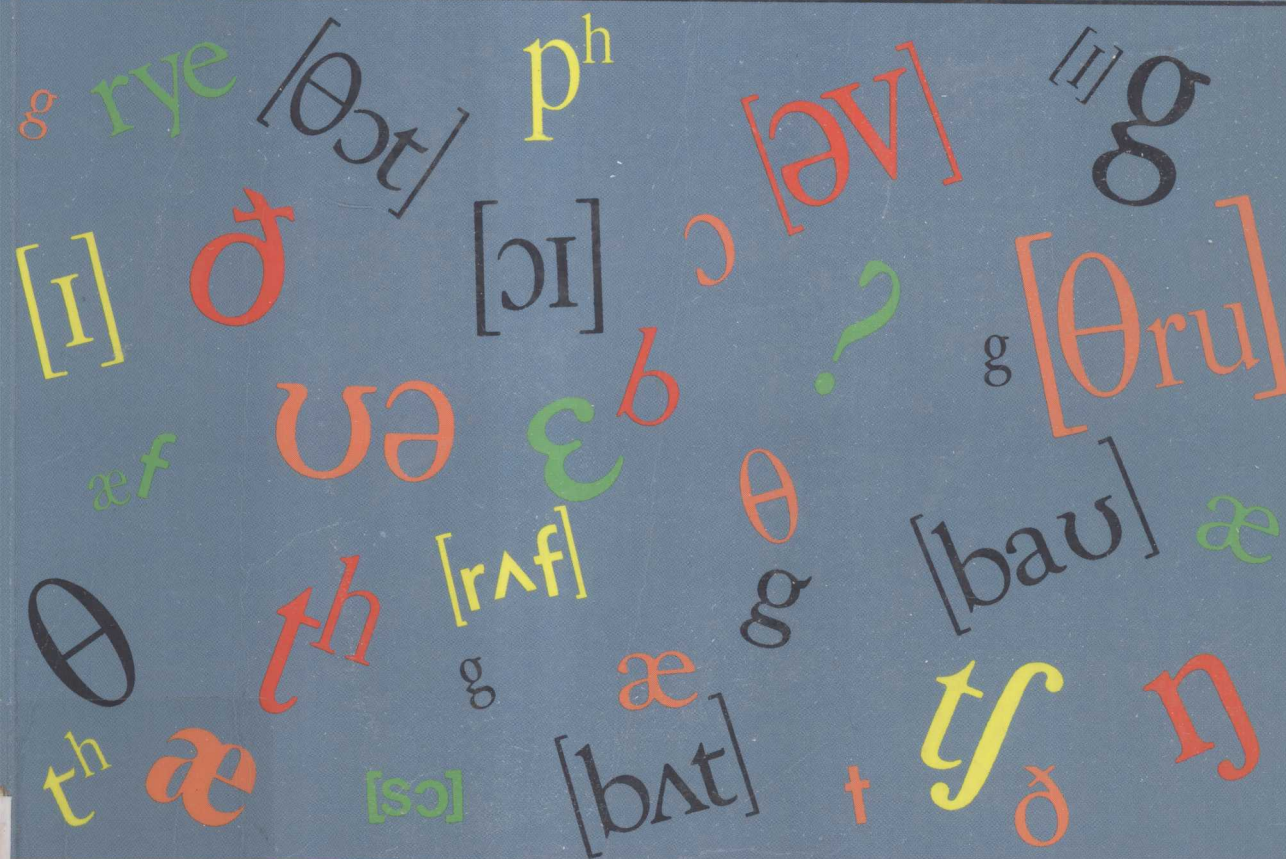


AN INTRODUCTION TO

LANGUAGE

FROMKIN RODMAN COLLINS BLAIR



SECOND AUSTRALIAN EDITION

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LANGUAGE

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AN INTRODUCTION TO

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**DEPARTMENT OF LINGUISTICS
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CHRISTCHURCH, N.Z.**

PREFACE

Interest in linguistics—the study of human language—has existed throughout history. Many of the questions this book discusses have been asked for thousands of years. What is language? What do you know when you know a language? Is language unique to the human species? What is the origin of language? Why are there many languages? How and why do languages change? What is the meaning of ‘meaning’? How do children learn language? Are some languages and dialects simpler than or superior to others? Can machines talk? Can computers understand? What is the biological basis for human language?

