The A/A'-status of Russian Scrambling^{*}

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ABSTRACT

This paper investigates the A/A'-status of Russian scrambling, using the standard A/A'-diagnostics. Whereas the majority of these diagnostics are shown not to be suitable for Russian, there are two diagnostics, namely the reconstruction (for Condition C) diagnostic and the Weak Crossover (WCO) diagnostic, which apply in Russian. These two diagnostics, however, while confirming the generally assumed A'-status of long distance scrambling, unveil the paradoxical behaviour of local scrambling in Russian: the two types of Russian local scrambling, 'inversion' and 'dislocation', behave like A'-movement with respect to the reconstruction diagnostic, but like A-movement with respect to the WCO diagnostic. It is argued on empirical and theoretical grounds that the observed paradox cannot be accounted for by Bailyn's (2003ab, 2004) analysis of Russian scrambling, who, adopting Mahajan's (1990) analysis of Hindi scrambling and Miyagawa's (2001) analysis of Japanese scrambling, draws a line between the two types of Russian local scrambling, claiming that 'inversion' is A-movement while 'dislocation' is A'-movement. Neither can we make a use of Webelhuth's (1989) mixed A/A'-position, given that in Russian local scrambling yields ungrammatical sentences under the reconstruction diagnostic and grammatical sentences under the WCO diagnostic.

1. INTRODUCTION

The term 'scrambling' can be roughly defined as a linguistic mechanism by which a syntactic constituent, usually a maximal projection, is 'displaced' at the surface structure from its underlying position. In other words, the term 'scrambling' refers to a mechanism that yields a 'free' word order.

For the past 30 years, linguists working on scrambling have been debating whether or not scrambling is a syntactic operation of movement or if it is a result of base-generation. Those linguists who converge on the movement analysis of scrambling face yet another challenge: If scrambling is movement, then what is the driving force behind it? This necessity for a driving force becomes especially important within the Minimalist Program (MP)

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framework (Chomsky 1995 and work thereafter), which views movement as a feature-driven operation.

Recently, many linguists have provided evidence indicating that it is only at first glance that scrambling as movement seems to have no apparent motivation. Scrambling as A'-movement is argued to be motivated by discourse functions such as Topic or Focus (King 1995, Miyagawa 1997, Kiss 1995, Karimi 1999, Bailyn 2002ab) whereas scrambling as A-movement is argued to be motivated by the Extended Projection Principle (EPP) (Lavine 1998b, Miyagawa 2001, Bailyn 2002ab). The question of the motivation for scrambling is thus closely associated with the question of what type of movement scrambling represents: Is scrambling A or A-bar movement?

Whereas most linguists agree that scrambling across clause boundaries (long-distance scrambling) is an instance of A'-movement, opinions diverge when it comes to scrambling within a clause (short-distance or local scrambling). On one hand, there are linguists such as Webelhuth (1989), Mahajan (1990), Miyagawa (1997), Bailyn (1995) who advocate that clause-internal scrambling has a double nature, i.e., it is sometimes A-movement and sometimes A'-movement with a mixed A/A' landing site (Webelhuth 1989) or a distinct landing site for each (Mahajan 1990, Miyagawa 1997, Bailyn 1995). On the other hand, there are linguists such as Grewendorf & Sabel (1999) and Müller & Sternefeld (1994) who argue that clause-internal scrambling, just like long-distance scrambling, is always A'-movement.

The purpose of this paper is threefold: First, to show that the majority of standard A/A'-diagnostics are not suitable for Russian, because the A/A'-distinction which these diagnostics are designed to reveal is masked by some grammatical principles of Russian which are absent in English. Second, to demonstrate that while the applicable A/A'-diagnostics uncontroversially identify Russian long-distance scrambling as A'-movement, their classification of Russian local scrambling is more controversial, in that they classify both inversion and dislocation either as A or as A'-movement, depending on the A/A'-diagnostic used. Third, to provide empirical evidence which demonstrates that although both types of local scrambling in Russian cannot be uniformly identified in terms of A or A'-movement when using the standard A/A'-diagnostics, the two exhibit identical behaviour across the board. This evidence suggests that local scrambling in Russian, contrary to previous claims (Bailyn 1995, 2001, 2002ab, 2003ab), should not be divided into two distinct processes.¹

The paper is organized as follows. In Section 2, an overview of previous analyses of scrambling is presented. In this section I also discuss the standard A/A'-diagnostics. In Section 3, I briefly describe those grammatical properties of Russian that are relevant to the present investigation. In Section 4, I attempt to determine which type of movement inversion, dislocation and long-distance scrambling represent, by applying standard A/A'-diagnostics to the Russian data. This is also a section where I provide an account of the data put forward by Bailyn (2003ab, 2004) in support of division of the two types of local scrambling into A and A' types. Section 5 concludes the paper by raising some questions about the appropriateness of the standard A/A'-diagnostics, i.e., whether they are indeed diagnostics that can correctly distinguish between A and A'-movement across languages. Another important conclusion,

¹ In the present paper claims are only made for scrambling in sentences with neutral intonation. The status of scrambling in emotive sentences requires further investigation.

which is presented in Section 5, is that two types of Russian local scrambling, 'inversion' and 'dislocation', contrary to Bailyn's (1995, 2001, 2002ab, 2003ab) claim, cannot be analyzed as two distinct phenomena, given that they exhibit a uniform behaviour within the realm of a given A/A'-diagnostic.

Let me begin the present investigation by briefly discussing some of the previous analyses of scrambling.

2. PREVIOUS ANALYSES OF SCRAMBLING

Starting with Ross (1967), the traditional analysis of scrambling was that of an optional movement associated with stylistic - rather than purely grammatical - functions. On this view, both long distance and local scrambling represent a single phenomenon in that: (i) they both appear to be optional, i.e., semantically vacuous processes; (ii) neither involves any morphological changes, i.e., the verbal and nominal morphological forms of moved constituents remain unchanged.

As research on scrambling has advanced, various linguists have challenged the claim that scrambling is just stylistic 'rule' application. They have noticed that sentences related by scrambling, although they have similar meanings, not only differ stylistically, but also each require a different context in which they can be used. As a result, scrambling was asserted to be discourse dependent, i.e., discourse-driven.

Recent research into the nature of scrambling has brought some linguists to believe that not all instances of scrambling are alike, especially when it comes to clause-internal scrambling. To name a few, Webelhuth (1989), Mahajan (1990), Miyagawa (1997), Bailyn (1995), using standard A/A'-diagnostics, have argued that whereas long-distance scrambling displays properties of A'-movement, clause-internal scrambling seems to exhibit properties of both A and A'-movement. Before discussing some empirical evidence that has been brought forward in support of the double status of local scrambling, let us briefly review the standard A/A'-diagnostics.

2.1 STANDARD A/A'-DIAGNOSTICS

I should mention at this point that there is no general agreement in the literature on what constitutes an A or an A'-position. Traditionally, linguists defined all theta and, later, all Case positions to be A(argument)-positions and all other positions to be A'(non-argument)-positions. This 'definition' was designed to distinguish the properties of what is believed to be instances of a classical A-movement, e.g., passivization and raising (both of which are generally analyzed as undergoing movement for Case reasons), from other movements, e.g., Wh-movement and topicalization. Thus, an A-chain was not only thought to be a chain with all of its links in A-positions but was also believed to have a more restricted structure whereby its tail corresponded to a theta but no Case position and its head corresponded to a Case but no theta position, similarly to NP chains in (1) and (2). Correspondingly, an A'-chain was defined as a chain that has its head in an A'-position, namely in neither a theta nor a Case position, e.g., [Spec, CP] as in (3).

- (1) This book_i was colored t_i by children.
- (2) John_i seems to Mary [t_i to be happy].
- (3) What_i did John buy t_i ?

However, once A-scrambling was allowed into the system the restrictive definition of an A-chain was abandoned, provided that scrambling is not a Case driven movement, i.e., provided that a scrambled object preserves its Accusative Case:

(4) Petju ljubit Maša.
 Petja-ACC loves Masha-NOM
 'Masha loves Petja.'

Consequently, we can no longer define an A-chain by simply looking at whether or not the movement is to a Case position. We need to use some other tests that can indicate the distinction between A and A'-movement. Hence, we turn to the standard A/A'-diagnostics.

For decades now, linguists have been trying to identify syntactic properties that would distinguish A from A'-movement. It is the presence or absence of these properties that is standardly used in A/A'-diagnostics. Let me briefly discuss each of these diagnostics.

2.1.1 NEW BINDING RELATIONS

The first of the properties that have been exclusively attributed to A-movement is the ability to create new binding relations, where 'new' stands for binding relations that did not exist prior to movement. In particular, only an element that undergoes A-movement (to an A-position) can function as the antecedent of an anaphor, thus turning an initially ungrammatical sentence (cf. (5a)) into a grammatical one (cf. (5b)). In contrast, an element that undergoes A'-movement (to an A'-position) cannot feed a new binding relation (cf. (6)). The standard Binding Theory (BT) (Chomsky 1981) embraces the observed A/A'-distinction, by being a theory of A-binding. In particular, according to BT, only elements which occupy A-positions are relevant to binding conditions. Conversely, items which occupy A'-positions cannot function as anaphor's antecedent, given their irrelevance to A-binding.

- (5) a. *It seems to himself_i that Peter_i is smart.
 - b. Peter_i seems to himself_i [t_i to be smart].
- (6) a. *It seems to himself_i that Mary likes John_i.
 - b. *Whom_i does it seem to himself_i that Mary likes t_i?

The grammaticality of sentences such as (5b) demonstrates that a raised NP, being able to satisfy Condition A of BT, occupies an A-position which, in turn, defines 'raising' as A-movement. On the other hand, the ungrammaticality of sentences such as (6b) indicates that a raised Wh-phrase, failing to bind the anaphor, occupies an A'-position which, in turn, defines Wh-movement as an A'-movement.

In sum, only A-movement can feed Condition A of BT.

2.1.2 RECONSTRUCTION

One of the diagnostics which, despite its controversy, is still largely employed to determine the nature of movement relies on the availability of reconstruction (for binding purposes), that is, on the ability of a moved constituent to be interpreted in its base-generated position.

This diagnostic originally emerged from Chomsky's (1995) claim that reconstruction is an exclusive property of A'-movement and, hence, that there is no such thing as reconstruction in A-movement. Chomsky's argument, however, was rebutted on empirical grounds by Fox (1999, 2000) and Lebeaux (1998) (among many others), who have shown that A-movement does reconstruct for Condition A:

(7) A-movement:

a. [Pictures of himself_i]_i seem to John_i [t_i to be on sale].

b. [Friends of [each other]_i]_i seem to [John and Mary]_i [t_i to be interesting].

