

"Socio-tonetics": Methods and issues in analyzing tone as an acoustic sociophonetic variable

James N. Stanford
Dartmouth College

The majority of the world's languages are tonal (approx. 70% according to Yip 2002), yet lexical tone is underrepresented in variationist sociolinguistics (Stanford 2008; Hildebrandt 2003; Zhang 2005). While there has been considerable progress in researching intonation as a sociolinguistic variable (e.g., Fagyal & Stewart in press; Yaeger-Dror, Hall-Lew & Deckert 2003; Grabe 2004), lexical tone remains understudied in this paradigm. If lexical tone can receive proportionate attention in variationist research, our understanding of language variation and change will more fully include the sociolinguistic experience of speakers of tone languages around the world.

This workshop explores the acoustic analysis of tone as a sociophonetic variable, i.e., "socio-tonetics," a research initiative growing at the crossroads of acoustic phonetics, tonetics, and sociophonetics. Using field data from the indigenous Sui language of southwest China, the workshop presents techniques for analyzing tone as a sociolinguistic variable, working toward developing reliable methods for socio-tonetic research in a wide range of languages.

The workshop will include practical methods for analyzing tone pitch tracks acoustically in Praat software, normalizing tones across gender and age, and statistical techniques needed for tones. Problems in socio-tonetics are described as well, including fieldwork issues. Should tones be collected from free speech, word lists, reading passages, or some other style? How much intra- and inter-speaker variation may be expected? The workshop also addresses methodological challenges in measuring tone, including word-list intonation, problems extracting tone in free-speech style and in idiolectal breathy/creaky speech, and the effects of voiceless consonants.