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## Long-Distance Scrambling, VP Ellipsis, and Scope Economy in Russian

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Svitlana Antonyuk-Yudina

## Abstract

The paper presents evidence suggesting that Scope Economy (Fox, 2000) constraints QP scope in Russian just the way it does in English. It also discusses a wide range of data on Long Distance Scrambling and argues that Quantifier Scope in Russian LDS sentences is also semantically constrained by the Scope Economy Principle: the scope derived as a result of scrambling a QP long distance is allowed if and only if this scope reading would not have been available prior to Scrambling. With Scope Economy (along with other output constraints) having been argued to be operative in Japanese Long Distance Scrambling as well (Miyagawa, 2006), our data constitutes further cross-linguistic evidence that reinforces the idea of Scrambling not being semantically vacuous (Bailyn, 2001). The data also constitutes evidence in favor of the Scope Economy Principle itself as well as offers some insights into quantifier scope availability in Russian.

# Long-Distance Scrambling, VP Ellipsis, and Scope Economy in Russian

Svitlana Antonyuk-Yudina \*

## 1 Introduction

It has been previously claimed that Russian is a language in which quantifier scope relations between two quantifier phrases (henceforth QPs) are determined strictly by c-command, with the availability of covert movement such as Quantifier Raising (QR) being constrained by the availability of other, “discourse” types of movements such as overt Topic and Focus movements: “scope between two QPs is frozen in Russian, regardless of whether the word order is SVO or OVS, and of whether the universal or the indefinite is higher at Spell-Out” (Ionin, 2001:5).

It has been argued recently (Antonyuk, 2006) that such a view of Quantifier scope relations in Russian is untenable and that inverse scope between two QPs is generally available and can be explained by QR with properties similar to those of QR in English (May, 1985; Fox, 2003, etc.). The present paper follows this view of Russian and attempts to elucidate the nature of the interaction between Long-Distance Scrambling (LDS) and QP Scope in Russian. Specifically, it is argued that Scope Economy can determine what scopes are available in multiply quantified sentences in Russian and, furthermore, that the Scope Economy principle interacts with LDS in determining the output.

## 2 Scope Economy

### 2.1 Original Evidence for Scope Economy in English

Fox (2000) proposed that sentences with two QPs are constrained by a scope economy principle in (1):

- (1) Scope Economy Principle (adapted from Fox 2000):

*A Scope Shifting Operation can move a QP from a position in which it is interpretable only if the movement crosses another scope-taking element and this results in creating a new scope reading not available before movement.*

Fox’s Scope Economy explains, for instance, why scopally uninformative sentences such as “Every boy loves every girl,” “John loves every girl” are not ambiguous: since moving the structurally lower QP in either of these sentences would not produce any difference in the truth conditions of the sentences, such movement is prohibited and QR (past VP level, needed independently) does not apply. Fox argues further that Scope Economy and the Parallelism requirement on ellipsis resolution taken together can account for the scopes available in VP-ellipsis constructions.

- (2) a. Someone in the audience knows the capital of every country.  
(some > every), (every > some)  
b. Someone in the audience knows the capital of every country. The lecturer does, too.  
(some > every), \*(every > some)  
c. Someone in the audience knows the capital of every country. [The person who was invited to talk about it] does, too.  
(some > every), (every > some)

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- (3) a. One of the film reviewers admires every movie.  
(one > every), (every > one)
- b. One of the film reviewers admires every movie. The organizer of the film festival does, too.  
(one > every), \*(every > one)
- c. One of the film reviewers admires [every movie]<sub>i</sub>. [The person who produced it<sub>i</sub>] does, too.  
(one > every), (every > one)

Fox's examples above show that a scopally ambiguous sentence with two QPs (2a, 3a) loses its ambiguity when it is the antecedent of an elided clause that does not contain a QP (2b, 3b). This is so because the lower QP (*the capital of every country, every movie*) cannot QR above the subject without violating Scope Economy in the lower clause due to the subject being non-quantificational since this QR would not produce a new scope relation (that is, it would be semantically vacuous). The Parallelism restriction on Ellipsis ensures that the corresponding operation (QR) does not take place in the antecedent clause (since this operation is independently prohibited in the elided clause).

