

THE PHONATION PATTERNS OF CHINESE AND ENGLISH
PROSODY BY NATIVE SPEAKERS AND L2 LEARNERS

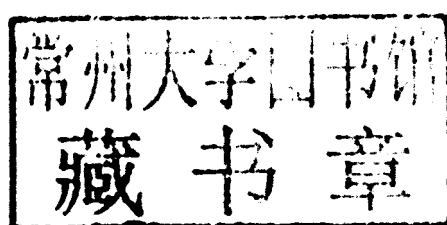
母语者与学习者汉英语韵律发声研究

◎ 杨 晋 著

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内 容 提 要

本书从信号处理角度依照语音学及音系学原理开展声学实验,考察了汉语、英语母语者和学习者分别对英、汉语句末窄焦点和朗读材料的呼吸模式这些超音段的韵律特征。研究显示:学习者的开商、速度商一起和基频呈互补关系。不同语言具有不同的呼吸模式。汉语体现出典型的大呼吸含小呼吸、大小呼吸交替的“大跨步、小碎步”呼吸模式,英语则呈现各音段“步长类等”的呼吸模式。本书通过嗓音证据和呼吸模式的量化描述,揭示了母语者和学习者汉英语窄焦点和节奏这两个韵律特征实际的运作规律。

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In loving memory of my grandmother...

Foreword

I remember when I was sitting in Shanghai International Studies University (hereafter briefed as SHISU) PhD candidate entrance interview, my supervisor asked me about my research proposal if I would be accepted. And I answered phonetics. Then I didn't realize all the hardship I would face, from theory to practice, especially the huge experimental labor work. The completion of this dissertation is impossible without so many people's help.

First and foremost, I owe my deepest gratitude to my distinguished supervisor, Prof. Li Ji'an, for his immense support and intellectual guidance throughout the years. His patience, tolerance, humor and optimism have been sources of my courage and persistence. Without his recognition, all my work is but in vain. My sincere thanks also go to Prof. Mei Deming, Prof. He Zhaoxiong, Prof. Xu Yulong and Prof. Shu Dingfang at SHISU, whose lectures and seminars have greatly broadened my view. Thanks also go to Wang Wangni and Hu Wenhui at SHISU for sharing with me so much knowledge under the guidance of our supervisor.

My special gratitude goes to Prof. Winifred Strange who have enlightened my knowledge about acoustics and perception studies in a lab setting for the first time, Prof. Janet Fodor who has guided me into a phonology-syntax interface threshold, Prof. Dianne Bradley for showing me intonation labeling, Prof. Gita Martohardjono for her L2 acquisition lectures and Prof. Elizabeth Ijalba for her brilliant phonetics lessons and introduction to Prof. Winifred Strange. My special thanks go to Prof. Eva Fernandez for her brilliant Psychological Linguistics lessons, patient instructions in Speech Analyzer software handling and many times' help during my stay at City University of New York (hereafter briefed as CUNY). Prof. Howard Kleinmann and Alice, I will never forget their care and concern for me at New York. I'd like to thank PhD student Shari Berkowitz for her guidance into their Lab and Mai for sharing with me lecture notes. I'd also thank my colleague Lisa for accompaniment at CUNY.

I owe tremendous gratitude to Prof. Kong Jiangping who have taught me acoustics ABC, Matlab programming to analyze phonation and provided a lab setting and technical support

to make my experiments possible, Prof. Wang Hongjun for her nonlinear phonology and historical linguistics lectures, my idol Prof. Wang Yunjia for her L2 phonetics acquisition, general phonetics lectures and much more beyond, Prof. Li Xiaofan and Prof. Xiang Mengbing for their brilliant Chinese Dialect lectures, especially Prof. Li Xiaofan who has taken a serious consideration for my dialect fieldwork application, and Prof. Lin Youjing for her great grammar fieldwork lectures and generous consulting on my paper at PKU. Most of my knowledge on phonation, phonetics and phonology are from her. Words cannot tell how I appreciate what she have taught me. Her insights will benefit me for a lifetime. Among my pals at PKU, Dong Li, Yang Feng and Zhang Ruifeng have provided me with most unselfish help and support. Thank Junru for helping me contact her PhD supervisor about my visiting application. Thank Yinhao for helping me combat with my laptop for Kay program. I'm also deeply appreciative of Yudai, Cao Hongling, Hanna, Yu Qian, Liu Siwei, Yu Mengxiao and Lijun, because of whom my life at PKU becomes unforgettable and meaningful. I'm deeply impressed by my fellow visiting scholar Prof. Guan Yingwei, who had devoted most time researching. I would also thank my roommate, Pan Qiong, Sun Yanjie and Liu Xiaoxia, for their help, care and friendship when I was crazy not being able to find subjects and was burdened by clipping and trimming of sounds. Pan Qiong has helped me in understanding matrix and I sincerely hope she will soon pursue her PhD study in mathematics.

I would also like to thank professors from Psychology Department, PKU for allowing me to sit in their classes. Thank Prof. Gen Haiyan for her Experimental Psychology lessons, Prof. Gan Yiqun for her Psychology Statistics lessons and Prof. Chen Lihan for his Psychtoolbox lessons. I have benefited a lot from their lessons on experimental design, conduction and analysis. I owe a special debt to participants who have taken my experiments in such a busy final examination season. Without their help, these experiments are impossible.

I also owe deep thanks to my University of Shanghai for Science and Technology (hereafter briefed as USST) colleagues, Prof. Lu Le, Prof. Deng Zhiyong, Prof. Liu Qin, Prof. Gao Jun and Prof. Ni Rong for their everlasting support. Prof. Zheng Xiaoyuan, Leng Bingbing and Jia Xiaoqing, thank them for sharing with me knowledge, comprehension

and care.

My friends Tian Lu, Yubing, Yifeng and Xiaodong, thank you for your everlasting friendship.

Finally and most of all, I thank my husband Kevin for his everlasting effort to support our family, and for sharing with me all the joys and sorrows which has become a precious part of our life. I owe too much to my dearest son Ronny, you are the most precious in my heart. I also owe too much to my beloved parents, who have taken over so much responsibility to enable me sit for hours on work. I will resume a much normal life upon the completion of this dissertation and try my best to compensate soon and afterwards.

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Chapter 1 Introduction

