Comparison of English and Cantonese Intonation

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Objectives: The primary aim of this research is to analyze and compare the intonation patterns of Hong Kong English speakers, whose first language is Cantonese, with those of native English speakers. The study seeks to explore how Cantonese, as a tonal language, influences the way its speakers use intonation when speaking English, a non-tonal language. Specifically, it examines the differences in intonation features between the two groups, with a focus on understanding the challenges faced by Cantonese speakers in mastering English intonation. The research aims to uncover why Hong Kong English speakers often struggle to produce natural-sounding intonation.

Methodology: This research examined intonation differences between Hong Kong English speakers and native English speakers through audio recordings and video clips. First, we asked 11 Hong Kong English speakers to record themselves reading 6 selected English sentences, reflecting their natural intonation patterns. Second, we found 6 online video clips of native English speakers saying the same sentences as the Hong Kong English speakers. These data were collected for comparison. Praat, a phonetic analysis software, was used to analyze the intonation in both groups. A comparative analysis identified differences and similarities in intonation patterns.

Results: In WH-questions "Where did you find that?", native English speakers used falling intonation while Hong Kong English speakers tended to use rising intonation. In Yes/No questions "Do you like it?", while native English speakers exhibited rising intonation, Hong Kong English speakers often produced a level intonation. Moreover, native English speaker used rising-falling intonation in a sentence "If we can get through this, we can get through anything.", while Hong Kong English speakers used falling intonation. In Either/Or questions "Should we stop or keep going?", while native English speakers used rising-falling intonation, Hong Kong English speakers used falling-rising intonation. In listing "Yogurt, coffee, orange juice and toast.", native English speakers used rising-falling intonation, while Hong Kong English speakers often defaulted to falling-rising intonation. In statement "I don't remember.", while native English speakers used falling-rising intonation, Hong Kong English speakers used falling intonation.

Discussion: The results of our research reflected the systematic intonation differences between native English speakers and Hong Kong English speakers. The acoustic analysis showed Hong Kong English speakers displayed excessive and irregular pitch variation, often applying typical pitch movement patterns of Cantonese tones on the last one or two syllables. This led to intonation contours that differed significantly from native English patterns, making the speech sound less natural (Ran et al., 2020). Hong Kong English speakers sometimes struggled to use intonation to signal sentence type as well (e.g. distinguishing questions from statements), due to a lack of similar forms in Cantonese and transfer of tonal strategies (Mok et al., 2016). These findings clarify the specific challenges faced by Hong Kong English speakers in achieving native-like intonation.