

漢英音節比較研究

CHINESE SYLLABLES AND
ENGLISH SYLLABLES

臺灣學生書局印行

漢英音節比較研究 (全一冊)

著作者：董 昭 輝

出版者：臺 灣 學 生 書 局

本書局登：政院新聞局局版臺業字第一一〇〇號
記證字號

發行人：丁 文 治

發行所：臺 灣 學 生 書 局

臺北市和平東路一段一九八號

郵政劃撥帳號二四六六號

電話：3211097. 3413467. 3214156

定價：精裝新臺幣一九五元

平裝新臺幣一四五元

中華民國七十二年二月初版

8057

版權所有・翻印必究



董昭輝教授

著者簡介

董昭輝，一九三一年生於台灣南部。台灣大學外文系畢業。台灣師範大學、德州大學奧斯丁分校、加州大學伯克來分校研究。現任教台灣師範大學英語系。著有「高雄地區台語音系概要」等語言學或英語教學論文。

「現代語言學論叢」緣起

語言與文字是人類歷史上最偉大的發明。有了語言，人類纔能超越一切禽獸成爲萬物之靈；有了文字，祖先的文化遺產纔能綿延不絕，相傳到現在。尤有進者，人的思維或推理都以語言爲媒介；因此，如能揭開語言之謎，對於人類之探求至少就可以獲得一半的解答。

中國對於語文的研究有一段久而輝煌的歷史，成爲漢學中最受人重視的一環。爲了繼承這光榮的傳統並且繼續予以發揚光大起見，我們準備刊行「現代語言學論叢」。在這個論叢裡，我們有系統地介紹並討論現代語言學的理論與方法，同時運用這些理論與方法，從事國語語音、語法、語意各方面的分析與研究。論叢將分爲兩大類：甲類用國文撰寫，乙類用英文撰寫。我們希望將來還能開闢第三類，以容納國內研究所學生的論文。

在人文科學普遍遭受歧視的今天，「現代語言學論叢」的出版，可以說是一個相當勇敢的嘗試。我們除了感謝臺灣學生書局提供這難得的機會以外，還虔誠地呼籲國內外從事漢語語言學研究的學者不斷給予支持與鼓勵。

湯 廷 池

民國六十五年九月二十九日於臺北

• i •

語文教學叢書緣起

現代語言學是行爲科學的一環，當行爲科學在我國逐漸受到重視的時候，現代語言學却還停留在拓荒的階段。

爲了在中國推展這門嶄新的學科，我們幾年前成立了「現代語言學論叢編輯委員會」，計畫有系統地介紹現代語言學的理論與方法，並利用這些理論與方法從事國語與其他語言有關語音、語法、語意、語用等各方面的分析與研究。經過這幾年來的努力耕耘，總算出版了幾本尚足稱道的書，逐漸受到中外學者與一般讀者的重視。

今天是羣策羣力、和衷共濟的時代，少數幾個人究竟難成「氣候」。爲了開展語言學的領域，我們決定在「現代語言學論叢」之外，編印「語文教學叢書」，專門出版討論中外語文教學理論與實際應用的著作。我們竭誠歡迎對現代語言學與語文教學懷有熱忱的朋友共同來開拓這塊「新生地」。

語文教學叢書編輯委員會 謹誌

Preface

This study investigates the differences and similarities between Chinese and English pronunciations from the point of view of syllables, which phoneticians have not so far been very successful in defining. I have ventured to undertake the investigation because it seems to me that a rather straightforward definition of the syllable is possible if we remember some basic facts about natural languages in general.

Specifically, what the study treats are mostly familiar facts much discussed in the literature, as both languages are among the most thoroughly studied of all the languages in the world. But I have tried to put them together in what I presume to be a new and sensible way, viewing some of them in new light and introducing a few new terms where necessary. Such new terms are all duly defined and defended, directly or indirectly, as the discussion proceeds. It is hoped that what I have done in this study will make as

much sense to the reader, and will thus contribute, in a modest way, to our understanding of the two languages and to human knowledge as a whole.

