## The Realization of Chinese Sentence Prominence in L2 Studies

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ABSTRACT: Sentence focus is usually marked by prosodic prominence (Truckenbrodt 1995). According to Jun (2005) who believes that the realization of post-lexical or sentence level prominence depends on what suprasegmental features the language employs for the realization of the lexical prosody, the acoustic correlates of post-lexical prominence are language specific. Mandarin Chinese is a tonal language and sentence level prominence is expressed mainly by expanding pitch range, intensity and duration but not changing the lexical tone contours (Chen 2004; Flemming 2008). The acquisition of Mandarin focus marking poses a difficult challenge for non-tonal language speakers, such as English and Japanese which represent stress-accent languages and pitch-accent languages. English post-lexical pitch accents have particular pitch targets and are associated with stressed syllables, which can be marked by increased duration, higher peak and total amplitude, and spectral changes, making them stress accents (Beckman 1986). Japanese uses a variety of prosodic mechanisms to mark focal prominence, including local pitch range expansion, prosodic restructuring to set off the focal constituent, and post-focal subordination, but not manipulation of accent (Venditti et al. 2008) and duration (Jun 2005).

The present study examines the second language (L2) tonal productions of Chinese mono-syllabic narrow focus implemented by 20 American English-speaking learners and 20 Tokyo Japanese-speaking learners. It is found in this cross-language study that Japanese speakers' general accuracy rate is higher than English speakers'. In terms of individual tones, both groups show the greatest accuracy with the target Mandarin high-falling tone (T4). However, when errors occur, English-speaking learners demonstrate an obvious preference of T4 to substitute for target tones, which reflects the L1 transfer of accented pitch tone H\*L. Japanese-speaking learners usually lengthen low tones and use Mandarin low dipping tone (Full-T3) in substitutions. The Japanese speakers' manipulation of duration in expressing sentence focus in the L2 Mandarin tones is not predicted by Jun (2005) but is echoed with L2 German. Kaltenbacher (1997) reports that Japanese learners of German often lengthen the rhythm to express focus in the non-native German productions. This study thus makes a supplementary claim to Jun (2005) that the realization of post-lexical pitch accent in the context of L2 may not directly use the lexical prosody realization strategies. This study also argues that the frequent use of low pitch in focus marking by Japanese speakers may be due to the unmarkedness of low tones (Ohala 1978; Yip 2002) and it represents the situation of "the Emergence of the Unmarked" in the context of L2 acquisition (Broselow et al., 1998). That is, some of Japanese speakers' error patterns in L2 acquisition could neither have been learned from L2 input alone nor derived from the L1 grammar patterns but reveal universally preferred tone structures. This study concludes that the effects of L1 transfer and the "emergence of the unmarked" (McCarthy and Prince, 1994) co-construct the non-tonal language speakers' interlanguage tone grammars for sentence focus marking.

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