A diachronic analysis of Persian vowels: From Early New Persian to the contemporary three national dialects

Iman Sheydaei Baghdadeh, University of Wisconsin-Madison
sheydaeibagh@wisc.edu

This study has taken a trans-national-dialect approach to provide a diachronic account of the vowel systems in the three national varieties of Persian. This account will explain the development of Early New Persian (ca. 10th – 13th century) vowels into the vowels of Dari, Iranian Persian, and Tajik. In doing so, Oxford’s (2015) model of contrast and sound change and Avery and Idsardi’s (2001) phonological representation model have been adopted and combined to provide feature hierarchies at the dimension level for the vowels in the three national dialects of Persian (Figures 1 to 3 below). The results show the hierarchy of the dimensions remain the same from ENP for all three national dialects and only the dimension Labial is added in the Dari and Tajik hierarchies. Thus, the different vowel systems of Dari, Iranian Persian, and Tajik can be explained through dialect-specific completions. This is specifically important for the description of Dari and Tajik vowels which have exactly the same dimension hierarchies but different completions (Figures 1 and 3). This study also provides a specific feature-based analysis of Iranian Persian vowels, which have been traditionally classified into two classes of long and short based on evidence from orthography, versification, and vowel harmony patterns (Windfuhr, 1997; Rahbar, 2012). Recently, Iranian Persian vowels have been described qualitatively based on the feature [tense] (Rahbar, 2012). However, the contrast between [tense] and [lax] – in terms of correlates of duration, degree of constriction, pharyngeal volume, or tongue height – is not specified in Rahbar’s analysis. The analysis of Iranian Persian vowels in this study shows that the feature [tense] could be specified using the dimension tongue root, which could in turn be completed by the feature [retracted tongue root] (Figure 2).
Tongue Root (TR) > Tongue Thrust (TT) > Tongue Height (TH) > Labial (LAB)
TR = [str]; TT = [front]; TH = [high]; LAB = [round]

**Figure 1.** Feature hierarchy of Dari's vowels at dimension level

Tongue Root (TR) > Tongue Thrust (TT) > Tongue Height (TH)
TR = [rrr]; TT = [back]; TH = [high]

**Figure 2.** Feature hierarchy of Iranian Persian's vowels at dimension level

Tongue Root (TR) > Tongue Thrust (TT) > Tongue Height (TH) > Labial (LAB)
TR = [str]; TT = [back]; TH = [high]; LAB = [round]

**Figure 3.** Feature hierarchy to Tajik's vowels at dimension level