Scope Freezing, Scrambling and QR in Russian

Svitlana Antonyuk-Yudina*

This paper presents evidence for a scope asymmetry in Russian ditransitives fully parallel to that found in English Double Object constructions (Larson 1990). I argue that the scope freezing effect found in Russian ditransitive sentences with indirect object-direct object word order is simply a subcase of a more general scope freezing effect observed in Russian whenever (local or long-distance) Scrambling raises one Quantifier Phrase (QP) over another QP in the same sentence. Given substantial evidence for a Accusative-above-Dative base order in Russian ditransitives (Bailyn 1995, 2009), scope freezing in ditransitives can be argued to result from an overt instance of A scrambling of the quantificational Dative object above the quantificational Accusative object within the VP, in conformity with other cases of scope freezing observed in the language (Antonyuk-Yudina 2009). I provide a unified account of scope freezing with overt QP displacement that crucially relies on the idea that QR and QP Scrambling are overt and covert realizations of the same type of movement (Johnson and Tomioka 1997, Johnson 2000, Miyagawa 2003, 2006), both constrained by Scope Economy (Fox 2000, Miyagawa 2003, 2006). The proposed account makes no appeal to Superiority in explaining scope freezing in Russian, suggesting that Superiority-based accounts of English Double Object and Spray-load constructions (Bruening 2001) should be rethought as well.

Key words: *Scope Freezing, ditransitives, Double Object Construction, Scrambling, quantifier scope, Russian, Quantifier Raising*.

1 The Puzzle: QP Scope in Russian Ditransitives

As originally noted in Larson 1990[1], the Prepositional Construction (henceforth PC) and the Double Object Construction (DOC) in (1) exhibit the following scope asymmetry: the Prepositional Construction allows for scope ambiguity while the Double Object Construction is confined to the scope reading that reflects the surface c-command relations:

(1) a. The teacher assigned an exercise to every student (PC). (a > every), (every > a)
b. The teacher assigned a student every exercise (DOC). (a > every), ***(every > a)**

* Various parts of this paper have been presented at Stony Brook University Brown Bag, Penn Linguistics Colloquium 32, the Syntax Supper at CUNY Graduate Center, the NYU Linguistics Brown Bag Series, FASL 17 at Yale and a Seminar on QR and Scrambling at Reed College. I'm very grateful to the audiences at these meetings for helpful questions and discussions. I'm particularly indebted to John F. Bailyn, Chris Barker, Jonathan Bobaljik, Željko Bošković, Jonathan Brennan, Benjamin Bruening, Lucas Champoillon, Marcel den Dikken, Daniel Finer, Anthony Kroch, Richard K. Larson, Tom Leu, Alec Marantz, Edgar Onea, Roumyana Pancheva, Paul Pietroski, Maria Polinsky, Anna Szabolcsi, Radek Šimík and Satoshi Tomioka who at various points have offered me very helpful comments and suggestions. The comments and suggestions of the anonymous reviewers have been similarly critical in making this a much better paper. Finally, thank you to my numerous native speaker consultants for their infinite help and patience. The remaining mistakes are certainly my own.

[1] Larson attributes this observation to David Lebeaux.

The Prepositional Construction in (1a) is ambiguous between the surface scope reading, on which a single exercise is assigned to each of the students in some contextually relevant set, and the inverse scope reading, on which each of the students in the set is assigned a (potentially) different exercise. The Double Object Construction in (1b) is unambiguous, with surface scope interpretation being the only one possible: it has to be understood as involving a single student x such that x was assigned every single exercise in the relevant set of exercises.

As discussed at length in Bruening (2001), the Double Object Construction in (1b) and the *with*-variant of the spray-load construction in (2b) are parallel in that they both disallow inverse scope interpretation (hypothesized by Larson 1990 to be caused by the same phenomenon), systematically differing in this respect from their counterparts in (1a) and (2a):

(2) a. Maud draped a (different) sheet over every armchair. (a > every), (every > a)
b. Maud draped a (#different) armchair with every sheet. (a > every), ***(every > a)**

In Russian the Prepositional Construction has a very limited distribution, the Spray-Load Construction is unavailable, and what looks like a Double Object Construction can appear with either the Accusative-marked direct object (DO) or the Dative-marked indirect object (IO) linearly first, as in (3):

(3) a. Vanja podaril avtomobil' mojej sestre
Vania gave car$_{ACC}$ my sister$_{DAT}$
'Vania gave a car to my sister'

b. Vanja podaril mojej sestre avtomobil'
Vania gave my sister$_{DAT}$ car$_{ACC}$
'Vania gave my sister a car'

What has gone unnoticed in the literature on Russian up to now is that Russian exhibits exactly the same scope asymmetry, with a Dative object being able to take wide scope over the preceding Accusative object, while the opposite order (IO_{DAT} > DO_{ACC}) results in surface scope freezing[2],[3]:

(4) a. Učitel' dal kakuju-to knigu každomu studentu
Teacher$_{NOM.MSC}$ gave [some book]$_{ACC.FEM}$ [every student]$_{DAT.MSC.}$
'The teacher gave some book to every student' (some > every), (every > some)

[2] The existence of a parallel scope asymmetry in Russian might be taken as tentative evidence that the ACC>DAT ditransitives in Russian correspond to the English Prepositional Construction while the DAT>ACC ditransitives correspond to the Double Object Construction. However, in order to remain as theory-neutral on this point as possible I will continue to refer to such sentences simply as 'ditransitive'.

[3] It should be pointed out that scrambling the Dative QP over the Accusative in example (4) results in ambiguity. This is as expected, because after scrambling, the lower QP in the structure is now the existential one and we know that sentences in which the existential QP is the lower one quite generally appear to be ambiguous. As shown in Pietroski and Hornstein (2002), however, such instances are quite distinct from those where the lower QP is universal, and unlike the latter case, just *appear* to be ambiguous, as the seamingly distinct interpretations in such cases are not associated with distinct LFs. To control for this, the existential QP is always kept in a structurally higher position so that the cases where inverse scope reading is available can be confidently taken to be due to the syntactic mechanism of Quantifier Raising that results in a distinct LF structure.

b. Učitel' dal kakomu-to studentu každuju knigu
Teacher$_{NOM.MSC}$ gave [some student]$_{DAT.MSC.}$ [every book]$_{ACC.FEM.}$
'The teacher gave some student every book' (some > every), ***(every > some)**

The Russian data in (4) show that the Scope Freezing found in English obtains in the same context in Russian, i.e. when a quantificational Dative object precedes the quantificational Accusative object in overt syntax. Thus while (4a) can mean that either the same or a different book was given to every student, the only possible interpretation of (4b) is the one on which there is a particular student who received every book in the relevant set of books[4].

The goal of this paper is to explain the scope asymmetry found in Russian ditransitives by putting it into the broader context of what is known about ditransitive structures, movement and quantifier scope in Russian. I will argue that the Scope Freezing effect found in such sentences does not reflect anything peculiar about the construction that would cause such scope effects but rather that Scope Freezing is an instance of a more general phenomenon and as such has to be addressed by inspecting a much broader range of data. Specifically, I will argue that all Scope Freezing effects in Russian result from scrambling a Quantifier Phrase (henceforth QP) overtly across another QP in the sentence and that such freezing effects reflect the constraints imposed on overt Scrambling of QPs by a version of Fox's (2000) Scope Economy (Miyagawa 2003, 2006).[5] The Scope Freezing in the Dative over Accusative ditransitives is thus argued to result from a similar instance of overt QP Scrambling, on a well-motivated view of the structure of ditransitives with the Accusative object originating higher than the Dative within the VP (Bailyn 1995, Madariaga 2008, Bailyn 2009).

Let us start by demonstrating that the Scope Freezing found in Russian Dative-above-Accusative ditransitives is in fact a real syntactic phenomenon.

1.1 Evidence for Scope Freezing in DAT > ACC Ditransitives

To demonstrate that Scope Freezing indeed obtains in Russian Dat > Acc sentences but crucially not when the order of the objects is reversed, I will use the tests employed for the same purpose in Bruening (2001). This subsection will demonstrate complete parallelism between the two languages with respect to scope.

1.1.1 Availability of Pair-List reading in wh-QP interactions

As is well known, a pair-list reading arises when a QP moves via QR to a position where it can take scope over a wh-word (May 1985). Bruening (2001) argues that if QP-wh-interaction is

[4] The inverse scope interpretation in (4a) is even more salient when *kniga* is replaced with *zadača* (task) or *upražnenije* (exercise) (Polinsky, (p.c.)). Native speakers who find inverse scope judgments difficult in such sentences may prefer to use one of these NPs instead in such examples.

[5] The claim that overt movement of QPs freezes scope in Russian was originally advanced in Ionin (2002). However, the explanation of such Scope Freezing provided here is crucially different from that of Ionin (2002) since on her account QR past vP level in doubly quantified sentences is unavailable so that only surface scope is allowed. Furthermore, Ionin does not relate Scope Freezing to overt displacement of QPs; for her even QPs in SVO sentences exhibit surface scope interpretation only. Antonyuk-Yudina (in preparation) proposes that claims of complete lack of ambiguity in Russian SVO sentences with quantificational subject and object that are sometimes found in the literature (Grebenyova (2004), Stepanov and Stateva (2009)) are due to (silent) prosody imposed on such sentences that creates a surface scope bias, and not due to syntactic properties of QPs in Russian or lack of QR.

indeed the same as QP-QP interaction (as it is often assumed to be), the Pair-List reading should be absent in exactly the same contexts where Scope Freezing obtains, that is, in the DOC and the *with*-variant of the Spray-Load Construction[6]. Applied to Russian, this test yields a strikingly parallel result:

(5) a. Kakuju knigu učitel' dal každomu rebenku?
[Which book]$_{ACC}$ teacher gave [every child]$_{DAT}$
'Which book did the teacher give to every child?' **✓Pair-List OK**

b. Kakomu rebenku učitel' dal každuju knigu?
[Which child]$_{DAT}$ teacher gave [every book]$_{ACC}$
'Which child did the teacher give every book to?' ***Pair-List**

We see that in (5a), where the Accusative-marked direct object is wh-moved to the front of the sentence, the Pair List reading is indeed available, suggesting that the Dative-marked indirect object is able to scope over the direct object (as the lack of Scope Freezing in (4a) suggests that it should). In (5b) however, where the Dative-marked object moves via wh-movement past the direct object marked with Accusative case, the Pair List reading is not available. Thus if the lack of Pair List reading is taken to be a solid indication of a QP's inability to obtain scope over a wh-phrase, we have to conclude that the Accusative-marked object is not capable of taking wide scope over the higher Dative object, which is precisely what is suggested by the data in (4) above.

1.1.2 Variable Binding

It is similarly well known that if a QP is capable of taking scope over another QP within a sentence, it should be able to bind a variable contained within the QP that is being scoped over, since quantifiers cannot bind variables that do not fall within their scope (Higginbotham 1980, May 1985). If the Dative object is able to take scope over the Accusative object and if the reverse is not true, then only the Dative object should be able to bind a variable within the Accusative object, but not the other way around. The contrast in (6) below supports this conclusion[7],[8]:

(6) a. ?Učitel'nitsa dala kakuju-to knigu, kotoruju on$_i$ poprosil,
Teacher$_{NOM.FEM}$ gave some book$_{\mathbf{ACC.FEM}}$ that he asked

[6] Bruening (2001) uses the two variants of the Spray-Load construction to demonstrate this point for English:
i. a. Which sheet did he drape t over every armchair? P-L OK
b. Which book did you give t to every student? P-L OK
ii. a. Which armchair did he drape t with every sheet? *P-L
b. Which wall did he spray t with every color of paint? *P-L

[7] One speaker finds the sentence in (6a) to be unacceptable on coreference. I however and all of the other native speakers I asked find this sentence to be grammatical, although a few speakers do find it to be slightly degraded. Importantly, even the speakers who find (6a) to be somewhat degraded agree there is a clear contrast between this sentence and the ungrammatical (6b).

[8] In (6b) the 'teacher' NP is used in the masculine form to avoid interference from this NP with respect to who the pronoun can refer back to that would result if both the subject and the direct object NPs were in feminine forms.

каждому ребенку$_{i}$
every child$_{\textbf{DAT.MSC.}}$
'The teacher gave some book that he$_{i}$ asked for to every child$_{i}$'
(every > some), *(some > every)

b.*Učitel' dal kakomu-to rebenku, kotoryj ejo$_{i}$ poprosil,
Teacher$_{\text{NOM.MSC.}}$ gave some child$_{\textbf{DAT.MSC.}}$ that her asked
každuju knigu$_{i}$
every book$_{\textbf{ACC.FEM.}}$
'The teacher gave some child that asked for it$_{i}$ every book$_{i}$'

The sentence in (6a) allows for the bound variable interpretation according to which the teacher gave each child a book that child had asked for, that is, the books vary with the children. Since the Accusative direct object that contains the variable bound by the Dative object is structurally higher than the Dative object and thus not c-commanded by it in surface syntax (as will be demonstrated below), for this reading to obtain the Dative object has to be able to QR to a c-commanding position above the Accusative object in order to bind the pronoun contained inside it. The Dative-above-the-Accusative counterpart in (6b) is absolutely impossible on the bound variable interpretation; it cannot mean that the teacher gave each child a book that the child had asked for. Thus, the bound variable test also indicates the inability of the Accusative Object to scope over the Dative object at LF in the Dat > Acc construction[9].