(8) A'-movement:

a. It is [pictures of himself_i]_i [that John_i sells t_i].

b. It is [friends of [each other]_i]_i [that [John and Mary]_i dislike t_i].

Thus, the grammaticality of the examples in (7) and (8) indicate that the NP containing an anaphor reconstructs at LF in order to satisfy Condition A of BT, i.e., in order to be properly bound by its antecedent, regardless of whether or not it underwent A' or A-movement. The fact that both A and A'-movement are able to undergo reconstruction seems to undermine the validity of the present diagnostic.²

Yet, it has been pointed out in the literature that there exists a discrepancy between Condition A and Condition B/C when it comes to reconstruction (Lebeaux 1998). For instance, unlike Condition A, Condition B picks out the difference between A and A'-movements, as the grammaticality contrast in (9) reveals:

(9) a. A-movement:

[Pictures of him_i]_j seem to John_i [t_j to be perfect].

b. A'-movement:

*It was [pictures of him_i]_i that Peter_i sold t_i yesterday.

How exactly are the data in (9) related to reconstruction? The grammaticality of (9a) suggests that A-movement does not obligatorily reconstruct for the purpose of Condition B. If it did, it would result in ungrammaticality, yielding an LF representation that violates Condition B:

(10) LF: *Pictures of him_i seem to John_i [picture of him_i to be perfect].

violation

 $^{^{2}}$ The diagnostic is still valid for a language (if there is one) in which reconstruction for Condition A does pick out the A/A'-distinction.

The ungrammaticality of (9b), on the other hand, suggests that the pronoun obligatorily reconstructs at LF. Thus, in the LF representation of (9b) pictures of him occupies its base-generated position, triggering a Condition B violation:

(11) LF: *It was pictures of him_i that Peter_i sold pictures of him_i yesterday. violation

Given that Condition B, unlike Condition A, distinguishes A- form A'-movement when it comes to reconstruction, we can use the reconstruction A/A'-diagnostic with Condition B but not with Condition A.

The question that remains to be answered is whether reconstruction for Condition C picks out the A/A'-distinction. And the answer is yes. Consider the following examples which illustrate the grammaticality contrast between A and A'-movement:

(12) a. A-movement:

[Pictures of John_i]_i seem to him_i [t_i to be on sale].

b. A'-movement:

*It's [pictures of John_i]_i that he_i sells t_i.

The grammaticality of (12a) implies that pictures of John does not reconstruct. If it did it would yield an ungrammatical LF representation that violates Condition C:

(13) LF: *Pictures of John_i seem to him_i [pictures of John_i to be on sale]. violation

Hence, the grammaticality of (12a) points to the unavailability of reconstruction for Condition C in A-chains. The example (12b), on the other hand, provides evidence that A'-movement obligatorily reconstructs at LF. Thus, the grammaticality judgment of (12b) can be accounted for if the A'-moved constituent reconstructs, i.e., if it is interpreted in its base-generated position at LF:

(14) LF: *It's [pictures of John_i] that he_i sells pictures of John_i.

The sentence (12b), thus, argues for obligatory reconstruction in A'-chains, when Condition C of BT is entertained.

To conclude, in English, reconstruction with A-movement behaves differently from reconstruction with A'-movement only when Condition B or Condition C are considered. Consequently, the reconstruction diagnostic can be used to test the A or A'-status of a given movement in English when combined with Condition B or Condition C, but not with Condition A.

2.1.3 WEAK CROSSOVER (WCO) EFFECT

The presence or absence of the WCO effect is often taken to be an indication of a movement's status. The contrast between A' and A-movement is the following: while A'-movement of a quantifier phrase (QP) past a non c-commanding variable (a coindexed pronoun that is c-commanded by the moved QP) results in an ungrammatical sentence due to WCO, A-movement of a QP past a non c-commanding variable, being able to override the WCO effect, results in a grammatical sentence:

- (15) A-movement:Who_i t_i seems to his_i mother [t_i to be happy]?
- (16) A'-movement (WCO):*Whom_i does his_i mother love t_i?

In short, according to the WCO diagnostic only A'-movement is predicted to exhibit a WCO effect.

2.1.4 PARASITIC GAPS

Another property that has been exclusively attributed to A'-movement is the ability to license parasitic gaps (PGs). Consequently, ability versus inability to license a PG is often employed as a diagnostic of the A/A'-status of a given movement. This diagnostic stems from the definition of PGs as gaps (empty elements) that are dependent on the existence of other gaps (true gaps), where true gaps are defined as traces created by A'-movement. Interestingly enough, a PG must be A'-bound (c-commanded) by the same antecedent as the true gap but not by the true gap itself. Consider the legitimate examples of PG licensing:

(17) A'-movement:

- a. Which articles_i did John file t_i without reading pg?
- b. This is **the book**_i that John bought t_i in order to read **pg**.

In (17a) a PG is licensed by Wh-movement and in (17b) by Topicalization, both of these movements being instances of A'-movement. Crucially, A-movement, such as NP-movement in passivization (18a) and raising (18b), does not license PGs:

(18) *A-movement*:

- a. *John_i was killed t_i by a tree falling on pg.³
- b. *Mary_i seemed t_i to disapprove of John's talking to pg. (Culicover & Postal 2001)

Importantly, a PG cannot be licensed in the absence of overt A'-movement, as only the latter can create a true gap on which the PG can 'be dependent'. To illustrate, consider the following example, where wh-in-situ cannot license a PG:

³ t stands for a 'true' gap and pg for a parasitic gap.

(19) *Who t filed which article without reading pg?

To sum up, according to the PG diagnostic only overt A'-movement is expected to be able to license a PG.⁴

To conclude this subsection on A/A'-diagnostics, let me summarize the properties that we expect to find or not to find, depending on the type of movement under investigation:

Properties	Examples	A-movement	A'-movement
1. New Binding Relation Feeding Condition A	5-6	Yes	No
2. Reconstruction			
a. Feeding Condition B	9	No	Yes
b. Feeding Condition C	12	No	Yes
3. WCO Effect	15-16	No	Yes
4. PG Licensing	17-18	No	Yes

Table 1. Summary of the standard A/A'-diagnostics

Let us now see how these A/A'-diagnostics have been used when testing the status of scrambling.

2.2 USING STANDARD A/A'-DIAGNOSTICS

It has been argued in the literature that the standard A/A'-diagnostics described above disclose the double status of local scrambling. Webelhuth (1989), working on scrambling in German, was the first to observe that local scrambling exhibits properties of both A and A'-movement.

(20) ?Peter hat die Gäste [ohne pg anzuschauen] einander t vorgestellt.⁵ Peter has the guests [without looking-at] each other introduced-to 'Peter introduced the guests to each other without looking at them.' (Webelhuth 1989)

For instance, in (20) the clause-internally scrambled element binds the anaphor einander,

⁴ It is not clear whether Russian has parasitic gap constructions, given that in Russian adverbials allow for object drop, in the absence of an overt A'-movement.

(i) a.	Petja	vybrosil pis'i	то	[ne	čitaja	e].				
	Petja-NOM	threw.away lette	er-ACC	[without	reading	1				
	'Petja trhew away the letter without reading.'									
b.	V Kreml	oxranniki	propustili	Petju	[ne		obyskivaja	e].		
	into Kremli	in security-NOM	(in	Petja-AC	C [with	nout	searching	1.		
	'The security let Petja into the Kremlin without searching him.'									

Parasitic gap constructions in Russian, thus, call for an extensive investigation. Until such research is completed, one cannot use the parasitic gap A/A'-diagnostic when testing the status of Russian scrambling.

⁵ Webelhuth attributes the marginality of this sentence to the marginality of parasitic gap constructions in German. In his dissertation, he demonstrates that there is no contrast between the acceptability of this sentence and acceptability of a sentence which only has a parasitic gap but no anaphoric binding.

revealing its A-properties, and, at the same time, it licenses a parasitic gap in the manner adverbial *ohne pg anzuschauen*, revealing its A'-properties. To account for the observed paradox, which in the literature came to be known as 'Webelhuth's paradox', Webelhuth (1989) proposes to treat local scrambling as movement to a mixed A/A'-position.

Webelhuth's claim about the double status of clause-internal scrambling was confirmed by analysis of data from Hindi. To illustrate, consider some of Mahajan's examples which brought him to the conclusion that clause-internal scrambling is ambiguous between A and A'-movement:⁶

(21) Underlying word order (WCO):

*Unkii_i bahin sab-ko_i pyaar kartii thii. their sister-SUB everyone-DO love do-IMP-FEM be-PAST-FEM 'Their sister loved everyone.' (Mahajan 1990: 25)

(22) Scrambled word order:

[Sab-koi[unkiii bahin]j[tj ti yaar kartii]thii].[everyone-DO[their sister-SUB][love do-IMP-FEM]be-PAST-FEM]'Their sister loved everyone.'(Mahajan 1990: 26)

(23) Underling word order:

nOkrii [Us aadmii-ne_i jo uske pitaa-ko jaantaa hE] apnaa; nOkar [that man who his father knows self's servant service nikaal diyaa. se from dismissed. 'The man who knows his father dismissed self's servant from the service.' (Mahajan 1990: 48)

(24) Scrambled word order:

Apnaa	nOkar	[us	aadmii-ne _i	jo	uske	pitaa-ko	jaantaa	hE]	nOkrii
self's	servant	[that	man	who	his	father	knows]	service
se	nikaal diy	aa.							
from	dismissed								

'The man who knows his father dismissed self's servant from the service.'

(Mahajan 1990: 49)

Mahajan points out that on one hand, the Hindi data in (22) indicate that clause-internal scrambling is an instance of A-movement, as it is able to override the WCO effect. Notably, (22) contrasts with the covert QR in (21) which, being a classical instance of A'-movement, creates a WCO effect. On the other hand, the Hindi data in (24) suggest that clause-internal scrambling is an instance of A'-movement, as it preserves the underlying binding relation as in (23), reconstructing to its base-generated position.

⁶ To support his claim Mahajan (1990) also uses A/A'-diagnostics not covered here. For Mahajan's complete argumentation readers are referred to his original work.

Importantly, even though Mahajan confirms Webelhuth's findings about the double status of local scrambling, he argues that A-scrambling has a different motivation from A'-scrambling. Hence, for him, local A-scrambling has a distinct landing site from local A'-scrambling. Mahajan, thus, denies the existence of a mixed A/A'-landing site position like the one proposed by Webelhuth (1989).

