Prosodically-conditioned syllable structure

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We reexamine the role of the metrical structure in relation to phonotactic complexity in Russian. Traditionally, the syllable weight has been associated with the rhyme (Hyman 1985). However, recent research has revealed that onset quality or the presence of onset may also determine the position of stress in languages such as Karo, Pirahã, Aranda, Banawã and Dutch (Topintzi 2010). Although Russian is mentioned among languages which do not exhibit any interaction of stress with either the onset quality or the presence of an onset, the present study reveals that the distribution of onsetless syllables is correlated with the position of stress. Our data shows a tendency for onsetful syllables to attract stress, and for onsetless syllables to repel it. This is a static distribution, nevertheless, the pattern is similar to the one attested in Aranda, in which a syllable with an onset is more likely to carry stress than an onsetless one (Topintzi 2010). Furthermore, Ryan (2014) demonstrates that onset length is a significant attractor of stress in Russian trisyllabics. We focus on onset clusters found in both accented and unaccented syllables in words composed of 2, 3, and 4 syllables. The novelty of this contribution consists in analyzing the complexity of onsets in relation to their distance to the stressed syllable. Since syllabification is often ambiguous in Russian (Knjazev 2006), we focus on the word-initial syllables.

The data was extracted from the *Wielki Słownik rosyjsko-polski* (Wawrzyńczyk et al. 2007). The list included 37 388 words (2 to 4 syllables), starting with vowels and simple/complex onsets. Our data shows two tendencies. First, there is a larger number of word-initial onsetless syllables in prosodically recessive positions. For bisyllabics (8 313 items), initial unstressed syllables are twice as likely to begin with a vowel (11,04%) compared to stressed syllables (5,91%). Second, the analysis demonstrates an asymmetrical distribution of clusters, with more complex onsets in stressed than in unstressed syllables. Also, an inspection of the distribution of clusters in unstressed syllables reveals that pretonic syllables display more varied clusters than atonic syllables. For trisyllabics, 30,05% of initial syllables contain CC/CCC/CCCC, compared to 21,07% in the immediately pretonic positions and 16,64% in positions removed from main stress by two syllables. Quadrisyllabics display the same pattern: stressed syllables contain 26,08% of complex clusters, while pretonic syllables have 17,92% of complex clusters. Syllables in positions not immediately preceding stressed syllables do not differ significantly: 13,81% of clusters are found in positions removed from main stress by two syllables and 14,21% of clusters occur in positions removed from main stress by three syllables. Interestingly, this distribution parallels the two-degree vowel reduction in Russian, where atonic positions support fewer vocalic contrasts than pretonic positions.

References

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