

The paradigm in Hungarian Vowel Harmony

VH is by definition phonological (to some extent) since it is the agreement of vowels in some non-arbitrary phonological property. However, various properties can make VH more or less morphologically vs. phonologically determined. At the lowest end of morphological conditioning we find dominant-recessive systems where the triggers/targets of harmony are purely phonologically determined. Root control systems are clearly more morphological but may be predominantly phonological beyond the identification of the location of the trigger (and the circumscription of the harmonic domain). HVH is usually described as such a system. We argue that – contrary to what is usually assumed – HVH is highly morphologized.

HVH is phonologically underdetermined, there are several zones of variation. Stems with identical vocalism may be harmonically different (*int-ünk* ‘wave-1PL.NDF’, *irt-unk* ‘eradicate-1PL.NDF’) and the same stem may be indeterminate in its harmonic behaviour (*fotel-unk*/*fotel-ünk* ‘armchair-1PL.POSS’).

These indeterminacies are often analysed in phonological terms, making use of various arbitrary representational devices. However, these purely phonological “solutions” are problematic due to (i) the graduality of phonological behaviour (cf., e.g., the Height Effect: *papír-nak* ‘paper-DAT’ vs. *norvég-nak*/*nek* ‘Norwegian-DAT’ vs. *kódex-nak* ‘codex-DAT’), (ii) the mismatches between harmonic and other domains required by morphology and other phonological processes (vowel harmony vs. low vowel lengthening), (iii) the necessity of lexical information in determining both types of variation (roots belonging to different stylistic/pragmatic categories may harmonize differently: *haver-om* ‘pal-1SG.POSS’ vs. *sóder-om*/*em* ‘gravel-1SG.POSS’ vs. *kompjűter-em* ‘computer-1SG.POSS’), (iv) a strong morphological constraint overriding phonological harmony in suffixed stems (*martini-nak*/*nek* ‘martini-DAT’ vs. *madrid-i-nak*/**nek* ‘Madrid-ADJZ-DAT’). These properties codetermine harmonic behaviour to such an extent that it is not feasible to exclude non-phonological information even from a descriptively adequate analysis of HVH, let alone an explanatorily adequate one.

Because of these properties, the harmonic classes involved in HVH show a high degree of similarity to inflectional classes (Blevins 2016, Stump 2001). Therefore, the patterns of HVH are best captured with universal and language-specific constraints on paradigm structure, which typically also refer to a combination of phonological, semantic, and lexical properties.

This approach makes it possible to give a uniform account of the following, otherwise apparently independent phenomena that are associated with HVH but are unusual in harmony systems.

1. Paradigm uniformity effects: The harmonic class of a word is determined by its root, even against its phonological shape: *madrid-i* ‘Madrid-ADJZ’ only takes back suffixes because its root (*Madrid*) only takes back suffixes, despite the fact that its phonological shape is similar to that of *martini*, which vacillates in accordance with

the phonological Count Effect (Hayes & Cziráky Londe 2006). This also interacts with other paradigm uniformity effects independent of harmony that apply in paradigms (the systematically asymmetrical selection of *j*-initial and *j*-less allomorphs in 3SG/PL.POSS: e.g. *sóder-ja%je%e*, but **sóder-a* ‘gravel-3SG.POSS’).

2. Anti-syncretism: Homophony avoidance explains the suspension of HVH in some cells of the verbal paradigm, e.g. the COND.1SG.NDF form of back roots does not harmonize in order to contrast with the COND.3PL.DEF form (*tud-nék* ‘know-COND.1SG.NDF’ vs. *tud-nák* ‘know-COND.3PL.DEF’).
3. Lexical information: Usage-related lexical sets of roots can determine harmonic classes in phonologically underdetermined cases, e.g. “familiar” (*tányér-om* ‘plate-1SG.POSS’, *haver-om* ‘pal-1SG.POSS’), “plain” (*furnér-em%om* ‘veneer-1SG.POSS’, *sóder-em%om* ‘gravel-1SG.POSS’) and “cultural” (*koncert-em* ‘concert-1SG.POSS’) items of identical vocalic makeup harmonise differently. Furthermore, a number of unclassifiable items have morpheme-specific harmonic properties not fully determined by their vocalism.
4. Non-vocalic phonological information: the quantity and quality of consonants between stem and suffix influence the harmonic class membership of roots while otherwise consonants are invisible to HVH (Hayes et al. 2009, Patay 2020).
5. Paradigm gaps motivated by harmony: there are missing verbal frequentatives with invariant suffixes that do not tolerate disharmony: e.g. *tur-kál* ‘dig-FREQ’, **tűr-kál*, **tűr-kél* ‘bear-FREQ’.

That is, the great degree of phonological indeterminacy in HVH strongly supports the hypothesis that harmonic classes that individual roots belong to are organized as a paradigmatic system, very similar to inflectional classes. Such lexically determined declension classes are required independently of vowel harmony to explain numerous lexically conditioned cases of allomorphy, such as lowering, the appearance of linking vowels and *j* in 3rd person possessives.

References

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