

CONSTRAINTS, CONTRAST, AND CONSONANTS: THE CASE OF CONSONANT HARMONY BLOCKING IN BERBER LANGUAGES

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Consonant harmony (CH) is a controversial phenomenon in phonology, primarily due to the divide over how to approach such a system. Some scholars (e.g. Hansson, 2001a; Rose & Walker, 2004) take a *restrictive* approach to CH, developing frameworks that only make use of the most common features of CH (i.e. few features harmonize, fixed directionality, no blocking, and so on). Any CH-like behaviour that deviates from these commonalities therefore cannot be CH in a restrictive approach.

In contrast to this, I will discuss a set of Berber languages that clearly have a CH system in their phonologies, but break a major rule from a restrictive approach.

Berber languages such as Tamajaq Tuareg (TT; Alojaly, 1980), Imdlawn Tashlhiyt (IT; Elmedlaoui, 1995), and Ayt Ndhir Tamazight (ANT; Penchoen, 1973) will generally harmonize the causative morpheme /s-/ for place and voicing:

(1)	TT	/s-əntəz/ → [z-əntəz]	/s-mǎʃān/ → [ʃ-əm:əʃən]
	IT	/s-bruz:a/ → [z-bruz:a]	/s-m:ɜdawl/ → [ɜ-m:ɜdawl]
	ANT	/s:-ətʃ:/ → [ʃ:-ətʃ:]	/s:-ɜəj/ → [ɜ:-uɜəj]

However, voicing harmony in IT and both harmonies in ANT will be *blocked* when certain voiceless segments intervene:

(2)	IT	/s-ħuz/ → [s-ħuz]	/s-n:uq:ɜ/ → [ʃ-n:uq:ɜ]
	ANT	/s:-aɕəz/ → [s:-iɕəz]	/s:-ɕɜəm/ → [s:-aɕɜəm]

If this blocking process can be unified as part of CH, the results will pose a serious problem for the restrictive approach to CH.

I show that, through a constraint-based approach adapted from Jurgec's (2010) assimilation framework, the harmonizing process and the process that prevents it are one in the same, contrary to what Hansson (2010b) suggests. A reordering of constraints will produce all of the possible results from any of the given languages in (1,2).

I will conclude by briefly discussing the subsequent issues regarding the empirical repercussions of this framework, as well as possible alternative, contrast-centred explanations for this blocking that depart from the harmony-based approaches outlined both by both Hansson and me.

References

- Alojaly, G. (1980). *Lexique touareg-français*. Copenhagen: Akademisk Forlag.
- Elmedlaoui, M. (1995). *Aspects de représentations phonologiques dans certains langues chamitosemitiques*. Rabat, Morocco: Faculté des Lettres et des Sciences Humaines. (1992. Rabat, Morocco: Université Mohammed V Doctoral dissertation.)
- Hansson, G. Ólafur. (2010a). *Consonant harmony: Long-distance interaction in phonology*. Los Angeles: UC Publications in Linguistics, University of California Press.
- Hansson, G. Ólafur. (2010b). *Long-distance voicing assimilation in Berber: Spreading and/or agreement?* Montréal. (Proceedings of annual conference of Canadian Linguistic Association.)
- Jurges, P. (2010). *Feature spreading 2.0: A unified theory of assimilation*. Unpublished doctoral dissertation, University of Tromsø, Tromsø.
- Penchoen, T. G. (1973). *Tamazight of the Ayt Ndhir*. Los Angeles: Undena Publications.
- Rose, S., & Walker, R. (2004). *A typology of consonant agreement as correspondence*. *Language*, 80, 475-531.