

The Acquisition of Vowel Harmony in Turkish

Ash Altan
Hacettepe University

Vowel harmony is probably the most widely known phonological characteristic of Turkic languages. In general terms, vowel harmony can be described as a set of constraints on the co-occurrence of vowels that hold both within a morpheme and across morpheme boundaries. It is a process where vowels in a given word tend to be similar—that is, they share backness, height, ATR features or rounding.

Vowel harmony in Turkish works from left to right. In a harmonic root morpheme in Turkish, any one of the eight vowels may occur as the vowel of the initial syllable. However, it should be underlined that there are strong restrictions on what the vowel(s) in the subsequent syllable(s) may be. Turkish language seems to be quite lenient to disruptions of internal vowel harmony, in the sense that many commonly used root morphemes, majority being loanwords, that do not abide by vowel harmony rules are tolerated without any problems, such as [*pilot*], [*kitap*], [*bahçe*], [*memur*].

In this study, the acquisition of vowel harmony will be examined. It has been noted in previous literature that Turkish children acquire vowel harmony at an early age (Ekmekçi, 1979; Aksu-Koç, 1985). However, there has been no study on how Turkish children deal with words that constitute exceptions to vowel harmony. The purpose of this study is to highlight the age children acquire vowel harmony in Turkish and to indicate how they treat words that do not obey vowel harmony.

Both naturalistic data and experimental data will be analyzed in this study. The naturalistic data consist of cross-sectional acquisition data collected for the Berkeley Cross-Linguistic Acquisition Project by Slobin (1972) from 33 children between ages 2;0- 4;8. The experimental data come from three experiments conducted to four groups of children between ages 2;0 and 5;0. In each age group, there are 12 children.

The first experiment is a type of wug test (Berko-Gleason, 1958) where the children are asked to conjugate the forms with the plural suffix or the possessive suffix. The idea behind this is that, children will use vowel harmony rules to pick the vowel in the suffix. There are 10 words in this section, 5 of which are exception words as [*saat*], where the plural form is [*saat-ler*] contrary to the rules of vowel harmony.

The second experiment is a truth-value judgement task, where children are asked to tell whether the utterances they hear are correct or not. Grammaticality judgments are obtained from the children using a puppet game technique (Stromswold, 1990).

In the third experiment, following the procedures generally used for imitation experiments outlined by Lust, Flynn and Foley (1996), children are asked to repeat 10 sentences, 5 of which will have vowel harmony errors. The aim of this task is to observe whether children automatically correct the vowel harmony errors in their production.

These experiments and the analysis of naturalistic data will show at what age children learn the general rules of vowel harmony and when they learn to deal with exceptions to vowel harmony. The study will also demonstrate whether children generalize exception words to other non-words that sound similar or whether they prefer to use the general vowel harmony rule.

References:

- Aksu-Koç, A. & Slobin, D. I. (1985). The acquisition of Turkish. In D. I. Slobin (ed.), *Cross-linguistic Study of Language Acquisition*. Vol:1. New Jersey: Lawrence Earlbaum Associates.
- Ekmekçi, Ö. (1979). *Acquisition of Turkish: A longitudinal study on the early language development of a Turkish child*. Unpublished Doctoral Dissertation. The University of Texas at Austin.
- Hacıoğlu, M. 1994. Türkçe'de Ünlü Uyumu. *Dilbilim Araştırmaları*. Hitit Yayınevi: Ankara.
- Kaun, Abigail. 1995. The Typology of Rounding Harmony: An Optimality Theoretic Approach . PhD Dissertation, UCLA.
- Kaun, Abigail (2004) The Typology of Rounding Harmony. In B.Hayes, R. Kirchner & D. Steriade (eds.) *Phonetic Bases of Markedness*. Cambridge: Cambridge University Press.
- Küntay, A. & Slobin, D. (1996). Listening to a Turkish mother: Some puzzles for acquisition. In D. I. Slobin et al. (eds.), *Social Interaction, Social Context and Language: Essays in Honor of Susan Ervin-Tripp*, 265-286. NJ: Lawrence Earlbaum Associates.
- Ladefoged, P & Maddieson, I. 1996. *The Sounds of the World's Languages*. Chapter 9: Vowels. Blackwell: Oxford. 281-322
- Lust, Barbara , Flynn, Suzanne, & Foley, Claire (1995). What Children Know about What They Say: Elicited Imitation as a Research Method for Assessing Children's Syntax. In D. McDaniel, C. McKee & H. S. Cairson (eds.), *Methods for Assessing Children's Syntax* (pp. 55-76). Cambridge, MA: MIT Press.
- Slobin, D. I. (1982). Universal and particular in the acquisition of language in E. Wanner & L.R. Gletiman (eds.) *Language Acquisition: The state of the art*. Cambridge, England: Cambridge University Press.
- Stromswold, Karin (1990). *Learnability and the Acquisition of Auxiliaries*, Doctoral Dissertation, Massachusetts Institute of Technology.
- Suomi, K., McQueen, J.M., Cutler, A. 1997. Vowel Harmony and Speech Segmentation in Finnish. *Journal of Memory and Language*. Vol.36, 442-444
- Vroomen, Tuomainen & Gelder. 1998. The Roles of Word Stres and Vowel Harmony in Speech Segmentation. *Journal of Memory and Language*. Vol.38. 138-149.