Phonetic Variability of Arabic /x/, /x/

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Abstract : In Jordanian Arabic, the phonetic realization of the Arabic voiceless velar fricative /x/ and the voiced velar fricative /y/ is highly context-sensitive and is largely influenced by the preceding or following consonants. In particular, the place of articulation, viz. velar or uvular, is determined by co-occurrence restrictions and mutual dependency between various 'emphatic'/non-emphatic' consonantal and vocalic articulations. Anticipation of an upcoming 'emphatic' consonant: a uvular plosive or a voiced alveolar trill alters the place of articulation of the fricative so that it becomes uvular. On the other hand, the anticipation of an upcoming 'non-emphatic' consonant entails constraints of a different order than those relevant to the 'emphatics.'

Keywords: Arabic velar/ uvular articulation dependency, emphatic/non-emphatic environment, lip protrusion and positioning of tongue, vowel formant frequencies values

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