Further examples (2c, 3c) show that if the subject of the elided clause contains a variable that can be bound by the lower QP, the sentences become once again ambiguous. This is expected on Scope Economy since now there is an independently-motivated semantic reason for QR to apply—binding of a variable—which means this operation is no longer vacuous (thus satisfying Scope Economy). In the following it will be shown that Scope Economy, as originally argued for by Fox on the basis of English data, is also operative in Russian.

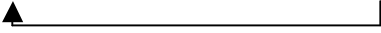
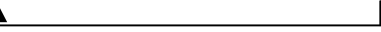
## 2.2 Evidence for Fox-Style Scope Economy in Russian

The following data prove that Scope Economy as envisaged by Fox can also explain Russian ellipsis data:

- (4) a. Dva studenta pročitali každyju knigu.  
Two students read every book  
'Two students read every book.'  
(two > every), (every > two)
- b. Dva studenta pročitali každyju knigu, i Maša tože.  
Two students read every book and Masha too  
'Two students read every book, and Masha did, too.'  
(two > every), \*(every > two)
- (5) a. Kakoj-to mal'čik vosxiščajetsja každyu učitelem.  
Some boy admires every teacher  
'Some boy admires every teacher.'  
(some > every), (every > some)
- b. Kakoj-to mal'čik vosxiščajetsja každyu učitelem i každyja devočka tože.  
Some boy admires every teacher and every girl too  
'Some boy admires every teacher and every girl does, too.'  
(some > every), \*(every > some)
- c. Kakoj-to mal'čik vosxiščajetsja každyu učitelem i kakaja-to devočka tože.  
Some boy admires every teacher and some girl too  
'Some boy admires every teacher and some girl does, too.'  
(some > every), (every > some)

Just as in English, basic sentences with two QPs (4a, 5a) are scopally ambiguous in Russian. As soon as such a sentence becomes an antecedent to an elided clause with a non-quantifier subject (as in 4b) or a QP subject that will render the sentence scopally uninformative (when the two QPs have an identical determiner), the antecedent becomes unambiguous, as is fully expected under the Scope Economy view (since no new scope relation will be established as a result of such QR, the movement is banned from taking place). However, as is demonstrated by 5c, when the subject of

the elided clause is a QP that renders the relation between the subject and object QP scopally informative, the sentence becomes ambiguous as well. Thus, with respect to doubly-quantified sentences and quantificational antecedents of ellipsis, Russian appears to be strikingly parallel to English. The parallelism between the two languages is also confirmed by the following Coordinate Structure construction (discussed in Fox, 2000):

- (6) a. \*Billi [<sub>a1</sub> wants to date [every girl in this class]<sub>1</sub>] and [<sub>a2</sub> has already asked [her]<sub>1</sub> out].  

- b. A boy [<sub>a1</sub> wants to date [every girl in this class]<sub>1</sub>] and [<sub>a2</sub> has already asked [her]<sub>1</sub> out].  

- \*(a > every), (every > a)

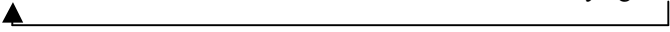
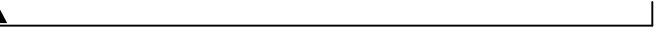
Fox (2000, 51) proposes the following generalization to account for the data in (6) above:

- (7) The Coordination QR Generalization:

*“In a structure such as (a), an optional instance of QR can move QP outside of the coordination only if there is some scope-bearing element  $\beta$  c-commanding the coordination such that (1)  $\beta$  and QP are scopally noncommutative<sup>1</sup> and (2) QR moves QP over  $\beta$ , as in (b).”*

- a. [<sub>YP</sub> ... [<sub>a1</sub> ... QP ...] and [<sub>a2</sub> ... x ...]]  
 b. QP<sub>x</sub> [<sub>YP</sub>  $\beta$  ... [<sub>a1</sub> ... x ...] and [<sub>a2</sub> ... x ...]]”

