

Russian prefixes, prepositions, and palatalization in Stratal OT

Since the work of Zubritskaya (1995) and Matushansky (2002), it has been known that prefixes (1) and prepositions (2) instantiate a synchronically unified and unique class (henceforth P) in Russian phonology. A less discussed point is that Russian prefixes (henceforth PFX) and prepositions (henceforth PREP) *cannot* be unified on the basis of their morphosyntactic characteristics. An existing analysis of P (Rubach, 2000) addresses only the phonological facts, implicitly assuming that the two categories are identical morphosyntactically. To resolve the apparent contradiction between the phonological identity and the morphosyntactic nonidentity of PFX and PREP, I propose a Stratal OT approach (Kiparsky, 2000) of the palatalization pattern across the boundary between P and the immediately following prosodic host (henceforth, P-complex) in which PFX and PREP are processed at distinct strata (word and postlexical, respectively). The account takes as its foundation the work of Blumenfeld (2003), and aims to treat the relevant phonological evidence as well as the morphosyntactic mismatch.

Word-internally and across certain stem-suffix boundaries in Russian, consonants palatalize to conform in backness to following high front vowels (3a). Across word boundaries, the backness of the vowel is altered (retraction), resulting in a velarized consonant followed by a [+back] vowel (3b). This pattern is found across the P-complex boundary (3c). The two-tiered derivational OT approach to this pattern proposed in Rubach 2000 relies on the interaction between jer vocalization and palatalization to explain why retraction, not palatalization, occurs at the P-complex boundary. Crucially, P contains a final jer, a vowel which is not always realized (as in the input of (6)). At the first level (for words), palatalization is highly ranked, but the underlying P-final jer renders this constraint irrelevant. At the second level (for phrases), the jers have already been processed, and those that do not vocalize are deleted. Rubach re-ranks faithfulness constraints to yield retraction, rather than palatalization, at level 2. The analysis implicitly and necessarily assumes that both PFX and PREP are put through both levels of derivation. Using the available tests that distinguish clitics from affixes (Zwicky and Pullum, 1983), it can be demonstrated that PREP is a clitic, while PFX is lexically composed. PREP leans on any category of host (4), while PFX attaches only to verb stems. Likewise, PREP does not form idiomatic chunks with its hosts, while combining PFX with a verbal stem can yield an idiomatic meaning (5). Given this evidence, an analysis that claims identical modes of composition for PREP and PFX appears insufficient.

The analysis I propose extends the work of Blumenfeld 2003, in which disparate palatalization patterns at the stem-suffix boundary in Russian are analyzed within a three-tiered Stratal OT (stem, word, and postlexical strata). I analyze PFX as processed at the word level, where the ranking is $\text{MAX}[\text{BK}]\text{C} \gg \text{IDENT}[\text{BK}]\text{V} \gg \text{DEP}[-\text{BK}]\text{C}, \text{DEP}[\text{+BK}]\text{C}$ (6). PREP and combinations of lexical words are processed at the postlexical level, where the ranking is $\text{MAX}[\text{BK}]\text{C} \gg \text{DEP}[-\text{BK}]\text{C} \gg \text{IDENT}[\text{BK}]\text{V}, \text{DEP}[\text{+BK}]\text{C}$ (7). The rankings differ between levels to permit retraction across word boundaries at the postlexical level, without having to specify every word-final consonant as [+back] in the input. The fact that P is a closed class allows us to specify the underlying [+back] feature of the consonant; such a move would not be favored for the open class of lexical words.

The proposal reconciles two sets of facts about prepositions and prefixes: first, that they are identical phonologically, and second, that they differ morphosyntactically. Using Stratal OT allows for the modelling of the (non)identity of P via composition at different strata: prefixes at the word level, and prepositions at the postlexical level. This claim, in combination with Stratal OT's ability to re-rank constraints at each stratum, straightforwardly accounts for the palatalization facts.

- (1) PFX + -ložitʲ (verbal stem) (2) PREP + komnata (room)
otložitʲ (to put aside) **ot** komnati (from the room)
podložitʲ (to put) **pod** komnatoj (under the room)
vložitʲ (to invest, insert) **v** komnate (in the room)
- (3) a. /obide/ → [obʲidʲe] (offense.DAT)
/ablʲt + ist/ → [ablʲtʲist] (viola player)
- b. /ugol Ivana/ → [ugolʲivana] (*ugolʲivana) ‘Ivan’s corner’
- c. /pod + igratʲ/ → [podʲigratʲ] (*podʲigratʲ) ‘accompany.INF’
/ob + Ide/ → [obʲide] (*obʲide) ‘about Ida’
- (4) k (etomu)/(krasivomu) domu (5) na-jti
to this.PREP/beautiful.PREP house.PREP CUMULATIVE.go
‘to (this)/(beautiful) house’ ‘find.INF’

/podʲOigratʲ/ ‘to accompany’		MX[BK]C	ID[BK]V	DP[-BK]C	DP[+BK]C
(6) a. ➡	podʲigratʲ		*		
b.	podʲigratʲ	*		*	

/sad ivana/ ‘Ivan’s garden’		MX[BK]C	DP[-BK]C	ID[BK]V	DP[+BK]C
(7) a. ➡	sadʲ ivana			*	*
b.	sadʲ ivana		*!		
/otʲO ivana/ ‘from Ivan’		MX[BK]C	DP[-BK]C	ID[BK]V	DP[+BK]C
a. ➡	otʲ ivana			*	
b.	otʲ ivana	*	*		

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