be taken as an indicator of a movement's status. Thus, A'-movement but not A-movement of a quantifier phrase (QP) past a non-c-commanding variable produces WCO, yielding an ungrammatical sentence:

- (9) a. A-movement:  
Who<sub>i</sub> t<sub>i</sub> seems to his<sub>i</sub> mother [t<sub>i</sub> to be happy]?
- b. A'-movement:  
\* Whom<sub>i</sub> does his<sub>i</sub> girlfriend love t<sub>i</sub>? (WCO)

In Russian, however, not only A-movement but even a classical example of A'-movement such as Wh-movement does not exhibit WCO, so the Russian equivalent of (9b) is grammatical:

- (10) a. A-movement:  
Kto<sub>i</sub> t<sub>i</sub> kažetja svoej<sub>i</sub> materi umnym?<sup>6</sup>  
Who-NOM seems [self mother]-DAT smart.  
'Who seems to his mother to be smart?'
- b. A'-movement:  
Kogo<sub>i</sub> ljubit ego<sub>i</sub> podruža?  
Whom-ACC loves [his girlfriend]-NOM.  
'Whom does his girlfriend love?'

Does this mean that in Russian A'-movement does not obey the principles responsible for the WCO effect? To put it differently, is it true that in Russian A'-movement of a quantifier over a coindexed non-c-commanding pronoun never results in WCO? Because if so, we could proclaim the WCO

<sup>6</sup> In Russian only the subject can be coindexed with an anaphor (i.e., anaphors are subject-oriented). Given that Russian, unlike English, has a genitive anaphor in its inventory, the Russian equivalent of (9a), i.e., (10a), contains a genitive anaphor rather than a genitive pronoun.

A/A'-diagnostic invalid for Russian, just like Grewendorf and Sabel's (1999) as well as Muller and Sternefeld's (1994) proposed to do for German. Unlike German, however, Russian has some examples of WCO. For instance, in Russian a sentence in which a QP precedes a coindexed variable, such as (11a), is grammatical, but a sentence in which a QP follows a coindexed variable, such as (11b), is ungrammatical, due to a WCO violation produced by covert QR.

- (11) a. My pokazali [každyu dressirovš'iku]<sub>i</sub> ego<sub>i</sub> l'va.  
We-NOM showed [each trainer]-DAT [his lion]-ACC.  
'We showed every trainer his lion.'
- b. \* My pokazali ego<sub>i</sub> dressirovš'iku [každyo l'va]<sub>i</sub>.  
We-NOM showed [his trainer]-DAT [each lion]-ACC.  
'We showed every lion to his trainer.' (from Pereltsvaig 2005)

The data in (11) force us to conclude that in Russian pronouns are susceptible to WCO and that A'-movement (at least covert A'-movement) does obey the principles accountable for WCO. The existence of such data entitles us to use the WCO diagnostic to test the A/A'-status of Russian scrambling.<sup>7</sup> Let us begin our investigation of Russian data by looking at some examples of clause-internal Wh- and quantifier movements:

- (12) S-V-O: *Underlying*:
- a. \* Ee<sub>i</sub> xožjajka striž'ot [každyu iz etix sobak]<sub>i</sub>.  
[Her owner]-NOM grooms [each of these dogs]-ACC-FEM.  
'Her owner grooms each of these dogs.'
- b. \* Ee<sub>i</sub> xožjajka striž'ot [kakuju iz etix sobak]<sub>i</sub>?  
[Her owner]-NOM grooms [which of these dogs]-ACC-FEM.  
'Which of these dogs does its owner groom?'
- (13) O-V-S: *Inversion*:
- a. [Každyu iz etix sobak]<sub>i</sub> t striž'ot ee<sub>i</sub> xožjajka t.  
[Each of these dogs]-ACC-FEM grooms [her owner]-NOM.  
'It is the owner of each of these dogs who grooms it.'
- b. [Kakuju iz etix sobak]<sub>i</sub> t striž'ot ee<sub>i</sub> xožjajka t?  
[Which of these dogs]-ACC-FEM grooms [her owner]-NOM.  
'Which of these dogs gets groomed by its owner?'

