# DEVOICING OF HISTORICALLY VOICED OBSTRUENTS IN XIANGXIANG CHINESE — AN ACOUSTIC-PHONETIC PERSPECTIVE ZENG Ting<sup>\*</sup>

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### ABSTRACT

In this paper the present-day pronunciations of the historically voiced obstruents in Xiangxiang Chinese were examined from an acousticphonetic perspective. Results strongly supported an ongoing process of devoicing for the voiced stops, fricatives and affricates, which is conditioned by a couple of factors including sex of speaker, place of articulation, manner of articulation and historically tonal type. Specifically, historically voiced obstruents in syllables corresponding to the historical tone category Ru have all become voiceless unaspirated or voiceless aspirated, meaning the process of devoicing has already completed; in contrast, for those that occur in syllables corresponding to the other three tonal categories, i.e., *Ping*, *Shang*, and *Qu*, i) the historical devoicing is still in progress, as evidenced by a considerable amount of intra- and inter-speaker free variation in the pattern of voicing among "fully voiced", "partially devoiced" and "fully devoiced" obstruents; ii) the degree of devoicing is the highest in voiced fricatives, followed by the voiced affricates, and is the lowest in voiced stops; and iii) the devoicing also tends to be more extensive for obstruents with a more posterior place of articulation, and for male than female speakers. Candidate explanations for these patterns of devoicing were also presented.

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#### **KEYWORDS**

Devoicing Historically voiced obstruents-stops-fricatives-affricates Xiangxiang Chinese Acoustics

## 汉语湘乡方言浊音清化的声学语音学分析

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提要

本文通过对大量语料的声学语音学分析,系统全面地探讨老湘语代表 点湘乡方言中,三类古全浊阻塞音声母的清化现象。研究结果表明, 湘乡方言的古全浊声母确实处在清化的进程当中,且清化程度各异: 三类浊音中,浊擦音的清化程度最高,其次是浊塞擦音,而浊塞音的 清化程度最低。浊阻塞音也因为发音人性别和辅音发音部位的不同而 呈现不同的清化程度,其具体趋势为:男性发音人浊阻塞音的清化程 度比女性发音人高;发音部位更后的浊阻塞音其清化程度更高。与中 古语音系统的比较显示,古全浊声母在湘乡方言内部的演化不平衡, 主要体现在调类上:古全浊声母入声字已经全部清化;舒声字中的古 全浊声母有清、浊和半浊三个自由变体,且这三个变体既即出现在同 一发音人内部,也出现在不同发音人之间,说明古全浊声母舒声字的 语音特征不稳定,正处在清化的进程当中。本文也试图解释发音人性 别、发音部位、发音方法、调类对浊音清化的影响。

关键词

**浊**音清化 **古**全浊阻塞音−塞音−擦音−塞擦音 **湘**乡方言 **声**学语音学