Further empirical evidence brought forward in support of the double nature of local scrambling comes from Japanese. Saito (1992) and Miyagawa (1997, 2001, 2003), using various linguistic tests, demonstrate that 'Webelhuth's paradox' seems to exist in Japanese too. Miyagawa (1997, 2001, 2003) attempts to explain the difference between two types of local scrambling in terms of a distinct driving force behind each. Discovering the force that triggers scrambling becomes an essential part of Miyagawa's work, as he tries to analyze scrambling within the Minimalist Program (MP) framework (Chomsky 1995, 2000), which views movement as an obligatory feature-driven operation. In accordance with previous analyses of scrambling, he claims that in Japanese clause-internal A'-scrambling, just like long-distance scrambling, is discourse-driven. The novelty of Miyagawa's analysis lies in the assumption that clause-internal A-scrambling is the manifestation of an independently motivated component of the grammar, namely the Extended Projection Principle (EPP). According to Miyagawa, A-scrambling is able to satisfy the EPP requirement, i.e., to check the EPP feature of T. This particular view of A-scrambling was incorporated into the analysis of Russian scrambling by Bailyn (2002ab, 2003ab, 2004) and, partially, by Lavine (1998b) and Babyonyshev (1996).⁷

Bailyn (2002ab, 2003ab, 2004) is concerned with two particular clause-internal scrambled constructions in Russian: O-S-V and O-V-S; S-V-O being the underlying structure.⁸ For simplicity of presentation, he labels scrambling in O-S-V structures 'dislocation' and scrambling in O-V-S structures 'inversion'. In line with Mahajan's (1990), Saito's (1992) and Miyagawa's (1997, 2001) analyses of scrambling in Hindi and Japanese, Bailyn argues that dislocation and inversion in Russian, despite their seeming similarity, correspond to two distinct types of movement. While the former, patterning together with long-distance scrambling, is an instance of A'-movement, the latter is an instance of A-movement. Bailyn empirically supports his claim by illustrating that inversion, unlike dislocation and long-distance scrambling, can create new binding relations, displaying its A-status. On the other hand, both dislocation and long-distance scrambling contrast with inversion in that they undergo reconstruction for binding purposes and create the WCO effect, revealing their A'-status.⁹

⁷ Lavine (1998b) exploits the possibility of analysing adversity impersonal constructions as EPP driven whereas Babyonyshev (1996) analyses inverted locative constructions as EPP driven. Given that the analysis of these constructions lies beyond the aim of the present investigation I will not discuss any details of Lavine's and Babyonyshev's proposals.

⁸ Along with the O-V-S order Bailyn (2002ab, 2003ab, 2004) discusses other constructions such as locative, quotative and possessive PP constructions along with adversity impersonals and Dative experiencers. He assumes that all of them undergo inversion. In other words, Bailyn claims that all of these constructions have a similar structure in which the subject (if present) remains in situ, the verb raises to I^o and an XP (other than the subject) is fronted to the beginning of the sentence in order to satisfy the EPP. Given the time and space limitations, I will leave the exact structure of these other constructions to further research.

⁹ For a detailed presentation of the data used by Bailyn consult Section 4.

Applying Miyagawa's (2001) account of Japanese scrambling to Russian, Bailyn proposes to treat inversion as EPP driven, being an instance of A-movement, and dislocation and long-distance scrambling as discourse-driven, being instances of A'-movement. He believes that, mechanically, A-scrambling is just like raising to subject, and A'-scrambling is lust like (English) topicalization. Technically, inversion is triggered by the combination of verb raising and the EPP. Thus, in sentences without scrambling, the EPP is satisfied by the subject, but in the sentences where the verb raises to T, the EPP can be satisfied by the scrambled object, allowing the subject to remain in situ.

The last contribution to the study of scrambling that I would like to briefly mention in this section comes from German. Linguists such as Grewendorf & Sabel (1999) as well as Müller & Sternefeld (1994) claim that in German all instances of scrambling, regardless of their locality status, have A'-properties. In order to defend their claim, they propose to reject some of the traditional A/A'-diagnostics as irrelevant. In particular, they propose to discard the WCO A/A'-diagnostic on the grounds that in German even a classical instance of A'-movement such as Wh-movement does not induce the WCO effect.

The present paper questions the validity of the majority of the standard diagnostics, when it comes to distinguishing A versus A'-scrambling in Russian, along the lines of Grewendorf & Sabel's as well as Müller & Sternefeld's proposals. Before we turn to the issue of the appropriateness of the standard A/A'-diagnostics, however, let us address the grammatical properties of Russian that are relevant to the present investigation.

3. The Structure of Russian

As has long been observed, Russian occupies an intermediate position between non-configurational and highly configurational languages (King 1995, Bailyn 1995). On one hand, Russian, as in non configurational languages, displays great freedom of word order. For instance, 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. On the other hand, Russian word order is only 'relatively' free, in that not all orders are acceptable in a given context. Even more intriguingly, Russian unmarked S-V-O word order coincides with the word order attested in configurational languages such as English, signaling its configurational properties. Given this observation it is evident that, although in Russian grammatical functions are structurally encoded, the constituents can easily move (scramble) out of the positions which define their grammatical functions.

King's (1995) extensive examination of Russian word order brought her to the conclusion that the movement by which these different word orders are derived (scrambling) is entirely discourse dependent, i.e., discourse-driven. According to her analysis, in Russian the different word orders, in combination with intonation, encode various discourse functions. Thus, constituents move to certain positions to acquire their discourse (topic or focus) interpretation. Descriptively, in non-emotive sentences (S-V-O, O-S-V and O-V-S), that is in the sentences which bear no emphatic stress but rather have neutral (falling) sentential intonation, topics precede the verb,¹⁰ while the domain of focus can fluctuate within the VP

¹⁰ This implies that all preverbal NPs in Russian are specific.

domain in that it can include or exclude the verb depending on the context.¹¹ When the verb is excluded from the domain of focus we obtain the so called narrowly focused reading, with only one constituent being focused.¹²

As we have already seen, Bailyn (1995, 2003ab, 2004) does not agree with King's claim, as he argues that movement in inverted constructions is not triggered by discourse functions such as topic or focus but rather by a purely grammatical requirement of the EPP.

Before we turn to the thorough examination of Bailyn's claim and the empirical evidence on which his claim relies, let us look at those grammatical properties of Russian that will be relevant to the analysis of Russian scrambling offered in this paper. First, note that, in Russian, verbs agree with subjects regardless of their relative order. For instance, in both (25a) and (25b) the verb agrees in person, number and gender with the sentential subject *Masha*, regardless of whether the subject precedes or follows the verb.

(25)	a.	Maša	kupila	mjač.						
		Masha-NOM-FEM	bought-3SG-FE	м ball-ACC-MASC						
		'Masha bought a/the ball.'								
	b.	Mjač	kupila	Maša.						
		ball-ACC-MASC	bought-3SG-FEI	Masha-NOM-FEM						
		'It is Masha who	bought the ball.'							

Second, since pronominal subjects in Russian are topical (deictic) in nature, they frequently precede the verb. Third, I assume that as in English, the distribution of anaphors and pronouns in Russian is mediated, by and large, by standard Binding Theory. Hence, Russian anaphors obey Condition A of BT in that they need to be bound by a c-commanding antecedent in their governing category (GC). For example, in (26) only an NP that c-commands the anaphor succeeds in functioning as its antecedent:

(26)	a.	[Petin _i	staršij	brat] _j	kupil	sebe* _{i/j}	novuju	mašiny.	
		[Petja	oldest	brother]-NOM	bought	self-DAT	new	car-ACC	
'Petja's oldest brother bought (him)self a new car.'									

b. ***Svoj**_i drug priglasil Kolju_i v gosti. self-NOM friend-NOM invited Kolja-ACC for visit 'Self friend invited Kolja over.'

Note that Russian has two types of anaphors: the personal reflexive sebja and the possessive

¹¹ In Russian emotive sentences a focused constituent bearing emphatic stress can appear in essentially any position (although, according to King 1995, most often appears directly before the verb), producing a large number of acceptable word orders. Recall that the present paper is not concerned with scrambling in emotive sentences (Footnote 1).

¹² Presumably, in Russian inverted constructions normally have such a narrowly focused readings (King 1995). To reflect the information structure of Russian narrowly focused sentences in what follows I will translate them into English using cleft construction. For instance, a sentence such as (i) will get (ii) as a translation:

⁽i) Mašu ljubit Petja.

Masha-ACC loves Petja-NOM

⁽ii) It is Petja who loves Masha.

(Genitive) reflexive *svoj* (which functions as a [Spec, NP]). Neither of these anaphors is morphologically sensitive to the grammatical number or gender of its antecedent. The difference between the two anaphors is that the personal anaphor lacks a Nominative form, whereas the possessive anaphor has all six Case forms, just like the noun which it agrees with. The implication of the described paradigm that is relevant for the analysis presented in this paper is that in Russian only a possessive anaphor is able to occur in the structural subject position as its specifier.

Importantly, the Russian anaphor *sebja*, being a morphologically simple anaphor, allows for a larger governing domain than the English anaphor *herself/himself* does. For instance, in object control constructions such as (27) the anaphor is ambiguous and, as such, it can be coreferential either with a local or a long-distance antecedent.

(27) Vanja; poprosil [Petinogo_j brata]_k [PRO_k otredaktirovat' Vanja-NOM asked [Petja's brother]-ACC to edit svoj $u_{i/*j/k}$ statju]. self article-ACC 'Vanja asked Petja's brother to edit his article.'

The example in (28) demonstrates that in Russian binding a reflexive across finite clause boundaries is impossible, i.e., an anaphor embedded within a finite clause cannot take a long-distance antecedent.

(28) *Petja_i dumal o tom, kak smešno svoja_i obaka spit. Petja-NOM was-thinking about how funny self dog-NOM sleeps 'Petja was thinking of how funny his dog sleeps.'

Sentences such as (27) and (28) brought researchers working on Russian binding to the conclusion that the GC of the Russian anaphor is the minimal finite clause containing it Progovac (1992), Rappaport (1998).¹³

One of the properties of the Russian anaphor that will play a crucial role in the present work is that the Russian anaphor, unlike its English counterpart, is subject-oriented.

- (29) a. Helen_i showed Susan_j a picture of herself_{i/j}
 b. Maša_i pokazala Ole_k svoju_{i/*k} komnatu.
 - Masha-NOM showed Olja-DAT self room-ACC 'Masha showed Olja her room.' c. Petja_i otdal rebjenka_j **svojej**_{i/*j} materi. Petja-NOM gave child-ACC-MASC self mother DA'
 - Petja-NOM gave child-ACC-MASC self mother-DAT 'Petja gave the child to his mother.'

¹³ Note that in Russian a Genitive 'subject' is an illegitimate antecedent for the anaphor:
(i) Vasja, pročital Petin, perevod svoej_{i/*j} stat'ji.

Vasja-NOM has-read Petja's translation of-self article-ACC 'Vasja has read Petja's translation of his article.'

