

When syllabic / meets Hungarian Vowel Harmony

In this paper, we examine a hitherto unexplored part of Hungarian loanword phonology, namely, the adaptation of words containing syllabic /, and the role that these words play in Hungarian vowel harmony (hereinafter: HVH).

HVH is root-controlled, its domain is the word. Labial harmony only occurs in pair with palatal harmony, thus, some suffixes show three-way alternation. In case of these suffixes, front stems (containing ø(:), y(:), back stems (containing u(:), o(:), ɒ, a(:) and neutral stems (containing i(:), ε, e(:) select the front, back and neutral alternant, respectively (Vago, 1980). In Hungarian, there are no syllabic consonants, and word-final consonant-/ clusters are almost completely absent (cf. sonority hierarchy, by Clements 1990). In a laboratory experiment, we studied how Hungarian speakers pronounce loanwords ending in a syllabic / and how they choose from suffix alternants.

Data was collected from 28 speakers (14 men, 14 women), whose age was between 19 and 57 years (mean: 29.1 years, SD: 13.2). They were asked to pronounce 6 target words in syntactic contexts that enforced the nominative, superessive (SUE; -on/-ən/-øn) and allative (ALL; -hoz/-hez/-höz) forms (thus, the one suffix being vowel-initial, while the other consonant-initial). The target words included two surnames of German origin ([ibʃ], [ʃtro:bl]) and four recent loans ([du:dl̩] <Doodle>, [gu:gʃ] <Google>, [lidl̩] <Lidl>, [pazl̩] <puzzle>).

Our hypotheses were the following. H1: Speakers pronounce the target words as disyllabic. H2: The nucleus of the second syllables varies: there is also a syllabic / and a reduced vowel inserted between the two final consonants ([gu:gʃl̩] ~ [gu:gʃl̩]). H3: In case of suffixes realising three-way alternation, usually the front alternant occurs, irrespective of the first vowel of the stem. The other possible alternant (neutral with neutral stems and back with back stems) occurs if there is no vowel epenthesis in the word. In turn, the front suffix alternants are selected if the stem contains a reduced vowel as the nucleus of its second syllable, which could then serve as the trigger for the front alternants.

After the experiment, the vowel quality of the suffixes attached to the target words and the number of realised syllables were examined. Thereafter, the formant structure and length of / and of the epenthetic vowels were analysed by means of Praat (Boersma–Weenink, 2021).

H1, i. e. speakers pronouncing the target words in two syllables, has been proven, aside from an insignificant amount of exceptions (a single word by two speakers). The number of syllables in target words was investigated on the evidence of the intonation peak in yes/no questions (Siptár–Törkenczy, 2000): ...ʃtrò:bl̩.hòz? / ...ʃtró:bl̩.hòz?).

Analysis verifies H2 as well. Namely, both forms with epenthetic vowel and syllabic / are present. Epenthesis is more frequent in yes/no questions than in declaratives, in SUE forms than in ALL forms (cf. their CV-structure), furthermore, in both suffixed forms than in the stem form. The latter fact reinforces Jurgec–Bjorkman (2018), who state that loanwords are less likely to be adapted in stems than in inflectional (and derivational) forms.

After the experiment, the following vowel harmony patterns emerged. A joint effect of loanword adaptation and HVH can be observed: Neither are epenthetic reduced vowels part of Hungarian phoneme inventory, nor can syllabic / be regarded as such. However, the forms examined harmonise mandatorily, thus, speakers have to apply harmony on novel cases. According to the analysis, neutral stems predominantly select front alternants ([ibʃ-hòz], [lidl̩-øn]), while in the case of back stems, both back and front suffixes occur ([pazl̩-øn], [ʃtro:bl̩-hòz]), even for a single speaker and the same target word ([ʃtro:bl̩-hòz], [ʃtro:bl̩-øn]). Therefore, syllabic / seems to be transparent to labial harmony occasionally, and to palatal harmony to a larger extent.

However, the harmonic behaviour of the target words cannot be explained by the insertion of a reduced vowel. In spite of the tendencies seen in connection with H2, only 60% of the forms with the front alternant contained a reduced vowel, and 78% of forms without a reduced vowel did select the front alternant, too. Thus, H3 being proven wrong, other factors may play a role, such as the acoustic similarity of [ø] and the alveolar consonants.

This would have major consequences to the description of HVH. Namely, a new harmonic class appears to emerge. In contrast to neutral stems, they can trigger front alternants while they can be transparent after back vowels, which is not the case for front stems (though triggering also front alternants). In conclusion, loanwords are not adapted into an existing paradigm, but create a new one.

References:

- Boersma, P. & Weenink, D. (2021). Praat: doing phonetics by computer [Computer program]. Version 6.1.56. Online: <http://www.praat.org>.
- Clements, G. N. (1990. 11). The role of the sonority cycle in core syllabification. In *Papers in laboratory phonology I: Between the grammar and physics of speech*, 283–333. Cambridge University Press. doi:10.1017/cbo9780511627736.017
- Jurjec, P. & Bjorkman, B. M. (2018). Indexation to stems and words. *Phonology*, 35, 577–615.
- Siptár, P. & Törkenczy, M. (2000). *The Phonology of Hungarian*. Oxford/New York: Oxford University Press.
- Vago, R. M. (1980). *The Sound Pattern of Hungarian*. Washington, D.C.: Georgetown University Press