Thus, the sentence in (6a) is taken to be ungrammatical since, the subject being non-quantificational, the QP cannot QR above it and the variable is left unbound. In (6b), on the other hand, the QR from the first conjunct is allowed by Scope Economy to take place since the subject is itself a QP so the movement would not be vacuous; as a result the moved QP is able to bind the variable in the second conjunct and the sentence is therefore well-formed. As predicted, the only reading available for the sentence is the one on which the QP in the first conjunct takes scope over the subject QP. The following sentences from Russian are exactly parallel to their English counterparts.

- (8) a. \*Vanja [<sub>a1</sub> xočet vstrečat'sja [s každoj devočkoj v etom klasse]<sub>1</sub>]  
 Vania wants to.date with every girl in this class  

- i [<sub>a2</sub> uže priglasil [jejo]<sub>1</sub> na svidanije].  
 and already asked her on date  
 \*'Vania wants to date every girl on this class and has already asked her out.'
- b. Kakoj-to mal'čik [<sub>a1</sub> xočet vstrečat'sja [s každoj devočkoj v etom klasse]<sub>1</sub>]  
 Some boy wants to.date with every girl in this class  

- i [<sub>a2</sub> uže priglasil [jejo]<sub>i</sub> na svidanije].  
 and already asked her on date  
 'Some boy wants to date every girl in this class and has already asked her out.'  
 (every > some), \*(some > every)

As can be seen, the construction is exactly parallel to its English counterpart, and the ungrammaticality of (8a) is explained by Fox's Scope Economy just the way it is in English: for the variable in the second conjunct to be bound, the QP in the first conjunct has to be able to move to a c-commanding position. This is impossible since the movement is illicit on Scope Economy; there-

<sup>1</sup> Scopally noncommutative = scopally informative.

fore, the whole structure is ruled out since the variable is left unbound.

Thus, as the above sections demonstrate, disambiguation in Ellipsis and Coordinate Structure contexts in Russian provides evidence for Scope Economy in the spirit of Fox (2000). In the following section it will be shown that Scope Economy is also at work in cases of Long Distance Scrambling of QPs in Russian.

### 3 Scope Economy and Long Distance Scrambling

In the previous section I argued that Fox's Scope Economy principle is not a constraint specific to English, with Russian quantifier scope being constrained by it in a very much parallel fashion. I will now argue that Scope Economy is at play elsewhere in the language, namely that it is the constraint that determines the output of Long Distance Scrambling. This possibility is a natural one to consider under the view that equates the scrambling of a QP with overt QR (see Miyagawa, 2006 and references therein), and we have just seen that QR in Russian does seem to be constrained by Scope Economy.

I therefore argue for a particular view of Russian Scrambling as an optional overt A-Bar movement<sup>2</sup> that is subject to some of the same constraints other (non-optional) types of movement are subject to, in this case the requirement that movement have an effect on the output (Fox, 2000; Reinhart, 1995). This is by no means a novel suggestion; Miyagawa (2006) has proposed a similar treatment of Japanese Long-Distance Scrambling, also showing that it is subject to Fox's Economy principle and thus arguing against the special status of LDS as a non-motivated, non-constrained movement that is primarily characterized by its "undoing property" (Saito, 1989, 1992).

#### 3.1 Evidence for Scope Economy in Russian LDS

To demonstrate that Scope Economy is operative in Long Distance Scrambling (henceforth LDS) in Russian, it is important to demonstrate the properties of LDS in this language. This paper follows Bailyn (2001) in treating LDS as an A-Bar type of movement; however, LDS has been argued to be a lowering operation instead (Bošković and Takahashi, 1998), with the seemingly scrambled phrase being in fact base-generated and having to lower at LF for theta and case reasons (hence the "undoing" property of LDS). Below is some empirical evidence that point to Scrambling being actual movement (as opposed to a base-generated structure) in that it obeys the same familiar constraints imposed on other types of movement, such as wh-movement. As Bailyn (2001) points out, however, if LDS were instances of base-generated structures undergoing obligatory lowering, such constraints should not apply.

- (9) a. \*Kogo<sub>i</sub> ona znajet mnogo ljudej kotoryje nenavidjat t<sub>i</sub>?  
 Who.ACC she knows many people who hate  
 \*'Who does she know many people who hate?'  
 b. \*[Etogo politika]<sub>i</sub> ona znajet mnogo ljudej kotoryje nenavidjat t<sub>i</sub>.  
 This politician.ACC she knows many people who hate  
 'This politician she knows many people who hate.'

