

Tones as gesture: space, time, perception, and change

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In Articulatory Phonology, the dimensions of active control in speech are those that represent phonological contrast (Pouplier, 2020). For lexical tone, this dimension is assumed to be pitch. Preliminary observations have indicated that tone gestures are coordinated in lexical tone languages, such as Mandarin, differently than in intonation languages, such as German (Gao, 2009; Mücke, Nam, Hermes, & Goldstein, 2012). Specifically, in lexical tone languages, tones are coordinated as consonant gestures (or at least as consonant gestures in languages that have complex syllable onsets). In this talk, I'll examine this claim, drawing on evidence from how tones influence the articulation of coproduced vowel gestures (Shaw, Chen, Proctor, & Derrick, 2016), how tone-vowel coproduction is perceived (Shaw & Tyler, 2020) and two cases of sound change (tone loss), one from Mandarin in which a change in gestural coordination precipitates tone loss (work with Muye Zhang) and one from Diaspora Tibetan in which a tone-conditioned coordination pattern is preserved even after tone loss (work with Chris Geissler). Together, the data suggest that the role of lexical tone in conditioning the coordination of other gestures is less direct than first assumed or, at least, that it unfolds at a different timescale. I'll close with a corpus study of Mandarin indicating that the gestures of lexical items absorb some aspects of the prosodic contexts in which they are produced (Tang & Shaw, 2021).

References

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