Whereas in (29a) the English anaphor *herself* allows for an ambiguous interpretation, in (29b) the Russian anaphor *svoju* can only take the subject as its antecedent. (29c) shows that the subject-orientation requirement also holds of an anaphor that is part of the indirect object.

Just as Russian anaphors display subject-orientation, Russian pronouns exhibit anti-subject orientation:¹⁴

(30)	a.	Maša _i	poka	azala	Olej	ee* _{i/j}	komnatu.		
		Masha-NOM	show	wed	Olja-DAT	her	room-ACC		
'Masha showed Olja her room.'									
	b.	Petja _i	otdal	rebjer	nkaj	ego*i/j	materi.		
		Petja-NOM	gave	child	ACC-MASC	his	mother-DAT		
	'Petja gave the child to his mother.'								

Thus, in both (30a) and (30b) a pronoun can only be coindexed with an object, regardless of whether the latter is an indirect object as in (30a) or a direct object as in (30b). Even if we construct the context so that the pronoun can no longer refer to the object, because of pragmatic requirements, the pronoun will not pick up the subject as its antecedent.

(31)	Petja _i	otdal	rebjenka _j	ego*i/#j/k	žene.
	Petja-NOM	gave	child-ACC-MASC	his	wife-DAT
	'Petja gave				

The last property of Russian that I would like to mention is that standard Russian generally prohibits constructions with backward anaphora (BA), i.e., constructions in which a pronoun linearly precedes its antecedent at S-structure (King 1995):¹⁵

(32)	a.	*Ego	podruga		ljubit	Ivana _i .		
		his	girlfriend	-NOM	loves	Ivan-ACC		
'His girlfriend loves Ivan.'								
	1.	*D.1		-1		1.1.1.1	т	

b. *Poka on_i el jabloko, Ivan_i smotrel televizor.
while he-NOM was.eating an apple, Ivan-NOM was.watching TV
'While he was eating an apple, Ivan was watching TV.' (Avrutin & Reuland 2002)

Interestingly, (32a) contrasts in grammaticality with the constructions derived from it, whereby an antecedent moves (scrambles) to a position that precedes the pronoun, thus repairing the BA violation (33a). (33b) contrasts with (32b) and demonstrates that in Russian the temporal clauses in which the pronoun precedes its antecedent are grammatical, as at S-structure they do not create the BA configuration.

¹⁴ This claim may only be true of simple Russian sentences. Crucially, in my analysis I only use simple constructions.

¹⁵ Avrutin & Reuland (2002) provide a more elaborated analysis of Russian BA which does not refer to linearity. Unfortunately, their analysis fails to account for the data presented in this paper. For instance, (33a) should be grammatical on their account. Hence, until further research, I assume that the BA requirement is a requirement on linear precedence. Importantly, this assumption will not, in any way, influence the present investigation.

(33) a. Ivana_i ljubit ego_i podruga. Ivan-ACC loves his girlfriend-NOM 'It's his girlfriend who loves Ivan.'

b. Ivan_i smotrel televizor poka on_i el jabloko. Ivan-NOM was.watching TV-ACC while he-NOM was.eating apple-ACC 'Ivan was watching TV while he was eating apple. (Avrutin & Reuland 2002)

The BA prohibition along with the orientational properties of Russian anaphors and pronouns will be crucial to the analysis of Russian scrambling presented in the following section. In particular, we will see that these factors mask the A/A'-properties of a given movement which the standard A/A'-diagnostics are designed to reveal, thus, rendering the majority of the standard A/A'-diagnostics unsuitable for Russian.

Now, having discussed all the relevant properties of Russian grammar, let us turn to the examination of the Russian scrambling data.

4. DETERMINING THE STATUS OF SCRAMBLING IN RUSSIAN

In the present section I will apply the standard A/A'-diagnostics to the Russian scrambling data in order to determine which types of movement inversion, dislocation and long-distance scrambling represent.

4.1 NEW BINDING RELATIONS

As we have seen in Section 2.1, the binding diagnostic asserts that only A-movement is able to create new binding relations. In particular, only a constituent that undergoes A-movement can bind an anaphor, whereas a constituent that undergoes A'-movement cannot. The diagnostic is exemplified by the English sentences in (5) and (6), partially repeated in (34), where an element that undergoes A, as opposed to A'-movement, can function as an anaphor's antecedent.

(34) a. A-movement:

Peter_i seems to himself_i [t_i to be smart].

b. A'-movement:

*Whom_i does it seem to himself_i that Mary likes t_i?

The binding diagnostic is one of the diagnostics that Bailyn (2003ab) uses in order to determine the A/A'-status of Russian scrambling. On the basis of the grammaticality contrast between sentences such as (35b) and sentences such as (35c) and (35d), Bailyn argues that Russian scrambling in inverted constructions, being able to create new binding relations, is A-movement, while scrambling in dislocated and long-distance scrambled constructions, which fails to create new binding relations, is A'-movement.

	<i>S-V-O (Underlying):</i> *[Svoi _i podčinnenye] volnujut Ivana _i	
,	[self's subordinates]-NOM worry Ivan-ACC 'Self's subordinates worry Ivan.'	(Bailyn 2004: 18)
	O-V-S (Inversion):	
	?Ivana _i volnujut [svoi _i podčinnenye].	
	Ivan-ACC worry [self's subordinates]-NOM	
	'Ivan is worried by his subordinates.'	(Bailyn 2004: 18)
	O-S-V (Dislocation): ¹⁶	
	*[Etu firmu], [svoi direktora] rekomendujut	
	[this firm]-ACC [self's directors]-NOM recommend	
	'The directors of this firm recommend it.'	(Bailyn 2003a: 168)
d.	OS-V (Long-Distance Scrambling):	
	*Ivana _i , my xotim, čtoby [svoi _i podčinnenye]	volnovali.
	Ivan-ACC we want that [self's subordinates]-NOM	worry
	'Ivan, we want self's subordinates to worry.'	(Bailyn 2004: 18)

In particular, the fact that in (35b) the scrambled element apparently succeeds in binding an anaphor is taken to be evidence that this element occupies an A-position, as opposed to the scrambled element in (35c) and/or (35d) which is unable to bind the anaphor and hence said to occupy an A'-position. According to Bailyn's analysis, in (35b) the object moves to a different position from that in (35c): in the former, it moves to an A-position, i.e. [Spec, IP], while in the latter, it moves to an A'-position, i.e., it adjoins to IP.

Interestingly, for the majority of Russian speakers (35b) is ungrammatical. Bailyn (2004) acknowledges this problem (in his footnote 22) yet claims that what is important for his analysis is that the contrast between (35b) and (35d) exists for those speakers who accept (35b). I believe that the reason why some of Bailyn's informants judged (35b) as acceptable is because he uses the psych verb 'volnovat' 'to worry' which somehow makes the line between grammatical and ungrammatical structures fuzzy. Given that psych verbs often behave differently from non-psych verbs (a fact that Bailyn does not take into consideration), let us test what grammaticality judgment the construction in (35b) gets if a non-psych verb is used instead (cf. (37b)).¹⁷

Before analyzing the Russian scrambling data, let us establish whether Russian sentences which are structurally parallel to the English examples in (34) display the same A/A'-distinction as their English counterparts. Consider the following sentences:

¹⁶ Unfortunately, Bailyn (2004) only compares inverted and long-distance scrambled constructions, omitting CP internal dislocation which the present paper also examines. In order to demonstrate a complete picture of his account, in (35c) I presented his (2003a) example of clause-internal dislocation. This is why the exact wording in the example (35c) differs from the other examples.

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¹⁷ Arguably, the sentence in (37b) is ungrammatical even for those speakers who accept (35b) (Unfortunately, I cannot test this claim, as all of my informants reject (35b)).

(36)	a.	Petja _i Petja-NOM	5	sebe _i self-DAT	ti	umnym. smart.		
		'Petja seem	'Petja seemed to himself to be smart.'					
	b.	*Kogo _i	[svoja	a _i sestra]		priglasila	t_i	na

. *Kogo_i [svoja_i sestra] priglasila t_i na večerinku?¹⁸ Whom-ACC [self sister-NOM] invited to the party 'Whom did his sister invite to the party?'

At first glance the Russian sentences in (36) seem to confirm the grammaticality contrast found in the English examples. Yet, unlike its English counterpart, the Russian sentence in (36b), apart from violating Condition A, also violates the subject ('anti-object') orientation of the anaphor, since in this construction the anaphor *svoja* is inappropriately coindexed with the object NP *kogo*. This 'extra' violation in (36b) obscures the validity of the binding diagnostic in Russian. The English sentence in (34b), on the other hand, incurs only one single violation, namely, that of Condition A, provided that in English an anaphor can take an object as its antecedent as in *Peter_i gave John_j a picture of himself_{i/j}*. Consequently, the binding A/A'-diagnostic is appropriate for English but not for Russian.

Turning now to scrambling, the binding diagnostic, in principle, predicts that only an A-scrambled element should be able to feed Condition A of BT. As can be seen from the data in (37), in Russian scrambling of an object past a coindexed anaphor, whether in an inverted, a dislocated or a long-distance scrambled construction, systematically results in ungrammaticality.

¹⁸ In an attempt to create a grammatical sentence in (36b) I have used a Genitive anaphor, given that in Russian a simple anaphor does not have a Nominative form (for more details see Section 3). However, I could have alternatively used a construction that uses the reflexive anaphor *sebja*, in Dative form, as in (i). Crucially, even in this example coindexation is banned.

⁽i) *Kogo_i sebe_i kažetsja Petja ljubit t_i?

Whom-ACC self-DAT seems Petja-NOM loves

^{&#}x27;Whom does it seem to self that Petja love?'

```
(37) a. S-V-O (Underlying):
```

*Svoi, deti očen' často navesčajut Ivana, self children-NOM very often visit Ivan-ACC 'His children quite often visit Ivan.'

b. O-V-S (Inversion):

***Ivana**_i očen' často navesčajut t_i **svoi**_i deti.¹⁹ Ivan-ACC very often visit self children-NOM 'It is his children who quite often visit Ivan.'

c. O-S-V (Dislocation):



d. O-...-S-V (Long-Distance Scarmbling, Extraction out of a non-finite clause):

prikazal svoim_i detjam_i [PRO_i navesčať t_i *Ivana_i Petja to visit Ivan-ACC Petja-NOM ordered self children-DAT [očen' často].21 quite often] 'Petja ordered his children to visit Ivan quite often.' *O*-...-*S*-*V* (Long-Distance Scarmbling, Extraction out of a finite clause): xotjat, čtoby Olja navesčala t_i *Ivana_i svoi, deti Ivan-ACC self children-NOM want that Olja visits očen' často. quite often. 'His children want that Olja visit Ivan quite often.'

