

**The mental representation of Second Language Phonological Lexicons:  
Implications from the Recognition of Mandarin Mispronounced Words**

**by Cantonese and Mandarin speakers**

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**Abstract**

Cantonese speakers tend to mispronounce monosyllabic words in Mandarin where both words are homophones in Cantonese but not in Mandarin (Zeng, 2009). For example, the words 聲 ‘sound’ and 星 ‘star’ are both pronounced *sɪŋl* in Cantonese but *ʃɛŋl* and *xɪŋl* in Mandarin respectively. Hence, some Cantonese speakers may mispronounce the word 聲 ‘sound’ as *xɪŋl* in Mandarin. This kind of mispronunciation is due to the negative transfer at the lexical rather than the phonological level from the first language because there is an involvement of lexical entries from both the first and second languages. A disyllabic word transcription task was carried out on Cantonese and Mandarin listeners to examine whether non-native listeners are better than native listeners in understanding Mandarin mispronounced words which show characteristics of Cantonese accent. Listeners heard mispronounced version (e.g., *xɪŋlɪn1*) or the correctly pronounced version (e.g., *ʃɛŋlɪn1*) of words (e.g., 聲音 ‘sound’) spoken by a native Mandarin speaker and then wrote down the words in Chinese characters. They were told that the speaker was from a Cantonese background and may have mispronunciations in her Mandarin productions and the participants were asked to guess the intended words spoken by the speaker. Results showed that Cantonese listeners understood these mispronunciations better than Mandarin listeners, supporting an interlanguage speech intelligibility benefit for listeners (Hayes-Harb et al., 2008). It was further shown that this benefit cannot be completely accounted for by the similarity of sounds between the Cantonese pronunciation (e.g., *sɪŋl*) and the Mandarin mispronounced version of the words (e.g., *xɪŋl*) in a subsequent sound similarity judgment task. When Cantonese listeners’ phonological proficiency improves, their recognition accuracy for the correct pronunciation improves while that of the mispronounced word does not deteriorate. A dual-route second language spoken word recognition and production model is proposed to account for these findings. Word recognition is purely sublexical while production is both lexical and sublexical, and the strengths of the two routes depend on language proficiency.

**References**

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