

语 INTONATION

ALAN CRUTTENDEN

PROFESSOR OF PHONETICS
UNIVERSITY OF MANCHESTER

SECOND EDITION



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出版说明

乔姆斯基的转换生成语法强调人类语言的普遍性,试图从语法原则与参数的高度揭开人类语言的普遍结构,更进一步揭示人类认知的奥秘。人类历史上似乎从未有哪一门学科如此富于创造性和挑战性,也很少有一种科学能够如此深刻地对相关学科产生如此广泛而深远的影响。这一理论在不断拓展的语料视野面前,在不断回应新思想方法的挑战过程中,不断地调整自己的思路和方法,跋涉了半个世纪,其所取得的成就不仅使语言学家激动和自豪,也令当代哲学、心理学、信息学、计算机科学、人工智能等众多领域的学者所瞩目。

乔姆斯基自称其理论远绍十七世纪法国普遍唯理语法。1898年, 马建忠在他的《马氏文通》后序中这样说:"盖所见为不同者,惟此已形已声之字,皆人为之也。而亘古今,塞宇宙,其种之或黄或白,或紫或黑之钧是人也,天皆赋之以此心之所以能意,此意之所以能达之理。则常探讨画革旁行诸国语言之源流,若希腊、若拉丁之文词而属比之,见其字别种,而句司字,所以声其心而形其意者,皆有一定不易之律;而因以律吾经籍子史诸书,其大纲盖无不同。于是因所同以同夫所不同者,是则此编之所以成也。"马氏是留法的,普遍唯理语法对他的影响同样是深刻的。

不过,在中国,普遍主义的思想也就此昙花一现,很快就湮没在强调汉语特点的思路中。半个多世纪之后,转换生成语法逐渐为中国学者所知,可是很多人都认为它不适合汉语语法研究,只有在国外的学者在这方面做了些工作,取得了不少成绩。这种研究尽管还存在许许多多的问题,但至少可以说明,汉语研究同样可以走普遍语法的道路。

马氏的模仿是显然的。然而我们今天的研究就能肯定不是模仿了么?朱德熙先生曾经说:"长期以来印欧语语法观念给汉语研究带来的消极影响……主要表现在用印欧语的眼光来看待汉语,把印欧语所有而汉语所无的东西强加给汉语。""我们现在在这里批评某些传统观念,很可能我们自己也正在不知不觉之中受这些传统观念的摆布。

这当然只能等将来由别人来纠正了,正所谓后之视今,亦犹今之视昔。"其言盖有深意焉。然而问题其实并不在于是否模仿,而在于模仿来的方法、视角是不是可以得出符合汉语事实的结论。反对模仿蕴涵着一个前提:即汉语与印欧语的结构没有相同之处。但是今天的我们对汉语的结构究竟了解了多少呢?

任何语言都有自己的特点,这一点毋庸置疑。但是不了解语言的普遍性,也就谈不上特点,也就无所谓走自己的道路。而且,在某一水平面上成为特点的规律,在更高或更深层的水平上也许就不成其为特点,而仅仅是普遍性的一种特殊表现而已。

当代社会文化领域中多元化是主流,当代语言学理论也趋于多元。在西方,形式语言学不大可能再如以往如此这般地波澜壮阔,而是进入一个相对平静的稳定发展的时期,语言的功能方面的研究已经占据一席之地。在未来的一段时期内,语言学将是一个酝酿期,为下一个重大突破作准备。而在中国,语言学在长期的"借鉴"之后,也在思考如何能够从汉语出发,取得重大突破,反哺世界学林。语言学发展到今天,又重新面临着路怎样走这一根本问题。

不管下一步怎么走,充分了解西方学者的成绩,借鉴他们的思路和方法无疑是必不可少的。特别是对于取得了如此重大成就的当代西方语言学,如果不能有正确的了解,无异于闭门造车,要想出门合辙,不亦难乎?

