

## Stress patterns interaction in loanwords in Kamas

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We will examine word prosody patterns in Russian borrowed nouns in Kamas compared to native items and earlier Turkic loans, focussing on vowel duration and tonal movement locus.

Kamas is an extinct Samoyedic (< Uralic) language. It used to be spoken in Southern Siberia; the last speaker, Klavdiya Plotnikova, died in 1989. This study is based on the INEL Kamas Corpus [1] which contains transcripts of all known recordings of Plotnikova (ca. 14 hours total; see [2] for details). Kamas had extensive contacts with Siberian Turkic languages, which probably lasted for a few centuries [3]. The next major contact language was Russian; in the 20<sup>th</sup> century, the remnants of the Kamas community shifted to Russian completely. Plotnikova's Kamas is affected by language erosion as well as Russian influence on all levels, however Kamas phonetics is relatively intact in her speech.

Kamas word prosody system before the language shift to Russian was described by Donner [4] as follows. The primary stress (expressed by an 'expiratory accent') would typically fall on the first syllable. The primary stress could shift to the second syllable if it was closed or had a long vowel. Under Turkic influence, the word-final syllable could acquire prominence, not only in Turkic loans but also in native lexemes. As Klumpp notes [3], "[t]he Turkic ultima accent, however, is a pitch accent, and we don't know how much it co-occurred with the previous patterns". Note that vowel length in Kamas is automatic in some contexts (e.g. before /r/: *par-* [pa:r-] 'return') and distinctive in others (e.g. when originating from vowel contraction, as in *kan-* 'go' vs. *ka:n* 'Khan' (< Turkic *qayan* 'Khan')).

In Plotnikova's recordings, we can observe the following patterns. First, there is no apparent first-syllable prominence tendency. In uninflected native Kamas words and older (Turkic) loans, it is the final syllable which typically shows greater vowel duration, unless a preceding syllable has a long vowel (e.g. *nüke* 'woman' vs. *bü:z'e* 'man'). If there is a (phrase-level) F0 movement, it is also usually anchored to the final syllable, whatever the vowel duration. Inflectional suffixes differ in their stress-related properties. The plural suffix *-ʔi*, for instance, acts as a stress attractor: it most often bears a very prominent tonal movement, and in many cases also shows vowel lengthening. (In what follows, we will mark this with acute, e.g. *ine-ʔi* 'horse-PL'). It can keep both properties when followed by a case marker, e.g. instrumental *-zi* or lative *-nə/-də*: *ine-ʔi-zi* 'horse-PL-INS'. This is not the case with the other, restricted plural suffix *-zaŋ*; when followed by a case suffix, it is the latter which bears the tonal movement, cf.: *tumo-ʔi-nə* '[mouse-PL-LAT] to the mice' vs. *mǎja-zaŋ-də* '[mountain-PL-LAT] to the mountains'. The root vowel length is generally unaffected by the inflectional suffixes.

Now consider Russian loanwords. In uninflected wordforms, the original Russian stress is typically manifested in vowel lengthening, without marked tonal changes: *kapu:sta* 'cabbage' (Rus. *kapústa*). (Note that while vowel duration in Russian is considered a major cue to stress, it is also the stressed syllable which serves as anchor to phrasal tonal movements.) When Kamas inflectional suffixes are added to a Russian noun, they show the same stress-related properties as in Kamas words, while the vowel lengthening representing the Russian stress is by default intact. E.g.: *al'e:n'ə-ʔi* 'reindeer-PL', *s'estra:-zaŋ-də* '[sister-PL-POSS] her sisters'.

However, there is evidence of interaction between the two systems. Apparently, the situation when the lengthening (marking the Russian stress) is adjacent to the Kamas stressed suffix is avoided. One option is to shift (Russian) stress to the left, as in *gro:za-ʔi* 'thunderstorm-PL' (cf. Rus. *grozá* [grɐ'za]), whereby the neutralized root vowel is restored. Another option is to omit lengthening altogether, as in *sasna-ʔi* 'pine-PL' (Rus. *sosná* [sɐs'na]). Another factor which comes into play is the avoidance of the unstressed high central [ɨ], atypical in Kamas.

- [1] Gusev, V., Klooster, T., & Wagner-Nagy, B. 2019. *INEL Kamas Corpus*. Version 1.0. Publication date 2019-12-15. <http://hdl.handle.net/11022/0000-0007-DA6E-9>. Archived in Hamburger Zentrum für Sprachkorpora. In: Wagner-Nagy, B., Arkhipov, A., Ferger, A., Jettka, D., & Lehmborg, T. (eds.). *The INEL corpora of indigenous Northern Eurasian languages*.
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- [4] Joki, Aulis J. *Kai Donners Kamassisches Wörterbuch nebst Sprachproben und Hauptzügen der Grammatik*. Lexica Societatis Fenno-Ugricae VIII. Helsinki: Suomalais-Ugrilainen Seura, 1944.

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