

The Phonetics and Phonology of Tone Mapping in a Constraint-Based Approach

by

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Submitted to the Department of Linguistics and Philosophy
on August 19, 2003, in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy in Linguistics

Abstract

This dissertation concerns both phonetic and phonological aspects of tone mapping in various Chinese languages. The central issue addressed is the role of contrast and positional prominence and neutralization in the realization of tone. The inventory of tonal contrasts constrains the outputs of contextual neutralization as well as the location of pitch targets in phonetic implementation. Two prominent phonological positions in the tone sandhi domain are distinguished: peripheral (initial and final) positions and metrically strong positions. Input tones occupying different prominent positions in the input are preserved in the output; their realization in the output can be determined by the location of stress. A typology of diverse patterns of tone preservation and realization emerge from the interaction of positional faithfulness and positional markedness constraints. The research findings reported here have implications for both phonetics and phonology.

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