Given the data in (37), the binding diagnostic, if applicable, would suggest that in Russian a scrambled element occupies an A' rather than an A-position, regardless of the type of scrambling construction. This conclusion would be a result of the observation that in (37b), (37c) and (37d) the scrambled NP *Ivana* fails to bind the anaphor *svoi*. However, as in the case of Wh-movement discussed above, the ungrammaticality of these sentences can be attributed not only to a Condition A violation but also to the fact that in all of these sentences the anaphor *svoi*, in violation of its subject-orientation requirement, is coindexed with an illegitimate antecedent, namely, with the object *Ivana*. Once again, the presence of the 'extra' violation renders the binding A/A'-diagnostic unsuitable for Russian. In other words, we can no longer rely on the binding diagnostic in order to establish what kind of movement Russian scrambling represents.

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¹⁹ This sentence is grammatical under the reading in which only the subject *svoi deti* is focused. Recall that Russian inverted sentences normally have such a narrowly focused reading (cf. Section 3).

²⁰ 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.

²¹ I deliberately chose a main verb that subcategorizes for a Dative object so that the Case of scrambled embedded object differs from that of the main object. This way we avoid the restriction proposed by Karimi (2003) which rules out a long-distance scrambling of a constituent pass another constituent that bears identical Case with it.

The question now is whether the reconstruction A/A'-diagnostic is more informative in revealing the status of Russian scrambling.

4.2 RECONSTRUCTION

4.2.1 CONDITION A

As we have seen from the examples in (7) and (8), which are partially repeated in (38), in English both A and A'-movements are able to reconstruct for the purpose of Condition A of BT:

(38) a. A-movement:

[Pictures of himself_i]_i seem to John_i [t_i to be on sale].

b. A'-movement:

It is [pictures of himself_i]_i [that John_i sells t_i].

These data in (38) undermine the validity of reconstruction as an A/A'-diagnostic, when it comes to Condition A. Yet, as was mentioned in Footnote 2, the reconstruction diagnostic can still be valid for a language (if there is one) in which reconstruction for Condition A does pick out the A/A'-distinction. The question that we need to entertain at this point is whether Russian is one of these languages. In other words, is the ungrammaticality of (39) entirely due to the A-movement's failure to reconstruct, as opposed to the grammaticality of (40)? And the answer is no.

```
(39) A-movement:
```

*Svoja _i	fizionomija	kazetsja	Petje _i	ti	privlekatel'noj. ²²				
self	face-NOM	seems	Petja-DAT		attractive				
'Petja's face seems to him to be attractive.'									

(40) A'-movement:
 Svojui statju Petjai opublikoval ti na prošloj nedele. self article-ACC Petja-NOM published last week
 'His article Petja published last week.'

The ungrammaticality of (39) can equally result from the fact that in this sentence the anaphor *svoja* is improperly coindexed with a non-subject. Once again, Russian anaphor's subject orientation brings additional complications to the present investigation, as it makes it virtually impossible to determine whether in Russian reconstruction of A-movement differs from reconstruction of A'-movement, when Condition A of BT is entertained. Therefore, reconstruction for the purpose of Condition A should be rejected as a legitimate A/A'-diagnostic not only for English but also for Russian.

 $^{^{22}}$ It should be noted that in Russian the Dative 'subject' does not qualify as a legitimate antecedent for the anaphor:

⁽i) *Petje_i nravitsja **svoja**_i rabota.

Petja-DAT likes self job-NOM

^{&#}x27;Petja likes his job.'

Not taking the anaphor's subject-orientation into consideration, Bailyn uses this diagnostic in order to demonstrate that in Russian inversion differs from other types of scrambling, i.e., that it represents an A and not A'-movement. In particular, he claims that in Russian, inversion does not reconstruct, given that presumably it does not preserve underlying binding relations when it comes to Condition A of BT. Bailyn deems this inability of inversion to reconstruct to be an exclusive property of A-movement.

Bailyn's claim about the unavailability of reconstruction in inverted constructions conflicts with the data in (41) which demonstrate that Russian inversion, just like dislocation and long-distance scrambling, does not yield a grammaticality judgment different from that of underlying structure, preserving the existing binding relation between an anaphor and its antecedent. In other words, the data in (41) demonstrate that in Russian a scrambled object does reconstruct to satisfy Condition A of BT, regardless of the type of scrambling.

(41) a. S-V-O (Underlying):

predstavil predsedatelju svoix, novyx znakomyx. Ivan; Ivan-NOM introduced to-Chairman self new acquaintances-ACC Ivan introduced his new acquaintances to the Chairman.'

b. O-V-S (Inversion):

Svoix_i novyx znakomyx predstavil predsedateliu Ivan: self new acquaintances-ACC introduced to-Chairman Ivan-NOM 'It was Ivan who introduced his new acquaintances to the Chairman.'

c. O-S-V (Dislocation):

Svoix_i novyx znakomyx Ivan; predstavil predsedatelju self new acquaintances-ACC Ivan-NOM introduced to-Chairman ešje včera.

even yesterday

'Ivan already introduced his new acquaintances to the Chairman yesterday.'

d. O-...-S-V (Long-Distance Scrambling, Extraction out of a non-finite clause): [Svoix_i novyx znakomyx] Ivani prikazal Petie [self new acquaintances-ACC]i Ivan-NOM ordered Petja-DAT

[PRO_k predstavit' predsedatelju t_i] ešje včera

to introduce to Chairman even yesterday

'Yesterday, Ivan already ordered Petja to introduce his new acquaintances to the Chairman.'

O-...-S-V (Long-Distance Scrambling, Extraction out of a finite clause): $[Svoju_i statju]_i$ ja xoču, čtoby Petjai opublikoval ti [self article-ACC] I-NOM want that Petja-NOM publishes v Ogon'ke. in Ogonjok

'I want that Petja publishes his article in "Ogonjok".'

Do the data in (41) imply that object scrambling in Russian is an instance of A'-movement across-the-board? It certainly patterns with the example of A'-movement in (40). Yet, given that we cannot predict the behavior of A-movement, i.e., given that we cannot determine whether or not A-movement in Russian reconstructs for Condition A, we can neither use the

examples in (41) nor the reconstruction diagnostic (for Condition A) itself to support any claim about the status of Russian scrambling.

Let us see now whether the reconstruction A/A'-diagnostic in combination with Condition B will help us to shed the light on the status of Russian scrambling.

4.2.2 CONDITION B

As has been pointed out in Section 2.1.2 A'-movement differs form A-movement when it comes to reconstruction for Condition B in that it obligatorily reconstructs at LF:

(42) a. A-movement:

[Pictures of him_i]_i seem to John_i [t_i to be perfect]

b. *A'-movement*:

*It were [pictures of him_i]_i that Peter_i sold t_i yesterday.

Bailyn uses the observed difference between A and A'-movement as a diagnostic to determine the status of Russian scrambling. He reports that in Russian an inverted construction in which an object containing a pronoun is scrambled over its antecedent yields the reverse grammaticality judgment from a sentence related to it by scrambling, whereas the corresponding dislocated or long-distance scrambled construction preserves the underlying grammaticality judgment: (43) a. S-V-O (Underlying):

*Ivan_i ljubit [ego_i druzej]. Ivan-NOM loves [his friends]-ACC 'Ivan loves his friends.'

b. O-V-S (Inversion): [Ego_i druzej]

[*Ego*_i *druzej*] ljubit Ivan_i.²³ [his friends]-ACC loves Ivan-NOM 'His friends are loved by Ivan.'

c. O-S-V (Dislocation):
?? [Ego_i druzej], Ivan_i ljubit. [his friends]-ACC Ivan-NOM loves 'His friends, Ivan loves.'

d. O-...-S-V (Long-Distance Srambling):

*[*Ego*_i *druzej*], my xotim, čtoby Ivan_i poljubil.²⁴ [his friends]-ACC we want that Ivan-nom love 'His friends, we want Ivan to love.' (Bailyn 2003a: 168)

Bailyn regards the grammaticality of (43b) as evidence that scrambling in inverted constructions does not reconstruct, given that reconstruction would produce an ungrammatical sentence such as (43a) which, according to his analysis, violates Condition B of BT. Under the assumption that inability to reconstruct is an exclusive property of A-movement Bailyn concludes that inversion is an instance of A-movement. Hence, A-scrambling, in general, and inversion, in particular, is claimed to be able to 'repair' a Condition B violation.

A thorough analysis of (43a) shows, however, that its ungrammaticality does not stem from a Condition B violation, but rather from the anti-subject orientation of the Genitive pronoun. Bailyn's claim about the source of the ungrammaticality of (43a) crucially relies on a rather standard assumption that in Russian an NP containing a Genitive pronoun does not constitute that pronoun's governing category (GC). Ungrammatical sentences such as (43a) are usually presented as evidence to support this assumption. Yet, the Russian data in (44) demonstrate that an NP containing a Genitive pronoun is able to form a pronoun's GC, given that in these sentences we do not get a Condition B violation. Thus, if in (44a) the GC of *ee* were not *ee knigu* and in (44b) the GC of *ee* were not *ee vladel'tsu*, then in both of these

očen' často].

quite often

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²³ Bailyn claims that (43b) is grammatical for those speakers who allow BA. I seem to be one of such speakers. Yet, contrary to Bailyn's claim, sentences (43b) and (43c) sound ungrammatical to me, with no grammaticality contrast between them, as they not only violate the BA restriction but also the anti-subject orientation of the pronoun (see discussion bellow). To express the intended meaning I would use the Genitive anaphor *svoix* (as in (41)) instead of the Genitive pronoun *ego*, thus avoiding the anti-subject violation. Interestingly, Babyonyshev (2003) also considers sentences such as (43b) to be ungrammatical.

²⁴ Notably, long-distance scrambling of this sort out of a non-finite clause also yields an ungrammatical sentence:

⁽i) *[Ego_i novy znakomyx] Ivan_i prikazal Pete_j [PRO_j navesčať t_i [his new acquaintances]-ACC Ivan-NOM ordered Petja-DAT [to visit

^{&#}x27;Ivan ordered Petja to visit his new acquaintances quite often.'

sentences the GC of *ee* would be the entire sentence. As a result, the pronoun would be bound in its GC in violation of Condition B of Binding Theory. The grammaticality of these sentences, however, not only argues for absence of Condition B violation, but also shows that in Russian an NP can form a binding domain of a Genitive pronoun:²⁵

(44)	a.	Petja	otdal	Olei	ee_i	knigu.					
		Petja-NOM	gave back	Olja-DAT	her	book-	ACC				
		'Petja gave back Olja her book.'									
	b.	Petja	otdal	mašinu _i	šinu _i ee _i		vladel'tsu.				
		Petja-NOM	DM gave back car-ACC-FEM her owner				owner-DAT				
'Petja returned the car to its owner.'											

