
Abstract:
Linguistic relativity (i.e., Sapir–Whorf hypothesis) holds that the structure of a language affects its speakers' world view or cognition. Many languages are tone languages in which pitch patterns are used to distinguish lexical meanings. In this talk, I will discuss that speaking a tone language modulates pitch processing from low-level sensory processing to high-level phonological processing, tonal contrasts differing in pitch contours are perceived more categorically than tonal contrasts differing mainly in pitch heights, hemispheric lateralisations of pitch processing differ at different stages of processing, and the pitch processing in music and language interacts bi-directionally. Findings discussed above substantiate our understanding of the influence of language on our perception and provide empirical evidence for Sapir–Whorf hypothesis.