

## Testing the productivity of Chinese tone sandhi - Jie Zhang

The majority of the world's languages are tone languages. In Mandarin, for example, the syllable "ma" said with a high level pitch has a completely different meaning from the same syllable said with a high-to-low falling pitch ("mother" vs. "to scold"). The tone on a syllable sometimes changes according to the linguistic context in which it is found; this process is known as "tone sandhi." In Mandarin a mid-low-high dipping tone will change to a mid-high rising tone when it is placed immediately before another dipping tone. The patterns of tone sandhi in a language can be extremely intricate, and many mysteries remain unsolved as to how speakers internalize these patterns. This project investigates the extent to which native speakers of various Chinese dialects can apply tone sandhi patterns to novel words. The results will shed light on the nature of phonological knowledge, in particular, whether articulatory constraints, perceptual distinctiveness, and the lexical frequencies of tone sandhi patterns constitute part of the knowledge that speakers have about the tone system of their language. Due to the international nature of the research, the project also fosters collaborative relations between U.S. and Chinese institutions.