

## **Determinants of Cantonese syllable wellformedness**

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The study of phonotactics is a central topic in phonology (Chomsky and Halle, 1965, 1968; Coleman and Pierrehumbert, 1997; Hayes and Wilson, 2008). While Cantonese phonotactics has been the object of much discussion (Hashimoto, 1972; Bauer, 1985; Cheung, 1986; Yip, 1988, 1989; Cheng, 1991; Cutler and Chen, 1997; Yip, 2004*b,a*; Kirby and Yu, 2007; Yip, 51, 2011), surprisingly little is known about the factors that determine Cantonese syllable wellformedness and, by extension, wordlikeness, especially considering the fact that phonotactic knowledge affects language acquisition, language processing, and verbal short-term memory.

This talk focuses on the results of a series of experiments testing native Cantonese speakers' processing of existing and unattested syllables as well as their judgments of syllable wellformedness. In addition to canonical factors such as bigram probabilities, neighborhood density, and grammatical co-occurrence restrictions, we show significant effects of individual-level factors such as individual "autistic traits" and working memory capacity. Implications of these findings for language processing and sound change will be discussed.