Velarization

Velarization is a secondary articulation that refers to the raising of the tongue body toward the back of the soft palate. Classical Arabic has four velarized phonemes, /tˤ/, /dˤ/, /sˤ/, and /qˤ/, all of which are coronal consonants with a primary articulation in the dental-alveolar region of the vocal tract. Sibawayhi uses the term *mutḥaq ‘covered’ in his *Kitāb to describe the velarized consonants of Arabic (→ ‘ibāq). These consonants are often referred to as pharyngealized. In terms of articulation, a pharyngealized consonant is one made with the root of the tongue drawn toward the back wall of the pharynx. Ladefoged and Maddieson (1996:365) note that Arabic dialects vary as to whether they have velarization or pharyngealization. There is very little acoustic distinction between the two; both are characterized by the lowering of the second formant. The term ‘emphatic’ is also used to refer to the velarized consonants. This is a translation of the Arabic term *muflaxama, which is traditionally understood to include the uvular consonants as well. Both uvular and velarized consonants are made with the tongue body raised toward the back of the soft palate; with the uvular consonants, the tongue body raising is the primary articulation, whereas with the velarized consonants it is a secondary articulation that accompanies the primary contact in the dental-alveolar region. The English term ‘emphatic’ is typically used only for the velarized consonants.

A phonological analysis of velarization in an Arabic dialect must answer the following two questions: what are the velarized phonemes of the dialect, and to what extent does velarization affect neighboring sounds? With respect to the first question, while almost all modern dialects have maintained the velarized consonants, there are some differences from Classical Arabic. For example, colloquial Cairene Arabic has /tˤ/ rather than Classical Arabic /dˤ/, while the northern Palestinian dialect described in Herzallah (1990) lacks /dˤ/. Furthermore, most dialects are reported to have a variety of other velarized consonants that are sometimes referred to as ‘secondary emphatics’. These include the liquids [e] and [i] as well as the labials [b] and [m]. However, the phonemic status of the secondary emphatics is controversial in that they are often marginal, not occurring in many words or only occurring in the environment of a low vowel. As an example, although many dialects are reported to have a velarized [s], its phonological behavior is usually distinct from the ‘primary emphatics’ /tˤ/, /dˤ/, /sˤ/, and /qˤ/. This is because velarized [s] usually only occurs in the context of a low vowel and alternates with its nonvelarized counterpart when the low vowel is not present. An illustration of this comes from Cairene Arabic, where the /tˤ/ in the word /kubʕe/ ‘big [pl.]’ is pronounced as velarized when adjacent to a low vowel, but pronounced as nonvelarized in /kabʕe/ ‘big [sg.]’ when the low vowel is not adjacent. Primary emphatics do not alternate in such a manner; they are pronounced as velarized regardless of the vocalic context, as exemplified by the Cairene Arabic pair /naʃiːt/ ‘active’/[ʔanʃiːt] ‘more active’.

The second question that a phonological analysis of velarization in an Arabic dialect must address is the extension of velarization beyond the single phoneme. In most dialects, when there is a velarized phoneme in the word, neighboring sounds are also pronounced as velarized. In some dialects it is only the vowel immediately adjacent to the velarized consonant that is pronounced as velarized (e.g. certain dialects of Saudi Arabia), whereas in other dialects it may be the entire word that is velarized (e.g. Cairene Arabic). Thus, depending on the dialect, the common Arabic word /ṣaːbāh/ ‘morning’ will either be pronounced with just the first syllable velarized or with the entire word velarized. The effect of velarization is particularly strong with the low vowel, where it is generally identified as allophonic variation between a low back vowel (velarized) and a low front vowel (nonvelarized). Moreover, detailed investigations of velarization in specific dialects (e.g. Ghazeli 1977; Heath 1987; Herzallah 1990; Younes 1993; Davis 1995; Shahin 1997; Watson 1999; and Zawaydeh 1999) reveal that some dialects
display an asymmetry between velarization that is regressive and velarization that is progressive. For example, in the northern Palestinian dialect discussed in Herzallah (1990), velarization extends (or spreads) regressively to the beginning of the word, but the progressive spreading of velarization is limited. Thus, when a word has a velarized consonant at the end, the entire word is velarized, as exemplified by /sâyây/ ‘tailor’, which is pronounced entirely velarized. But when the velarized consonant is at the beginning, only part of the word would usually be velarized, as exemplified by /sâbâh/, in which only the first syllable is velarized. Another manifestation of the asymmetry between the regressive and progressive spreading of velarization is the observation that in some dialects certain sounds (typically those made with a high tongue position) block the progressive spread of velarization. In the rural Palestinian dialect discussed by Younes (1993), the consonants /š/, /l/, and /w/ block progressive spreading, as exemplified by the word /šiâyâl/ ‘fasting’, in which only the initial /š/ is pronounced velarized; these consonants do not prevent regressive spreading, as illustrated by the word /sâyây/ ‘tailor’, in which the entire word is pronounced as velarized. A third asymmetry between regressive and progressive spreading of velarization, documented by Zawaydeh (1999) for Ammani Jordanian Arabic, is that regressive spreading is categorical, whereas progressive spreading is gradient. For example, the word /tasallât/ ‘he overruled’ is pronounced with the first two syllables just as velarized as the third syllable, whereas in the word /adalâtâk/ ‘your muscles’, the third syllable shows less velarization than the second, and the fourth syllable shows even less velarization than the third. The asymmetries manifested between regressive and progressive assimilation reflect that regressive velarization is stronger than progressive velarization, and this may have a basis in articulation, as suggested by Watson (1999).

A largely unexplored topic with respect to velarization is its sociolinguistics, namely to what extent, if any, does velarization in a single dialect vary with respect to gender, style, social class, etc. An investigation undertaken by Royal (1985) documented acoustically stronger velarization patterns for males than for females.

BIBLIOGRAPHICAL REFERENCES

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