Example (9) demonstrates that LD Scrambling out of the relative clause results in an ungrammatical structure just as it does with wh-movement. The following example from Bailyn (2001) shows that neither wh-movement nor Scrambling is possible out of indicative embedded clauses (on the assumption, shared here, that extraction in Russian is possible out of subjunctive clauses only).

- (10) a. \*Kogo Marina znaet [čto [Ivan ljubit t<sub>i</sub>]]?  
 Who.ACC Marina<sub>NOM</sub> knows that Ivan.NOM loves  
 'Who does Marina know that Ivan loves?'

<sup>2</sup> See Bailyn (2001) for more arguments against treating Russian LDS as base-generated (Bošković and Takahashi 1998).

- b. \*Borisa<sub>i</sub> Marina znaet [čto [Ivan ljubit t<sub>i</sub>]]  
 Boris.ACC Marina.NOM knows that Ivan.NOM loves  
 ‘Marina knows that Ivan loves Boris’

Bailyn (2001) also shows that, just as is the case with wh-movement, Scrambling out of (one of the conjuncts of) a Coordinate Structure is prohibited:

- (11) a. Kogo ty xočeš', čtoby Ivan videl [t<sub>i</sub> i Mašu]?  
 Whom.ACC you want that Ivan saw and Masha<sub>ACC</sub>  
 ‘Who do you want Ivan to see Masha and?’  
 b. \*Borisa<sub>i</sub> ty xočeš', čtoby Ivan videl [t<sub>i</sub> i Mašu].  
 Boris.ACC you want that Ivan saw and Masha<sub>ACC</sub>  
 ‘BORIS you want Ivan to see Masha and.’

The following example addresses the Reconstruction property of LDS. Example (b) below shows that the LD Scrambled phrase appears to necessarily reconstruct at LF since the Principle C violation in (12a) is not remedied by scrambling out the violation-incurring phrase. Thus, Reconstruction clearly takes place in (12b).

- (12) a. \*Ja xoču čtoby ona<sub>i</sub> vstretila Mašinu<sub>i</sub> babušku.  
 I want that she met Masha<sub>POSS</sub> grandmother  
 \*‘I want her to meet Masha’s grandmother.’  
 b. \*[Mašinu<sub>i</sub> babušku]<sub>k</sub> ja xoču čtoby ona<sub>i</sub> vstretila t<sub>k</sub>.  
 Masha<sub>POSS</sub> grandmother I want that she met  
 ‘Masha’s grandmother, I want her to meet.’

I propose that if Scope Economy is in fact operative in LDS, we might expect the Reconstruction property of the scrambled QP to be affected<sup>3</sup>.

- (13) **Prediction:** if Scope Economy interacts with LDS, total reconstruction should be disallowed whenever LDS establishes new scope relations<sup>4</sup>.

That this may in fact be so is suggested by the following data:

- (14) a. Maša xočet čtoby dekan vygnal každogo studenta.  
 Masha wants that dean expelled every student  
 ‘Masha wants the dean to expel every student.’  
 (want > every), \*(every > want)  
 b. [Každogo studenta]<sub>i</sub> Maša xočet čtoby dekan vygnal t<sub>i</sub>.  
 Every student Masha wants that dean expelled  
 ‘Every student, Masha wants the dean to expel.’  
 (every > want), \*(want > every)  
 (15) a. Maša ne xočet čtoby dekan vygnal každogo studenta.  
 Masha not wants that dean expelled every student  
 ‘Masha doesn’t want the dean to expel every student.’  
 (not > want > every), \*(every > not > want)  
 b. [Každogo studenta]<sub>i</sub> Maša ne xočet čtoby dekan vygnal t<sub>i</sub>.  
 Every student Masha not wants that dean expelled  
 ‘Every student, Masha doesn’t want the dean to expel.’

<sup>3</sup> One way to envisage this relation is to say that Reconstruction of LDS is in fact the norm and that other principles (such as Scope Economy in this case) determine when it is unavailable due to the independent requirements imposed by these principles.

<sup>4</sup> Note that since LDS is possible only out of subjunctive clauses (that involve volition verbs), such new scope relations are expected every time LDS moves a QP across the (scope-taking) verb *want*.

