

Comprehension of English intonation by Chinese EFL learners

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A growing body of research is examining the production and perception of phonetic correlates of focus/nuclear accents and nuclear tones by Chinese learners of English (e.g. Wang et al. 2010; Chen 2008). Some consistent findings are: 1. they are more likely to rely on F0 to realize accentuation and rarely reduce unstressed syllables' vowel duration, and 2. they primarily resort to high-level (H*) instead of low-rise (L*H) to make the pitch accents stand out. These strategies have also been found in their performance on perception tasks. However, investigating differences at the phonetic level alone is by no means enough to understand learners' acquisition of intonation; the extent to which learners understand the *meaning* of intonation patterns is equally worthy of investigation, so as to better pinpoint the source of their inability to perceive and realize the phonetic patterns (Mennen and de Leeuw 2014). Thus this paper aims to examine whether and to what extent Chinese EFL learners can comprehend English intonation, and can this ability be improved after an intensive training course?

Modelled after Atoye (2005) and Cruz-Ferreira (1987), the stimuli in this study were 20 naturally produced sentences by two native-speaker linguists. Each sentence had two different versions, with meaning contrasted only via intonation (i.e. location of accentuation, phrasing, or nuclear tone). Learners were forced to choose the correct meaning of each intonation pattern they heard within 30 seconds. Sixty Chinese students doing English-related postgraduate programs were mapped into three homogenous groups according to their English proficiency. Two groups had 3-week long intonation instruction followed by self-paced practice with the help of Praat (group 1, which accessed to the visual display of intonation patterns) and Audacity (group 2, which accessed to the auditory feedback only). Group 3 and ten native RP speakers served as control groups.

Statistical analysis by One-way MANOVA and multiple univariate ANOVAs showed that all three features were performed significantly worse by Chinese learners than by native speakers (for accentuation: $F(3, 66) = 5.365, p < 0.01$; partial $\eta^2 = .196$; for phrasing: $F(3, 66) = 27.104, p < 0.001$; partial $\eta^2 = .552$; for tone: $F(3, 66) = 4.424, p < 0.01$; partial $\eta^2 = .167$). Repeated measures were done to reveal that both treatment groups performed significantly better after the training in terms of all three features, while the Chinese control group only had an improvement in the comprehension of phrasing contrasts, with the correct rate of accentuation and tone remaining at the pre-training level. These findings are insightful for our next experiment which will examine the *production* of these three intonational features, delving deeper into the extent to which learners' comprehension and production ability are correlated, which has been under-researched. It will also contribute to the advancement of teaching materials and pedagogical applications of intonation to this particular group of English learners.

References:

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