Comparative Tonal Text-Setting in Cantonese and Mandarin Popular Song

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           *Seminar will be conducted via ZOOM

Prior registration is required
The Zoom Meeting details will be provided on March 28, 2022

Abstract

Much as there exist metrical constraints on poetic language based on properties like stress and vowel length, text-setting constraints in tone languages govern the ways in which tonal sequences can be married to musical melodies. Previous work suggests that two main principles are at play: a preference for *similar settings*—symmetries between the direction of melodic bigrams (rising, falling, level) and the corresponding sequence of tones in an accompanying text—and an avoidance of *contrary settings*—sequences where musical and tonal pitches move in opposite directions. Given these basic constraints, one may then ask how strictly they are enforced across languages and musical genres, as well as how to determine whether a given sequence of lexical tones should be judged as rising, falling, or level.

However, subsequent work has shown that assessing the proportions of similar and contrary settings is only part of the story. This is due in part to cross-cultural differences in how tonal text-setting constraints interact with musical considerations, but also because the considerable differences in the phonetics and phonology of the tone systems themselves which play a decisive role in determining which tonal sequences "count". Moreover, it is becoming clear that the treatment of *oblique settings*—where either the tonal or melodic subsequence remains stationary—may differ considerably between languages.

Yet conducting meaningful cross-linguistic comparisons is challenging, because virtually any such comparison involves a change in both language and musical genre. To this end, this talk presents a comparative case study of tonal text-setting in Mandarin and Cantonese popular song, using a corpus in which language-specific texts have been set to the same musical melody. By holding the musical component constant, it becomes possible to better assess the extent to which observed variation in tone-tune alignment is a function of linguistic rather than musical differences. Consistent with previous studies, tone-tune correspondence in Cantonese is high, with few contrary and even fewer oblique settings, while in Mandarin, contrary and oblique settings are essentially as common as similar settings. These differences are shown to persist even when annotating for word and phrase boundaries, neutral tones, and contextually variable realization of tonal targets. I suggest these differences can be explained by reference to the distribution of tonal registers in the two languages: Cantonese tones inhabit a space of four equally distributed registers, whereas for the purposes of text-setting, most Mandarin tones belong to just one of two registers. This may explain at least in part why contrary and oblique settings are significantly more common in Mandarin popular song.

Speaker

James Kirby is Professor of Spoken Language Processing at the Institute for Phonetics and Speech Processing at the Ludwig-Maximilans-University in Munich, Germany. He received his PhD in Linguistics from the University of Chicago in 2010 and spent 10 years in the Department of Linguistics and English Language at the University of Edinburgh before moving to Munich in 2021. Since 2018 he has led the ERC-funded EVOTONE project on the emergence and evolution of linguistic tone. His research interests include sound change, computational and statistical methods, tone and register, language and music, and the languages of Southeast Asia.

All are Welcome