

Vowel harmony in Sakha: factors influencing the choice of suffix allomorph in loanwords

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Sakha (Yakut), a North Siberian Turkic language spoken by approximately 378,000 people (Eberhard et al., 2023), has a symmetrical 8-vowel system typical of Turkic languages, with the addition of contrastive long vowels and four diphthongs. It exhibits strict palatal and labial harmony, the latter being more robust than in most other Turkic languages though still exhibiting height-based asymmetry (sequences /o-u/ and /ø-y/ are permitted, but not the reverse; instead, /u-a/ and /y-ε/). Older Russian loanwords often have standard nativized forms, but for recent borrowings, speakers, almost all of whom are bilingual, may choose from variants ranging from fully adapted to fully Russian pronunciations, depending on sociolinguistic factors. Although speakers are generally able to adapt novel borrowed words (Vasilyeva, 2017), the Russian pronunciation is often the least marked option (Ferguson, 2016), resulting in harmony violations. It has been assumed that like in Turkish, the stem-final vowel of disharmonic loanwords determines the backness and roundness features of the following suffix vowel in Sakha (Comrie, 1981), but this has not been thoroughly studied.

This study investigates vowel harmony processes in contemporary Sakha speech, with a focus on suffixation patterns in borrowed words. The data was obtained from interviews with six adult native speakers of Sakha, who completed two tasks. The first was an elicitation task in which consultants were shown prompts consisting of a picture and English word and asked to produce the word they would normally use for that object in Sakha, along with the plural /-LAr/ and first-person possessive /-Im/ forms. The target words were a mixture of what were expected to be native Sakha nouns, established borrowings, and newer borrowed items. The interview session also included discussions that contributed qualitative data. The second component was a rating task in which participants were shown native and borrowed words in suffixed form, written in standard orthography. Each item was given with four variants in randomized order which included all possible vowel qualities for that suffix, and participants rated the acceptability of each variant on a five-point scale. For example, for the word *университет* [ʊnʲɪvʲɪrsʲɪ'tʲɛt] 'university', participants rated the possible plural forms /universitet:ɑr/, /universitet:or/, /universitet:er/ and /universitet:ør/.

Participants consistently produced (Task 1) and rated most highly (Task 2) the expected suffix variants for native and nativized words. The choice of suffixes for non-adapted words also showed clear patterns; however, the suffix vowel was not determined by the stem-final vowel, as seen in the preferred plural forms given in the following examples:

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| 1) a. магнит | [mɛ'gnʲɪt] | 'magnet'; | PL [mɛgnʲi't:ɑr], ?[mɛgnʲi't:er] |
| b. завод | [zɛ'vot] | 'factory'; | PL /zɛvo't:ɑr/, */zɛvo't:or/ |
| c. понедельник | [pɔnʲɪ'dʲɛlʲnʲɪk] | 'Monday'; | PL /pɔnʲɪdʲɛlʲnʲɪk'tɑr/, */pɔnʲɪdʲɛlʲnʲɪk'ter/, |
| but: d. бэнидэлник | [benidɛlnʲɪk] | 'Monday' (nativized); | PL [benidɛlnʲɪk'ter] |

The main factors influencing the choice of suffix form were whether the root was harmonic and the height of the suffix vowel; the presence of non-native segments also played a role. For non-native words, vowel harmony violations were more likely to involve front or round triggers, and the preferred targets were the back unrounded vowels /ɑ/ or /u/. In the rating task, the plural form /-Lɑr/ was given the highest rating in 75% of tokens involving a non-adapted word; of those only 25% would be expected to have this form based on the stem-final vowel. The back unrounded 1POSS variant /-um/ was chosen for over half of all non-adapted tokens requiring a high vowel but would have been the expected choice for about 20% of those forms. For non-adapted words with stem-final /o/, the low rounded form /-Lor/ was strongly dispreferred, but the rounded variant /-um/ was frequently chosen for the high-vowel suffix. These patterns could indicate the emergence of default suffixes for loanwords.

References

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