If in Russian an NP containing a Genitive pronoun constitutes the pronoun's GC, then the ungrammaticality of (43a) can no longer be attributed to a Condition B violation. It must come from something else, presumably from the anti-subject orientation of the pronoun. In other words, (43a) is ungrammatical because the pronoun *ego* is inappropriately coindexed with the subject *Ivan* and not because *ego* is bound in its GC. Given that scrambling, in principle, should not be able to repair any violation on orientation, theoretically (43b) should be at least as bad as (43a) is (when it comes to their grammaticality judgments), if not worse, since it also violates the ban on BA.

Given the anti-subject properties of Russian pronouns, one should be cautious in using the reconstruction A/A'-diagnostic, in combination with Condition B, when testing the status of scrambling in Russian. While it seems to be true that the difference between A and A'-movement exists in English when it comes to reconstruction for Condition B (as can be seen from the grammaticality contrast between (42a) and (42b)), this distinction is not observable in Russian:

²⁵ Given that the present paper is not concerned with the underlying structure of the Russian double object construction, i.e., whether underlyingly the Dative NP c-commands the Accusative NP or vice versa, I provide two examples of Russian double object construction. In (44a) the Accusative NP c-commands the Dative NP whereas in (44b) the Dative NP c-commands the Accusative NP. Importantly, no matter what one believes about the underlying structure of the Russian double object construction, the data in (44) show that in Russian an NP containing a Genitive pronoun constitutes the pronoun's GC.

(45) a. *A*-movement:

*[Ego_i kniga]_j kažetsja Pete_i [t_j xorošo napisannoj].²⁶ his book-NOM seem Petja-DAT well written 'His book seem to Petja to be well-written.'

b. A'-movement:

* $[Ego_i knigu]_j$, ja xoču čtoby Petja_i prodal t_j segodnja. [his book]-ACC I want that Petja-NOM sells today 'I want Petja to sell his book today.'

Unfortunately, the Russian equivalent of (45a) is ungrammatical due to the ban on BA which, as we have seen in Section 3, is an operative constraint in standard Russian. Moreover, the ungrammaticality of the Russian equivalent of (45b) cannot be used as evidence for obligatory reconstruction, given the fact that the object *ego knigi* in its base-generated position does not violate Condition B (as we have established above). Why, then, is (45b) ungrammatical? Because it incurs two violations: one resulting from BA, and one from the anti-subject orientation of the pronoun.

Due to the demonstrated absence of a grammaticality contrast between A and A'-movement, we cannot use the reconstruction diagnostic in combination with Condition B to test the status of Russian scrambling. Hence, Bailyn's data in (43), even if accurate, should not constitute any evidence in support of either the A or A'-status of Russian scrambling.

What about reconstruction for Condition C? Can we use it as an A/A'-diagnostic for Russian scrambling data? Let us turn to this question next.

4.2.3 CONDITION C

As has been demonstrated in Section 2.1.2, in English reconstruction for Condition C does pick out the A/A'-distinction. In particular, A' as opposed to A-movement obligatorily reconstructs, yielding a configuration in which Condition C is violated. The sentences (12a) and (12b) which illustrate this generalization are repeated in (46):²⁷

b. A'-movement:

 $^{^{26}}$ Russian speakers who allow for BA may accept (45a). Arguably, they would reject (46b), since apart from violating BA it also violates the anti-subject orientation of the Genitive pronoun. As a result, these speakers would distinguish movement in (45a) from movement in (45b). Is this due to the A/A'-distinction? Not necessarily. For instance, it may be argued that these sentences differ in that in (45a) the subject is moved whereas in (45b) the object is moved. Consequently, even the judgments of Russian speakers who allow for BA cannot help us to establish the A/A'-status of the scrambling data in (43).

²⁷ When it comes to the reconstruction (for Condition C) A/A'-diagnostic, Bailyn uses the contrast between A and A'-movement differently from that in (46). Instead, he uses the contrast demonstrated in (i), whereby only A'-movement is believed to reconstruct, bleeding Condition C. Note, however, that the sentence (ib) does not constitute evidence for obligatory reconstruction. Technically, at the surface structure *him*, occupying an A'-position, does not violate Condition C. Hence, *him* is not 'forced' to reconstruct in order to insure the grammaticality of (ib). Crucially, (ib) contrasts with (46b), where the topicalized phrase 'pictures of John' must reconstruct, thus accounting for the ungrammaticality of the surface sentence. (i) a. *A-movement*:

^{*}He_i seems to John_i's mother [t_i to be the best candidate].

It's him_i that John_i's mother met t_i at the bank.

(46) a. A-movement: [Pictures of John_i]_j seem to him_i [t_j to be on sale].
b. A'-movement: *It's [pictures of John_i]_i that he_i sells t_i.

The question that we need to ask at this point is whether in Russian reconstruction for Condition C singles out the mentioned A/A'-distinction. To answer this question let us examine whether Russian constructions that are structurally equivalent to (46) show a grammaticality contrast that can be related to presence versus absence of a Condition C violation.

(47) a. *A*-movement:

[Novye druzja Ivana_i]_j kazutsja emu_i [t_j 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 druzej Ivanai]j oni priglasil v gosti tj?
 [which among friends of-Ivan]-ACC he-NOM invited for visit
 'Which friends of Ivan did he invite over?'

Fortunately, the data in (47) do not violate any principles which distinguish Russian from English, i.e., the BA restriction or the orientation of Genitive anaphors/pronouns. So we are able to observe the grammaticality contrast between A and A'-movement not only in the English examples in (46) but also in the Russian examples in (47).

Just like in English, the grammaticality contrast between sentences (47a) and (47b) indicates that in Russian reconstruction for Condition C is only obligatory in the case of A'-movement. In particular, the ungrammaticality of (47b) suggests that in Russian an A'-moved constituent obligatorily reconstructs to its base-generated position at LF, yielding a configuration that violates Condition C of BT.²⁸ The grammaticality of (47a), on the other hand, implies that an A-moved constituent, unlike its A'-counterpart, does not reconstruct, escaping a Condition C violation.

Consequently, the contrast between A and A'-movement, whereby the latter but not the former obligatorily reconstructs and, hence, feeds Condition C, can be used as an A/A'-diagnostic both in English and in Russian. Let us start our examination of Russian scrambling with dislocation and long distance scrambling:

²⁸ Importantly, the ungrammaticality of (47b) cannot be attributed to a BA violation at LF (after reconstruction took place), given that the BA requirement is a condition on S-structure.

(48) S-V-O (Underlying):

očen' často vstrečaet [novyx znakomyx Ivana;]. *Oni acquaintances of-Ivan]-ACC he-NOM quite often meets Inew 'He quite often meets Ivan's new acquaintances.'

(49) O-S-V (Dislocation):

vstrečaet očen' často. Ivana;] oni *[Novyx znakomyx acquaintances of-Ivan]-ACC he-NOM meets auite often Inew 'The new acquaintances of Ivan, he meets quite often.'

(50) *O*-...-*S*-*V* (Long-Distance Scrambling):

a. Out of a non-finite clause:

prikazal Mašek *[Novyx znakomyx] Ivana;]; on acquaintances of-Ivan]-ACC he-NOM ordered Masha-DAT [new [PRO_k priglasil v gosti t_i imenno zavtra]

precisely tomorrow] to invite for visit

'He ordered Masha to invite over new acquaintances of Ivan exactly tomorrow.' b. Out of a finite clause past an embedded antecedent:

*[Novyx znakomyx] xoču, čtoby on_i priglasil Ivana_i]_i, ja acquaintances of-Ivan]-ACC I-NOM want that he-NOM invites [new v gosti t_i imenno zavtra.

for visit precisely tomorrow

'I want that he invites over the new acquaintances of Ivan exactly tomorrow.'

c. Out of a finite clause past a matrix antecedent:

*[Novyx znakomyx] priglasil $Ivana_i]_i$, oni xočet, čtoby ja acquaintances of-Ivan]-ACC he-NOM wants that I-NOM invite Inew gosti t_i imenno zavtra. v

for visit

precisely tomorrow

'He wants that I invite over the new acquaintances of Ivan exactly tomorrow.'

The ungrammaticality of the sentences in (49) and (50) suggests that a scrambled constituent in both local and long distance dislocated constructions reconstructs to its base-generated position at LF, yielding an ungrammatical construction such as in (48). According to the diagnostic under discussion, reconstruction for Condition C is an exclusive property of A'-movement. If so, we can conclude that in Russian dislocation and long-distance scrambling are both instances of A'-movement.

What is the status of inversion? The data in (51) reveal that an inverted version of (48)unlike its dislocated version is marginally acceptable. Is it the lack of reconstruction that is responsible for the grammaticality of (51a) and (51b)? On the basis of the data in (52), I will claim that the answer to this question is no.

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- (51) O-V-S (Inversion):
 - a. ?? [Novyx znakomyx Ivana_i] očen' často vstrečaet on_i. [new acquaintances of-Ivan]-ACC quite often meets he-NOM 'It is he who quite often meets the new acquaintances of Ivan.'
 - b. ?? [Novyx znakomyx Ivana_i] očen' často vstrečaet Ivan_i.²⁹ [new acquaintances of-Ivan]-ACC quite often meets Ivan-NOM 'It is Ivan who quite often meets the new acquaintances of Ivan.'
- (52) a. *[Novyx znakomyx Ivana_i] predstavil on_i predsedatelju. [new acquaintances of-Ivan]-ACC introduced he-NOM to the Chairman 'It is to the Chairman that he introduced new acquaintances of Ivan.'
 - b. *[Novyx znakomyx Ivana_i] predstavil Ivan_i predsedatelju. [new acquaintances of-Ivan]-ACC introduced Ivan-NOM to the Chairman 'It is to the Chairman that Ivan introduced new acquaintances of Ivan.'

As can be seen from (52), if we modify the construction in (51) so that the subject, i.e., *on* or *Ivan*, occupies a non-focused position, the sentences become unacceptable (with coindexation). Recall that in Russian inverted constructions only the final element is focused (cf. Section 3). Hence, it is the focusing of the subject that renders the sentences (51a) and (51b) grammatical. It may well be that these sentences are marginally acceptable because they are reanalysed by Russian speakers as the 'right dislocated' construction in (53), with the possibility of a null pronoun in (51b):³⁰

(53) [Novyx znakomyx Ivana_i] očen' často vstrečaet on_i, Ivan_i. [new acquaintances of-Ivan]-ACC quite often meets he, Ivan-NOM 'It is he, Ivan, who quite often meets the new acquaintances of Ivan.'

The ungrammaticality of the sentences in (52) suggests that inversion, just like dislocation or long-distance scrambling, is an instance of A'-movement. In other words, the reconstruction A/A'-diagnostic (for Condition C) classifies Russian scrambling as an instance of A'-movement across the board; inversion, dislocation and long-distance scrambling are simply different realizations of it.