The book consists of five chapters plus an appendix. Chapter I, where the syllable is defined, is important despite its brevity. After that introductory chapter, attention is directed specifically to some of the behaviors and structural characteristics of syllables in English as represented by General American, and in Chinese as represented by Mandarin, in order to compare the two languages with regard to these behaviors and structural characteristics. Chapter II, first of all, surveys the suprasegmental aspects. Viewing stress as an ultimately conceptual phenomenon, the chapter devotes considerable space to an informal discussion of stress variation in English in addition to phenomena related to pitch. The next two chapters deal with the segmental aspects. That is, Chapter III examines the "initial processes", or prevocalic elements, and Chapter IV considers the "terminal processes", or post-vocalic ele-

ments, as well as the "main bodies", or nuclei, followed by a close look at the nature of "rhyming parts" in words. Then, in Chapter V, where results of the investigation are summarized, a conclusion is drawn primarily from the standpoint of a native speaker of Chinese learning English. As for the appendix, which lists some 6,000 most frequently used English words arranged according to rhyming parts, it should be of theoretical interest as corpus for a significant part of the investigation. But since it provides information on pronunciations of English words in a form not commonly available, it should be useful for practical purposes as well.

It is perhaps already clear that more space has been devoted in this study to English than to Chinese. Indeed, in many ways, what has been done is looking at English pronunciation through the eyeglass of Chinese pronunciation. This bias is mainly due to the author's professional and linguistic backgrounds. But the volume, of course, is intended not only for teachers or students of English whose first language is Chinese, but also for those

- viii -

who are simply fascinated by the wonderful human creation called language.

Finally, I extend my heartfelt thanks to Prof. Charles T. C. Tang. By sitting up all through a cold night to read my draft very carefully and write out many valuable comments and suggestions, and in other ways, he really helped a lot to minimize the number of flaws in what is now presented before the reader.

Taipei

February 1983

Note on Symbols

The symbols used to indicate the phonetic values of material treated in this volume are of two kinds in general: the Mandarin Phonetic Symbols (國語注音符號) for material in Mandarin, and adaptations from the Trager-Smith system for material in English. In the latter case, the modifications involve, notably, the uniform representation of both /ɔ/ and /o/ as /o/ and the dropping of the post-vocalic /h/, for reasons given in Chapter IV (footnote 14). Also, as a device to differentiate prevocalic and post-vocalic elements systematically, the hyphen is always used with all symbols representing elements other than the main vowel of a syllable, as in /p-, t-, k-/ , etc., as opposed to /-p, -t, -k/, etc. As for the Mandarin Phonetic Symbols, the customary transcriptions in IPA symbols that correspond to them are as follows:

ㄅ	ㄆ	ㄇ	ㄈ	[p p' m f]
ㄊ	ㄋ	ㄌ	ㄋ	[t t' n l]
ㄍ	ㄎ	ㄅ		[k k' x]
ㄐ	ㄑ	ㄒ		[tʃ tʃ' ʃ]
ㄓ	ㄔ	ㄕ	ㄖ	[tʃ tʃ' ʃ z]
ㄗ	ㄘ	ㄙ		[ts ts' s]
ㄟ	ㄡ	ㄣ		[i u y]
ㄝ	ㄚ	ㄜ	ㄞ	[ɿ, ʌ a o ɤ e]
ㄟ	ㄚ	ㄜ	ㄞ	[ai ei au ou]
ㄟ	ㄚ	ㄜ	ㄞ	[an ən aŋ əŋ]
ㄟ				[ɔ]

C O N T E N T S

	Page
Preface	v
Note on Symbols	ix
Chapter	
I. INTRODUCTION	
1.1 Voice -- the Physical Basis of Speech	1
1.2 Breath -- the Source of Energy for Voice	3
1.3 Possibilities of Varying Laryngeal Tone	5
1.4 Things Making Foreigners Sound Strange	8
1.5 Why Are There Syllables?	10
1.6 Voice Syllables and Breath Syllables	12
1.7 Voiced and Voiceless Syllables	16
1.8 Syllables as Conceptual Units	18