In addition to the philosophical interest, practical considerations have also motivated linguists, psychologists, philosophers, teachers, sociologists, neurologists, communication engineers and computer scientists to address these questions. Linguistics provides a theoretical basis for practical applications that include the diagnosis and treatment of language disorders such as aphasia and dyslexia, the planning of ‘language arts’ curricula in schools, the fight against illiteracy in many nations of the world, the development of automatic, computerised speech production and recognition, the learning of foreign languages, and the simplification of legal language.

For these reasons previous editions of this text were directed towards students of many disciplines. The book has been used in both non-linguistic and linguistic courses, for students in computer science and English, in speech pathology and anthropology, in communication studies and philosophy. This new edition continues this approach and adds new material to make it suitable for an even wider audience. It also reflects the new developments in linguistic theory and related fields.

Part One sets the framework by discussing the nature of human language and the nature of grammar, linguistic creativity, language universals, and non-human communication.

Chapters 2 to 6 in Part Two examine the kinds of linguistic knowledge speakers of Arabic or Zulu, English or Aranda, or any other human language, possess—the ‘Grammatical aspects of language’, which include sounds and sound patterns (phonetics and phonology), words and word formation (morphology), sentence structure (syntax), and meaning (semantics). These chapters have been substantially revised since the previous edition; for example, syllable and metrical structures in phonology are discussed, developments in syntactic theory have motivated basic changes in the discussion on syntax, and the sections on semantics and pragmatics are expanded.

Part Three examines 'Social aspects of language' in its three chapters on language variation, language change, and writing.

The final section, Part Four, on 'The biological aspects of language' has been greatly expanded. First and second language acquisition are compared, as is human language with the communicative abilities of chimps and other primates. Since the last edition, neurolinguistic research concerned with brain and language has advanced rapidly; Chapter 11 discusses some of the new and exciting developments in this area, and, together with the section on sign languages in Chapter 10, examines the neural basis of both spoken and sign language. A new chapter, Chapter 12, on language processing by humans and computers has been added, with sections on psycholinguistic production and comprehension models and developments in computer processing—automatic translation, speech synthesis and recognition, and artificial intelligence.

This Australian edition reflects the study of linguistics in Australia, both by taking account of the place of language in Australian society and by basing its detailed description of English on the Australian English dialect. For example, the phonetic symbols are those that are in standard use in this country, and the discussion of social and regional variation in Chapter 7 focuses on Australia and New Zealand.

As in the previous editions, the primary concern has been with basic ideas rather than with a detailed exposition of formal theory or of the grammar of English or any other language. The text assumes no previous knowledge on the part of the student. The reference section at the end of each chapter is included to stimulate the reader to further investigate all aspects of human linguistic ability. Also included are exercises to enhance the student's interest in and comprehension of the textual material.

We wish to thank the reviewers of this edition and to say that we have also benefited greatly from discussions with and suggestions from friends, colleagues, students, lecturers, tutors and reviewers of the last edition. They are too many to name, but if this text is better than the last, it is because of them. The responsibility for errors in fact or judgment is of course ours. Finally, we wish to say 'thank you' to the lecturers who have used the earlier editions; without them and their students there would be no new edition.

CONTENTS

Preface ix

Part One The nature of human language 1

1 What is language? 3

- Linguistic knowledge 3
- Linguistic knowledge and performance 10
- What is grammar? 11
- Language universals 15
- Animal 'languages' 18
- Summary 21
- Exercises 22
- References and further reading 24

Part two Grammatical aspects of language 25

2 Phonetics: the sounds of language 27

- Sound segments 28
- Articulatory phonetics 30
- The phonetic alphabet 48
- Phonetic features 57
- Summary 60
- Exercises 60
- References and further reading 63

3 Phonology: the sound patterns of language 64

- Phonemes: the phonological units of language 65
- Sequences of phonemes 80
- Natural classes 83
- Prosodic phonology and suprasegmentals 84
- The rules of phonology 91
- Summary 110
- Exercises 112

