A rare contrast in Slavic: the palatalization of rhotics

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While phonetic palatalization of consonants is widely attested, contrastive/phonological palatalization is typologically uncommon (Bhat 1978, Stadnik 2002, Bateman 2011, Krämer & Urek 2016). In a balanced 100 language sample, only 6 languages showed a secondary palatalization contrast (Easterday 2019). Among secondary palatalization contrasts, the contrastive palatalization of rhotics is even more rare (Żygis 2005). It has been claimed that its rarity is due to the articulatory incompatibility of palatalization, which involves tongue dorsum raising, with rhotics in general, which require tongue root backing, and to the conflicting articulatory demands on palatalization and trilled rhotics in particular (Iskarous & Kavitskaya 2010, Jaworski 2018). This rare contrast is nonetheless attested in Slavic, where secondary palatalization of rhotics first arose through an early sound change of yod palatalization (jotation). While this change affected all dental consonants, we propose a specific reconstruction of palatal and palatalized oppositions in Common Slavic, showing that the /r/ : /r^{j}/ contrast is the only secondary palatalization contrast after the jotation sound change. The other contrasts that result from jotation involve a shift in the primary place of articulation, e.g., **nasjā* 'load, burden' > Ru *no*[ʂ]*a*, **swajtjā* 'candle' > Ru *sve*[tʃ]*á*, but **marjā* 'sea-gen.sg' > Ru *mo*[r^{j}]*a*.

However, the reconstructed /r/ : /r^{j}/ contrast is preserved only in a few contemporary Slavic languages, such as Russian, Ukrainian, Eastern Bulgarian, and Upper and Lower Sorbian, e.g., Ru /rat/ 'glad' : /r^{j}at/ 'row'. In other Slavic languages, it is either lost, e.g., Slovene, BCS, or preserved in a different manner, e.g., **marjā* 'sea-gen.sg' > Cz *mo*[r̝]*a*, Po *mo*[ʒ]*a*. Provided that the contrast is phonetically unstable and rare, we explore the phonetic and functional reasons for its preservation. It has been proposed that the palatalization contrast in Slavic is preserved due to various phonetic stabilization strategies found in Slavic languages (Iskarous & Kavitskaya 2018). Yet another potential explanation for the retention of the contrast in rhotics is the phonetic impossibility of the palatal rhotic (Hall 2000). However, we find that the /r/ : /r^{j}/ contrast in Slavic has been preserved only in languages that acquired additional palatalization contrasts in positions other than the jotation context. We argue that this correlation is not coincidental and that, in addition to the phonetic strategies, there are functional pressures that are crucial for the for the contrast preservation (Hockett 1967, Wedel et al. 2013).

Selected bibliography

Bateman, N. 2011. On the typology of palatalization. *Language and Linguistics Compass* 5/8, 588–602.

Bhat, D. N. S. 1978. A general study of palatalization. In: *Universals of human language. Volume 2. Phonology*, ed. by J. H. Greenberg, 47–92, Stanford.

Easterday, Sh. 2019. *Highly complex syllable structure. A typological and diachronic study*. Language Science Press.

Hall, T. A. 2000. Typological generalizations concerning secondary palatalization. *Lingua* 110.1–25.

Hockett, C. 1967. The quantification of functional load. *Word* 23: 320–339.
Iskarous, Kh. & D. Kavitskaya. 2010. The interaction between contrast, prosody, and coarticulation in structuring phonetic variability. *Journal of Phonetics* 38.625–639.
Iskarous, Kh. & D. Kavitskaya. 2018. Sound change and the structure of synchronic variability: Phonetic and phonological factors in Slavic palatalization. *Language* 94: 43–83.
Jaworski, Sylwester. 2018. *Rhotic Sounds in the Slavic Languages: An Acoustic Study*. Verlag Dr. Kovač, Hamburg.
Krämer, M. & O. Urek. 2016. Perspectives on palatalization. *Glossa* 1(1)–31: 1–17.
Stadnik, E. 2002. *Die Palatalisierung in den Sprachen Europas und Asiens. Eine areal-typologische Untersuchung*, Tübingen.
Wedel, A., S. Jackson & A. Kaplan. 2013. Functional load and the lexicon: Evidence that syntactic category and frequency relationships in minimal lemma pairs predicts the loss of phoneme contrasts. *Language and Speech* 56: 395–417.
Żygis, M. 2005. (Un)markedness of trills: the case of Slavic *r*-palatalisation. *Zeitschrift für Slawistik* 50: 383–407.