1.1.3 Pair-List and Variable Binding

As was demonstrated in Bruening 2001 for English, the variable binding test can be successfully combined with the Pair-List test. On this test we expect that a bound variable interpretation will be unavailable in exactly the cases where the Pair-List reading is unavailable, that is, in cases where the QP is not capable of scoping over the moved wh-phrase. Again, the data here are consistent with the claim that only the Dative object is able to take wide/inverse scope over the Accusative object with the opposite being not true[10]:

(7) a. Kakuju knigu, zainteresovavšuju ego$_{i}$, učitel'nitsa dala
Which book$_{\text{ACC.FEM}}$ that interested him teacher$_{\text{NOM.FEM.}}$ gave
každomu rebenku$_{i}$?
every child$_{\text{DAT.MSC.}}$
'Which book that interested him$_{i}$ did the teacher give to every child$_{i}$?' **✓Pair-List OK**

[9] As pointed out to me by Masha Polisky (p.c.), a sentence like this one may be independently unacceptable due to Russian generally disallowing cataphora or Bachward Pronominalization. Antonyuk-Yudina and Bailyn (2008) show, however, that ungrammaticality due to Backward Pronominalization is usually considerably improved in cases were the offending pronoun is embedded in a layer of structure and so ungrammaticality in sentences such as (6b) and (7b), on coreferent interpretation, is not expected to be due to Backward Pronominalization. Other relevant examples are discussed later on in the context of using WCO as evidence for covert movement in Russian since similar considerations arise there as well.

[10] Interestingly, my subjects and I find that the intuitions on (7a) are even clearer and easier to get than was the case in (6a) even though this test is more complex in that it combines the two tests discussed above. It appears that the Pair List interpretation, which is quite easy to get, facilitates obtaining the bound variable reading, thus making the sentence easier to process.

b. *Kakomu rebenku, poprosivšemu ejo$_i$, učitel' dal
Which child$_{DAT.MSC.}$ that asked (for) her teacher$_{NOM.MSC.}$ gave
každuju knigu$_i$?
every book$_{ACC.FEM.}$
'Which child that asked for it$_i$ did the teacher give every book$_i$?' ***Pair-List**

The sentence in (7a) asks for pairs of books and children such that for each pair, the teacher gave each child a book the child showed interest in. The sentence in (7b), on the other hand, cannot be interpreted as asking about pairs of children and books, it can only be asking about one particular child; as expected, the bound variable reading in this sentence fails, resulting in the ungrammaticality of the sentence on the intended reading[11].

Furthermore, quite importantly, just as is the case in English, the Scope Freezing found in Russian ditransitives is relative in that it only holds between the two objects in the Dat > Acc sentences. It is easy to show that this surface scope effect is not absolute and that the Accusative object in ditransitives is able to take scope over the subject whenever the Dative object is non-quantificational:

(8) Kakaja-to učitel'nitsa dala mne každuju knigu
Some teacher$_{NOM.FEM.}$ gave me$_{DAT}$ every book$_{ACC.FEM.}$
"Some teacher gave me every book" ✓(some > every), ✓(every > some)

To summarize, all three tests, Pair List availability, the bound variable test and a combination of the two have shown that while the Dative-marked indirect object can scope over a preceding Accusative-marked direct object, the Accusative object is not able to take scope over a preceding Dative object. Thus, as far as the scope possibilities in ditransitive sentences are concerned, there is complete parallelism between Russian and English.

2 Towards an Analysis: Quantifier Scope and Scrambling in Russian

One of the arguments made in this paper is that despite the striking similarities in scope distribution between Russian and English just observed (as well as other similarities to be demonstrated below), the Russian data should not be analyzed in the same way as they have been analyzed in English. Specifically, I argue that adopting the Superiority analysis of Scope Freezing in Dat > Acc ditransitives (following Bruening 2001) would miss a striking generalization that otherwise emerges in Russian with respect to scope, namely the fact that overt movement of one QP over another *always* causes Scope Freezing in Russian. I will propose a unified account of such Scope Freezing in Russian that subsumes Dat > Acc ditransitives as just another instance of overt QP movement over another QP. This account, together with the above similarities with respect to scope between Russian and English will then be argued to affect English as well. Specifically, given all the parallels with respect to scope in the two languages, the analysis proposed here opens up a possibility that such Scope Freezing movement is involved in English as well.

Let us start by examining the relevant facts from quantifier scope and QP Scrambling in Russian that will set the stage for the analysis to follow.

[11] The sentence is, of course, grammatical on the non-covarying interpretation of the pronoun.

2.1 Quantifier Scope in Russian SVO Sentences

The way quantificational phrases interact with each other and with other scope-taking elements in a sentence has been well documented for English (Chomsky 1976, May 1977, 1985, Rodman 1976 inter alia). Sentences such as (9) below have been standardly analyzed as involving a covert A' movement operation of Quantifier Raising (QR) that yields two distinct Logical Forms for the sentence, corresponding to the two distinct interpretations:

(9) Two students read every book
(two > every): two students x are such that x read every book in some relevant set of books;
(every > two): for every book x, x was read by two (possibly different) students

There is less agreement up to this day however about how to analyze such sentences in other languages, including Russian. Russian has been argued to be a language radically different from English in terms of scope interactions in doubly quantified sentences. Specifically, it has been claimed that the existence of overt "discourse-driven" movements such as Focus movement and Topicalization constrains the availability of inverse scope readings in sentences involving two Quantifier Phrases (Ionin 2002). Thus the Russian counterpart of the above English example given in (10) has been claimed to disallow the inverse scope reading of this sentence:

(10) Dva studenta pročitali každuju knigu.
[Two students]$_{NOM}$ read$_{PST.PL}$ [every book]$_{ACC}$
'Two students read every book'

The supposed lack of ambiguity has been argued to result from the fact that the object QP can only undergo covert Quantifier Raising to the vP level (independently necessary, as is generally believed, for correct semantic interpretation of the object QP)[12]. The reconstruction of the subject into its underlying position within the vP (and hence within the scope of the object) on this account is prohibited by the general ban on reconstruction of overt movement for scope purposes[13].

By expanding the range of data in the following section and by using standard syntactic tests, I show that the "frozen scope" view of Russian doubly quantified sentences cannot be maintained in its strong form, certainly not for sentences with SVO order which *are* scopally ambiguous (Antonyuk 2006). I present evidence strongly suggesting that Russian has QR and

[12] My informants and I, however, find this and many similar sentences to be perfectly ambiguous. It is true, however, that the inverse scope interpretation of sentences with *odin NP* in subject position used by Ionin in her paper is somewhat harder to obtain for some speakers due to the lexical preference of the determiner *odin* to be interpreted as specific. Certain speakers thus find ambiguity in examples like (10) above more or less salient depending on which existential QP occurs in the subject position: some admit ambiguity more readily when *para studentov* "a couple of students" is used; others when *kakoj-to student* "some student" is used in the subject position. The reader is encouraged to try out various weak/existential subject QPs (*neskolko NP, para NP, kakoj-to NP, bolše dvux NP*) in examples such as (10) if the ambiguity of (10) is not immediately obvious. I cannot provide all of these examples in text for reasons of space.

[13] The claim about the lack of reconstruction for overtly moved QPs will be shown to be largely correct below. However, it only holds for overtly scrambled QPs; reconstruction of a subject QP is not only allowed but is in fact required for the object wide scope to obtain, as will be demonstrated shortly.

furthermore, that Russian QR obeys the same constraints as those QR in English is known to obey, including the Scope Economy Principle (Fox 2000).

2.1.1 Syntactic Evidence for covert QR in Russian

Though Ionin's idea that Russian is a language that "wears its LF on its sleeve" may seem attractive in view of a wider range of possibilities for overt displacement than that found in English, such a view finds little support once we scrutinize the data. Thus, evidence from the Possessive DP Constraint, Weak Crossover, and Inverse Linking Construction in this section all suggest that inverse scope interpretation is generally available in doubly quantified sentences and that the ambiguity is derived by covert movement, QR.

Russian obeys a Possessive DP Island constraint on which movement from inside the possessive phrase is prohibited (11b):

(11) a. O čjem ty čital [stat'ju __]?
About what you read article
'What did you read an article about?'

b. *O čjem ty čital [Mašinu stat'ju __]?
About what you read Maša's article
'What did you read Maša's article about?'

While the surface scope reading may indeed be generally more salient for some speakers, the contrast in scope possibilities between the minimally different sentences in (12) helps to sharpen the judgment and notice that (12a), unlike (12b), is in fact ambiguous. As demonstrated in Antonyuk (2006), this contrast is entirely expected if the inverse scope reading available in (12a) results from covert movement, and that this movement is constrained by some of the same constraints as those that apply to overt movement, in this case the prohibition on movement from possessor phrases:

(12) a. [Kakoj-to student] čitajet [$_{NP}$ stat'ji o každom professore]
Some student read$_{PRES.SG}$ articles about every professor
'Some student reads articles about every professor'
✓(some > every), ✓(every > some)

b. [Kakoj-to student] čitajet [$_{DP}$ Mašiny stat'ji o každom professore]
Some student read$_{PRES.SG}$ Maša$_{POSS.PL}$ articles about every professor
'Some student reads Masha's articles about every professor'
✓(some > every), *(every > some)

Thus, (12a) can mean either that there is a student x such that x reads articles about every professor or that for every one of the professors x, there is a (possibly different) student y, such that y reads articles about x. The sentence in (12b) predictably allows only the former reading.

Overt movement has also been shown to obey the Coordinate Structure Constraint on which movement from one of the conjuncts in impossible (Ross 1967):

(13) a. Bill cooked supper and washed the dishes.
b. *What$_i$ did Bill cook t_i and wash the dishes?

Similarly, an account that posits movement in scopally ambiguous sentences (such as (14a) below) predicts the lack of inverse scope reading in cases where the lower QP is inside one of the conjuncts (14b):

(14) a. Kakoj-to student ljubit každogo professora
Some student loves every professor
'Some student loves every professor'
✓(some > every), ✓(every > some)

b. Kakoj-to student ljubit Mašu i každogo professora
Some student loves Maša and every professor
'Some student loves Maša and every professor'
✓(some > every), * (every > some)

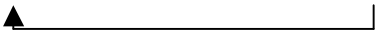
Thus, while the sentence in (14a) can mean that for every one of the professors in some relevant set there exists a (possibly) different student who loves that professor, the parallel sentence with the lower QP inside the second conjunct does not allow this reading, being confined to the surface scope interpretation only. Again, such sentences prove that despite a preference for surface scope the first sentence in the pair is ambiguous.

Further evidence for covert movement in doubly quantified sentences in Russian comes from Weak Crossover (WCO). Chomsky (1976) observed that overt movement can give rise to Weak Crossover effects whenever movement creates a variable that acts as an antecedent to a pronoun on its left, as in (15a). In other words, moving a wh-word from its underlying position across a coreferenced c-commanding pronoun is ungrammatical. However, a variable can act as an antecedent to the pronoun on its right, as in (15b), where the base position of the moved wh-word is above the coreferring pronoun:

(15) a. *Who$_i$ did [his$_i$ mother criticize t]?
b. Who$_i$ [t criticized his$_i$ mother]?

The impossibility of the bound variable reading in sentences such as (16) below is widely taken to be further evidence for the existence of covert movement of quantifier phrases: here the QP *every student* is believed to be raising covertly across the pronoun construed as a bound variable, hence the WCO violation.

(16) *His$_i$ mother loves [every student]$_i$.



Bailyn (2004) has shown that Russian exhibits WCO effects, thus further pointing to the conclusion that sentences such as (17) involve an instance of covert A-bar movement that crosses the coreferent pronoun[14]:

[14] When dealing with Russian, however, presenting sentences such as (17) may not be enough to prove that a WCO violation is to blame, since Russian is known to differ from English in disallowing Backward Promonimalization (BP). As sentences in (i) demonstrate, BP-violating cases (i.a) are structurally very similar to alleged WCO violations such as (i.b) in that the coreferring pronoun cannot be to the left of its antecedent (Antonyuk-Yudina and Bailyn (2008)):

(17) *[Ee$_i$ uborščica] vošla v každuju$_i$ komnatu
Her cleaning.lady$_{NOM.FEM.}$ entered in every room$_{ACC.FEM.}$
'Its$_i$ cleaning lady entered every$_i$ room'

Finally, the Inverse Linking Construction (ILC), which involves an embedded Quantifier Phrase that binds a variable it does not c-command in overt syntax, has been taken to represent a prime piece of evidence for the existence of covert QR, with the embedded QP analyzed as covertly raising at LF and adjoining to its containing phrase to obtain c-command and thus bind the pronoun. An example of ILC provided in (18) thus means that for every one of the cities there is someone from that city who despises it:

(18) [Someone [from every city$_i$]] despises it$_i$ (May 1977)

Assuming, as most accounts do, that covert QR *is* the mechanism needed to derive the bound variable reading and therefore the most salient scope interpretation in ILC, the mere existence of ILC in a language can be taken as evidence for covert QR. Crucially, Russian allows the construction, thus providing another parallel between English and Russian with respect to quantifier scope possibilities. The sentence in (19a) most naturally means that for every one of the cities x, someone among its dwellers despises x. The LF representation of this sentence on its bound variable reading is given in (19b)[15].

