

**Title:** Consonant harmony as spreading: an evaluation

**Abstract Category:** oral/poster

A relatively large number of the world's spoken languages display some form of the typological property known as vowel harmony in which vowels in neighboring syllables are required to agree in one or more properties, such as vowel height, rounding, or tongue root position. A rather smaller number display a pattern of consonant harmony in which non-adjacent consonants are either required to or tend to share certain of the place, phonatory or other attributes of nearby consonants. Ohala (1990) claimed that vowel harmony, at least in its origin, is a product of vowel-to-vowel assimilation across intervening consonants. Later Gafos (1999) essentially argued that consonant harmony may similarly be assimilatory in origin. For this to be the case, the segments that intervene between affected consonants — typically vowels — must be capable of transmitting the harmonizing property. For some properties, such as nasality or lip-rounding, such 'spreading' is non-problematic as these can be properties of either consonant or vowels. An alternative view, e.g. in Hansson (2010), is that consonant harmony (although this term is more narrowly defined in Hansson's usage) is a correspondence or copying process, not an assimilatory effect. That is, the harmonizing property involves the independent repetition of an articulatory gesture (or gestures) rather than being the result of the anticipatory or perseverative prolongation of a single gesture. In this paper a range of attested varieties of consonant harmony will be evaluated in terms of how plausibly an assimilatory component might be involved in their origin. The analysis indicates that consonant harmony patterns vary along a scale of their likelihood to be explicable as assimilatory in nature. Nasal consonant harmony most likely is always (at least originally) triggered by nasal coupling across intervening vowels, although it may be generalized to apply where non-adjacent segments are affected, as in Sundanese (Cohn 1989). Processes such as sibilant harmony — where typically alveolar and palato-alveolar fricatives are not permitted to co-occur — may have an assimilatory component, as suggested by Whalen et al (2011) in relation to Tahltan. This idea is supported by a limited acoustic study reported here, showing that vowel formants in /a/ surrounded by /s/ differ significantly from the formants of this vowel surrounded by /ʃ/. This suggests that some aspects of the different tongue configurations in /s/ and /ʃ/ can be transmitted through a vowel. However, consonant harmony involving certain phonatory and laryngeal features, such as voicing (given that vowels are prototypically already voiced) or ejective production, which cannot be a property of vowels, does not plausibly involve assimilatory transmission of the harmonizing property. The typology of consonant harmony should therefore be accounted for in terms of an interplay of the effects of historical assimilatory processes and other, more cognitive, copying processes, in addition to the interaction between such patterns.