Fall of the jers: A multi-factorial analysis of the sound change progression in the Old Novgorodian birchbark texts

The graphics of the birch bark texts produced in Novgorod from the 11th to the 13th centuries show effects of the fall of the jers in the weak position in that the jers in word-initial and word-medial syllables of word forms are rendered inconsistently, or not at all (Janin / Zaliznjak 1993; Zaliznjak 2004). According to Eom et al. (2004), the progression of the underlying sound change process, as reflected in these texts, is associated with the process of optimization of word structure. However, it is still an open question whether and how the position of weak jers in the phonological word influenced the progression of their fall (Zaliznjak 2004: 63). This paper investigates the progression of this process in birch bark texts as a function of structural and usage-based factors.

The data were coded and analyzed with respect to the following variables: (estimated) time of text creation; jer position in the phonological and morphological word; length of the phonological and morphological word (in syllables); status of the morpheme containing the weak jer; alternation of the target form with inflectional forms having strong jers in the word paradigm; nature and frequency of the resulting consonant clusters (if present in the lexicon). A multifactorial analysis of the data was performed using logistic regression with the random variables "text or author" and "time" (cf., Baayen, 2008; Szmrecsanyi, 2013).

The analysis demonstrates that the fall first affects the jers in the initial syllables of morphological words, then the jers in the word-medial syllables of morphological words, and finally the jers in the proclitics. In addition to the random variable "time", the writing or non-writing of the weak jers in the word-initial and the word-medial syllables is determined by (a) the status of the morpheme containing the jer (suffixes are affected earlier than prefixes and prepositions), (b) the resulting consonant cluster's frequency and (c) the cluster's phonological makeup. The progression of the fall of jers can thus be explained by an interaction of structural – both morphological and phonological – and usage-based factors.

References

Baayen, Harald R. 2008. *Analyzing linguistic data*. Cambridge: Cambridge University Press.

Eom, Jeehyeon / Werner Lehfeldt / Peter Meyer. 2004. Der Jerausfall und seine Folgen für die Wortstruktur der slavischen Sprachen. *Zeitschrift für Slavische Philologie* 63, 249-309.

Janin, Valentin L. / Zaliznjak, Andrej A. 1993. *Novgorodskie gramoty na bereste (iz raskopok 1984-1989 gg.)*. Moskva.

Szmrecsanyi, Benedikt. 2013. The great regression: Genitive variability in Late Modern English news texts. In: Borjars, Kersti, David Denison, and Alan Scott (eds.) *Morphosyntactic categories and the expression of possession*, 59–88. Amsterdam: Benjamins.

Zaliznjak, Andrej A. 2004. *Drevnenovgorodskij dialekt*. Moskva: Jazyki slavjanskoj kultury.