(19) a. [Kakoj-to žitel' [každogo iz gorodov$_j$]] prezirajet jego$_j$
[Some dweller]$_{NOM}$ [every from cities]$_{GEN}$ despises it$_{ACC}$
'Someone from every city despises it'

b. [$_{TP}$[každogo iz gorodov$_j$]$_y$ [$_{TP}$[kakoj-to žitel' **y**]$_x$ [$_{TP}$ **x** prezirajet jego$_j$]]]

To summarize, the above tests from the Possessive DP Constraint, the Coordinate Structure Constraint, Weak Crossover and Inverse Linking provide convincing syntactic

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i. a. *Ego$_i$ roditeli razdražajut Ivana
His parents annoy$_{PRES.PL.}$ Ivan$_{ACC}$
'His parents annoy Ivan'
b.*Ego$_i$ roditeli razdražajut [každogo podrostka]$_i$
His parents annoy$_{PRES.PL.}$ every teenager$_{ACC}$
*'His$_i$ parents annoy [every teenager]$_i$'

However, the two violations are in fact violations of two independent constraints. Thus, (ii.a), a BP configuration, improves dramatically once the pronoun-containing expression is embedded in another layer of structure. The same does not happen when the coreferring expression is a quantifier phrase, as in (ii.b):

ii.. a. Mašina ego$_i$ načal'nika nravitsja Ivanu$_i$
Car$_{NOM}$ his$_{GEN}$ boss$_{GEN}$ pleases$_{PRES.REFL}$ Ivan$_{DAT}$
'His$_i$ boss' car is liked by Ivan$_i$'
b.*Mašina ego$_i$ načal'nika nravitsja [každomu klerku]$_i$
Car his boss$_{GEN}$ pleases every clerk
*'His$_i$ boss' car is liked by [every clerk]$_i$'

Since the extra embedding alleviates the BP violation (as shown by ii.a), we can see that what causes the violation in (ii.b) is WCO. This in turn argues fo the existence of covert QR in Russian.

[15] Serbo-Croation, which appears to be more constrained than Russian with respect to the availability of inverse scope also disallows the Inverse Linking Construction (Ivana Mitrovic, (p.c.) While this observation may need to be verified with a larger group of native speakers, it is an important correlation to note in light of our discussion.

evidence that in the scopally ambiguous sentences above the ambiguity is due to a syntactic mechanism (QR) that is constrained very similarly to the more familiar English variety. The emerging picture is thus the following: doubly quantified sentences with non-derived word orders (that is, sentences without Scrambling) are scopally ambiguous due to the existence of covert QR; overt Scrambling of a QP across another QP in a sentence, on the other hand, results in (surface) Scope Freezing[16]. The second part of the generalization is shown to hold in section 2.3 below.

2.2 Deriving Object-wide Scope

Turning next to the actual syntactic implementation, one might reasonably expect that scope ambiguities in doubly quantified sentences with a quantified subject and a quantified object in Russian may arise in one of the two ways that have at different times been proposed for English. One possibility involves covert raising of the object QP from a vP-adjoined position (necessary for semantic convergence) to a TP-adjoined position, thus gaining c-command over the subject and therefore deriving object wide scope (May 1985). Another option, and one that currently appears to enjoy some support of the field, is covert quantifier raising of the object with concomitant reconstruction of the subject to a position where the object can obtain scope over it[17]. Convincing evidence to the effect that the latter option (e.g., QR of the object and subject lowering) is correct for English comes from the fact that in those cases where lowering of the subject is prohibited, the otherwise available object wide scope reading suddenly disappears (Johnson 2000). Thus, in (20b), where the positive polarity item *some student* is prohibited from lowering into the scope of negation, the reading that was available in (20a) is no longer present:

(20) a. Some student has answered many of the questions on the exam.
(some > many): there is a student x such that x answered many of the questions on the exam;
(many > some): there are many questions x such that x got answered by (possibly) different students.

b. Some student hasn't answered many of the questions on the exam.
*(neg > some): it is not the case that some student x answered many of the questions.

The sentence in (20b) indeed cannot mean that there are many questions such that some student or other did not answer them. As Johnson (2000) shows, it has to be the case that such lack of ambiguity is caused by the inability of the positive-polarity subject to be within the scope of negation. Thus, the sentence in (21) cannot mean that no student was met; it has to mean that there is a student such that I (the speaker) have not met this student, that is, the positive-polarity item *has* to take scope above negation.

(21) I have not met some student.

[16] Ionin (2002) does not differentiate between non-derived sentences and sentences derived via Scrambling with respect to scope possibilities; for her both of the above are surface scope configurations.

[17] This view assumes QR of the object at least to vP, but arguably higher than that, in order to allow scope over negation and intentional verbs.

It is quite revealing then, that the object wide scope in (20b) disappears exactly where the subject cannot lower below negation; thus while (20a) cannot differentiate between the two possible mechanisms for object wide scope, (20b) forces us to conclude that object QR is not enough; subject lowering is apparently a necessary component of object-wide scope[18], [19]. A similar conclusion can be reached on the basis of the following binding facts (Hornstein 1995):

(22) a. Everyone met a boy_i before he_i left. (everyone > a), (a > everyone)
b. A boy_i met everyone before he_i left. (a > everyone), ***(every > a)**

In (22a) it is possible to obtain a reading on which the boys vary depending on the values assigned to the existential QP *everyone* (that is, narrow scope of the object with respect to the subject) while still maintaining a bound variable interpretation. For this interpretation to obtain it is enough for the object QP to QR to a position c-commanding the pronoun while still staying in the scope of the subject. The other reading, the one on which there was a particular boy who met everyone (that is, wide scope for *a boy*) is available as well. In (22b) there is only one reading, one where boys do not vary depending on the values assigned to *every*. The lack of the *every > a* reading is unexpected on the May-type view of QR but is predicted on the subject-lowering account on the reasonable assumption that the *before*-clause containing the pronoun is structurally above the subject's base position within the vP, thus forcing the subject to remain high enough to maintain c-command of the pronoun.

Returning to Russian, it is interesting that we have to maintain the same account of object-wide scope as was shown to be necessary for English, that is, the necessity of lowering the subject along with concomitant QR of the object to the position that is structurally higher than the lowered position of the subject. The conclusion is due to Russian sentences like (23), which is parallel to the English (20):

(23) a. Kakoj-to student rešil mnogo zadač
[Some student]$_{NOM}$ solved [many problems]$_{ACC}$
'Some student solved many problem'

---

[18] I assume the semantics of quantification provided in Heim and Kratzer (1998), on which a QP that is a sister of a one-place predicate (e.g., a subject of an unergative verb or an object of an unaccusative verb) does not need to undergo QR. A QP that is not a sister of a one-place predicate (e.g., an object QP) on this view is assumed to necessarily undergo QR to a clause-denoting position thus forming a one-place predicate through movement (via λ – abstraction over the trace position).

[19] As pointed out by Richard Larson (p.c.), it remains possible to argue that the object wide scope over the subject is obtained by raising the object to a position above the subject in Spec, TP (that is, without necessarily lowering the subject) since the lack of inverse scope in examples such as (20-21) may be due to the object's inability to move out of the weak island that is created by negation. Examples in (22) however seem to support the conclusion that subject reconstruction may indeed be necessary for object-wide scope as the relevant example in (22b) does not contain an island that would prevent the raising of the object yet the inverse scope is still unavailable, which is here clearly due to the subject's inability to reconstruct on the bound variable interpretation. The same contrast holds in Russian as well:

i. a. Každyj poznakomilsia s [kakim-to malchikom]$_i$, pered tem kak tot$_i$ /on$_i$ ušel.
Everyone met with some boy before that how that/he left.
'Everyone met a boy_i before he_i left'. (everyone > some), (some > everyone)
b. [Kakoj-to malchik]$_i$ poznakomilsia s každym, pered tem kak [PRO$_i$ ujti].
Some boy met with everyone before that how PRO leave$_{INF}$
'Some boy_i met everyone before he_i left/before leaving' (some > everyone), ***(everyone > some)**

(some > many): there is some student x such that x solved many of the problems in the relevant set of problems;
(many > some): for many of the problems x, there is a (different) student y, such that x was solved by y.

b. Kakoj-to student ne rešil mnogo zadač
[Some student]$_{NOM}$ not solved [many problems]$_{ACC}$
'Some student hasn't solved many problems'
*(neg > some)

With the object wide scope reading disappearing in (23b), we have to conclude then, in a fashion parallel to the English case, that subject reconstruction is indeed necessary for the object wide scope to obtain in Russian just as it appears to be necessary in English[20]. What is remarkable about the Russian examples presented above is that they show how pervasive the parallelism between Russian and English with respect to scope is; apparently Russian doubly quantified sentences are not only ambiguous in the same cases but that the mechanism for deriving the ambiguity has to be exactly the same as well. The next section will explore the effects of overt displacement of QPs in Russian derived via local and long distance Scrambling.

2.3 Scope Freezing Effect of Overt QP Displacement

In this section I will present evidence suggesting that, perhaps surprisingly, *both* the overt A-movement and the overt A' movement of QPs as instantiated by Local and Long-Distance Scrambling in Russian, despite their other well-known syntactic differences[21], behave similarly with respect to scope in that both types of QP Scrambling result in surface scope interpretation only.

2.3.1 Scope Freezing with Local Scrambling

We have seen that Russian sentences with a quantificational subject and object are ambiguous between surface and inverse scope. Consider the examples in (24)[22]:

(24) a. Maša uverena, chto kakoj-to čelovek uslyšal každuju šutku
Masha sure that [some person]$_{NOM}$ heard [every joke]$_{ACC}$
'Masha is sure that some person heard every joke' (some > every), (every > some)

[20] The account of Russian scope given in Ionin (2002) cannot handle these data.

[21] See, for instance, Bailyn (2001, 2002a) for relevant discussion.

[22] A related OVS sentence, however, appears to be ambiguous:

i. Kakuju-to šutku uslyšal každyj čelovek
[Some joke]$_{ACC}$ heard [every person]$_{NOM}$
'Some joke was heard by every person' (some > every), (every > some)

The ambiguity of quantificational OVS sentences is a further problem for (Ionin 2002). On the account proposed here the ambiguity could stem from the subject QP being attached to TP on the right, hence c-commanding the object QP that is in the Spec, TP position (see, for instance, Bailyn (2002b) for the evidence supporting the claim that the object in such sentences moves to the canonical subject position, presumably to check the EPP feature).

b. Maša uverena, chto [kakuju-to šutku]$_{i}$ každyj čelovek uslyšal **t$_{i}$**
Masha sure that [some joke]$_{ACC}$ [every person]$_{NOM}$ heard
'Masha is sure that some joke, every person heard' (some > every), ***(every > some)**

The sentence in (24a) means, on the surface scope interpretation, that Masha is sure that there is a person, whoever it may be, such that that person heard every joke in some contextually delimited set of jokes. On the inverse scope reading the sentence means that what Masha is sure of is that for every one of the jokes in the relevant set, each joke was heard by some person or other (allowing people to vary with the jokes). The sentence in (24b), where the object QP has been scrambled to the front of the clause, can only have the surface reading, on which some particular joke was heard by every person in the relevant set of people[23]. It thus appears that moving a QP overtly fixes the scope such that only the QP that is now structurally higher is capable of taking wide scope, that is, a 'frozen' surface scope obtains. The lack of reconstruction of the object QP is all the more surprising given that other phrases, for instance, names, *must* reconstruct, as shown by the Principle C violation in (25) where the R-expression has been scrambled outside of the c-command domain of the coreferring pronoun:

(25) *[Mašino otraženije]$_{j}$ ona$_{j}$ uvidela t$_{j}$ v bol'šom zerkale na stene
[Masha's reflection]$_{ACC}$ she$_{NOM}$ saw in big mirror on wall
*"Masha's$_{j}$ reflection, she$_{j}$ saw in the big mirror on the wall"

That the locally scrambled QP in (26b) does not reconstruct, in contrast to examples like (25) above, can be further shown with Binding Principle C:

(26) a. *Ona$_{j}$ i kakije-to ejo$_{j}$ znakomye posetili vsex Mašinyx$_{j}$ podrug
She and[some her acquaintances]$_{NOM.PL}$ visited [all Masha friends]$_{ACC.PL}$
*'She$_{j}$ and some acquaintances of hers$_{j}$ visited all of Masha's$_{j}$ girlfriends'

b. Vsex Mašinyx$_{j}$ podrug ona$_{j}$ i kakije-to ejo$_{j}$ znakomye posetili
[All Masha friends]$_{ACC.PL}$ she and[some her acquaintances]$_{NOM.PL}$ visited
*'She$_{j}$ and some acquaintances of hers$_{j}$ visited all of Masha's$_{j}$ girlfriends'

While the example in (26a) is ungrammatical on indicated coreference due to a Principle C violation, scrambling the object QP that contains an offending R-expression bleeds condition C, which is indicated by the lack of reconstruction. This lack of reconstruction with scrambled QPs is quite general in that it holds with various constituents, as long as the constituent in question contains a QP. In (27b) scrambling a PP that contains a quantifier phrase with an embedded R-expression similarly bleeds Condition C, in contrast with the ungrammatical pre-scrambling example (27a):

[23] The existential and the universal quantifiers have been switched in this sentence to ensure that the universal remains in a structurally lower position after scrambling has taken place, thus restricting available interpretations to those that arise through the syntactic mechanism of quantifier raising only (see, for instance, Pietroski and Hornstein (2002) for relevant discussion)

(27) a. *Ona$_j$ i kakije-to ejo$_j$ znakomye pobyvali na vsex Mašinyx$_j$ filmax
She and [some her acquaintances]$_{NOM.PL}$ attended on [all Masha$_{POS}$ movies]
*'She$_j$ and some acquaintances of hers$_j$ attended all of Masha's$_j$ movies'

b. Na vsex Mašinyx$_j$ filmax ona$_j$ i kakije-to ejo$_j$ znakomye pobyvali
On [all Masha$_{POS}$ movies] she and [some her acquaintances]$_{NOM.PL}$ visited
*'All of Masha's$_j$ movies, she$_j$ and some acquaintances of hers$_j$ attended'

Quite importantly, exactly the same behavior of QPs with respect to reconstruction is also observed in ditransitives. Consider the contrast in (28):

(28) a. *Druz'ja rekomendovali ejo$_{ACC}$ [každomu buduščemu bossu Maši]$_{DAT}$
Friends recommended her every future boss Masha
*'Friends recommended her to every future boss of Masha'

b. ?[Každomu buduščemu bossu Maši]$_{DAT}$ druz'ja rekomendovali ejo$_{ACC}$
every future boss Masha friends recommended her
(po ejo že pros'be)
(on her own wish)
'Every future boss of Masha$_i$ she$_i$ was recommended to by friends (on her own request)'

c. [Každomu buduščemu bossu Maši]$_{DAT}$ kto-to rekomendoval ejo$_{ACC}$
every future boss Masha someone recommended her
(po ejo že pros'be)
(on her own wish)
'Every future boss of Masha$_i$ she$_i$ was recommended to by someone (on her own request)'

In the sentences in (28) the Accusative-marked pronoun c-commands the coreferenced R-expression contained within the Dative-marked object in surface syntax (28a), with the sentence being ungrammatical due to a Principle C violation. Scrambling the QP containing the R-expression to the front of the sentence improves the sentence for most speakers (28b); those who still find (28b) somewhat degraded do agree that (28c), containing a quantificational subject *kto-to* instead of the non-quantificational *druz'ja* is perfectly grammatical on coreference.