<sup>7</sup> The contrast between grammatical (10b) and ungrammatical (11b) can be accounted for if we make an explicit distinction between overt and covert A'-movement. Thus, overt Wh-movement, in grammatical (10b), undergoes an initial scrambling, overriding WCO. Covert quantifier movement, however, in ungrammatical (11b), does not undergo an initial scrambling (given that scrambling is an overt operation) and, hence, induces WCO.



- (14) O-S-V: Dislocation:
- a. [Každuju iz etix sobak]<sub>i</sub> t ee<sub>i</sub> xožjajka striž'ot t  
 [Each of these dogs]-ACC-FEM [her owner]-NOM grooms  
 raz v mesjac.  
 once a month.  
 'Each of these dogs, its owner grooms it once a month.'
- b. [Kakuju iz etix sobak]<sub>i</sub> t ee<sub>i</sub> xožjajka striž'ot t  
 [Which of these dogs]-ACC-FEM [her owner]-NOM grooms  
 raz v mesjac?  
 once a month.  
 'Which of these dogs does its owner groom once a month?'

The grammaticality of (13) and (14) suggests that local scrambling of an object in both inverted and locally dislocated constructions is an instance of A-movement, as it can override the WCO effect. Importantly, contrary to Bailyn's (2003a, 2003b, 2004) claim, we found no distinction between these two types of local scrambling.

Unlike locally scrambled sentences, Russian long-distance scrambled sentences are ungrammatical:

- (15) O-...-S-V: Long-Distance: Out of infinitival clauses:
- a. ?\* [Každuju iz etix sobak]<sub>i</sub> t Nataša prikazala  
 [Each of these dogs]-ACC-FEM Natasha-NOM ordered  
 [ee<sub>i</sub> xožjajke]<sub>k</sub> t [PRO<sub>k</sub> strič' t raz v mesjac].  
 [her owner]-DAT to-groom once a month.  
 '\*Natasha ordered its owner to groom each of these dogs once a month.'
- b. ?\* [Kakuju iz etix sobak]<sub>i</sub> t Nataša prikazala  
 [Which of these dogs]-ACC-FEM Natasha-NOM ordered  
 [ee<sub>i</sub> xožjajke]<sub>k</sub> t [PRO<sub>k</sub> strič' t raz v mesjac] ?  
 [her owner]-DAT to-groom once a month.  
 '\*Which of these dogs did Natasha order its owner to groom once a month?'
- (16) O-...-S-V: Long-Distance: Out of finite clauses past a matrix pronoun:
- a. ?\* [Každuju iz etix sobak]<sub>i</sub> t ee<sub>i</sub> xožjajka xočet  
 [Each of these dogs]-ACC-FEM [her owner]-NOM wants  
 čtoby t Maša strigla t raz v mesjac.  
 that Masha-NOM groomed once a month.  
 '\*Its owner wants that Masha grooms each of these dogs once a month.'

- b. ?\* [Kakuju iz etix sobak]<sub>i</sub> t ee<sub>i</sub> xozjajka xočet  
 [Which of these dogs]-ACC-FEM [her owner]-NOM wants  
 čtoby t Maša strigla t raz v mesjac?  
 that Masha-NOM groomed once a month  
 ‘\*Which of these dogs does its owner want that Masha grooms  
 once a month?’

According to the WCO diagnostic, the ungrammaticality of these sentences implies that in Russian long-distance scrambling is an instance of A'-movement. Interestingly, the sentences in (17), unlike those in (15) and (16), are grammatical. Their grammaticality confirms our results about the A-status of local scrambling, as in these examples the Wh-phrase *každuju iz etix sobak* and the QP *kakuju iz etix sobak* undergo long-distance scrambling through an initial stage of local scrambling, which overrides WCO.