北大出版社多年来坚持学术为本的出版方针,我们愿意为语言学在新世纪的发展尽一分绵薄之力。为了推动我国语言学事业的发展,在总编张文定先生的主持下,我们将原版引进一批高质量的语言学专著和教材,命之曰"西方语言学丛书",以飨学林。引进的作品将包括语音学、韵律学、句法学、语义学、语言史、词源学、方言学等各个领域;既包括宏观的理论研究,也包括重要问题的个案研究;既包括形式语言学的方法,也包括认知、功能等视角。但不管是哪一种,都是经过精挑细选,庶几开卷有益。

我们期待着中国语言学的新突破!

北京大学出版社

When published in 1986, this book was the first to survey intonation in all its aspects, both in English and universally. In this updated edition, while the basic descriptive facts of the form and use of intonation are presented in the British nuclear tone tradition, there is nevertheless extensive comparison with other theoretical frameworks, in particular with the ToBI framework, which has become widespread in the United States.

In this new edition Alan Cruttenden expands the sections on historical background, different theoretical approaches and sociolinguistic variation. After introductory chapters on the physiology and acoustics of pitch, he describes in detail the forms and functions of intonation in English and discusses the sociolinguistic and dialectal variations in intonation. The concluding chapter provides an overview of the state of the art in intonational studies.

Intonation remains the basic reference book on the subject for linguists, phoneticians, speech therapists and all those concerned with speech in any way.

ACKNOWLEDGEMENTS

My principal acknowledgement for any knowledge I have about intonation must be to my teachers Gordon Arnold and Doc O'Connor; the influence of their teaching and of their book pervades large chunks of this book. If the study of intonation is now developing a body of theoretical discussion, this is only happening because of the existence of prior and thorough basic descriptions, and of these O'Connor and Arnold's Intonation of Colloquial English is pre-eminent. It should also be apparent that the two recent writers on the theory of intonation who have influenced me most are Bob Ladd and Carlos Gussenhoven; while in the area of universals, the chief influence has been that of Dwight Bolinger. I must also acknowledge a debt to various colleagues with whom I have discussed intonation over many years and who have provided me with many examples: David Allerton, Edward Carney, Alan Cruse, Martin French, and John Payne. Postgraduate students have also supplied me with examples: in particular I mention Mangat Bhardwai, Madalena Cruz-Ferreira, Eric Jarman, and Graham Low. My thanks to John Trim, who has provided helpful criticism of the whole manuscript; to David Faber, who has critically dissected almost every sentence both for content and for style, besides being the most fertile of all sources of examples; and to Penny Carter. who has always been a most helpful in-house editor. And my final thanks go to those who provided the secretarial assistance, principally Eunice Baker, and, to a lesser extent, Patricia Bowden and Irene Pickford.

Manchester, 1985

In preparing the second edition I again thank all those who have read and commented on parts of this book. Particular mention must be made of Louise Coward, Esther Grabe, and Hector Ortiz-Lira.

Manchester, 1996

PREFACE

This was the first textbook on intonation for linguists and the first textbook which attempted to widen the discussion of intonation to include languages other than English. There have been a number of excellent textbooks which have been pedagogically oriented to the needs of speakers of English as a second or foreign language (see in particular Palmer, 1922; Armstrong and Ward, 1926; Kingdon, 1958a; O'Connor and Arnold, 1961 and 1973; Halliday, 1970; and Pike, 1945, as the sole American book of this sort). Such textbooks have all included at least some (and often a large amount of) practice material. The present book is not intended as a practice book; those whose ears and mouths need to practise the skill of recognising and producing intonation patterns should use one of the above books, preferably one which uses the same tonetic-stress marks as the present book (e.g. O'Connor and Arnold, 1973). Among previous books on intonation the nearest approaches to the present volume are Bolinger (1972b), Crystal (1969a), Ladd (1980), and Couper-Kuhlen (1986). Bolinger (1972b) is a book of readings with the selective coverage which that entails; Crystal (1969a) is the most thorough bibliographic survey in print, but covers essentially only English; Ladd (1980) gets to grips with many of the difficult theoretical problems in intonational analysis, but is nevertheless selective and also limited to English; while Couper-Kuhlen (1986) thoroughly surveys a wide range of work on intonation, but is yet again limited to English. At the time when the second edition of this book is going to press, two further books have been written which will add significantly to the intonational stock: Ladd (1996) represents a major discussion of the theoretical issues, particularly within the framework now codified in ToBI (see section 3.9.2 of this book), and Hirst and di Cristo (forthcoming), will be the first volume to present a point-by-point comparison of many languages.