We have thus seen evidence that overt displacement of a QP (unlike the displacement of a Referring expression) via Local (A) Scrambling may not reconstruct, which is supported by the Principle C test; the lack of reconstruction in such cases accounts straightforwardly for the Scope Freezing effect seen in examples such as (28b-c) above, where the object QP scrambled overtly above the subject QP. The contrast between (28b) and (28c) that exists for most speakers I have consulted is particularly important, it shows that it is the quantificational nature of the scrambled constituent and of the constituent that is being scrambled across that is responsible for the lack of reconstruction.

2. 3. 2 Scope Freezing with Long-Distance Scrambling

In this section we will see evidence suggesting that Long-Distance Scrambling (LDS) of Quantificational Phrases is strikingly parallel to the above cases of Local Scrambling in that apparently the LD-scrambled QP may not reconstruct either. This is quite surprising in light of data such as (29), suggesting that reconstruction of non-quantificational phrases is required in such cases since the sentence that was ungrammatical on coreference due to a Principle C violation (29a) is not improved after the application of LDS (29b)[24]:

(29) a. *Ja xoču čtoby **ona$_j$** vstretila **Mašinu$_j$** babušku
I want that she met Masha$_{POSS}$ grandmother
*'I want her to meet Masha's grandmother'

b. *[**Mašinu$_j$** babušku]$_k$ ja xoču čtoby **ona$_j$** vstretila **t$_k$**
Masha$_{POSS}$ grandmother I want that she met
*'Masha's grandmother, I want her to meet'

LDS of quantificational phrases, on the other hand, does not reconstruct, which is especially obvious if the matrix subject is also quantificational. Again, we see that scrambling the violating QP (containing the coreferenced R-expression) may or may not reconstruct for different speakers with the non-quantificational matrix subject such as *ja* ('I') in (30b); when the subject *is* quantificational (as in (30c)), all speakers agree that the sentence is perfectly grammatical on coreference between the pronoun and the R-expression:

(30) a. *Ja xoču čtoby **on$_j$** uvolil [každogo sovetnika **Bušа$_j$**]
I want that he fired every adviser Bush$_{GEN}$
'I want him$_i$ to fire every adviser of Bush$_i$'

b. */?[Každogo sovetnika **Bušа$_j$**]$_i$ ja xoču čtoby **on$_j$** uvolil **t$_i$**
Every adviser Bush$_{GEN}$ I want that he fired
'Every adviser of Bush$_i$, I want him$_i$ to fire'

c. [Každogo sovetnika **Bušа$_j$**]$_i$ kto-to xocet ctoby **on$_j$** uvolil **t$_i$**
Every adviser Bush$_{GEN}$ someone wants that he fired
'Every adviser of Bush$_i$, somebody wants him$_i$ to fire'
(every > someone > want), ***(someone > want > every)**

[24] An anonymous reviewer suggests that the way to resolve this tension is to adopt the Copy Theory of Movement (Chomsky 1993) in conjunction with a theory of which phrases can and cannot be late-merged, such as Takahashi and Hulsey (2009). On such an account, the R-expression would be merged before the application of LDS, thus being present at the lower position as well as the higher one, hence accounting for the Principle C effect in (29b). While I acknowledge the ability of this account to explain examples like (29) above, it is not enough to account for the contrast in (30), where the sentences also contain an R-expression in the LD-Scrambled phrase as in (29), yet are grammatical. The crucial difference between the ungrammatical (29b) and the grammatical (30c) then appears to be that in the latter the R-expression is contained within a QP that undergoes LDS and moreover, the QP is 'trapped' in the higher position by the presence of another QP in the upper clause that is being crossed over; in the former, this is not the case. On the reviewer-suggested account we might reasonably expect the R-expression to be present before LDS in sentences in (30) just as in (29), predicting, incorrectly, no difference between (30b-c) on the one hand and (29b) on the other. An account of why QPs get 'trapped' in the scrambled position will be presented in Section 4.

Once again, we see that overt local or long-distance Scrambling of a QP over another QP results in surface scope due to the scrambled QP not being able to reconstruct to a position below the QP it crossed on its way up. Both the scope facts and Binding Principle C facts strongly support this conclusion. The next section will discuss the structure of the ditransitive VP, arguing that adopting the independently motivated Acc-higher-than-Dative view on which the two orders are derivationally related (Bailyn 1995, Madariaga 2008, Bailyn 2009) allows us to unify all these instances of Scope Freezing which in turn strongly suggests that all these cases should be given a unified explanation.

3 On the Structure of the Ditransitive VP in Russian

In this section I will argue that only one of the existing analyses of the ditransitive VP - the one that proposes the underlying structure as in (31) can provide an adequate explanation of the full range of Russian Scope Freezing facts.

(31) $[_{VP}\ NP_{ACC}\ [_{V'}\ V\ XP_{DAT/OBL}]]$ (Bailyn 1995)

3.1 Evidence for the Acc > Dat Base Order of Russian Ditransitives

Some of the evidence for the structure in (31), adopted here, comes from instrumental adjunct small clauses such as (32), where the reference of the small clause subject, PRO, is controlled by the subject of the main clause[25]:

(32) $Vanya_j$ obyčno rabotaet $golodnym_j$
$Vania_{NOM}$ usually works $hungry_{INSTR}$
'Vania usually works hungry'

In sentences with both the subject and the direct object either NP can serve as the controller of PRO, as long as both NPs agree with the predicate adjective in Phi-features (33a). The indirect Dative object, however, cannot be the controller of PRO, as shown in (33b)[26],[27]:

(33) a. $Boris_j$ našel $Sašu_k$ $[PRO_{i/k}$ $pjanym_{i/k}]$.
$Boris_{NOM}$ found $Sasha_{ACC}$ $drunk_{INSTR.MSC.}$
'Boris found Sasha drunk.' (Boris or Sasha = drunk)

b. $Boris_j$ sovetoval $Saše_k$ $[PRO_{\mathbf{i}}$ $pjanym_{j/*\mathbf{k}}]$
$Boris_{NOM}$ advised $Sasha_{DAT}$ $drunk_{INSTR}]$
'Boris advised Sasha drunk.' (only Boris = drunk)

[25] I adopt the analysis of Instrumental adjunct small clauses as given in Bailyn (forthcoming), who follows Bowers (1993, 1997 among others) in assuming that a small clause predicate assigns thematic roles to its subject, PRO. The reference of PRO is controlled by the closest c-commanding argument.

[26] Bailyn (p.c) informs me that not all speakers accept the subject reading in sentences such as (33). This suggests that there may be only one level of attachement available due to a Minimal Distance principle, requiring that only the closest c-commanding argument be a controller of PRO. Even if this is indeed so, the argument in favor of a higher base position of the Accusative Direct Object remains unaffected.

[27] This and the following examples of Instrumental small clauses cited here are based on examples in Bailyn (forthcoming).

The same situation holds with ditransitive verbs, with only the Accusative object, of the two internal arguments, being a possible controller for PRO, but not the Dative:

(34) a. Boris$_j$ predstavil Sašu$_k$ Kole$_m$ [PRO$_{\mathbf{i/k/*m}}$ pjanym$_{\mathbf{i/k/*m}}$]
Boris$_{NOM}$ introduced Sasha$_{ACC}$ Kolia$_{DAT}$ drunk $_{INSTR}$
'Boris introduced Sasha to Kolia drunk'

b. Boris$_j$ predstavil Saše$_m$ Koliu$_k$ [PRO$_{\mathbf{i/k/*m}}$ pjanym$_{\mathbf{i/k/*m}}$]
Boris$_{NOM}$ introduced Sasha$_{DAT}$ Kolia$_{ACC}$ drunk$_{INSTR}$
'Boris introduced Sasha to Kolia drunk'

As is shown in (34), independent of the linear order of internal arguments in the ditransitive VP, only the direct object, marked with Accusative case, but not the indirect object, can be the controller of PRO in Instrumental small clauses. As shown in Bailyn (forthcoming), this result follows from distinct attachment possibilities: if the small clause is attached above the VP level, the subject will be the closest c-commanding argument; if the adjunct clause is attached to VP, the Accusative object will be the closest c-commanding argument, thus gaining control of PRO's reference. On the structure of VP given in (31) the inability of the Dative object to control PRO follows from the fact that it either doesn't c-command PRO (as in 34a) or, when the Dative object precedes the Accusative, isn't the closest c-commanding argument (34b)[28]. Crucially, alternative accounts of Russian ditransitives, such as, for instance, Richardson (2007), which analyzes Datives as generated in SpecVP, or Dyakonova (2005), which argues for Datives being generated above Accusatives in the Specifier of a distinct Applicative head (following Pylkkanen 2002) cannot explain the inability of Datives to control into Instrumental small clauses.

Other evidence for the Acc > Dat underlying order comes from Weak Crossover (Bailyn 2009):

(35) a. Kogo$_{\mathbf{i}}$ ty xočeš' čtoby Maša predstavila [VP _$_{\mathbf{i}}$ [ego$_{\mathbf{i}}$ novym sosedjam]] ?
who$_{ACC}$ you want that Masha introduce [his new neighbors]$_{DAT}$
'Who do you want Masha to introduce to his new neighbors?'

b. ??/*Komu$_{\mathbf{i}}$ ty xočeš' čtoby Maša predstavila [VP [ego$_{\mathbf{i}}$ novyx sosedej] __$_{\mathbf{i}}$] ?
who$_{DAT}$ you want that Masha introduce [his new neighbors]$_{ACC}$
'Who do you want Masha to introduce to his new neighbors?'

The contrast between the two sentences in (35) is accounted for as follows: in (35a) the Accusative object wh-moves out of the VP without crossing the lower Dative object due to originating higher up in the tree; in (35b) the Dative-marked object has to cross the Accusative object that contains a coreferenced pronoun, hence the WCO violation[29],[30]. Again, the alternative

[28] Arguably, on the view of the VP taken here, in cases like (34b) the indirect object has undergone A-Scrambling to a position within the VP but above the Accusative object, thus gaining c-command, yet not control of PRO since the Accusative in the specifier of VP position is still a closer c-commanding argument (on the assumption that the specifier of the category XP to which an adjunct is attached can c-command out of XP into the adjunct).

[29] As one reviewer points out, given the possibility of Scrambling in Russian, it is not clear why the Dative-marked wh-phrase cannot move to a position still within the VP yet above the base position of the Accusative object, hence escaping WCO as this instance of scrambling would arguably (on my account) leave an A trace, which are known

accounts that have the Dative object base generated above the Accusative do not have a way of accounting for this asymmetry.

Apart from the evidence discussed above, there are various other asymmetries, for instance, oblique case assignment asymmetries that affect Accusatives (or Nominatives, for unaccusative verbs), but crucially not Datives, further suggesting that the structure in (31) is the correct underlying structure for Russian (see Bailyn 2009, forthcoming, Madariaga 2008 for details)[31],[32]. In the following section we will see that adopting this independently well-motivated view of the structure of Russian ditransitive VP, taken together with a few other established facts about QR and Scrambling, to be discussed in the next section, allows for a unified explanation of all the Scope Freezing facts we have observed.

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not to cause WCO. One possibility, suggested by the reviewer, is to argue that wh-movement, which happens to satisfy the [+wh] feature cannot be combined with QR since this would incorectly fix the scope of the wh-phrase. Such an account may be somewhat problematic, the reviewer continues, as wh-movement is known to be succesive-cyclic and each movement prior to the one to SpecCP looks almost exactly like QR. However, I believe it may be possible to argue that it is exactly because the wh-movement has to be cyclic that such movement cannot be combined with A-scrambling as discussed above, since these two instaces of movement might be too local, in a sense yet to be made precise. I do not yet have a full account of this fact though. It should be noted, however, that something like this instance of A-scrambling must indeed be optionally available for some speakers, as a few Russian speakers I asked find the example in (35b) degraded but not ungrammatical (hence the double question mark), as it should be due to WCO. Many other speakers do however find this example fully ungrammatical. It is not clear how this variability in native speaker judgments can be accounted for unless we posit that some speakers optionally allow such A-movement to precede wh-movement while others do not.

[30] One native speaker reports the sentence in (35a) to be ungrammatical.

[31] I purposefully do not go into the details of and arguments that have at various points been made in favor of the opposite view, referred to above on which the base order of the two arguments is either the opposite of that given in (31) (Richardson 2007) or the Dative is generated in the Specifier of an Applicative head (Dyakonova 2005,) since that will take us too far away from the focus of this paper. Ultimately, settling the question of which account of ditransitives in Russian is correct is not the goal here. Instead, my goal is to show that only if we adopt the derivational view on which the direct object originates in a structurally higher position than the indirect object in Russian can the Scope Freezing pattern found in Dat > Acc ditransitives receive an adequate explanation, one that recognizes the striking similarity between this instance of Scope Freezing and all the other ones that are clearly due to overt movement of a lower QP across another, structurally higher QP. To the extent that such unification is found justified and theoretically attractive, the existence of Scope Freezing in Russian ditransitives can be viewed as another piece of evidence in favor of the structure of ditransitives adopted here (Bailyn 1995, 2009).