- ?(every > not > want): for every student *x*, it is not the case that Masha wants the dean to expel *x*;  
 (not > every > want): it is not the case that for every student *x*, Masha wants the dean to expel *x*;  
 \*(not > want > every): it is not the case that Masha wants the dean to expel every student

In the above pre-scrambling examples (14a, 15a), the QP in the subordinate clause is (quite expectedly) not able to take scope over *want* due to the well-known property of QR being clause-bound<sup>5</sup> (May, 1985). As demonstrated by (12b), LD Scrambled phrases necessarily reconstruct. If this were so in cases where the scrambled phrase is a QP, we would expect the scrambled counterexamples of (14a, 15a) not to have readings other than those with the QP taking scope below *want*. This, however, is not the case: the “unscrambled” scope is exactly the one that is not available, which means reconstruction to the pre-scrambling position does not take place. The same is true when two QPs are involved:

- (16) a. [<sub>TP</sub>Dva profesora xotjat [<sub>CP</sub> čtoby [<sub>TP</sub> dekan vygnal každogo studenta]]].  
 Two professors want that dean expelled every student  
 ‘Two professors want the dean to expel every student.’  
 (Two > want > every), \*(every>two >want)  
 b. [Každogo studenta]<sub>i</sub> dva profesora xotjat čtoby dekan vygnal t<sub>i</sub>.  
 Every student two professors want that dean expelled  
 ‘Every student, two professors want the dean to expel.’  
 (Every > two > want), (two > every > want), \*(two > want > every)

In (16a), the only available reading is the one on which the matrix clause subject QP takes scope above *want* and the lower clause QP takes scope below *want*, as is expected due to the clause-bounded nature of QR. When the lower QP is scrambled into the matrix clause to the pre-subject position, the only two readings available are those with the scrambled QP above *want*<sup>6</sup>.

The following examples use Binding Principle C violation as a diagnostic for the reconstruction of Long Distance Scrambled QPs.

- (17) a. \*Kto-to xočet čtoby ona<sub>i</sub> uslyšala [každuju šutku o Maše<sub>i</sub>].  
 Someone wants that she heard every joke about Masha  
 ‘Someone wants her<sub>i</sub> to hear every joke about Masha<sub>i</sub>.’  
 b. [Každuju šutku o Maše<sub>i</sub>] kto-to xočet čtoby ona<sub>i</sub> uslyšala t<sub>i</sub>.  
 Every joke about Masha someone wants that she heard  
 ‘Every joke about Masha<sub>i</sub>, someone wants her<sub>i</sub> to hear.’  
 (Every > someone > want), (someone > every > want)  
 c. \*/?[Každuju šutku o Maše<sub>i</sub>] ja xoču čtoby ona<sub>i</sub> uslyšala t<sub>i</sub>.  
 Every joke about Masha I want that she heard  
 \*‘Every joke about Masha<sub>i</sub> I want her<sub>i</sub> to hear.’<sup>7</sup>

<sup>5</sup> This clause-boundedness is not absolute, though. Fox (2000) discusses cases in which a QP is able to raise into the higher clause; however, this “violating” QR appears to be governed by Scope Economy as well. See Fox (2000) for details.

<sup>6</sup> The presence of the second scope reading—that of the scrambled phrase below the matrix clause subject QP but above the verb—is not quite expected on the Scope Economy view argued for here unless it results from the additional step of QR of the subject above the scrambled phrase. Such a claim does not contradict anything I have said about Scope Economy as far as I can see. It is, however, less likely to be the explanation in view of the fact that (15b) does appear to have the scope on which the scrambled phrase is interpreted below negation.

<sup>7</sup> Scope economy on my account predicts examples (17c) and (18c) to be grammatical. My informants, however, differ in their judgments on these. Some accept these sentences on intended coreference while others find these ungrammatical. What is crucial for the proposed analysis is that speakers who do not accept the (c) sentences do accept the (b) examples on the coreferent reading. The crucial difference then appears to be the ability of the lower QP to obtain wide scope over the structurally higher QP, thus supporting the claim that scope economy disallows total reconstruction whenever new scope relations are established.