The present book differs from any predecessor in attempting to give thorough descriptive and theoretical coverage and to extend the database to languages other than English. In this attempt to achieve wider coverage, it is inevitable

Preface

that there are many areas which are near-virgin territory and where what is written is almost entirely my own point of view based on my own long interaction with theory and analysis in intonation; where this applies I have clearly said so in the text. For many linguists the content of this book will represent a curious mixture of the analytic, the descriptive, the typological, and the theoretical. Linguists tend to belong to one of these categories and to regard those belonging to one of the other categories as at the very least doing a different sort of linguistics. But if this book is to be used as a textbook it seems to me important that students should be introduced to (i) the sort of difficulties involved in setting up the formal units within which an intonational description is to be made (see in particular 3.2, 3.4, and 3.6); (ii) a certain amount of descriptive detail about the actual forms and meanings of tunes (see in particular chapter 4, sub-section 4.4.1); (iii) a discussion of the theoretical issues which have been and/or still are in the forefront of prosodic argumentation (see in particular chapter 2, section 2.5; chapter 3, section 3.9; chapter 4, sub-sections 4.4.2-4.4.4; and chapter 5, sub-section 5.4.3); and (iv) some sort of cross-dialectal and cross-language survey to show dimensions of variation and putative universals (see in particular chapter 5). It follows therefore that, according to the persuasion and interests of any particular reader, sub-sections of the book can be skipped without necessarily impairing understanding of later sections.

I have written the book in such a way as to keep references in the text to the absolute minimum. At the end of each chapter there is then a very full listing of any sources I have used, together with guidance on further reading. The examples in 4.1–4.4.2 have been read aloud by me on an accompanying cassette.

TRANSCRIPTIONS

Systems of intonational transcription fall into two categories, roughly analogous to the broad and narrow transcriptions of segmental phonology. A narrow transcription uses some sort of continuously varying line or series of dots (either through or alongside the basic text) to represent the continuously varying pitch of the speaker. The type of narrow transcription preferred in this book is often referred to as 'interlinear tonetic' and looks like this

The type of transcription the top and bottom lines represent the top and bottom of the speaker's pitch range and each dot corresponds to a syllable, the larger dots indicating stressed and/or accented syllables (for a discussion of the terms stress and accent, see the beginning of chapter 2).

A broad transcription of intonation represents some level of phonological analysis of the pitch patterns used by a speaker. The system most common in the U.S. is based in a tradition which sees intonational patterns as analysable into a series of level tones. In early analyses of this sort (see in particular Pike, 1945; and Trager and Smith, 1951) four levels were used. But over the last two decades (initiated by Pierrehumbert, 1980; and now codified as ToBI - see section 3.9.2 below) an analysis based on only two pitch levels (H and L) has become most commonly used. In Britain an analysis based on contour tones continues to be widely taught and is preferred in this book, not least because of its highly-convenient and iconic transcription system involving 'tonetic-stress' marks. This type of transcription has a long history of British usage with roots going back to Walker (1787), Sweet (1878 and 1892), and Palmer (1922); and it has been used in a number of well-known pedagogical textbooks of British English intonation (see in particular Kingdon (1958a), Schubiger (1958), and O'Connor and Arnold (1961, 1973)). In a full system of tonetic-stress marking, a mark is placed before each stressed syllable and the differences between the marks indicate the type of pitch movement beginning on that syllable.

