Against the QR Parameter: New Evidence from Russian Scope Freezing

This paper supports a view of Russian as a QR language of the English variety together with the general nuanced picture of Bobaljik and Wurmbrand (2012), wherein there is no "QR parameter" sorting languages as scope frozen vs. scope fluid; rather, scope freezing is a property of constructions. Russian, I argue, shows the same contexts of scope fluidity as those in English, but also exhibits previously unnoticed contexts where scope is indeed frozen – specifically in Russian ditransitives including (1), bona-fide spray-load constructions (2), spray-load type of verbs where scope freezing results on one of the orders via a simple reordering of internal arguments (3), what I call "reflexive monotransitives" (4), long-distance scrambling of a (lower) QP across another QP (5) and local scrambling of a lower QR across a higher one (6). Ambiguity vs. frozen scope in (1)-(6) are verified with a number of syntactic tests, some familiar from Bruening (2001) and some new, such as contrastive focus and passivization tests.

(1)	 a. Maša potrebovala [kakije-to dokumenty] [s každogo posetitelja] Masha demanded [some documents]_{ACC} [PP from every visitor]_{GEN} 'Masha demanded some documents from every visitor' 	(E<∀), (∀ <e)< th=""></e)<>
	b. Maša potrebovala [s kakogo-to posetitelja] [každyj document] Masha demanded [PP from some visitor]GEN [every document]ACC 'Masha demanded every document from some visitor'	(E <a),*(a<e)< td=""></a),*(a<e)<>
(2)	a. Vanja zagruzil [kakoje-to seno] [na každyj gruzovik]	(∃>∀), (∀>∃)
	Vania loaded [some hay] _{ACC} [on every truck] _{ACC}	
	'Vania loaded some hay on every truck'	
	b. Vanja zagruzil [kakoj-to gruzovik][každym vidom sena]	(E <a),*(a>E)</a),*(a>
	Vania loaded [some truck] _{ACC} [every type of hay] _{INSTR} 'Vania loaded some truck with every type of hay'	
(3)	a. Maša nakryla [kakoj-to prostynej] [každoe kreslo]	(E < E), (E < E)
(5)	Masha covered [some sheet] _{INSTR} [every chair] _{ACC}	(= -),()
	'Masha put some sheet over every chair'	
	b. Maša nakryla [kakoe-to kreslo] [každoj prostynej]	(E<∀),*(∀≥E)
	Masha covered[some chair]_{ACC}[every sheet]_{INSTR}	
	'Masha covered some chair with every sheet'	
(4)	a. Maša zarazilas' [kakoj-to bolezn'ju] [ot každogo pacienta]	(∃>∀), (∀>∃)
	Masha infected _{REFL} [some illness] _{INSR} [from every patient] _{GEN} 'Masha got infected with some illness by every patient'	
	b. Maša zarazilas' [ot kakogo-to pacienta] [každoj bolezn'ju]	(E <a)*(a<e)< td=""></a)*(a<e)<>
	Masha infected _{REFL} [from some patient] _{GEN} [every illness] _{INSTR}	
	'Masha got infected with every illness by some patient'	
(5)	a. *[Kto-to] xočet čtoby on _j uvolil [každogo sovetnika Buša _j]	(E <a),*(a>E)</a),*(a>
	[Someone] wants that he fired every adviser Bush _{GEN}	
	•	iple C violation)
	b. [Každogo sovetnika Buša _j] _i [kto-to] xocet ctoby on_j uvolil t_i	(∀ <e),*(e<∀)< td=""></e),*(e<∀)<>
	[Every adviser Bush] _{GEN} [someone] wants that he fired	· 1. () · · · · · · · · · · · · · · · · · ·
(6)		ciple C escaped) $(\exists \geq \forall), (\forall \geq \exists)$
(6)	a. Maša uverena, chto [kakoj-to čelovek] uslyšal [každuju šutku] Masha sure that [some person] _{NOM} heard [every joke] _{ACC}	(ZZV), (VZ)
	'Masha is sure that some person heard every joke'	
	b. Maša uverena, chto [kakuju-to šutku] _i [každyj čelovek] uslyšal t _i	(E <a),*(a<e)< td=""></a),*(a<e)<>
	Masha sure that [some joke] $_{ACC}$ [every person] $_{NOM}$ heard	
	'Masha is sure that some joke, every person heard'	

