

Phonological evidence for a distinction between Russian prepositions and prefixes

Vera Griбанова

University of California Santa Cruz

gribanov@ucsc.edu

In large part due to the work of Zubritskaya (1995) and Matushansky (2002), it has been frequently asserted that prefixes (1) and prepositions (2) instantiate a synchronically unified and unique class (henceforth P) in Russian phonology.

- | | | | |
|-----|---|-----|--|
| (1) | PFX + -ložitʲ (verbal stem)
ot ložitʲ (to put aside)
pod ložitʲ (to put)
v ložitʲ (to invest, insert) | (2) | PREP + komnata (room)
ot komnati (from the room)
pod komnatoj (under the room)
v komnate (in the room) |
|-----|---|-----|--|

An existing account of the phonology of P (Rubach, 2000) addresses only the phonological facts, implicitly assuming that the two categories are identical morphosyntactically. However, Russian prefixes (henceforth PFX) and prepositions (henceforth PREP) *cannot* be unified on the basis of their morphosyntactic characteristics. Though this might indicate a contradiction between the phonological identity and the morphosyntactic nonidentity of PFX and PREP, I argue that there is, in fact, no mismatch: PREP and PFX are both morphosyntactically and phonologically distinct, as can be deduced from the pattern of jer (vowels that alternate with zero) vocalization PFX-finally as opposed to PREP-finally (following similar claims by Steriopolo 2006). This evidence is analyzed in a three-tiered Stratal OT system (Kiparsky, 2000) in which PFX and PREP are processed at distinct strata (word and postlexical, respectively).

The characteristics that are known to distinguish clitics from affixes (Zwicky and Pullum, 1983) indicate that PREP behaves like a clitic while PFX behaves like an affix. PREP leans on any category of host (3), while PFX attaches only to verb stems.

- (3) k (etomu)/(krasivomu) domu
 to this.PREP/beautiful.PREP house.PREP
 'to (this)/(beautiful) house'

PREP can combine with any semantically feasible noun phrase; there are no lexical gaps. PFX, however, is significantly limited in the verb stems it can attach to (4).

- | | | |
|-----|---|---|
| (4) | a. nanesti 'bring over (some amount of)'
b. nabratʲ 'to collect (some amount of)'
c. najti 'find' | d. *na-iskatʲ 'na-search'
e. *na-ljubitʲ 'na-love'
f. *na-imetʲ 'na-have' |
|-----|---|---|

Moreover, it can be demonstrated that PREP and PFX are also *phonologically* distinct. While PFX jers do not display any variation in their realization, jers in monoconsonantal PREP are not as consistent, as evidenced by Google searches (5).

	PREPOSITIONS	VARIATION	PREFIXES	VARIATION
(5)	s vzrosłim (with grown-up)	17%	sobratʲ (to collect)	99.98%
	so vzrosłim	83%	sbtratʲ	0.02%
	s mnogimi (with many)	16%	sožgla (burned.3.F.PF)	99.99%
	so mnogimi	84%	sžgla	0.01%

I claim that this is due to inter-speaker variability in conditions on the sonority of the word-edge, rather than being a property of the PREP-final jer. Predictably, PREP containing more segmental material, such as *pod* and *ot*, are not subject to the same variability (6), because they do not form a complex cluster when combined with the beginning of the word in the absence of jer realization.

	PODO	VARIATION	OTO	VARIATION
(6)	pod vzroslim (<i>under</i>)	99.55%	ot vzroslogo (<i>from</i>)	100%
	podo vzroslim (<i>grown-up</i>)	0.45%	oto vzroslogo (<i>grown-up</i>)	0%
	pod mnogimi (<i>under many</i>)	99.75%	ot mnogix (<i>from many</i>)	99.96%
	podo mnogimi	0.25%	oto mnogix	0.04%

I claim further that, unlike with PREP, PFX jer realization is not motivated exclusively by sonority constraints on the word-initial consonant cluster. As early as Pesetsky 1979, it has been asserted that PFX jers vocalize when the verbal stem contains a jer; this is independent of sonority, and it is this fact that differentiates PFX from PREP phonologically. This claim is supported by the fact that PFX jers are often realized in cases where nothing about the phonotactics of the word-initial cluster is objectionable for Russian. For example, consider the near-minimal pair [podprignutʲ] ‘jump up.INF’, and [podopru] ‘support.1S.FUT’: the left edge cluster (before the addition of the PFX) is almost identical (-pri/-pru) in both cases. It is not the phonotactics of the word-initial cluster that trigger jer realization, since in that case, both words would vocalize a PFX jer. The jer in [podopru] is realized for a different reason: the verb stem contains an unrealized jer (c.f. *pEreʲ* ‘trudge.INF’). By contrast, there is no jer in the verb *prignutʲ* ‘jump.INF’.

This evidence distinguishes PFX from PREP phonologically, and provides an argument for analyzing PREP and PFX at distinct levels. On a Stratal OT account, both the stem-internal jer and the PFX jer are evaluated at the word level (assuming that the constraints affecting jer vocalization are not relevant at the stem level). At the postlexical level, all jers that were once present in the word have either been deleted or have become real vowels; the only trigger for jer realization in PREP is an unparsable consonant cluster at the word-edge. Constraints at the postlexical level — *CA (no complex appendices), SSC (sonority sequencing), and *CC (no complex codas) — are ranked so as to militate against particular types of clusters at the word-edge, allowing for jer realization (which violates DEP- μ , following Yearley 1995) as a repair for such violations (7).

	podO Pdom	‘under ice.PREP’	SSC	*CC	*CA	DEP- μ	Parse-seg- σ	MAX-V
(7)	a.	po.doʲl.dom				*		
	b.	pod.Pdom	*					*
	c.	podʲ.Pdom		*				*

References

- Blumenfeld, Lev. 2003. Russian palatalization in Stratal OT: morphology and [back]. In W. Browne, J.-Y. Kim, B. H. Partee, and R. Rothstein (Eds.), *Proceedings of the Annual Workshop on Formal Approaches to Slavic Linguistics 11*, 141–158, University of Massachusetts, Amherst. Michigan Slavic Publications.
- Kiparsky, Paul. 2000. Opacity and cyclicity. *The Linguistic Review* 17:1–15.
- Matushansky, Ora. 2002. On formal identity of Russian prefixes and prepositions. *MIT Working Papers in Linguistics* 42:217–253.
- Pesetsky, David. 1979. Russian morphology and Lexical Phonology. Unpublished ms., MIT.
- Rubach, Jerzy. 2000. Backness switch in Russian. *Phonology* 17(1):39–64.
- Steriopolo, Olga. 2006. Yer vowels in Russian prepositions. *Slavic Linguistics Society*.
- Švedova, Natalia Ju. (Ed.). 1982. *Russkaja Grammatika*. Moscow: Akademija Nauk.
- Yearley, Jennifer. 1995. Jer vowels in Russian. In J. N. Beckman, L. W. Dickey, and S. Urbanczyk (Eds.), *Papers in Optimality Theory*, 533–571. University of Massachusetts, Amherst: GLSA.
- Zubritskaya, Ekaterina. 1995. *The Categorical and Variable Phonology of Russian*. PhD thesis, University of Pennsylvania.
- Zwicky, Arnold, and Geoffrey K. Pullum. 1983. Cliticization vs. inflection: English *n't*. *Language* 59:502–513.