[32] Another rather strong piece of evidence for the derived status of IO > DO comes from the fact that in ditransitive sentences where the indirect object is above the direct object in surface syntax the direct object receives a referential interpretation (existence presupposition) that is not available in DO > IO orders. This situation is highly reminiscent of the effects on the interpretation found with object shift in Germanic languages (Reinhart (1995), Ruys (2000) inter alia). Focus/presupposition split in generic ditransitive sentences point to the same conclusion. Consider the following pair:

i. a. Vania často darit knigi svoim druzjam
Vania often gives books_{ACC} $[\text{self friends}]_{DAT}$

R1: “Often, whenever there’s a book-giving event by Vania, it is book-giving to his friends” (focus on IO)

R2: “Often, whenever there is an event of giving by Vania, it is giving of books to his friends” (focus on DO + IO)

b. Vania často darit svoim druzjam knigi
Vania often gives $[\text{self friends}]_{DAT}$ books_{ACC}

R1: “Often, whenever there’s an event of giving by Vania to his friends, it is giving of books” (focus on DO)

*R2: “Often, whenever there’s an event of giving by Vania, it is giving of books to his friends” (focus on DO+IO)

I’m grateful to Marcel den Dikken (p.c.) for pointing out this direction of research to me.

3. 2 Towards the Account: Evidence for the Existence of the A-type Position within the VP

So how can we account for the puzzling Scope Freezing facts that obtain in ditransitive sentences, such as those in (4), repeated below in (36)?

(36) a. Učitel' dal kakuju-to knigu každomu studentu
Teacher gave some book$_{ACC}$ every student$_{DAT}$
'The teacher gave some book to every student' (some > every), (every > some)

b. Učitel' dal kakomu-to studentu každuju knigu
Teacher gave some student$_{DAT}$ every book$_{ACC}$
'The teacher gave some student every book' (some > every), ***(every > some)**

I propose that the scope freezing effect that we find in Dat > Acc sentences results from an *overt* instance of A movement that derives the Dat > Acc order from the underlying Acc > Dat order[33]. That it is in fact A Scrambling that is involved can easily be shown with binding tests. Consider the following paradigm (based on Bailyn 1995)[34]:

(37) a. *Mama predstavila [drug druga]$_j$ Petrovym$_j$
Mother$_{NOM}$ introduced each other$_{ACC}$ the Petrovs$_{DAT}$
'Mother introduced the Petrovs to each other'

b. Mama predstavila Petrovym$_j$ [drug druga]$_j$
Mother$_{NOM}$ introduced the Petrovs$_{DAT}$ each other$_{ACC}$
'Mother introduced the Petrovs to each other'

The sentence with the Acc-marked reciprocal object preceding a co-referenced R-expression in (37a) is ungrammatical. This is expected on the proposed view of the structure of ditransitives in Russian (given in (31) above) as the reciprocal is unbound in surface syntax. Scrambling the co-referenced Dative-marked R-expression to a position preceding the Accusative-marked reciprocal in (37b) improves the sentence dramatically, which both proves that the two orders are derivationally related as well as attests to the A-type nature of the position the Dative object finds itself in after the movement[35],[36].

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[33] The existence of the asymmetries with respect to scope and binding observed above does strongly suggest that the two orders are derivationally related.

[34] I thank an anonymous reviewer for reminding me of this data.

[35] The same reviewer mentions that Sekerina (1997) reports this sentence as ungramatical. I and my native speaker informants, however, agree with Bailyn's judgments. Presenting the (b) sentence along with the (a) example rather than by itself makes the contrast especially noticeable.

[36] Another reviwer wonders whether constructing sentences with Parasitic Gaps can be used to explore the nature of the position the Dative object moves into. Availability of parasitic gaps has been employed to argue for the A-Bar nature of the position for the moved element which licenses the 'parasitic' gap, as in (i) below (Engdahl 1983):

i. [Which articles]$_k$ did John file t_k without reading e_k?

While examples such as (i) are grammatical in Russian, there is an additional complication in that such 'gaps' can apparently occur in Russian sentences without such movement having taken place, as in ii. (which is not possible in English), rendering the results of the test when applied to Russian suspect, unless an account of such differences between English and Russian with respect to Parasitic Gaps is offered.

Importantly, we can demonstrate that quantificational Dative objects can apparently move to this position, given the possibility of binding the Accusative-marked reciprocal object by a Dative QP object[37]:

(38) Učitel' dal každomu studentu$_j$ kakuju-to knigu drug druga$_j$
Teacher gave [every student]$_{DAT}$ [some book each other]$_{ACC}$
'The teacher gave every student some book of each other's'

Given the evidence from section 2 for the scope-freezing effect of scrambling a QP above another QP within a sentence, and given the similar effect found in ditransitives where (on the proposed account) the Dative QP scrambles overtly across the higher Accusative QP, I formulate the following generalization to capture all these cases:

(39) ***The Russian Scope Freezing Principle:***
Scrambling a QP over another QP freezes scope in Russian

The immediate question to ask is why such a Scope Freezing principle should exist. This question is dealt with in the next section.

4 The Proposed Account of Scope Freezing in Russian

The account of Scope Freezing I propose is based on the idea that QR and overt Scrambling of QPs are covert and overt realizations of the same movement (following proposals in Johnson and Tomioka 1997, Johnson 2000, Miyagawa 2003, 2006 among others). Adopting this well-known idea, I argue that since QR is independently necessary and apparently freely available (given all the ambiguous sentences in Russian we have seen in previous sections), moving the QP overtly, when it has the option of moving covertly, may be computationally costly. Given that in scrambling languages, such as Russian, Scrambling can freely apply to any type of phrase, the QP can also be scrambled overtly. However, if QR and QP are indeed constrained by the Scope Economy Principle (Fox 2000), as I maintain they are, we may expect Scope Economy to prohibit the reconstruction of an overt instance of QP scrambling if that instance had a semantic effect on the output[38]. This, I argue, is exactly what happens in Dat > Acc ditransitives as well as in all other cases in Russian where overt movement of a QP across another one results in Scope Freezing.

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ii. Ivan vybrosil [etu statju]$_k$, ne pročitav e$_k$.
Ivan throw out.PST this article not having read
'Ivan threw thew out this article without having read

Since I do not have an account of the complicating data in (ii), I will refrain from using this test for the moment.

[37] Note that (38) is predicted to be grammatical even on the view of ditransitives argued against here, namely the Dative-above-Accusative view. However, assuming that the strong evidence in favor of the Accusative-above-Dative view of ditransitives reviewed above is found convincing, the example in (38) demonstrates that the position the lower Dative object scrambles into does indeed have A properties, such as the possibility of establishing new binding relations. I thank an anonymous reviewer for suggesting this example as additional evidence for the A nature of the proposed position.

[38] The Scope Economy principle is given in (41) below.

4.1 Deriving Scope Freezing in Russian Dat > Acc Ditransitives

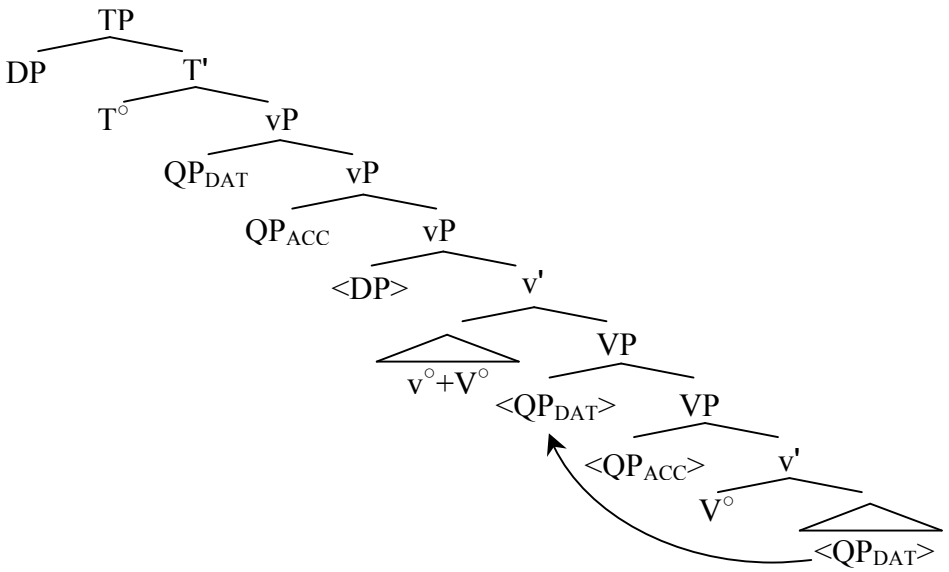
Let us demonstrate in detail how this account would explain the scope distribution facts that obtain in ditransitives. We know that the two quantificational objects need to undergo QR at least to vP level for interpretability reasons. When the two objects both undergo QR to vP from their base-generated positions in the Specifier of VP (for Accusative objects) and the complement of VP (for Dative objects), depending on the order in which the two objects move and adjoin to vP, either the surface or inverse scope will obtain, accounting for the ambiguity in Acc > Dat ditransitives. However, given the availability of the A-position within the VP above the base position of the direct object, the lower Dative object may scramble to this position overtly, resulting in the Dative-above-Accusative overt word order. Because Scrambling is free to apply to any phrase in Russian, it can target the Dative-marked object and move it overtly to the A-position above the base position of the Accusative object. This movement arguably happens for reasons other than scope (to be discussed shortly). Nevertheless, it has a scope-related effect: the scrambled Dative object now has (surface) wide scope over the Accusative object. Covert raising of the Accusative QP to vP can now only happen in a way that would preserve the newly established scope relations. This must follow from Economy considerations: since in the base order of the two objects the sentence was ambiguous, overt raising of the Dative object effectively disambiguates scope in favor of wide scope for the Dative-marked object. If the Accusative object now moves in a way that changes scope again (by covert QR), it will undo the semantic effect achieved by Scrambling. Hence, the Accusative object necessarily raises to vP before the Dative object does, resulting in fixed Dat > Acc scope.

The relevant example of Scope Freezing is repeated here in (40a), with the proposed structure provided in (40b):

(40) a. Učitel' dal kakomu-to studentu každuju knigu
Teacher gave some student$_{DAT}$ every book$_{ACC}$
"The teacher gave some student every book" (some > every), ***(every > some**)

b. derivation of (40a), irrelevant details omitted[39]:

[39] It is conceivable that once the overt instance of scrambling applies in (40b), there are at least two ways in which the derivation can proceed, in addition to that described in the text above: either the two VP-internal objects QR covertly to adjoin to vP, preserving their order due to Cyclic Linearization of Fox and Pesetsky 2005, or (which to me appears to be less likely) that further movement of the two QPs is in fact prohibited, in which case the QPs will have to be interpreted semantically *in situ* (Heim and Kratzer 1998).



Since this account relies on Fox's Scope Economy Principle being enforced in Russian, it is crucial to show that it is in fact active in the language. The next subsection provides evidence proving that Scope Economy is indeed obeyed in Russian.

4.2 Evidence for the Scope Economy Principle in Russian

Fox (2000) proposed that a Scope Economy Principle regulates application of optional instances of QR to constrain semantically vacuous application of QR:

(41) ***Scope Economy Principle****: A Scope Shifting Operation can move XP1 from a position in which it is interpretable only if the movement crosses XP2 and <XP1, XP2> is not scopally commutative* (Fox 2000:26)

According to Scope Economy, an optional instance of QR (that is, one not necessary for semantic interpretability of a QP) may apply if and only if this instance of QR will result in a truth conditional distinction between the sentence with and without such operation taking place[40]. Some of the most appealing arguments for Scope Economy provided by Fox come from ellipsis resolution contexts. Fox combined the hypothesized Scope Economy Principle and the well-known parallelism requirement on ellipsis resolution to account for some otherwise puzzling scope facts of VP ellipsis[41]. Consider the data in (42):

(42) 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)**

[40] In other words, the meaning derived by the application of QR would be truth conditionally distinct from that available before the application of the given instance of QR.

[41] Syntactic parallelism is informally defined here as the reuse of identical syntactic structure in adjacent sentences or clauses.

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)

The sentence in (42a) is, as expected, ambiguous: either the subject has wide scope, in which case there is a person x such that for every country y, x knows the capital of y, or the object has wide scope, in which case for every country x, there is some person or other who knows the capital of x. In other words, on the former reading there exists one erudite person who knows the capitals of all relevant countries, whereas on the latter reading the people are allowed to vary with the countries. The latter reading becomes unavailable in (42b), where this sentence acts as an antecedent for the ellipsis. Fox argues that optional QR (past *v*P-level) in the elided clause is prohibited by Scope Economy since the subject of the clause is non-quantificational and so application of QR in this case would be vacuous[42]. With QR being prohibited in the elided clause by Scope Economy, the parallelism requirement on ellipsis resolution prohibits the application of this instance of QR in the antecedent clause as well, hence the lack of object-wide, or inverse scope reading. That it is the (non-quantificational) nature of the subject that bans the optional instance of QR in (42b) is further supported by the reemergence of the inverse scope in (42c). Here, even though the subject *the person who was invited to talk about it* is also non-quantificational, it contains a pronoun that can obtain a bound variable interpretation should the object QP gain c-command over it. The bound variable interpretation is truth-conditionally distinct from the surface scope reading in the elided clause and so Scope Economy does not ban optional QR in this case and Parallelism further ensures that the same instance of QR applies in the antecedent clause as well, hence the ambiguity.

