Russian Scrambling, feature typologies, and syntactic 'marking for movement' John Frederick Bailyn Stony Brook University

In this paper, I argue that three interrelated points about A'-dependencies (wh-mvt and Long Distance Scrambling, both present in Russian), motivate a particular articulated theory of movement that incorporates the spirit of Bošković's 2007 "goal-driven movement", within the framework of Rizzi's 1990/2014 Relativized Minimality.

The three initial points are these: (i) that A'-scrambling must be treated as feature-driven movement (as argued in Kawamura 2004), despite its apparent optionality, and not simply a discourse-driven process (Miyagawa 2006); (ii) that the Scrambling feature ($[\Sigma]$), must be integrated into the typology of A'-features in Rizzi 2004, in order to account for a range of blocking effects in Russian extraction; and (iii) that A'-features must be seen *as a hierarchically organized bundle*, whereby some A'-features, such as $[\Sigma]$, "subsume" others, such as [+Q] on quantifier QPs.

We begin from the well-known observation that Russian long distance dislocation (scrambling) is A'-movement (Bailyn 2001, a.o.), sensitive to standard movement constraints such as the Constraint on Extraction Domains (CED), as shown in (1a), or the Complex NP Constraint (Subjacency) as shown in (1b). Wh-mvt is similarly constrained as shown in (2):

(Subjacency) as shown in (1b). Wh-mvt is similarly constrained as shown in (2):	
(1) a. *Borisa ja ušel domoj, [potomu čto Maša ljubit] Boris _{ACC} I left to.home [because Masha loves] *"Boris I went home because Masha loves?"	(*Scr)
b.*Ty doktor znaeš' [ljudej [kotoryx volnuet]]? you doctor _{NOM} know [people [who _{ACC} worries]] *"The doctor do you know people who worries?"	(*Scr)
(2) *Kogo ty ušel domoj, [potomu čto Maša ljubit] ? who _{ACC} you left to.home [because Masha loves] *"Who did you go home because Masha loves?"	(*wh)
However, as noted in Müller & Sternefeld (1993), scrambling is not sensitive to which otherwise constrain wh-mvt (3b):	wh-islands (3a)
(3) a. Ty musor slyšala, [kogda uvozili]? You trash _{ACC} heard [when took away] "Did you hear them taking the trash away?" (Zemskaya 1973: 399)	(√Scr)
b. *Ty čto slyšala, [kogda uvozili]? You what _{ACC} heard [when took away] *"What did you hear them taking away?"	(*wh)
Similarly, relativization is also not sensitive to wh-islands, as shown in detail in Lyu	tikova 2009:
(4) tut pojavljaetsja novyj mir, v kotorom ja ne znaju [kak žit' here appears new world in which I neg know [how to.liv "And there appears a new world here in which I don't know how to live" (Lyuti	/e]
Finally, a survey of blocking effects with scrambling based partly on Shields 200 base-generated adverb is a more powerful blocker than a scrambled element:	05, reveals that a
(5) a. ??Ja $\textbf{bystro}_{[+\Sigma]}$ xoču, [čtoby ona $\textbf{často}_{[+Mod]}$ exala]. (*Scrov I quickly want [that she often went] "I want it to often go quickly." (ex from Shields 2005, my diacritics)	ver [mod])
b. $\mathbf{Ivanu}_{[+\Sigma]}$ ja $\mathbf{srazu}_{[+\Sigma]}$ xoču,[čtoby ona pozvonila Ivan_DAT I right away want [that she call "Ivan I want her to call right away." (LD Dat arg scrambling over scrambled ten	

The typology of various kinds of blockers is given in (6): I adopt a version of Rizzi's 2004 feature class analysis of A'-dependencies, whereby a superset distinction is made between [+Q] (WH, Neg, Foc, Quant) features and [-Q] features, such as [+Top] and [+Mod].