To recapitulate, thorough examination of reconstruction as an A/A'-diagnostic brought us to the conclusion that this diagnostic is suitable for Russian only in combination with Condition C but not with Condition A or Condition B. When combined with Condition C this diagnostic identifies the two types of Russian local scrambling as well as Russian long-distance scrambling as instances of A'-movement. The reconstruction A/A'-diagnostic

(i) [Sestra Ivana_i]_j kažetsja [novym znakomym Ivana_i] [t_j očen' krasivoj]. [sister of-Ivan]-NOM seems [new acquaintances of-Ivan]-DAT [very beautiful]

²⁹ Given that it is very odd to have a pronoun in a sentence-final focused position, in (51b) I provide some sentences where a full NPs occupies this position. Importantly Russian permits the use of two identical NPs within the same sentence:

^{&#}x27;Ivan's sister seems to new acquaintances of Ivan to be very beautiful.'

³⁰ Why focusing of the subject makes possible the mentioned reanalysis of inverted constructions or why right dislocation escapes a Condition C violation is beyond the scope of the present paper.

thus illustrates that Russian scrambling, contrary to Bailyn's (2003ab, 2004) proposal, does not need to be divided into two distinct processes but can be analyzed as a uniform phenomenon of A'-movement.

In the next subsection we will turn to the WCO A/A'-diagnostic in an attempt to confirm the results of the reconstruction diagnostic presented above. In particular, we will try to determine whether Russian scrambling with respect to WCO behaves as A'-movement across the board. We will see that the WCO diagnostic, unlike the reconstruction diagnostic, classifies Russian scrambling as two distinct types of movement: local scrambling as A-movement and long-distance scrambling as A'-movement. Yet, no distinction between the two types of Russian local scrambling, i.e., between inversion and dislocation, will be found.

4.3 THE WCO FILTER

As has been demonstrated in Section 2.3, only the A'-movement of a quantifier phrase (QP) past a non-c-commanding variable, and not A-movement, exhibits the WCO effect. Examples (15) and (16), which demonstrate this observation, are repeated below:

- (54) a. A-movement:
 - Who_i t_i seems to his_i mother [t_i to be happy]?
 - b. A'-movement (WCO):

*Whom_i does his_i mother love t_i?

Interestingly enough, Russian sentences that structurally correspond to the sentences in (54) display the opposite grammaticality contrast from the one found in English. In particular, in Russian, contrary to English, the A-movement of a Wh-element past a coindexed pronoun is ungrammatical while the A'-movement of a Wh-phrase past a coindexed pronoun is grammatical.³¹

(55) a. A-movement:

*Kto_i t_i kažetja ego_i materi umnym? who-NOM seems his mother-DAT smart 'Who seems to his mother to be smart?'

b. *A'-movement:* Kogo_i ljubit ego_i podruga? whom loves his girlfriend-NOM 'Whom does his girlfriend love?'

- (i) a. Každaja mat'_i š'itajet čto ee_i rebjenok samij odarennij.
 every mother-NOM considers that her child-NOM most gifted
 'Every mother considers her child to be the most gifted one.'
 - b. Každyj rebjonok_i ljubit svoju_i mat'.
 every child-NOM loves self mother-ACC
 'Every child loves his mother.'

³¹ Crucially, in Russian both the Genitive pronoun and an anaphor can be interpreted as logical variables:

The sentence in (55a) is ungrammatical because it violates the pronoun's anti-subject orientation. If we substitute the Genitive pronoun with a Genitive anaphor, the sentence becomes grammatical, as now the subject *kto* is accurately bound to the anaphor *svoej*:

(56) A-movement:

Kto_i t_i kažetja svoej_i materi umnym? who-NOM seems self mother-DAT smart 'Who seems to his mother to be smart?'

The data in (55)-(56) demonstrate that in Russian not only A-movement but even the classical examples of A'-movement such as Wh-movement do not exhibit WCO. Does the grammaticality of (55b) imply that in Russian A'-movement, unlike in English, does not obey the principles responsible for the WCO effect (Grewendorf & Sabel's and Muller & Sternefeld's approach)?³² Or does it mean that Russian pronouns are not susceptible to WCO, just like English PRO?³³ In other words, is it true that in Russian A'-movement over a coindexed non-c-commanding pronoun never results in WCO? The data in (57) and (58), adopted from Avrutin & Reuland (2003), suggest that the answer to this question is no.

In their article, which is concerned with backwards anaphora (BA) in temporal Russian constructions, Avrutin & Reuland point out an interesting observation. While there are some temporal Russian constructions where BA seems to be allowed, these constructions do not tolerate a QP as pronoun's antecedent. In other words, the temporal sentences that allow for BA are grammatical only if a pronoun is coindexed with an NP, as opposed to a QP. To demonstrate, consider some of Avrutin & Reuland's slightly modified examples, where coindexing *ego* with *Ivan* is acceptable but with *každyj student* is unacceptable.

(57)	a.	Poka	Maša	fotografirovala	egoi	sestru,	Ivan _i	ulybalsja.
		while	Masha	was.photographing	his	sister	Ivan	was.smiling
		'While	Masha	was photographing hi	s sister	: Ivan w	as smiling.'	

b. *Poka Maša fotografirovala ego_i sestru, každyj student_i ulybalsja.
 while Masha was.photographing his sister every student was.smiling
 'While Masha was photographing his sister, every student was smiling.'

³² There exist many different accounts of the WCO phenomena in the literature (Postal (1971), Koopman and Sportiche (1983), Lasnik & Stowell (1991), Safir (1984, 1996, 2004) just to name a few). Given that the exact nature of the principles responsible for WCO is irrelevant to our discussion, I do not commit myself to any of these existing accounts of WCO.

³³ To demonstrate that PRO in English is not subject to the constraints responsible for WCO consider the grammaticality contrast between (ia) and (ib). (ia), where a wh-element moves over a coindexed pronoun, is ungrammatical due to WCO. On the other hand, (ib), where a wh-element moves over a coindexed PRO, is grammatical and hence does not violate WCO. This is why, in English PRO has to be assigned a 'special' status regardless of what analysis of WCO one chooses.

⁽i) a. *Who_i did his_i singing of Bob Dylan bother t_i ?

b. Who_i did [PRO_i singing of Bob Dylan] bother t_i?

Nossalik

- (58) a. Poka ego_i mama gotovila obed, Ivan_i smotrel televizor. while his mother was.cooking dinner Ivan was.watching TV 'While his mother was cooking dinner, Ivan was watching TV.'
 - b. *Poka ego_i mama gotovila obed, **každyj student**_i smotrel while his mother was.cooking dinner every student was.watching televizor.

TV

'While his mother was cooking dinner, every student was watching TV.'

The ungrammaticality of (57b) and (58b), as opposed to grammaticality of (57a) and (58a), implies that in these sentences the covert QR movement, namely the LF movement of *každyj student* past *ego*, violates restrictions responsible for WCO and, hence, triggers the WCO effect. The data in (57)-(58) thus force us to conclude that in Russian pronouns are susceptible to WCO and that A'-movement (at least when covert) does obey the principles accountable for WCO. Importantly, the existence of data (57)-(58) entitles us to use the WCO A/A'-diagnostic when testing the status of Russian scrambling, as it confirms that in Russian, just as in English, A'-movement, as opposed to A-movement, triggers WCO.

In light of these conclusions, we need to explain the contrast between the grammatical (55b) and the ungrammatical (57b) and (58b). This contrast can be accounted for if we assume that in (55b) Wh-movement undergoes an initial scrambling, which overrides WCO, yielding a grammatical sentence. The covert quantifier movement in (57b) and (58b), on the other hand, does not undergo an initial scrambling (provided that scrambling is an overt operation) and hence induces WCO.³⁴ Bearing this assumption in mind, let us begin our investigation of Russian scrambling, using the WCO A/A'-diagnostic. First, consider some examples of overt CP-internal Wh- and quantifier movements. Note that in the sentences (60b)-(61b) intermediate traces indicate the landing sites of scrambling:

- (59) S-V-O (Underlying):
 - a. *Ee_i xožjajka striž'ot [každuju iz etix sobak]_i.
 her owner-NOM grooms [each of these dogs]-ACC-FEM 'Her owner grooms each of these dogs.'
 - b. ***Ee**_i xožjajka striž'ot [kakuju iz etix sobak]_i? her owner-NOM grooms [which of these dogs]-ACC-FEM 'Which of these dogs does its owner groom?'

³⁴ This assumption goes together with Chomsky's (1995) claim that a covert A-movement does not exist.

(60)	O-V-S (Inversion):												
	a. [Každuju iz etix sobak] _i striž'ot ee _i xožjajka												
	[each of these dogs]-ACC-FEM grooms her owner-NOM												
	'It is its owner who grooms each of these dogs.'												
	b. [Kakuju iz etix sobak] _i t _i striž'ot ee _i xožjajka												
	[which of these dogs]-ACC-FEM grooms her owner-NOM												
	'Which of these dogs gets groomed by its owner?'												
(61)	O-S-V (Dislocation):												
	a. [Každuju iz etix sobak] _i ee _i xožjajka striž'ot												
	[each of these dogs]-ACC-FEM her owner-NOM grooms												
	raz v mesjac.												
	once a month												
	'??Each of these dogs, its owner grooms once a month.'												
	b. [Kakuju iz etix sobak] _i t _i ee _i xožjajka striž'ot												
	[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?"												
	<i>6 6 </i>												

The fact that in (61) and (62) scrambling of the quantifier *každuju iz etix sobak* or the operator *kakuju iz etix sobak* past the coindexed non-c-commanding pronoun *ee* does not produce WCO suggests that local scrambling in Russian is A-movement with respect to the WCO A/A'-diagnostic.

At this point we can explain why the English example in (54b) is ungrammatical while its Russian counterpart in (55b) is grammatical. The answer to this question is straightforward: in English, overt A'-movement cannot escape WCO by way of an initial operation of A-scrambling, as it does in Russian, because scrambling is unavailable in English.

The question that we need to investigate at this point is whether the WCO diagnostic also classifies Russian long-distance scrambling as an instance of A-movement? The ungrammaticality of (62) and (63) imply that the answer is no.

t_i.³⁵

 t_i ?

ti

ti

³⁵ From the data at hand it is impossible to infer whether in Russian a CP-internal QR undergoes an extra A'-movement overtly or covertly (unlike Wh-movement which I assume to be overt in Slavic). That is why the examples of QR in (60) and (61), unlike the examples of wh-movement, do not have intermediate traces.