On the view advanced here that QR in Russian is identical to QR in English, it is therefore not surprising that the parallel ellipsis data in Russian is equally amenable to Fox's analysis that crucially relies on Scope Economy. Consider the Russian data below (from Antonyuk-Yudina 2009):

(43) a. Dva studenta pročitali každuju knigu
Two students read every book
'Two students read every book'
(Two > every), (every > two)

[42] Note that while Fox 2000 assumes that object-wide scope over the subject is obtained via an optional instance of QR over the subject, arguably to a TP-adjoined position, it is possible to reconcile Fox's proposal with the view of object-wide scope over the subject as resulting from the application of QR to a position above vP but below TP and concomitant lowering of the subject. Note further that if this mechanism for obtaining object-wide scope is applied to Fox's data we are forced to assume that subject lowering occurs to a position other than its base position in the Specifier of vP. If the subject were lowering into its theta position within the vP and assuming that the subjects in both (42b) and (42c) would equally have to lower, we would loose the generalization as the object would be equally able to get wide scope over the subject in both of these sentences. If, on the other hand, the position to which the subject has to reconstruct is higher than the subject's base position yet lower than the position of negation and the position occupied by intentional verbs, then the difference between (42b) and (42c) comes down to whether this optional instance of object QR is allowed to take place - exactly what we need. Thus to the extent that such reformulation of the scope-taking mechanism adopted in Fox 2000 is successful and justified it also provides support for the theories that argue for the prohibition of lowering into theta positions (Johnson and Tomioka 1997, Johnson 2001). Whichever of the two analyses regarding the mechanism for object wide scope is taken the account proposed here remains unaffected. I will assume the obligatory subject lowering with a concomitant raising of the object past vP level since we have seen empirical data both from English and from Russian supporting this account.

b. Dva studenta pročitali každuju 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)**

The ambiguous sentence in (43a) becomes unambiguous, with a surface scope reading only, in (43b), where it acts as an antecedent for the elided clause with a non-quantificational subject. The application of Scope Economy in the elided clause and the Parallelism requirement enforced on the antecedent clause thus account for the lack of inverse scope in (43b) just as they do in the parallel English case[43]. The data in (44) mirrors other cases discussed in Fox that are also straightforwardly accounted for in the same manner.

(44) a. Kakoj-to mal'čik vosxiščajetsja každym učitelem
Some boy admires every teacher
'Some boy admires every teacher'
(Some > every), (every > some)

b. Kakoj-to mal'čik vosxiščajetsja každym učitelem i každaja 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 každym 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)**

Here the unambiguous (b) sentence also differs from the ambiguous (a) example in lacking the inverse scope reading even though the subject of the elided clause is quantificational. This is expected, since if we 'undo' the ellipsis, we will get *every girl admires every teacher*, with subject and object QPs having the same quantificational determiner. It is easy to verify that such a sentence will have identical truth conditions irrespective of which QP takes wide scope, hence the prohibition on QR in this case is enforced by Scope Economy, and Parallelism takes care of the rest. That it is still Scope Economy and not some independent constraint on QR that is

[43] Kazenin (2001) and other similar accounts would argue that examples such as (43b) and (44b-c) are not true cases of ellipsis. Not taking a stand on the issue here for reasons of space, I will only note that the paradigm holds even with such uncontroversial cases of ellipsis as i. below:

i. a. Dva studenta budut čitat' každuju knigu
Two students be$_{FUT}$. read every book
'Two students will read every book'
(Two > every), (every > two)

b. Dva studenta budut čitat' každuju knigu, a Maša ne budet
Two students be$_{FUT}$. read every book and Masha not be$_{FUT}$
'Two students will read every book, but Masha won't '
(Two > every), ***(every > two)**

responsible for the lack of inverse scope in cases such as (44b) is shown in (44c). With the pair *<some girl, every teacher>* in the elided clause being scopally non-commutative, the application of QR in this clause is allowed to take place and so, by Parallelism, QR takes place in the antecedent clause, hence the ambiguity.

An additional merit of Fox's Scope Economy Principle is that it offers some insight into the otherwise mysterious clause-bounded nature of QR, demonstrated by sentences such as the well-known pair from Moltmann and Szabolcsi (1994), reproduced here in (45).

(45) a. One girl knows that every boy bought a present for Mary. (one > every, ***every > one**)
b. One girl knows what every boy bought for Mary. (one > every, **every > one**)

What (45a) demonstrates is that the universal QP in the embedded clause is not capable of taking scope over the matrix clause subject. Surprisingly, the scope over the matrix clause subject is possible for the same QP in the minimally different (45b). Fox argues that the lack of this reading in (45a) and its availability in (45b) is explained if we assume his Scope Economy Principle and furthermore assume that QR in general is constrained by Shortest, requiring that each application of QR is as local as possible. Thus, by Scope Economy, the universal QP *every boy* cannot scope over the complementizer (an operation that would let it gain access to the matrix clause and eventually get scope over the subject) and a longer movement, one that would let the embedded clause QP gain wide scope over the matrix subject, is prohibited by Shortest. In (45b) on the other hand, scoping *every boy* over the wh-word results in a pair-list interpretation (yielding distinct pairings of boys and their corresponding purchases). This instance of QR is thus allowed to take place, which in turn allows this QP to raise further to obtain scope over the matrix subject.

The data in (46) shows that the scope distribution in parallel Russian sentences is exactly the same, thus providing further crosslinguistic support for Scope Economy, to the extent that it can be viewed as a viable explanation of the scope data in (45), and further evidence for parallelism with respect to scope between English and Russian. The only difference here between the English and Russian data is that in Russian the complementizer and the relevant wh-word happen to be homophonous (the two Russian sentences have very distinct prosodic realizations, however[44]):

(46) a. Odna devočka znajet, čto každyj mal'čik kupil podarok dlja Maši
One girl knows that every boy bought present for Masha
'One girl knows that every boy bought a present for Masha'
(one > every, ***every > one**)

b. Odna devočka znajet, čto každyj mal'čik kupil dlja Maši
One girl knows what every boy bought for Masha
'One girl knows what every boy bought for Masha'
(one > every, **every > one**)

The data discussed in this section strongly suggest that quantifier scope in Russian is indeed constrained by Scope Economy, thus completing the parallelism between English and Russian

[44] In (46a) the strongest pitch accent falls on the last DP in the sentence whereas in (46b) the strongest accent falls on the wh-word *čto* (what), followed by a somewhat destressed realization of the rest of the clause.

with respect to quantifier scope and providing initial support to the proposed account of Scope Freezing.

4.3 Additional Evidence: Semantic Effects of QP Scrambling

In addition to the fact that both QR and QP Scrambling are similarly constrained in terms of their syntax[45], a further similarity between the two operations is that both can have a semantic effect: QR changes scope relations; Scrambling can do the same when a QP is scrambled overtly, although it is not the only semantic effect Scrambling can have[46], [47]. I believe it is specifically this property of Scrambling, namely its ability to affect interpretation that prohibits QP Scrambling from reconstructing due to Scope Economy. To see this, let us take another look at the data in (28) repeated here as (47):

(47) a. *Druz'ja rekomendovali ejo$_{ACC}$ [každomu byvšemu bossu Maši]$_{DAT}$
Friends recommended her every past boss Masha
*'Friends recommended her to every past boss of Masha'

---

[45] There is plenty of crosslinguistic evidence suggesting that QR and Scrambling are indeed essentially the same in the sense of having the same basic properties. For instance, it is well known that both QR and Scrambling can move any category (neither is restricted to movement of arguments); there are apparently no restrictions on attachment site for either Scrambling or QR – both use already existing positions. Both movements also appear to be constrained in very similar ways. For instance, both QR and Scrambling obey the constraint that prohibits their application to DPs with a genitive (Johnson 2000, attributing the example to Müller 1993):

(i) *…das ich über Benjamin gestern Antjes Buch gelesen habe
…that I about Benjamin yesterday Antje's book read have
(…that I have read Antje's book about Benjamin yesterday.)

(ii) My report about almost every California city curses its traffic.

Johnson (2000) argues that just as Scrambling of material from inside the Genitive phrase is prohibited in German (i), the sentence in (ii), which is a case of Inverse Linking in English, does not allow an interpretation on which the pronoun *its* is bound by the universal quantifier, which naturally suggests that QR cannot raise the QP out of the Genitive phrase to a position where it can obtain c-command and bind the pronoun.

Johnson also proposes that English has a construction with overt instances of Scrambling, which, on his suggestion, are related to the instances of QR that are responsible for bringing out the bound variable reading in Inverse Linking, namely Extraposition from NP (iiib):

(iii) a. A report about almost every California city appeared today.
b. A report appeared today about almost every California city.
c. *My report appeared today about almost every California city.

According to Johnson, the fact that Extraposition from NP is also blocked in the presence of a Genitive (iiic), just as Scrambling and QR are blocked in this context, further proves that this construction is "the overt manifestation of Scrambling/QR".

[46] Scrambling has also been argued to change focus potential (Miyagawa (2006)) and information structure. Specifically, scrambling languages, including Russian, have been argued to use A' scrambling to disambiguate "distinct information loads" (Bailyn 1995, 2001)). King (1993) has also proposed that in Russian leftward movement (aka scrambling) is always associated with Topic/Focus structure.

[47] A reviewer raises a question of semantically vacuous scrambling (Saito 1989 and others), in particular whether pragmatic/information structural effects exhibited with LDS are taken to obey Scope Economy as well. My answer to this question is 'no'. While I believe that there is no 'vacuous' scrambling in Russian in the sense that even scrambling of non-quantificational elements has effects on the output (see previous footnote), these effects are non-truth conditionally distinct from their pre-scrambling counterparts. It is thus predicted by the proposed account that Scope Economy will not constrain the reconsturction of such non-quantificational elements. And indeed, we have seen in previous sections that both Long Distance and Local Scrambling of names and other non-quantificational phrases necessarily reconstruct for the purposes of binding, thus supporting the proposal made here.

b.?/*[Každomu byvšemu bossu Maši]$_{DAT}$ druz'ja rekomendovali ejo$_{ACC}$
every past boss Masha friends recommended her
(po ejo že pros'be)
(on her own wish)
'Every past boss of Masha$_i$ she$_i$ was recommended to by friends (on her own request)'

c. [Každomu byvšemu bossu Maši]$_{DAT}$ kto-to rekomendoval ejo$_{ACC}$
every past boss Masha someone recommended her
(po ejo že pros'be)
(on her own wish)
'Every pass boss of Masha$_i$ she$_i$ was recommended to by someone (on her own request)'

In (47b) scrambling the QP to the front of the sentence yields mixed results: while some speakers find it to be improved over the non-scrambled version, others still find it to be ungrammatical or marginal. The crucial contrast is between (47b) and (47c), with the latter example containing another QP; this example unambiguously disallows the reconstructed reading even for those speakers who find (47b) degraded but improved in comparison with (47a). I believe that this contrast is due to the fact that crossing the higher QP has another interpretive effect, namely the introduction of a distributive reading. As suggested by a reviewer, some speakers apparently obey a particularly strong version of Scope Economy in that they will only license instances of scrambling (and subsequent lack of reconstruction) if such interpretive effects are present. The fact that the exact same pattern is observed with Long Distance Scrambling further suggests that this lack of reconstruction is semantic in nature and is not related to some other properties of these sentences[48].

These examples from Russian thus provide crucial supporting evidence for the claim that Scrambling of QPs is also constrained by a version of Fox's Economy (Miyagawa 2006, Antonyuk-Yudina 2009). Using somewhat similar data from Japanese, Miyagawa has proposed that Scrambling, which, like QR, is entirely optional, is in fact constrained by Economy: if an instance of movement has a semantic effect (in the sense that a new, previously unavailable interpretation is established) it is licensed in the new position, otherwise it has to reconstruct[49],[50].

[48] Such a paradigm is strongly reminiscent of Relativized Minimality (Rizzi 1990) since the (lack of) reconstruction is obviously dependent on the nature of the scrambled element, with elements of the same type (QPs) preventing reconstruction that otherwise appears to be obligatory. Granted, Relativized Minimality (RM) was originally conceived of as constraining (upward) movement, not reconstruction. Since Scrambling in Russian appears to be generally unconstrained with respect to which phrases it can apply to and which phrases can be crossed by a scrambled element, RM clearly does not apply to overt displacement via scrambling. It is entirely possible though that it does apply to reconstruction of scrambled elements, and in this sense RM may well be what is responsible for Scope Freezing, though it is not clear that one could distinguish RM from Scope Economy in this respect, which I argue is the principle at work here. More work may be necessary to see which of the two principles, Relativized Minimality or Scope Economy is at work here or if they indeed conspire to yield the same outcome and are thus indistinguishable in scope contexts. The reason I believe that Scope Economy is the correct explanation here is that we clearly see its effects in other areas in Russian, namely Fox-type ellipsis examples discussed above. Since Scope Economy is apparently independently required for Russian, invoking it to explain all the other Scope Freezing effects observed in Russian allows for a unified explanation of all the scope data, rather than relying on various distinct principles to explain the distribution of various Russian scope facts.

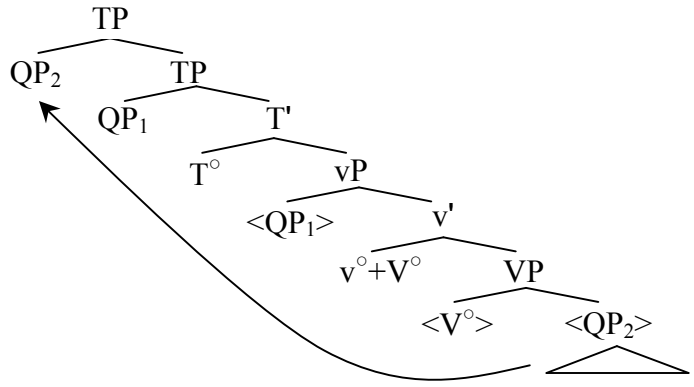
[49] Optional in the sense that its application is not regulated or constrained by feature attraction.