(6) Relativized Minimality blockers in Russian

	[+Q] blockers				[-Q] blockers	
	[+WH]	[+Foc]	[+Quant]	[+Neg]	[+Mod]	$[+\Sigma]$
kind of mvt						
WH-movement	*	*	*	*	$\sqrt{}$	$\sqrt{}$
Focus movement	*	*	*	*	$\sqrt{}$	\checkmark
Scrambling	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	*	\checkmark

Given (6), one would predict scrambling of [+Q] quantificational elements across wh-islands, also a [+Q] element, to induce degradation. However, such extractions are fully grammatical (7):

(7) Ty
$$\mathbf{vsex}_{+Q], [+\Sigma]}$$
 slyšala, $[\mathbf{kogda}_{[+wh]}]$ uvozili ____]? ($\sqrt{[+Q]}$ Scr over $[+WH]$) You everyone_{ACC} heard [when took away ____] "Did you hear them taking everyone away?"

We have reached an apparent paradox: [+Q] elements block Agree relations between other [+Q] elements, and yet they themselves are not blocked by wh-islands. We argue that this is because the Scrambling feature $[+\Sigma]$, inherently [-Q], subsumes the [+Q] feature of the quantifier in the derivational formation of a Scrambling Phrase, whereby $[+\Sigma]$ marks DP for movement:

(8) Syntactic object after Marking for Scrambling:

i.
$$[+\Sigma]$$
 + ii. $DP/CP_{[Lexical\ Feature\ Bundle]}$ \rightarrow (iii) ΣP (a DP/QP marked for Scrambling The subsuming of the otherwise active $[+Q]$ feature in scrambling contexts parallels the lack of island $[+\Sigma]$ wh- $DP/QP_{[Lexical\ Feature\ Bundle]}$

in scrambling contexts parallels the lack of island sensitivity in relativization shown in (4) above,

which falls out under the feature class system, if we introduce hierarchical relations among features,

(9) Feature relations: a. QuestionP: [+Q], [+wh] b. Relative pronoun: [-Q], [+wh] c. Quantifier OP [+O] d. Scrambled OP: $[+\Sigma]$ (no longer [+O]) e. base-gen adverb: [+Mod] f. Scrambled Adv: $[+\Sigma]$ (no longer [+Mod])

True wh question phrases are both [+Q] and [+wh], whereas relatives are also [+wh] but not [+Q]. [+Q] Quantifiers phrases block wh-mvt, but become $[+\Sigma]$, and hence [-Q], when scrambled, and as such can escape wh-islands, as we have seen. Similarly, base-generated adverbials block scrambling, but previously scrambled modifiers do not, having had their [+Mod] feature subsumed by [+ Σ]. If feature bundles are organized hierarchically, with syntactic additions subsuming lexical features, we have an account for how A'-blocking works. In conclusion we discuss how the theory proposed comprises an argument against extreme syntactic cartography in the sense of Rizzi 2004.

References: Abels, K. 2012. The Italian Left Periphery: A View from Locality. LI 43; Bailyn, John F. 2001. On Scrambling: A Reply to Bošković & Takahashi. LI 32. Bailyn, John. F. 2018. Zemskaya's Paradox and the Typology of Feature Classes (ms.) Bošković, Z. 2007 On the Locality and Motivation of Move and Agree: An Even More Minimal Theory, LI 36, Kawamura, T. 2004. A feature-checking analysis of Japanese Scrambling. Journal of Linguistics 40; Lyutikova 2009 Otnositel'nye predlozhenija s sojuznym slovom kotoryj: ("Relative clauses with kotoryj"). In: Korpusnyje issledovanija po russkoj grammatike (Corpus studies in Russian Grammar); Miyagawa, S. 2006. On the Undoing Property of Scrambling: A response to Bošković. LI 37(4); Müller, G. & W. Sternefeld 1993. Improper Movement and Unambiguous Binding. LI 24; Rizzi, L. 1990. Relativized Minimality. MIT Press; Rizzi, L. 2004. Locality and Left Periphery in The Cartography of Syntactic Structures vol. 3; Shields, R. 2005. Russian Adverbs and Relativized Minimality. Proceedings of WIGL; Zemskaja, E. 1973 Russkaja Razgovornaja Reč', Nauka, Moscow.