II. TONE, INTONATION, AND STRESS	
2.1	Pitch and Chinese Syllables 21
2.2	Pitch and English Syllables
2.2.1	What is Intonation? 26
2.2.2	The Three Major Intonation Patterns 28
2.2.3	Intonation Units 36
2.3	Stress and Syllables
2.3.1	Relative Importance of Syllables 38
2.3.2	Degrees of Stress 44
2.3.3	Variation of Stress Patterns 51
2.3.4	Trager-Smith Stress Divisions Reexamined 62
2.4	Some Remarks 65
III. WAYS OF BEGINNING SYLLABLES	
3.1	Points and Manners of Articulation 71
3.2	Simple Initial Processes for Chinese Syllables
3.2.1	General 96
3.2.2	The Labials 99
3.2.3	The Dentals 101
3.2.4	The Velars 104
3.2.5	The Palatals 105
3.2.6	The Retroflexes 106
3.2.7	Absence of a Consonantal Initial Process 108

3.3	Simple Initial Processes for English Syllables	
3.3.1	General	110
3.3.2	The Oral Stops . .	114
3.3.3	The Nasal Stops .	121
3.3.4	The Affricates . .	121
3.3.5	The Fricatives . .	123
3.3.6	The Liquids . . .	125
3.3.7	Absence of a Conso- nantal Initial Process	128
3.4	Complex Initial Processes	
3.4.1	General	130
3.4.2	Complex Initial Processes for Chinese Syllables	136
3.4.3	Complex Initial Processes for English Syllables	138
3.5	Overview	142
IV.	TERMINAL PROCESSES, MAIN BODIES, AND RHYME	
4.1	Simple Terminal Processes	
4.1.1	Consonantal Terminal Processes for English Syllables	149
4.1.2	Consonantal Terminal Processes for Chinese Syllables	161
4.1.3	Absence of a Conso- nantal Terminal Process	163
4.2	Complex Terminal Processes	165

4.3	Main Bodies	
4.3.1	General	176
4.3.2	Main Bodies With Direct Modifiers .	189
4.3.3	Main Bodies Without Direct Modifiers .	192
4.3.4	Main Bodies of Unimportant Syllables	197
4.4	Rhyme in Chinese and English	202
V.	SUMMARY AND CONCLUSION	211
Appendix.	POSSIBLE RHYMING PARTS FOR ENGLISH WORDS	221
Bibliography		291

Introduction

1.1 Voice -- the Physical Basis of Speech

All normal human beings are born with the ability to produce through the mouth (as well as the nose) a kind of sound called "voice". Language is a highly complex auditory signaling system that human beings manipulate when they try to make themselves heard and understood using that inborn ability. In the pages that follow, we propose to examine in some detail an area of the auditory aspect of language as far as English and Chinese are concerned. It is thus proper for us to begin with an account of the physical phenomenon we call "voice".

No one will deny the importance of voice to talking. Observable even in a newborn baby as its first cry at birth, it is indeed so much a part of the action of speaking in one's life, no matter what language (or languages) one

will learn to speak, that we may without exaggeration say it is the physical basis of speech. This is not just because we cannot make ourselves heard clearly enough without voice when we talk. More important, it is because, stated in most concrete terms, to talk in a normal situation, whether in Chinese, in English, or in any other language, is nothing but to vary voice in meaningful ways. In other words, it is by varying the auditory effects of voice that human beings transmit the kind of signals called speech regardless of the languages they speak. That, however, is not surprising considering the obvious merits voice has as a medium for forming a versatile signaling system.

First, voice is something produced as part of breath, practically without any extra effort.

Second, voice is perceptible at a considerable distance, even in the dark.

Third, and perhaps most important, voice is readily variable in so many ways that no one can really tell how many.