(62) *O*-...-S-V (Long-Distance Scrambling, out of infinitival clauses): prikazala ee_i a. *[Každuju iz etix sobak]_i Nataša Natasha-NOM ordered her of these dogs]-ACC-FEM [each t_i t_i [PRO_i strič' t_i raz v mesjac]. xožjajke_i to groom once a month] owner-DAT ſ "Natasha ordered its owner to groom each of these dogs once a month." iz etix sobak]_i Nataša prikazala ee_i b. *[Kakuju Natasha-NOM ordered her of these dogs]-ACC-FEM which xožjajke_i t_i t_i [PRO_i strič' t_i raz v mesjac]? owner-DAT to-groom once a month Γ "Which of these dogs did Natasha order its owner to groom once a month?" (63) *O*-...-S-V (Long-Distance Scrambling, out of finite clauses past a matrix pronoun): a. *[Každuju iz etix sobak]; eei xožjajka xočet čtoby t_i t_i of these dogs]-ACC-FEM her owner-NOM wants that [each t_i raz v mesjac. Maša strigla Masha-NOM groomed once a month "*Its owner wants that Masha grooms each of these dogs once a month."

b. *[Kakuju iz etix sobak]_i ee_i xožjajka xočet čtoby t_i t_i [which of these dogs]-ACC-FEM her owner-NOM wants that Maša strigla t_i raz v mesjac? Masha-NOM groomed once a month '*Which of these dogs does its owner want that Masha grooms once a month?'

From the data in (62) and (63) we can observe that long-distance scrambling of a Wh-element or of a quantifier over a co-indexed matrix pronoun produces WCO, resulting in ungrammaticality. According to the WCO A/A'-diagnostic this means that, in Russian, long-distance scrambling is A'-movement.

If we, however, look at the sentence in (64), we will see that here long-distance scrambling does not result in WCO. Does the grammaticality of (64) jeopardize the A'-status of Russian long-distance scrambling? And the answer is no.

(64) *O-...-S-V* (Long-Distance Scrambling, out of finite clauses past an embedded pronoun:

а	. [Každuju	iz	etix	SO	bak] _i	ja	xoču	čtoby	ti	t_i	eei	xožjajka
	[each	of	these	do	gs]-ACC-FEM	Ι	want	that			her	owner-NOM
	strigla	t_i	raz	v	mesjac.							
	groomed		once	а	month							
'*I want that its owner grooms each of these dogs once a month.'												
b	. [Kakuju	iz	etix	SC	bak] _i	ty	xočeš	' čtoby	/ t	i t	i ee	_i xožjajka

[which of these dogs]-ACC-FEM you want that her owner-NOM strigla t_i raz v mesjac?

groomed once a month

"Which of these dogs do you want that its owner grooms once a month."

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The fact that in (64) scrambling of *každuju iz etix sobak* or *kakuju iz etix sobak* does not yield a WCO configuration is due to the cyclicity of long-distance scrambling. Thus, a Wh- or Q-phrase undergoes long-distance scrambling through an initial stage of local scrambling. Given that it is at the stage of local A-scrambling that *každuju iz etix sobak* or *kakuju iz etix sobak* encounters the co-indexed pronoun *ee* and not at the stage of long-distance A'-scrambling, the grammaticality of (64) should come as no surprise, provided that A-movement does not trigger WCO.

Before I summarise our findings, let me mention that the WCO diagnostic is one of the A/A'-diagnostics that Bailyn uses to determine the status of scrambling in Russian. He reports that in Russian only scrambling of a QP over a non-c-commanding variable in inverted constructions does not display WCO, signalling its A-properties. This statement relies on the following data:

(65) a. S-V-O (Underlying):

)	u.	STO (Chachying).	
		*[Ee _i sobaka ljubit každuju devočku _i .	
		[her dog]-nom loves [every girl]-ACC	
		'Her dog loves every girl.'	
	b.	. O-V-S (Inversion):	
		[Každuju devočku] _i ljubit [ee _i sobaka t _{i.}	
		[every girl]-ACC loves [her dog]-NOM	
		'Every girl is loved by her dog.'	
	c.	. OS-V (Long-Distance Scrambling):	
		*[Každuju devočku] _i , ja xoču, čtoby [ee _i sobaka] poljubila t _i .	
		[every girl]-ACC I want that [its dog]-NOM loves	
		'Every girl, I want her dog to love.' (Bailyn 200	04: 26-27)

Unfortunately, Bailyn (2004) only compares and contrasts inversion and long-distance scrambling. He does not present any examples of clause-internal dislocation which, on his account, being A'-movement, should be subject to WCO. Yet, as we saw in example (61), local dislocation does not result in WCO. The data in (61), thus, refute Bailyn's claim about the apparently existing contrast between inversion and clause-internal dislocation.

To sum up, in this subsection we have seen that in Russian scrambling of a wh-element or of a quantifier over a non c-commanding logical variable in both inverted and dislocated sentences does not result in WCO, revealing the A-status of Russian local scrambling. In contrast, long-distance scrambling of a wh-element or of a quantifier over a non-c-commanding logical variable produces WCO, signaling its A'-properties. The WCO diagnostic, thus, classifies Russian scrambling as two distinct types of movement, whereby the two types of Russian local scrambling are instances of A-movement and Russian long-distance scrambling is an instance of A'-movement. Importantly, this division of Russian scrambling into the two types is inconsistent with Bailyn's analysis, which draws the line between inversion and dislocation/long-distance scrambling.

To recapitulate, 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, whereas Russian long-distance scrambling exhibits behaviour of A'-movement under both of these A/A'-diagnostics, Russian local scrambling behaves like A-movement

with respect to the WCO diagnostic and like A'-movement with respect to the reconstruction diagnostic.

The following section summarizes the overall results of our investigation.

5. CONCLUSION

In the present paper we attempted to determine the status of Russian scrambling, using the standard A/A'-diagnostics. Unfortunately, the majority of these diagnostics turned out to be unsuitable for Russian, mostly due to grammatical principles in Russian that are not found in English, such as the restriction on backward anaphora and orientational properties of Russian anaphors and pronouns. As for the parasitic gap diagnostic, we were unable to use it, given that Russian might lack parasitic gaps altogether.

Consequently, only two out of the seven A/A'-diagnostics that are discussed in the present paper were judged to be appropriate for Russian: the reconstruction diagnostic, whereby only A'-movement is able to feed Condition C, and the WCO diagnostic, whereby only A'-movement exhibits WCO. Both of these diagnostics confirmed the generally assumed A'-status of long-distance scrambling (Mahajan 1990, Saito 1992, Bailyn 2002ab). Yet, when it came to Russian local scrambling, these diagnostics revealed conflicting results. While both inversion and dislocation behave like A'-movement with respect to the reconstruction diagnostic, they behave like A-movement with respect to the WCO diagnostic. In other words, the results of the reconstruction and WCO diagnostics reveal the presence of 'Webelhuth's paradox' in Russian.

To interpret the paradoxical behavior of Russian local scrambling, one could, in principle, adopt Grewendorf & Sabel's (1999) as well as Muller & Sternefeld's (1994) approach and reject one of the standard A/A'-diagnostics as invalid, i.e. as a diagnostic that does not reflect actual status of a given movement. Unfortunately, in Russian, it is impossible to determine which of the A/A'-diagnostics we can reject, as there are only two of them, one arguing for A'-status of local scrambling and the other for its A-status.

Another way to interpret our 'controversial' results would be in line with Webelhuth's (1989) account. In order to do so, one would need to show that Russian allows for local A and A'-scrambling simultaneously. Unfortunately, it is impossible to construct a sentence in Russian where a scrambled element reconstructs for Condition C and overrides the WCO effect at the same time. Thus, one cannot combine the ungrammatical structure that results from reconstruction of a locally scrambled constituent with the grammatical structure that results form local scrambling escaping WCO effect, without compromising the overall grammaticality of such a construction. As a result, we cannot make a use of Webelhuth's mixed A/A'-position in order to explain the observed paradox.

Importantly, the paradox at hand cannot be accounted for by Bailyn's (2003, 2004) analysis of Russian scrambling, who, adopting Mahajan's (1990) analysis of Hindi scrambling and Miyagawa's (2001) analysis of Japanese scrambling, claims that Russian has two different types of local scrambling, 'inversion' and 'dislocation', whereby the former is said to be A and the latter is said to be A'-movement across the board. Contrary to Bailyn's claim, the present paper has demonstrated that Russian inversion displays behaviour identical to dislocation in that it behaves as A'-movement under the reconstruction A/A'-diagnostic and as A-movement under the WCO A/A'-diagnostic. Given this observation, one cannot divide

Russian local scrambling into two distinct processes of A and A'-movements, as proposed by Bailyn.

Overall, the results of our investigation point to the general limitations of our knowledge about the phenomena of A and A'-movement. Ironically, given that there are no formal definitions, it is not clear what constitutes A and what constitutes A'-movement. All we know, at the present stage of linguistic development, is that, in English, these types of movement correlate with two seemingly distinct sets of properties. The standard A/A'-diagnostics are designed to differentiate between these sets. The question that remains to be answered is whether these sets of properties indeed exclusively pick out the A/A'-distinction, or if there are other factors that come into play. It might also be that these sets of properties which we deem to be universal are in fact language-specific, just like Grewendorf & Sabel (1999) as well as Müller & Sternefeld (1994) anticipated by questioning the validity of the WCO A/A'-diagnostic for German. The paradox at hand, then, calls for a cross-linguistic reevaluation of the A/A'-dichotomy.

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RÉSUMÉ

Ce papier examine le statut A/A' du brouillage en russe, en utilisant les diagnostics A/A' standards. Tandis que la majorité de ces diagnostics ne sont pas applicables au russe, il y en a deux, à savoir le diagnostic de la reconstruction (pour la Condition C) et le diagnostic WCO, qui s'appliquent au russe. Ces deux diagnostics, cependant, bien qu'ils confirment le statut A' du brouillage longue distance généralement présumé, révèlent le comportement paradoxal du brouillage local en russe: les deux types de brouillage local en russe, inversion et dislocation, se comportent comme un mouvement A' par rapport au diagnostic de reconstruction, mais comme un mouvement A par rapport au diagnostic WCO. Sur la base de données empiriques et théoriques, on argumente que le paradoxe observé ne peut pas s'expliquer par l'analyse du brouillage en russe de Bailyn (2003ab, 2004) qui, adoptant l'analyse du brouillage en hindi de Mahajan (1990) et l'analyse du brouillage en japonais de Miyagawa (2001), sépare les deux types de brouillage local en russe, maintenant que l'inversion est un mouvement A tandis que la dislocation est un mouvement A'. Nous ne pouvons pas davantage utiliser la position A/A' mixte de Webelhuth (1989), étant donné que en russe le brouillage local donne lieu à des phrases non grammaticales au diagnostic de reconstruction mais des phrases grammaticales au diagnostic WCO.

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