

A Phonetic Study of Tones and Vowels in Fuqing Chinese

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Abstract

Fuqing Chinese is a distinctive dialect of the Eastern Min variety of the Min group. This thesis studies the acoustic characteristics of tones and vowels in Fuqing Chinese, trying to explain the phenomenon of *bianyun* by experimental phonetic results. This study is the first comprehensive survey of acoustic characteristics of tones and vowels in Fuqing Chinese; it concentrates on the acoustic description of seven citation tones, four falling contours, vowels and tone-vowel interaction with the data from 14 speakers.

Fuqing has four falling contours. It is found that the two higher falling tones differ from each other in pitch height. The two mid falling tones contrast with each other in length, and are accompanied by phonation types. This study suggests that the lowest falling contour is a pure low tone. A key point for the pure low tone is that it is perceived as low [+LOW] as a whole. Acoustically, including vowel /a/, there are six sets of vowels in Fuqing Chinese. They are high, high-mid, mid, mid-low, low-mid and low.

This study examines vowel quality from the perspective of tones in order to investigate the relationship between tones and vowels. With regard to vowel quality alternation, there are two different strategies: vowel height contrast and diphthongization. For vowel height, there is a four-degree contrast in terms of openness instead of a three-degree one. The discussion of tone-vowel interaction hypothesized a phonation correlation to explain this issue in Fuqing. This thesis pioneers the use of acoustic methodology to investigate the tone-vowel interaction of Fuqing Chinese. It contributes to further research by adopting the phonational framework.