If the proposal advanced here is on the right track we have further crosslinguistic evidence for the "sameness" of QR and (QP) Scrambling in terms of their basic characteristics: both are optional, interpretation-driven movements and both are crucially constrained by Economy. If QR and Scrambling are the same in the relevant respects, it is easy to see that scrambling a QP overtly may indeed be constrained by Economy in the manner described above. If this is correct, the Scope Freezing effect found with overt Scrambling of QPs in Russian, including the Dat > Acc ditransitives, argued to be derived by overt Scrambling of a Dative QP over the Accusative QP, is explained.

Strikingly similar effects to those found in Dat > Acc ditransitives obtain, as we have already seen, when a QP object scrambles overtly overt a QP subject:

(48) a. Maša uverena, chto [kakuju-to šutku]$_{\mathbf{i}}$ každyj čelovek uslyšal $\mathbf{t_i}$
Masha sure that [some joke]$_{ACC}$ [every person]$_{NOM}$ heard
'Masha is sure that some joke, every person heard' (some > every), ***(every > some)**

b. derivation of the subordinate clause of (48a), irrelevant details omitted[51]



'Some joke, every person heard'

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[50] The examples from Miyagawa (2006), though similar to the Russian examples above are also different from them in that according to Abe (2005), whom Miyagawa credits with this finding, for the Scrambled QP in Japanese to be licensed in the new position, each step of the movement has to be licensed:

i. a. Daremo-ni$_i$ dareka-ga [John-ga t_i kisusita to] omotteiru.
everyone-$_{DATi}$ someone-$_{NOM}$ [John-$_{NOM}$ t_i kissed C] thinks
'Everyone, someone thinks that John kissed.'
*everyone > someone, someone > everyone

b. Daremo-nii dareka-ga [futari-no-kodomo-ga t_i kisusita to] omotteiru.
everyone-$_{DATi}$ someone-$_{NOM}$ [2-GEN-kids-$_{NOM}$ t_i kissed C] thinks
'Everyone, someone thinks that two kids kissed.'
ok/??everyone > someone, someone > everyone

According to Miyagawa, the crucial difference between the two examples in (i) is that the scrambled QP in the (b) example crosses another QP in the lower clause, which satisfies Scope Economy. No QP is crossed in the first sentence, hence the sentence has to reconstruct since, according to Miyagawa, this violates Economy. Obviously, one has to account for why Russian and Japanese are different in this respect in that in Russian it is apparently enough for the moved QP to be licensed in the higher clause (by crossing over another QP, resulting in a distinct semantic interpretation). I will not attempt to do this here, leaving this question for further research.

[51] Verb movement to little v head and subject movement to Spec, TP position are not shown explicitly with arrows.

In examples like this one, the object QP is scrambled to a position above the subject, which results in the object obtaining surface wide scope. Since the sentence was ambiguous before the scrambling, this overt QP movement effectively disambiguated the scopes in favor of the scrambled QP object, hence reconstruction (and apparently, further QR by the subject QP) are prohibited by Scope Economy. We have seen that the optional nature of QR and Scrambling, the well-motivated idea that QR and (QP) Scrambling are covert and overt realizations of the same type of movement, coupled with an independently needed Scope Economy principle allow for an explanation of Scope Freezing that obtains in various contexts in Russian, that in Dat > Acc ditransitives being just one such instance. There are, however, some residual questions that should be addressed. I provide tentative answers to these questions in the following section.

5 Residual Questions

5.1 On the Nature of the VP-Internal A-Position

One of the natural questions to wonder about, in light of the analysis of Scope Freezing proposed here, is why such VP-internal A-position that the Dative object can overtly move to in Russian should exist. But perhaps even more important is the question of the motivation for this movement.

While I do not have a ready answer to the question of why such A-position should be available within the VP in Russian, the data provided in section 3.2 is rather strong evidence that this position does exist and is of an A-type. As for the motivation behind movement to this position, I suggest that there is no such motivation, yet there are effects of such movement. Specifically, by saying that this movement has no motivation I am arguing that movement into this position is not distinct from any other instance of optional, non-feature-driven movement, that is, Scrambling. The position being there, the Dative object in the complement of VP is free to move into it. When it does, however, there may be, and often are, distinguishable effects on the outcome. Taking this view of the motivation of Dative movement is justified in that it allows us to view this instance of movement as just another instance of local A-Scrambling. To the extent that movement into this position for the Dative object appears to be entirely free (non-feature driven), optional (in that either order of the objects is equally possible), and has recognizable syntactic properties associated with A-scrambling (the ability to bind from this position), the proposal here is supported by the empirical data.

5.2 Subject vs Object Reconstruction

Another important question that needs to be addressed is the observed differences between the subject and the object QPs with respect to reconstruction[52]. We had to conclude in section 2.2, on the basis of empirical evidence, that object wide scope (at least in those cases we have seen) is achieved by subject reconstruction and concomitant object raising, as demonstrated by cases like (20b) for English and (23b) for Russian. Other examples demonstrating that subjects routinely reconstruct in English abound (see, for instance, Fox (2000) and references wherein). What we haven't seen, however, is object reconstruction, either in English or in Russian. The question to

[52] I thank an anonynous reviewer for raising this question.

ask then, is what is it about object QP movement, both overt and covert that disallows reconstruction?[53]

One possibility that comes to mind has to do with differences in terms of reasons for movement between subject raising to Spec, TP and object raising to a vP-adjoined position, followed by optional raising of object QP to a position where it can obtain scope over the reconstructed subject. It is generally believed that subject raising, even of quantificational subjects, takes place for reasons other that QR, namely, to satisfy the EPP (Chomsky 1995, 1998). We know as well that subject QPs do not need to undergo QR the way object QPs do, to be interpretable. It is thus possible to make a formal distinction between subject raising and object raising and claim that true QR (that subject QPs do not undergo) *never* reconstructs[54, 55]. One indication that this approach may be on the right track comes from examples where one of the objects is advanced to subject position. Consider the contrast in (49):

(49) a. Maša otpravila dvum zakazčikam každuju posylku.
Masha$_{NOM}$ sent [two clients]$_{DAT.MSC}$ [every parcel]$_{ACC.FEM}$
'Masha sent two clients every parcel' (two > every), ***(every > two)**

b. Dvum zakazčikam byla otpravlena každaja posylka
[Two clients]$_{DAT.MSC}$ was sent [every parcel]$_{NOM.FEM}$
'Every parcel was sent to two clients' (two > every), **✓(every > two)**

What is important about the examples in (49) is that whereas (49a), a Dat > Acc ditransitive structure, predictably allows only surface scope, in (49b), where the Dative object undergoes advancement to subject position under passivization, suddenly the inverse scope becomes

[53] Note that this is a question not only for the account presented here but for any other account dealing with quantifier scope ambiguities as well.

[54] A proposal by Pietroski and Hornstein (2002) regarding strong and weak quantifiers strikes me as a potentially very attractive and straightforward solution to this puzzle. Pietroski and Hornstein argue (assuming the Copy and Deletion theory of movement) that VP-shell internal copies of strong QPs such as those headed by *every* must necessaily delete for semantic reasons, while those headed by weak determiners such as *some* and *two*, for instance, can have either the VP-shell internal or the external (post-movement) copy deleted. Since in cases where we are interested in the availability of inverse scope it is the lower (usually the object) QP that is necessarily headed by a strong determiner, the lack of object QP reconstruction in acounted for (for a highly articulated theory on why this is required see Pietroski and Hornstein (2002)). Thus, if the pre-movement, VP-shell internal copies of strong QPs must delete while with weak QP subjects either copy can be deleted, we have a straightforward account of why one finds cases of subject reconstruction but not of object reconstruction (or at least not the cases of reconstruction to the VP-internal position). Note as well that the above account due to Pietroski and Hornstein (2002) also explains, straightforwardly, why it is *only* in cases where the lower copy of the subject has to be interpreted that the object QP can have scope over the subject.

[55] Note that this suggestion appears to work even for quantificational sentences with OVS order, where the QP subject arguably undergoes right adjunction to TP, thus appearing sentence-final. As discussed in footnote 22, OVS sentences with a quantificational subject and object are in fact ambiguous. The subject-wide reading is expected since the subject c-commands the object in its right-adjoined position. The object-wide scope is derivable under the assumption that the object QP, being in the Spec, TP position can c-command the subject QP that is adjoined to TP. Alternatively, the subject-wide scope in OVS sentences can come from object reconsturction, since examples such as (49b) above show that objects in subject position do reconstruct. Importantly though, whether the subject QP occurs in its canonical subject position in SVO sentences or in the position to the right of the verb as in OVS sentences, the subject QP is still semantically interpretable due to being generated as a sister to one-place predicate. Hence, the proposed formal distinction between subject and object QPs can be maintained for all cases under discussion.

available, that is, the Accusative object is now able to scope over the Dative object. What this constrast in scope suggests is that in passive construction the Dative QP object in canonical subject position is behaving like the Nominative subjects of active sentences, that is, it reconstructs, something that is obviously not possible when the Dative object undergoes QR, supporting the idea that QP movement for subject-related reasons and QP movement for scope (e.g., QR) are to be viewed as two entirely different kinds of movement, subject to different restrictions[56].

5.3 Russian Scope Freezing and Superiority

The Scope Freezing facts that are explained here for Russian with the help of Scope Economy have been given a very different explanation for English in Bruening (2001). In light of the fact that the Russian scope data have been shown here to be strikingly parallel to the English data in all relevant respect, it is naturally to ask whether Russian data could have been given a similar explanation by appealing to Superiority essentially following Bruening's account. I will argue here that this is not only undesirable for Russian but that in fact the account proposed here may have important consequences for the analysis of parallel English data as well.

Bruening (2001) presents a wide range of data from English ditransitive sentences and shows, using the three tests employed for Russian in section 1, that Scope Freezing only obtains in the Double Object Construction and the *with*-variant of the Spray-load construction in English, repeated below in (50b) and (51b) respectively. On Bruening's account, the scope asymmetry is caused by Superiority that prohibits the structurally lower object (for him, the Accusative object) to raise to its vP-adjoined position before the structurally higher one does. Coupled with Shortest Attract or Shortest Move (Chomsky 1993, Richards 1997) it causes the (lower) direct object to cross paths with and tuck in right below the indirect object upon QR to vP[57].

(50) a. The teacher gave a (different) book to every student. every > a
b. The teacher gave a (#different) student every book. ***every > a**

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[56] Note also that the indirect Dative-marked Goal argument, even though it is advanced to subject position under passivization, cannot receive Nominative case, as do Accusative-Marked Theme objects of both transitive and ditransitive sentences (note similarly that in (49b) above the agreement has to be with the Theme, not the Goal argument):

i.	*Dva	zakazčika	byli	otpravleny	každuju	posylku
	[Two	clients]$_{\text{NOM.MSC}}$	were	sent	[every	parcel]$_{\text{ACC.FEM}}$

As argued in Bailyn (forthcoming), on the view of ditransitives which has the Theme argument base generated in Spec, VP position and the Goal argument in complement of VP, the inability of the Goal to receive Nominative case under passive morphology is expected: given the lower position of the Goal argument within the VP, the Nominative case assigner will never be able to reach it, assigning the Nominative case to the Theme argument in Spec, VP position instead. The inability of Dative Goals to receive Nominative case under passivization thus provides another strong argument for the internal structure of ditransitives adopted here.

[57] Richards, whose work Bruening relies on, subsumes both *Attract* and *Shortest* under the broader notion of Economy and defines them as follows (Richards 1997: 113):

i. ***Attract:*** *An attractor K attracts a feature F, creating a copy α′ of an element α containing F, and merging α′ with K. The relations between α′, K, and F must all obey Shortest.*

ii. ***Shortest:*** *A pair P of elements [α, β] obeys Shortest iff there is no well-formed pair P′ which can be created by substituting γ for either α or β, and the set of nodes c-commanded by one element of P′ and dominating the other is smaller than the set of nodes c-commanded by one element of P and dominating the other.*

(51) a. Maud draped a (different) sheet over every armchair. every > a
b. Maud draped a (#different) armchair with every sheet. ***every > a**

Admitting that Quantifier Raising in general is not obviously feature-driven, unlike other types of movement that are widely taken to be subject to Superiority, Bruening draws parallels between QR and object shift found in Germanic languages, which Chomsky (2001) analyzes as being feature-driven by a formal P feature that is optionally present on the light verb *v*. Bruening exploits the observation that both object shift in Germanic languages and QR in English have interpretive effects and proposes that the P feature can be parameterized: in languages that allow object shift the P feature is employed to attract the object to vP while in English (and other languages that do not have object shift) it is parameterized so as to apply to Quantifier Phrases[58]. Thus, on that account, when the English light verb *v* carries the optional feature, the QP will be attracted to little *v* via QR; if the *v* head lacks the P feature, QR will not apply, causing the derivation to crash if the QP is uninterpretable in its base-generated position[59]. Thus, the presence of the P feature on little *v* drives QR, and Superiority, together with Shortest, ensures that the structurally higher QP moves first and the structurally lower one 'tucks in', thus accounting for Scope Freezing. The cases where Scope Freezing does not obtain, such as (50a) and (51a), on Bruening's account are due to the two objects being equidistant from the verb carrying the P feature, thus either phrase can be attracted first, hence the scope ambiguity[60].

