

Russian Stress in Compound Nouns: Head Dominance or Anti-Faithfulness?

It is a common assumption that in Russian both roots and affixes may have underlying (i.e., lexical) accent, which can surface as stress. Therefore there are four possible combinations when two roots combine to form a compound noun:

Combinations			
i.	/root/ + /root/	iii.	/roót/ + /root/
ii.	/root/ + /roót/	iv.	/roót/ + /roót/

In stark contrast to non-compounds, Russian compound nouns have very regular stress: all four types have stress on either the second root or the inflectional ending of the word as determined by the second element when not in a compound (e.g., *betonomešálka*, *kinozvezdá*). Any account of the resolution of competition for stress that applies within non-compound words (say, when a root and an affix that both have a lexical accent) should also be compatible with compounds. Two recent theories have been proposed within the framework of Optimality Theory to provide an account of how intra-word accent conflicts are resolved: Transderivational Anti-Faithfulness as presented by Alderete 2001, and Head Dominance as presented by Revithiadou 1999. However, neither author addressed the case of compounds. This presentation extends these analyses by outlining the predictions that each theory makes about stress as applied to Russian noun+noun compound nouns. It discusses the problems of both and highlights a positive insight of a particular aspect of Revithiadou's theory.

Alderete posits that for every faithfulness constraint there is an "anti-faithfulness" constraint that requires some sort of change from input, e.g., the faithfulness constraint MAX (*do not delete anything from the input*) has a corresponding anti-faithfulness constraint \neg MAX (*delete something from the input*). In the case of Russian stress, he posits dominant and recessive accents in Russian, and an anti-faithfulness constraint (\neg OO_{Dom}MAX-PROM) indexed for this dominance/recessive feature, which states if the output contains a dominant affix, delete an accent (prominence) in the output that exists in a base comparison output form.

Revithiadou holds that morphology and phonology are parallel processes and therefore phonology has access to morphological structure. She posits two sets of faithfulness constraints pertaining to stress and accent: general constraints and those that enforce faithfulness to morphological heads, e.g., HEADFAITH(accent)>>FAITH(accent). She holds that Russian is head-dominant language. According to this theory, if a derivational affix is the head (not all are) and it has lexical accent, it will bear stress even if the root is also accented. Inflectional affixes can have accents, but never win against any other accents.

The table below shows that neither theory makes accurate predictions about stress assignment in noun+noun compounds.

	Transderivational Anti-Faithfulness	Head Dominance
i. /root/ + /root/	☛ First syllable after 2 nd root, or as close as possible	☛ Leftmost stress
ii. /root/ + /roót/	√ On lexical accent of second root	√ On lexical accent of second root
iii. /roót/ + /root/	☛ On lexical accent of first root	☛ On lexical accent of first root
iv. /roót/ + /roót/	√ On lexical accent of second root	√ On lexical accent of second root

In addition to head-dominant languages, Revithiadou also holds that there are head-stressed languages, where stress must be on the morphological head, even in the case where the head element has no lexical accent and the non-head element does. These languages have an undominated constraint HEADSTRESS

(*stress must fall on the morphological head of a word irrespective of lexical accent*). She posits that Russian is tending toward becoming head-stressed. According to Molinsky 1973, the formation of Russian compounds always results in the head element being the second (right) element. Therefore, a sub-grammar (per Inkelas and Orgun 1995) for the compounds examined here with an undominated HEADSTRESS does provide an accurate account of the observed stress patterns, while no obvious extension of Transderivational Anti-Faithfulness can.

Selected References

- Alderete, John (2001). *Morphologically Governed Accent in Optimality Theory*. Routledge: New York & London.
- Inkelas, Sharon and C. Orhan Orgun (1995). Level ordering and economy in the lexical phonology of Turkish. *Language* **71**. 763-93
- Molinsky, Steven (1973). *Patterns of ellipsis in Russian Compound Noun Formation*. Mouton: The Hague.
- Revithiadou, Anthi (1999). *Headmost Accent Wins: Head Dominance and Ideal Prosodic Form in Lexical Accent Systems*. Holland Academic Graphics: The Hague.
- Townsend, Charles (1975). *Russian Word-Formation: Corrected Reprint 1975*. Slavica Publishers: Columbus, Ohio.