

Moroccan Arabic Consonant Harmony

Moroccan Arabic displays an innovative long-distance consonant harmony process. The consonant harmony occurs regressively between coronal sibilants of a stem. The trigger causes the target to undergo [- dist] → [+ dist] feature assimilation. The alternations in (1a) co-occur synchronically; however, the innovative alternations, with the harmonized consonants, are preferred and occur more frequently than the conservative forms. The corresponding forms from Classical Arabic are shown in (3). These lack harmony. I propose that the innovative consonant harmony process in Moroccan Arabic is distinct from and must occur independently of Semitic root and template tier conflation, based on the nature of the assimilation.

There are various constraints on Moroccan Arabic consonant harmony. First, the consonant harmony is blocked when the trigger and target occur in the reverse order. As shown in (1b) this process follows strict regressive directionality; *ǰazira* (1b), which contains the post-alveolar fricative and an anterior alveolar, does not undergo harmony due to the ordering of trigger and target. Hansson (2001) typologizes consonant harmony in terms of directionality. Regressive assimilation of the type found in Moroccan Arabic is classified by him as “anticipatory” harmony. He gives an explanation of consonant harmony as in the domain of speech planning with support from research on speech errors and child language acquisition. Hansson further concludes that anticipatory harmony of sibilant coronals show a strong palatal bias, with evidence from other studies. Moroccan Arabic consonant harmony can be diagnosed as segmental correspondence, along the lines of Rose and Walker (2004).

Interestingly, the Moroccan data show the transparency of various intervening segments. I question what the data say about the nature of root-and-template morphology in Moroccan Arabic. The root-and-template heuristic proposed by McCarthy (1981) represents consonants of an Arabic stem as adjacent on some prosodic tier, separate from stem vowels. For example, in the word *ǰanṭarǰ* ‘chess’, the consonant harmony occurs between trigger and target with an intervening alveolar stop. McCarthy proposed an OCP-Place constraint, which prohibits segments with identical features from occurring in adjacent positions at the melodic level. In fact, it appears that the consonant harmony process is an extension of the OCP-Place constraint – speech errors occur most often between segments that share distinctive features and can be a result of a functional similarity avoidance constraint, following Frisch (2004).

Further, since the tier-based analysis of Arabic holds that spreading of association lines occurs exclusively progressively within the stem and the consonant harmony is strictly regressive, the two processes must occur independently of one another. Consonant harmony must occur post-tier conflation. The implications of this analysis are three-fold. First, the regressive directionality of the assimilation is epiphenomenal of the speech production/perception error nature of the process. Secondly, the fact that the conservative and innovative forms can alternate freely suggests that the OCP-Place is optionally being extended merely beyond the segmental tier stage of the derivation. Finally, the data support the malleability of coronal consonants with respect to assimilation, as compared to other classes of consonants such as dorsal and labial. It can be argued that this process, occurring only with coronal consonants, represents an emergence of the unmarked phenomenon.

Data:

(1) a. <i>Conservative</i>	<i>Innovative</i>	Moroccan Arabic
/zuʒ/	/ʒuʒ/	‘two’
/ʒən/	/ʒən/	‘prison’
/səʒəm/	/səʒəm/	‘window’
/mzuwwəʒ/	/mʒuwwəʒ/	‘married’
/zəlliʒ/	/ʒəlliʒ/	‘tiles’
/ʃərʒəl/	/ʒərʒəl/	‘quince tree’
/səntɾəʒ/	/ʒəntɾəʒ/	‘chess’
b. /ʒazira/	*ʒazira	‘island’

(2) *Hetero-morphemic contexts: No Consonant Harmony*

/raʃ aɾ-ɾaʒəl/	*raʃ aɾ-ɾaʒəl	‘the head of the man’
/raʃ aʒ-ʒməl/	*raʃ aʒ-ʒməl	‘the head of the camel’

(3) <i>Moroccan Arabic</i>	<i>Classical Arabic</i>	
/ʒəlliʒ/ ~ /zəlliʒ/	/zulayj/	‘tiles’
/zuʒ/ ~ /ʒuʒ/	/zawj/	‘spouse’

Selected References:

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