There are a number of reasons why I believe a Superiority account of similar facts in Russian is undesirable. One of the most serious problems for potential advocates of this account is that it is quite difficult to maintain that Superiority is active in Russian even with the type of movement that it arguably does constrain in other languages, namely, wh-movement (Rudin 1988, Richards 1997):

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[58] Note that formulated this way, Bruening's account seems to make the prediction that no language that allows object shift will also allow feature-driven QR, thus predicting no Scope Freezing in configurations similar to the one found in English Double Object Construction and Russian Dat > Acc ditransitives. At least one language I am aware of allows both specificity-related object shift (Mykhaylyk and Ko 2008, Mykhaylyk 2009) as well as demonstrates Scope Freezing in Dat > Accusative ditransitives, namely Ukrainian. Thus, the example in (i) below in which the Dative Goal precedes the Accusative Theme object exhibits the same surface scope effect as that found in English DOC and in Russian Dat > Acc ditransitives:

i.	Marijka	podaruvala	jakijs'	dytyni	kožnu	igrašku	(Ukrainian)
	Mary	presented	[some	child]$_{DAT.FEM}$	[every	toy]$_{ACC.FEM}$	

'Mary presented some child with every toy' (some > every), ***(every > some)**

The Acc > Dat order, on the other hand, is ambiguous in the same way its Russian and English counterparts are:

ii.	Marijka	podaruvala	jakus'	igrašku	kožnij	dytyni.
	Mary	presented	[some	toy]$_{ACC.FEM}$	[every	child] $_{DAT.FEM}$

'Mary presented some toy to every child' (some > every), (every > some)

It appears then that the original formulation of the Superiority acount of Scope Freezing given in Bruening (2001) needs to be reformulated to allow for such cases: either the same P feature has to be allowed to be responsible for both object shift and Superiority-obeying QR, or more than one optional feature on little v (and arguably on other heads, to allow for optional instances of QR past vP-level) has to be posited. Either of these solutions appears to weaken the original proposal in Bruening (2001) as far as I can tell.

[59] On Bruening's account this applies to object QPs but crucially not to QPs in subject position; subject QPs for Bruening do not have to raise to vP, hence no competition between the subject and the object QPs with respect to Superiority, a fact that explains for Bruening why either of the objects is able to scope over the subject QP.

[60] But see Johnson (2001) for some of the criticisms of Bruening's Superiority account of English Scope Freezing.

(52) a. Kto kogo videl?
Who$_{NOM}$ who$_{ACC}$ saw
'Who saw whom?'

b. Kogo kto videl?
Who$_{ACC}$ who$_{NOM}$ saw
*'Whom did who see?'

Thus, in sentences with two wh-phases in the subject and direct object position, either wh-word can be raised first without causing a Superiority violation. The same is true with indirect object wh-movement as well in that the Dative-marked object wh-word can be fronted before the subject wh-word is[61]:

(53) a. Kto komu podaril avtomobil' na Novyi God?
Who$_{NOM}$ whom$_{DAT}$ presented car$_{ACC}$ on New Year
'Who present whom with a car on New Year?'

b. Komu kto podaril avtomobil' na Novyi God?
Whom$_{DAT}$ what$_{NOM}$ presented car$_{ACC}$ on New Year
*'Whom did who present with a car on New Year?'

In fact, as shown in Stepanov (1998), Russian seems to lack Superiority effects in all conceivable contexts, including embedded clauses, correlative construction, sentences with pre-fronted constituents and long-distance multiple wh-questions[62]. Recent experimental studies of Superiority effects in Russian provide important further support for this claim[63].

It can be argued, however, that the lack of Superiority effects in Russian cannot be taken to mean that there is no Superiority in the language. Specifically, given that Scrambling is considered to be universally ordered before true A-bar movement such as wh-movement (Abels 2008), and given that Russian is a Scrambling language, one can maintain that prior to being attracted by a wh-probe, a lower wh-phrase can scramble to a position above the higher one, thus changing the hierarchical relations the probe is confronted with. This, in turn, would make it look like there is no Superiority in Russian[64].

Let us assume for the moment that Superiority in Russian does apply yet is obscured by Scrambling in the manner described above, to see how the Superiority account handles the Scope Freezing data in Russian. Assuming further the Accusative-above-Dative base structure of the

[61] This data of course is only informative if one of the objects is projected higher than the other since on the view that either object can be projected in a higher position or that they are equidistant we would not expect Superiority to apply even if it was active in the language. I have already argued that such a view of the structure of ditransitives is not tenable for Russian.

[62] Stepanov (1998) takes the absence of Superiory effects in Russian to be indicative of the lack of true wh-movement in Russian, and argues for a view of Russian as a wh-in-situ language similar to Chinese and Japanese. I will remain agnostic as to the theoretical status of wh-movement in Russian for purposes of this article as it has no bearing on the account proposed here or on the Superiority account of Scope Freezing, for that matter.

[63] Fedorenko and Gibson (2008) argue that there exists a real cross-linguistic difference in the availability of Superiority effects between English and Russian, with the latter differing from the former in not exibiting an asymmetry between subjects and objects in multiple wh-questions.

[64] I am very grateful to an anonymous reviewer for bringing this important possibility to my attention.

VP, the sameness of (covert) QR and (overt) QP Scrambling and the existence of the position inside the VP that the lower Dative Goal objects can move into, either overtly or covertly, the Scope Freezing in Russian Dat > Acc diransitives can indeed be accounted for under a Superiority account[65]. The ambiguity of the Acc > Dat ditransitives on this account is explained as follows: if no covert movement takes place prior to the P-feature of vP probing down, the closer Accusative object will be attracted to vP first, with the lower Dative object tucking in below the Accusative object (as per Bruening 2001). As a result, the Accusative object will have wide scope over the tucked in Dative object. If, on the other hand, the Dative object undergoes QR to a position within the VP prior to the P feature probing down, the structural configuration the P feature will be confronted with will be reversed in this case and the two objects will move in the opposite order, with the Accusative tucking in below the Dative and thus taking scope below it as well. The lack of ambiguity when the overt word order is Dat > Acc is then explained as follows: for this word order to obtain, the Dative object raises to the A position within the VP overtly, creating a configuration that forces the Dative object to be attracted by the P feature of little v first, with the Accusative tucking in below. This yields the Dat > Acc scope interpretation. Given that QR and QP Scrambling are assumed to be the same, the overt instance of the movement having taken place to this higher A position inside the VP, the Accusative cannot move covertly again before the P feature probes down (which would change the structural relations before feature-checking takes place) thus accounting for the lack of Acc > Dat scope[66, 67].

We see then that the spirit of Bruening's Superiority account can be preserved for Russian as well. Acknowledging this, I would nevertheless like to argue that appeal to Superiority in the case of Russian is still undesirable for a number of reasons. First, once we allow the option of moving the Dative QP object to the A position within the VP covertly, as above, other ways of accounting for the scope paradigm in Russian ditransitives become possible even without appealing to Superiority[68]. Second, consider again the status of Superiority in Russian. Even though given the option of Scrambling the lower phrase above the base position of the higher one in multiple wh-movement, for instance, makes ruling out Superiority as simply inapplicable to Russian virtually impossible, consider the consequences of taking such a 'Superiority-preserving' view. Since Superiority effects are never found in Russian[69], this effectively commits us to positing such instances of Scrambling *in every single case* where Superiority effects are expected, but not found, in Russian. This, in turn, suggests that those

[65] The possibility of such an account within the Superiority framework has been suggested to me by one of the reviewers.

[66] This account of Russian Scope Freezing that relies on Superiority in the spirit of Bruening (2001) was suggested to me by an anonymous reviewer.

[67] The technical side of this reviewer-suggested account, minus appeal to feature-attraction by the P feature of little v, is almost identical to the account of Scope Freezing in Dat > Acc ditransitives that obtains in Japanese, proposed in Harada and Larson (2009). Harada and Larson acount for the Scope Freezing by appealing to Cyclic Linearization at the vP node (Fox and Pesetsky 2005). Note however, that once covert movement to the A position inside the VP is allowed, given that both Cyclic Linearization and Scope Economy are independently necessary and that QR is generally not considered to be feature-driven (though see Beghelli and Stowell 1997, Szabolcsi 1997 for an alternative view), appealing to Superiority as suggested above becomes theoretically vacuous (as noted, for instance, by Richard Larson (p.c.)).

[68] See the preceding footnote for a discussion of one such alternative account, due to Harada and Larson (2009).

[69] See Stepanov (1998), Bošković (2002) for this view (but see Grebenyova 2004 for a discussion of Superiority effects found in Russian with multiple sluicing and in certain embedded contexts).

instances of Scrambling must *necessarily* take place before feature-attraction, a conclusion that is extremely difficult to reconcile with the well-known optional character of Scrambling. As unlikely as this situation appears to be, let us accept this as still possible, for the sake of further argumentation. Suppose Scrambling does indeed precede all instances of feature-attraction where Superiority effects would otherwise appear. The immediate question to ask then becomes this: given that scrambling saves us from Superiority effects in all other cases, why should we still find 'Superiority effects' (aka Scope Freezing) in Russian Dat > Acc ditransitives[70]?

Finally, and quite importantly in my opinion, adopting the Superiority account will crucially undergenerate for Russian in that it will have nothing to say regarding all the other instances of Scope Freezing that have been demonstrated for Russian (those where a lower QP scrambles overly across the higher QP), thus forcing the proponents of the Superiority account to treat those instances as entirely unrelated to the Scope Freezing that obtains in Russian Dat > Acc ditransitives. This, in turn, makes the latter instance of Scope Freezing appear to be a result of a highly idiosyncratic sole instance of Superiority-obeying movement in the language. All of the above reasons thus make adherence to the Superiority account of Scope Freezing highly unlikely for Russian.

6 Conclusions and Consequences

In this paper I have presented novel data on Scope Freezing in Dat > Acc ditransitive sentences in Russian. I have argued that such freezing effects should not be treated as a special case but should in fact be analyzed as a subset of a more general case of Scope Freezing found in other contexts in Russian as well. Specifically, I have shown that overt displacement of QPs via Local and Long Distance Scrambling results in frozen surface scope and have argued that this phenomenon can be understood as resulting from Scope Economy Principle if we accept the idea that QR and QP Scrambling are overt and covert instances of the same kind of movement (Johnson and Tomioka 1997, Johnson 2000, Miyagawa 2003, 2006). To the extent that the account proposed here is correct, the Scope Freezing in Dat > Acc ditransitives thus provides another piece of evidence for the structure of ditransitives in which the Dative Goal argument is base-generated in a lower position within the VP than the Accusative Theme argument (Bailyn 1995, 2009, forthcoming).

I have also shown that unlike what has been claimed about scopal properties of Russian before (Ionin 2002) Quantifier Scope facts in basic SVO sentences in Russian are amenable to the Quantifier Raising analysis that is fully parallel to what is generally believed to be true for English. The claim that QR in Russian is more limited than it is in English due to the availability of overt movements like Topicalization or Focalization can no longer be maintained; the original claim that overt displacement of QPs freezes scope in Russian (Ionin 2002) is indeed supported by the data provided here.

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[70] It appears that given the above objections, such a Superiority account can be made to work *only* provided the assumptions of the higher VP-internal A position, the base generation of the Dative object below the base position of the Accusative object and given the sameness of QR and QP Scrambling. Note, similarly, that it appears to be impossible to maintain the Superiority account on a view that posits base-generation of the Dative Goal object in a position above the Accusative object or one that allows for a possibility of either object being generated in a higher position, as there is no reason why the Accusative object should not be able to scramble VP-internally above the Dative object on such accounts, changing the structural configuration the probe will be confronted with and thus incorrectly predicting the lack of Scope Freezing in Dat > Acc ditransitives.

Finally, I have argued that a Superiority-based account of Scope Freezing (Bruening 2001) should not be extended to Russian for a number of reasons. Furthermore, if correct, the proposed account of Scope Freezing and the many parallels between English and Russian with respect to scope that were demonstrated here together raise the possibility that a parallel account of the Scope Freezing effects found in English in the Double Object and the *with*-variant of the Spray-load construction may be an attractive alternative to the feature-driven account that has been proposed for English (Bruening 2001), implicating scope-freezing overt instances of movement in these constructions[71]. A detailed exploration of the possibility of a similar account of English scope facts and the consequences that this account would have for the proposed structures in English is left for further research.

[71] The idea that overt movement may be causing Scope Freezing in English is certainly not new. Epstein (1992) cites the following data from Lasnik and Uriagereka (1988):

i. a. I don't think that Mary solved any problems.
b. *I don't think that any problems, Mary solved. (Lasnik and Uriagereka 1988)

The sentence in (ib) on that account is ungrammatical if the NPI *any problem* has to move at LF to the negative licensor, but cannot due to being displaced overtly. It has been pointed out to me however that examples such as (iib) may be ungrammatical for an entirely different reason: Postal (1974) argued that the moved QP needs to be interpreted as a topic but this interpretation is not available due to the quantificational status of the moved phrase (den Dikken, p.c.). See also Tomioka (to appear) for a similar analysis. I will leave this issue open for further research. Furthermore, examples such as (iib) from Heim and Kratzer (1998) also suggest that overt displacement of a QP across another QP may have a surface scope freezing effect (though the authors do not suggest this explicitly):

(ii) a. Almost everybody answered at least one question.
√ (almost everybody > at least one), √ (at least one > almost everybody)
b. At least one question, almost everybody answered.
√ (at least one > almost everybody), *(almost everybody > at least one)

Thus, while (iia) is ambiguous, displacing the object QP above the subject QP results in the wide scope interpretation of the moved QP; the fact that the other reading (subject wide scope) is unavailable suggests that reconstruction of the overtly moved QP does not take place. Such striking parallelism between English and Russian and the finding that QR in the two languages is the same with respect to the constraints it obeys strongly suggest that Scope Freezing in the English double object construction may in fact be amenable to the analysis proposed here for Russian.

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