

Vowel Harmony and Other Morphological Processes in Turkish

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Turkish figures prominently in discussions of morphologically conditioned phonology (MCP; e.g., Inkelas 2011). Unfortunately, these discussions rest on shaky descriptive and explanatory ground. On the one hand, the Turkish facts themselves are oversimplified almost to the point of caricature while on the other hand, confusion persists about whether phonology or morphology is responsible for MCP.

Turkologists tend to categorize MCP such as Vowel Harmony as strictly phonological (e.g., Göksel & Kerslake 2005). Phonologists, too, have long ascribed to the phonological component of grammar an ability to access morphological information (Chomsky & Halle 1968 et seq.). For instance, phonologists posit rules or constraints that are indexed to particular morphological domains (McCarthy & Prince 1993; Jurgec & Bjorkman 2018), classes (Itô & Mester 1995, 2001; Smith 2001), or morphemes (Pater 2000, 2007, 2009; Becker & Potts 2011; Gouskova 2012). The following presumption is apparent: “no other cognitive module ... is responsible for alternations—the [phonological component] bears all responsibility for generating them ... [T]he term ‘alternation’ here refers to any pair of morphologically related forms that give insight into the input, as determined by a particular theory (e.g. OT, SPE)” (de Lacy 2009:49).

Morphologists beg to differ, e.g.: “The morphology is the executive, phonology the executor” (Pounder 2000:36). Our paper/poster defends the latter view by examining diminutive formation in Turkish, a textbook case of MCP (Ketrez & Aksu-Koç 2007). Most productive is -CIK suffixation, so-written because it has “16 possible forms” (ib., p. 290), due to very general phonological processes in Turkish, listed in (1). Crucially, -CIK suffixation is accompanied by additional, less general phonological processes depending on the diminutivized base (ib.). For instance, -CIK is accompanied by the processes in (2) when the base is an adjective.

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| (1) a. <u>Vowel harmony (VH)</u> : <i>køpɾy-dʒyk</i>
‘bridge-DIM’; <i>kaz-dʒik</i> ‘goose-DIM’ | (2) a. <u>Initial stress</u> : <i>kisá</i> ‘short’ → <i>kísa-dʒik</i> ;
<i>indʒé</i> ‘thin’ → <i>índʒe-dʒik</i> |
| b. <u>Voicing assimilation</u> : <i>ip-fʃik</i> ‘string-DIM’;
<i>tabak-fʃik</i> ‘plate-DIM’; <i>inek-fʃik</i> ‘cow-DIM’ | b. <u>Stem-final k deletion</u> : <i>kyfʃyk</i> ‘small’
→ <i>kýfʃy-dʒyk</i> ; <i>ufák</i> ‘small’ → <i>úfa-dʒik</i> |
| c. <u>Prevocalic k lenition</u> : <i>kaz-dʒi:-ím</i> ‘goose-DIM-1S.POSS’; <i>inek-fʃi:-ím</i> ‘cow-DIM-1S.POSS’ | c. <u>Vowel insertion with (C)VC roots</u> : <i>az</i>
‘little’ → <i>ázidʒik</i> ; <i>dar</i> ‘narrow’ → <i>dáradʒik</i> |

Inkelas (2011:68) draws a distinction between regular phonological processes like VH (“a very general rule ... for the vowels of most suffixes”) and morphologically conditioned ones like stem-final *k* deletion in (2b); cf. (1b). This distinction matters little in practice, given the presumption that the phonology is fully responsible for both kinds of alternation. Moreover, this distinction is gradient at best. VH is a static fact of most polysyllabic roots and affixes, yet disharmonic morphemes abound, e.g., *anne ... kalkabil-di* ‘mother ... managed to stand up’ (Göksel & Kerslake 2005:24). Thus the only solid evidence that VH is an active process comes from vocalic alternations in suffixes and enclitics. But VH is not obligatory in concatenation either: at least a dozen suffixes and clitics never show VH (ib.). Similarly, our paper will show that the phonological processes in (1b, c) are widespread but not obligatory in Turkish suffixation, and conversely, that the restricted processes in (2a–c) accompany other word formation processes in the language. All represent morphologically conditioned phonology.

In conclusion, (1a–c) likely began as phonologically motivated processes (Dressler 1985:231), but eventually their phonological *raison d’être* became obsolete as their effects turned into static facts about Turkish words. In the meantime, their alternations became associated with concatenation, a mainstay in an agglutinative language. Morphology is unlike other modules of grammar in requiring access to all of

syntactic, semantic, and phonological properties to function, as (2) illustrates. One of the roles of morphology is to give commands to the phonology during word-formation, such as “Carry out VH!” The phonology need not account for why such a command does not accompany certain suffixes, why it does not apply to all roots, nor why other commands only accompany a few suffixes. More generally, there is no need for phonology to access morphological information in a modular model of grammar. We therefore propose an analysis in which morphology and lexicon control vowel harmony and the other processes illustrated in (1), which are thus claimed to be no longer part of the active phonology of Turkish.

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