- (18) a. \*Kto-to xočet čtoby **on**<sub>i</sub> uvolil [každogo sovetnika **Buša**]<sub>i</sub>.  
 Someone wants that he fired every adviser Bush.GEN  
 \*‘Someone wants him<sub>i</sub> to fire every adviser of Bush<sub>i</sub>.’
- b. [Každogo sovetnika **Buša**]<sub>i</sub> kto-to xočet čtoby **on**<sub>i</sub> uvolil t<sub>i</sub>.  
 Every adviser Bush.GEN someone wants that he fired  
 ‘Every adviser of Bush<sub>i</sub>, somebody wants him<sub>i</sub> to fire.’  
 (every > someone > want), (someone > every > want), \*(someone > want > every)
- c. \*/?[Každogo sovetnika **Buša**]<sub>i</sub> ja xoču čtoby **on**<sub>i</sub> uvolil t<sub>i</sub>.  
 Every adviser Bush.GEN I want that he fired  
 \*‘Every adviser of Bush<sub>i</sub>, I want him<sub>i</sub> to fire.’

Examples (17a, 18a) are Principle C violations, with the pronoun c-commanding the R-expression it is coreferent with and that is itself contained inside a QP. In examples (17b, 18b), the QP that contains the violation-incurring R-expression is scrambled above the coreferent pronoun to the sentence-initial position. If “total” reconstruction were available in such cases, we would expect these (b) sentences to be just as bad as the corresponding (a) examples. The examples, however, are absolutely grammatical, which proves reconstruction does not take place.

Note that on the view of Scope Economy taken here so far, the ungrammaticality of the corresponding (c) examples above is unexpected. Since LDS takes the QP that contains the violating R-expression across the scope-taking verb *want*, we expect that the QP should not reconstruct, if it is indeed the establishment of a new scope relation that prevents reconstruction from taking place.

Therefore, it appears that if Scope Economy is to be maintained as the explanation for the lack of reconstruction in the above cases, it would have to be modified respectively to take the contrast between the (b) and (c) examples into consideration. Specifically, it appears that it is the establishment of a new scope relation between two QPs—as opposed to just any two scope-taking elements as in the (c) examples above—that requires the scrambled QP to remain in its scrambled position.

Such a hypothesis makes a testable prediction: if it is indeed establishing a new scope between two QPs that prevents reconstruction from taking place, then we would expect that scrambling the lower QP to a position below the matrix subject QP should result in reconstruction to the pre-scrambling position, since such a scrambling movement would not place the QP in a position that would create a new scope relation between the two QPs<sup>8</sup>. A good way to test this prediction is again by combining the relevant scrambling movement with a Principle C violation, as scope judgments alone in such cases can be too subtle for speakers to distinguish between. The following example does just that:

- (19) \*/??Kto-to [každogo sovetnika **Buša**]<sub>i</sub> xočet čtoby **on**<sub>i</sub> uvolil t<sub>i</sub>.  
 Someone every adviser Bush.GEN wants that he fired  
 \*‘Someone wants him<sub>i</sub> to fire every adviser of Bush<sub>i</sub>.’

The prediction, indeed, seems to be borne out<sup>9</sup>: scrambling the lower QP outside of the c-command of the pronoun, but below the matrix subject QP, does not save the sentence from the Principle C violation, proving that reconstruction to the pre-scrambling position does indeed take place. This result, then, is quite striking: the difference between the grammatical (18b) example and the ungrammatical (19) is only in the availability of the new QP scope relation in the former, but not in the latter case, proving that it is exactly the establishment of a new quantifier scope relation that prevents the reconstruction of the scrambled QP from taking place.

#### 4 Concluding Remarks

In this paper, I have provided further evidence for Quantifier Raising in Russian and argued that

<sup>8</sup> On the assumption that further QR is unavailable since the phrase has just been moved overtly.

<sup>9</sup> Unlike all other Russian language sentences used in this paper, this example has not yet been tested with other native speakers and the judgment reported is my own. I do find the contrast between (18b) and (19) to be quite robust though.

QP scope in Russian is constrained by Fox's Scope Economy in ways that are parallel to those in English.

