

Predictability and mental representation: Evidence from Mayan and Chinese

Kevin Tang, Zhejiang University

Predictability is one of the many factors which influences the phonetic expression of a linguistic unit. Contextual predictability, which describes how predictable a linguistic unit is in some local environment, has been consistently shown to modulate the phonetic salience of words and other linguistic units in speech production (the probabilistic reduction effect). Furthermore, the average predictability of a linguistic unit has been shown to shape its mental representation above and beyond local predictability for not only phonemes (Cohen Priva, 2015) and words (Seyfarth, 2014), but also homophones (Gahl, 2008).

In this talk, I will answer the question of whether the probabilistic reduction effect, as previously observed for majority languages like English, is also found in Kaqchikel Mayan, a language which has relatively rich morphology but much less homophony and in Mandarin Chinese, a language which has relatively poor morphology but much more homophony.

First, I will show that contextual predictability can condition the phonetic expression of both morphological complex and simple words in the two languages, thereby establishing the robustness of the reduction effect beyond English. Second, I will show that for Mandarin Chinese average predictability does not only shape the mental presentation **across** word types but also **within** homophones, suggesting that homophones are not homophonic even in a language rich in homophony. These results suggest that the mental representation is rich both in its phonetic detail and in its granularity.