- (17) O-...-S-V:Long-Distance: Out of finite clauses past an embedded pronoun:
- a. [Každuju iz etix sobak]<sub>i</sub> ja xoču čtoby t<sub>i</sub> t<sub>i</sub>  
 [Each of these dogs]-ACC-FEMI-NOM want that  
 ee<sub>i</sub> xozjajka strigla t<sub>i</sub> raz v mesjac.  
 [her owner]-NOM groomed once a month  
 ‘\*I want that its owner grooms each of these dogs once a month.’
- b. [Kakuju iz etix sobak]<sub>i</sub> ty xočeš' čtoby  
 [Which of these dogs]-ACC-FEM you-NOM want that  
 t<sub>i</sub> t<sub>i</sub> ee<sub>i</sub> xozjajka strigla t<sub>i</sub> raz v mesjac?  
 her owner-NOM groomed once a month  
 ‘\*Which of these dogs do you want that its owner grooms once a  
 month.’

To recap, the results of the WCO diagnostic confirm the results of the reconstruction (for Condition C) diagnostic only when it comes to long-distance scrambling. In particular, both the reconstruction (for Condition C) and the WCO A/A'-diagnostics identify Russian long-distance scrambling as A'-movement. These diagnostics, however, yield contradictory results when it comes to local scrambling, in that the reconstruction diagnostic classifies Russian local scrambling as A-movement while the WCO diagnostic classifies Russian local scrambling as A'-movement. Crucially, we did not find any empirical distinction between inversion and local dislocation in the realm of a single diagnostic. In light of these findings, we can conclude that inversion and dislocation should not be analyzed as two distinct processes of A- and A'-movements, contrary to Bailyn's (2003a, 2003b, 2004) proposal. How about other proposals that have been advanced to solve the mystery of the double nature of local scrambling? Can they account for the paradox under discussion? In the next section, I will demonstrate that the answer to this question is no.

## 5. (Im)possible Solutions

As we have already seen in section 3, Grewendorf and Sabel's (1999) as well as Muller and Sternefeld's (1994) approach to scrambling is inappropriate for Russian. We cannot reject the WCO A/A'-diagnostic, as these linguists proposed to do in case of German, given that in Russian A'-movement is susceptible to WCO.

The same holds for Webelhuth's (1989) analysis. Although it is true that in Russian local scrambling exhibits the properties of both A and A'-movement, it never does so at the same time. Otherwise, we would expect Russian locally scrambled sentences to be always grammatical. Empirically, this prediction is unsupported, given that Russian has some ungrammatical examples of local scrambling, e.g., (6b) and (8). These sentences show that, with respect to the reconstruction A/A'-diagnostic, Russian local scrambling behaves exclusively as A'-movement.

Mahajan's (1990), Miyagawa's (1997) and Bailyn's (2003a, 2003b 2004) analyses of local scrambling are also unable to account for the paradoxical behaviour of Russian local scrambling. Contrary to the predictions that these analyses make, both types of Russian local scrambling display identical behaviour in realm of a given A/A'-diagnostic. Specifically, both inversion and dislocation behave as A'-movement under the reconstruction diagnostic and as A-movement under the WCO diagnostic.

In sum, none of the currently existing analyses of local scrambling can explain the double nature of Russian local scrambling.

## 6. Conclusion

The results of the present investigation jeopardize the validity of the A/A'-dichotomy, as it exists today. Ironically, given that with the introduction of A-scrambling the formal definitions of A and A'-movements were abandoned, it is no longer apparent what constitutes A and what constitutes A'-movement. Until we have clear definitions and a better understanding of these phenomena, we cannot rely on the A/A'-dichotomy to explain other processes, at the risk of building circular argumentation.

If we, however, go back to the original definition of A-movement as of case-driven movement and of A'-movement as of non case-driven movement, then all instances of scrambling should be classified as A'-movement, given that scrambling in general is not a case-driven movement. The question then emerges as to why certain A/A'-diagnostics fail to detect what should be, by definition, A'-movement?