While these results support the general conclusion of Bobaljik and Wurmbrand (2012) regarding the lack of the QR parameter, they also contradict specific aspects of their analysis insofar as Russian freely allows overt displacement (local and long-distance scrambling) yet also freely allows QR, all the while exhibiting previously undescribed scope freezing contexts. I propose a theory of scope freezing that relies on a key empirical generalization drawn from the data:

(7) **SF Generalization**: *Scope freezing always results from overt raising of one QP over another.*

Thus the one thing unifying all scopally frozen cases in (1)-(6), I argue, is the presence of overt raising of a lower QP across a higher one. Scope freezing itself I analyze in terms of a relation , established directly between the two QPs in raising contexts. Thus unlike previous theories of scope freezing that view the phenomenon either as a relation between a higher probe and a QP goal (Bruening 2001) or as a result of relative ordering of the two QPs wrt to the phase (Harada and Larson 2009), my account proposes that in scope freezing cases there exists a special relation between the two QPs themselves, similar to that existing between the two QPs in an inversely linked structure, or a binding relation. I propose a possible formalization in the spirit of Stanley and Szabo (2000) and Stanley (2002) whereby nominal restriction of the now lower QP1 (after overt movement of QP2 across QP1 has taken place) is associated with a domain variable bound by the now higher QP2. This binding relation established due to overt crossing of QPs is what precludes the structurally lower QP1 to raise past QP2, thus accounting for the relative nature of scope in scope freezing contexts, where QP1 is able to undergo further (covert) movement so long as it stays within the scope of the higher QP2 (Larson 1990).

The SF Generalization, which is shown to be very robust, encompassing an astonishingly wide range of constructions, has important consequences for the Russian VP-internal argument structure debate: on the premise that what causes scope freezing is an instance of overt movement of a structurally lower QP across a structurally higher one, we have a powerful tool for probing into VP-internal structure. This diagnostic suggests that none of the views found in the literature is entirely correct: it suggests that Russian ditransitives are not a homogeneous group, with one argument always projected higher than the other; instead, they are subdivided into three distinct classes, with internal argument structure of two of those classes being a mirror image of each other (ACC >> DAT/oblique and DAT/oblique >> ACC), and the third being a class where either argument can be base-generated in a structurally higher position). This conclusion is strongly supported by a wide range of syntactic and lexico-semantic tests. For instance, I show that semantic factors such as object *affectedness* play a crucial role in determining which group any given predicate belongs to. This finding confirms the crucial role of verb semantics as realized through thematic roles and its reflection in internal argument structure. The fact that the subdivision of predicates into three distinct classes based on scope freezing data is supported by a battery of syntactic and lexico-semantic tests lends further support to the conclusion drawn based on my Generalization. The SF Generalization itself is strongly supported by the existence of cases of scope freezing where one of the OPs is clearly an adjunct, rather than an internal argument, thus no issue of internal argument structure arises to begin with, yet scope freezing nevertheless obtains whenever the two QPs in question are overtly crossed (the same is true for instances of scope freezing that obtain with local and long-distance scrambling of QPs).

Overall, the detailed picture of Russian scope and scope freezing discussed in our work has important implications for cross-linguistic investigation of quantifier scope. In particular, it calls into question wholesale conclusions about other languages, previously claimed to be scopefrozen, such as Japanese (another language where construction-specific scope freezing is found, along with contexts of scope fluidity). Our work suggests that such languages may also have been misclassified into the "scopally-frozen" class; indeed, it is not clear that the label is not just an unfortunate misnomer, which glosses over existing important details of quantificational relations within a separately taken language classified as such.