The paper also argues for a conception of Scrambling as an overt A-Bar movement that is not unlike other types of movement (Bailyn, 2001) in that it, too, is constrained by Scope Economy, requiring that Long Distance Scrambling have an effect on the output. It is argued that in cases where scrambling a QP results in creating a new quantifier scope relation that the scrambled phrase does not reconstruct, which runs against the view of Scrambling as primarily characterized by its "undoing" property (Saito, 1989, 1992 and others).

Some of the evidence presented above also suggests that when there are opposing requirements of scope and binding in terms of where the scrambled phrase is pronounced, scope "wins" if it is a "strong" scope, that is, scope between two quantifier phrases, as opposed to a scope between a QP and a scope-taking verb, in which case the phrase appears to reconstruct to its pre-scrambling position for binding purposes.

More generally, the evidence presented here suggests that quantifier scope after all does have similar properties in languages that were initially believed to be vastly different with respect to the availability of inverse scope and concomitant Quantifier Raising and the constraints on quantifier scope. On the other hand, following primarily Bailyn (2001) and Miyagawa (2006), the paper argues for treating (Long Distance) Scrambling similarly to other, familiar (non-optional) types of movement in that Scrambling does seem to be constrained by some of the same principles that non-optional movement is constrained by, Scope Economy being one of them.

The obvious question that remains is the status of short or Local Scrambling in Russian with respect to Scope Economy. The question is especially important since there appears to be little agreement on whether these two types of scrambling have similar properties. In this respect, determining whether Scope Economy constrains Local Scrambling could help clear this issue<sup>10</sup>.

## References

- Antonenko, Andrei. 2007. The nature of Russian subjunctive clauses. Ms., SUNY Stony Brook.
- Antonyuk, Svitlana. 2006. The scope of quantifier phrases in Russian: a QR analysis. In *Linguistics in the Big Apple*. Available at: <<http://web.gc.cuny.edu/dept/lingu/liba/papers/Antonyuk2006.pdf>>.
- Bailyn, John F. 2001. On scrambling: a reply to Bošković and Takahashi. *Linguistic Inquiry* 32:636–658.
- Bošković, Željko, and Daiko, Takahashi. 1998. Scrambling and last resort. *Linguistic Inquiry* 29:347–366.
- Fox, Danny. 2000. *Economy and Semantic Interpretation*. Linguistic Inquiry Monographs, Cambridge, Mass.: MIT Press.
- Ionin, Tania. 2001. The one girl who was kissed by every boy: scope, scrambling and discourse function in Russian. In *Proceedings of ConSOLE X*, ed. M. van Koppen, et al., 65–80. Available at: <<http://www.hum2.leidenuniv.nl/pdf/lucl/sole/console10/console10-ionin.pdf>>.
- Johnson, Kyle. 2003. What VP ellipsis can do, and what it can't, but not why. In *The Handbook of Contemporary Syntactic Theory*, ed. M. Baltin and C. Collins. Oxford: Blackwell.
- May, Robert. 1985. *Logical Form*. Linguistic Inquiry Monographs, Cambridge, Mass.: MIT Press.
- Miyagawa, Shigeru. 2006. On the "undoing" property of scrambling: a response to Bošković. Remarks and Replies. In *Linguistic Inquiry* 37(4):607–624.
- Reinhart, Tanya. 1997. Quantifier scope: how labor is divided between QR and choice functions. *Linguistics and Philosophy* 20:335–397.
- Ruys, Eddy. 1993. The Scope of Indefinites. Doctoral Dissertation, Universitet Utrecht.
- Saito, Mamoru. 1989. Scrambling as semantically vacuous A'-movement. In *Alternative conceptions of phrase structure*, ed. M. Baltin and A. Kroch, 182–200. Chicago: University of Chicago Press.
- Saito, Mamoru. 1992. Long distance scrambling in Japanese. *Journal of East Asian Linguistics* 1:69–118.
- Szabolcsi, Anna. 2003. The syntax of scope. In *The Handbook of Contemporary Syntactic Theory*, ed. M. Baltin and C. Collins. Oxford: Blackwell.

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<sup>10</sup> Antonyuk-Yudina (in progress) discusses the status of Local Scrambling with respect to Scope Economy as well as the tensions between scope and binding.

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