Various questions about the legitimacy of the A/A'-diagnostics need to be answered even if we do not want to take the step "back" to the original definitions. Among other things, we need to determine whether the standard A/A'-diagnostics are indeed reliable tests that exclusively distinguish between A and A'-movements, leaving other grammatical properties aside. It may well also be that the properties that these diagnostics identify as A versus A'-movement are language-specific rather than universal.

So far, the standard A/A'-diagnostics have yielded the following scenario. Universally, there are syntactic positions that are A or A'. Plus, in

scrambling languages, there exist those “strange” positions that behave unexpectedly, in light of the current linguistic theory. These “double” positions sometimes behave like A and sometimes like A’-positions. Why scrambling languages allow for such “special” positions is yet another topic for further research.

Overall, the present paper raises more questions than answers. Nonetheless, these questions are too important to be ignored.

### References

- Bailyn, John F. 1995. A configurational approach to Russian ‘free’ word order. Doctoral dissertation, Cornell University.
- Bailyn, John F. 2003a. Does Russian scrambling exist? In *Word Order and Scrambling*, ed. S. Kirimi, 156-176. Oxford: Blackwell.
- Bailyn, John F. 2003b. A (purely) derivational account of Russian Scrambling. In *Formal Approaches to Slavic Linguistics 11: The Amherst Meeting*, eds. Ji-Yung Kim, Barbara H. Partee and Robert A. Rothstein, 41-62. MI: Michigan Slavic Publications.
- Bailyn, John F. 2004. Generalized Inversion. In *Natural Language and Linguistic Theory* 22(1): 1-49.
- Grewendorf, Günther and Joachim Sabel. 1999. Scrambling in German and Japanese: Adjunction versus multiple specifiers. In *Natural Language and Linguistic Theory* 16: 1-65.
- King, Tracy H. 1995. *Configuring topic and focus in Russian*. Stanford: CSLI publications.
- Mahajan, Anoop. 1990. A/A’-distinction and the movement theory. Doctoral dissertation, MIT.
- Miyagawa, Shigeru. 1997. Against Optional Scrambling. *Linguistic Inquiry* 28(1):1-26.
- Miyagawa, Shigeru. 2001. The EPP, Scrambling and WH-in situ, in *Ken Hale, A Life in Language*, ed., Michael Kenstowicz, 293-338. Cambridge, MA: The MIT Press.
- Miyagawa, Shigeru. 2003. A-movement scrambling and options without optionality. In *Word Order and Scrambling*, ed. S. Kirimi. Oxford: Blackwell.
- Müller, Gereon & Wolfgang Sternefeld. 1994. Scrambling as A-bar movement. In *Studies on Scrambling: Movement and non-movement approaches to free-word-order phenomena*, eds., Norbert Corver and Henk van Riemsdijk, 331-385. Berlin: Mouton de Gruyter.
- Nossalik, Larissa. 2005. The A/A’-status of Russian Scrambling. In *McGill Working Papers in Linguistics* 19(2), eds. Raph Mercado and Yukio Furakawa, 65-102. McGill University.
- Pereltsvaig, Asya. 2005. Aspect Lost, Aspect Regained. In *Aspectual Inquiries. Studies in Natural Language and Linguistic Theory* 62, eds., Kempchinsky, P. and Slabakova, R., 369-395. Dordrecht: Kluwer.
- Progovac, Ljiljana. 1992. Relativized SUBJECT: long-distance reflexives without movement. In *Linguistic Inquiry* 23: 671-680.
- Rappaport, Gilbert. 1998. On anaphor binding in Russian. In *Natural Language and linguistic Theory* 4(1): 97-120.
- Saito, Mamoru. 1992. Long Distance Scrambling in Japanese. In *Journal of East Asian Linguistics* 1: 69-118.
- Webelhuth, Gert. 1989. Syntactic saturation phenomena and the Germanic languages. Doctoral dissertation, University of Massachusetts.