TRANSCRIPTIONS

A broad transcription of intonation represents some level of phonological analysis of the pitch patterns used by a speaker. The system most common in the U.S. is based in a tradition which sees intonational patterns as analysable into a series of level tones. In early analyses of this sort (see in particular Pike, 1945; and Trager and Smith, 1951) four levels were used. But over the last two decades (initiated by Pierrehumbert, 1980; and now codified as ToBI - see section 3.9.2 below) an analysis based on only two pitch levels (H and L) has become most commonly used. In Britain an analysis based on contour tones continues to be widely taught and is preferred in this book, not least because of its highly-convenient and iconic transcription system involving 'tonetic-stress' marks. This type of transcription has a long history of British usage with roots going back to Walker (1787), Sweet (1878 and 1892), and Palmer (1922); and it has been used in a number of well-known pedagogical textbooks of British English intonation (see in particular Kingdon (1958a), Schubiger (1958), and O'Connor and Arnold (1961, 1973)). In a full system of tonetic-stress marking, a mark is placed before each stressed syllable and the differences between the marks indicate the type of pitch movement beginning on that syllable.

Transcriptions

In this book only a limited number of marks are used, as follows:

```
/ for an intonation-group boundary,

\for a fall from high to low (a 'high-fall')
\for a fall from mid to low (a 'low-fall')

/ for a rise ending high (a 'high-rise')

/ for a rise ending mid (a 'low-rise')

\for a fall-rise

\for a rise-fall

> for a mid-level

= for a stylised fall

| for a high pre-nuclear accent
```

All these marks (with the exception of the last) indicate the pitch pattern involved in a following 'nuclear tone' (see chapter 3, section 3.6). The last mark indicates a high pitch accent in a pre-nuclear position. These tonetic-stress marks are explained again as they arise up to chapter 3, section 3.7, in which section they are given a full explanation; thereafter they are not usually explained.

It is sometimes necessary to refer to stress with no indication of pitch: this is done by placing the mark over the vowel (whereas all the tonetic-stress marks precede syllables), e.g. áccent and tálking about áccent. It is also sometimes useful to refer to the nucleus or nuclear syllable (or 'primary stress') of an utterance without indicating pitch movement: this is done by using small capitals for the nuclear syllable, e.g. talking about accent. Syllable division is occasionally indicated by a hyphen, e.g. /eks-trə/.

The context of particular intonational examples is indicated as follows:

```
Preceding utterance spoken by same speaker: no overt indication but intonation not usually marked

Preceding utterance spoken by different speaker: ( )

Situational context: [ ]

Pauses are indicated by three dots: . . .

Omitted portions of utterances are indicated by five dots: . . . .
```

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1 Preliminaries

1.1 Prosodic features

Phonetics, in the mind of the 'man in the street', nurtured on Pygmalion and My Fair Lady, generally consists of sounds and the transcription of sounds: he thinks, for example, of the word nice being transcribed as /nais/. Such a transcription might be made for various purposes including, for instance, showing the varying relationships between sound and spelling, or indicating how to pronounce a particular word in a language or dialect. This sort of transcription is usually limited to sounds (which are represented as discrete) that follow one another in a fixed order: in the case of nice an /n/ is followed by an /ai/ which in turn is followed by an /s/. Such sounds are usually referred to as segments and the sort of transcription that represents them is consequently referred to as a segmental transcription. But there are clearly other features involved in the way a word is said which are not indicated in a segmental transcription. The word nice might be said softly or loudly; it might be said with a pitch pattern which starts high and ends low, or with one which begins low and ends high; it might be said with a voice quality which is especially creaky or especially breathy. Such features generally extend over stretches of utterances longer than just one sound and are hence often referred to as suprasegmentals (and a type of transcription which indicates how any of them are used is therefore called a suprasegmental transcription). Alternatively, the shorter term PROSODIC is sometimes used and I shall generally prefer this term in this book. Prosodic features may extend over varying domains: sometimes over relatively short stretches of utterances, like one syllable or one morpheme or one word (the tones of tone lang lages are generally relatable to such shorter domains); sometimes over relativel, longer stretches of utterances, like one phrase, or one clause, or one sentence (intonation is generally relatable to such longer domains). Of course this distinction is not always as clear-cut as it first appears: a sentence, for example, may consist of one word. Since this book is principally about intonation, I shall for the most part be concerned with features relating to the longer domains.