References and further reading 118

4 Morphology: the words of language 118

Dictionaries 120

Classes of words 121

Word sets 122

Morphemes: the minimal units of meaning 124

Rules of word formation 127

Word coinage 132

Inflectional morphology 137

The pronunciation of morphemes 139

Summary 147

Exercises 148

References and further reading 153

5 Syntax: the sentence patterns of language 155

Grammatical or ungrammatical? 155

What else do you know about syntax? 158

Sentence structure 160

Phrase structure rules 165

More phrase structure rules 170

The lexicon 175

The infinitude of language 181

The function of constituents 184

Types of languages 186

Transformational rules 188

Summary 192

Exercises 193

References and further reading 198

6 Semantics: the meanings of language 200

Word meanings 201

Phrase and sentence meaning 213

Discourse meaning 219

Pragmatics 222

When rules are broken 227

Summary	232	
Exercises	234	
References and further reading		240
Part Three Social aspects of language		243
✓ 7 Language in society		245
Dialects	245	
The Australian English dialect		248
The New Zealand English dialect		251
The 'standard'	253	
Aboriginal English	257	
Lingua francas	259	
Pidgins and creoles	260	
Styles and slang, registers and jargon		263
Taboo or not taboo?	268	
Language and sexism	271	
Artificial languages	275	
Summary	276	
Exercises	277	
References and further reading		281
8 Language change: the syllables of time		283
The regularity of sound change		285
Phonological change	287	
Morphological change	291	
Syntactic change	293	
Lexical change	295	
Reconstructing 'dead' languages		301
The genetic classification of languages		307
Why do languages change?	311	
Languages of the world	313	
Summary	314	
Exercises	317	
References and further reading		321
✓ 9 Writing: the ABCs of language		323
The history of writing	324	

Modern writing systems	329
Writing and speech	336
Spelling	338
Spelling pronunciations	341
Summary	342
Exercises	343
References and further reading	346

✓ **Part Four Biological aspects of language 347**

✓ **10 Language acquisition 349**

Stages in language acquisition	350
Theories of child language acquisition	357
The biological foundations of language acquisition	363
Learning a second (or third or . . .) language	369
Can chimps learn human language?	371
Summary	375
Exercises	376
References and further reading	377

11 Brain, mind and language 379

The two sides of the brain	381
Evidence for brain lateralisation	383
The critical age hypothesis	390
In the beginning: the origin of language	391
Summary	399
Exercises	400
References and further reading	402

12 Language processing: human and machine 404

Human processing of language: linguistic performance	404
Computer processing of language	415
Summary	428
Exercises	429
References and further reading	431

Index 433

PART ONE

The nature of human language

Just as birds have wings, man has language. The wings give the bird its peculiar aptitude for aerial locomotion. Language enables man's intelligence and passions to acquire their peculiar characters of intellect and sentiment.

G. H. Lewes, *The study of psychology*

Language is not an abstract construction of the learned, or of dictionary-makers, but is something arising out of the work, needs, ties, joys, affections, tastes, of long generations of humanity, and has its bases broad and low, close to the ground.

Walt Whitman

1

What is language?

When we study human language, we are approaching what some might call the 'human essence', the distinctive qualities of mind that are, so far as we know, unique to man.

Noam Chomsky, *Language and mind*

P₃ Whatever else people do when they come together—whether they play, fight, make love, or make dishwashers—they talk. We live in a world of language. We talk to our friends, our associates, our wives and husbands, our lovers, our teachers, our parents and in-laws. We talk to bus drivers and total strangers. We talk face to face and over the telephone, and everyone responds with more talk. Television and radio further swell this torrent of words. Hardly a moment of our waking lives is free from words, and even in our dreams we talk and are talked to. We also talk when there is no one to answer. Some of us talk aloud in our sleep. We talk to our pets and sometimes to ourselves. We are the only animals that do so—that talk.

The possession of language, more than any other attribute, distinguishes humans from other animals. To understand our humanity we must understand the language that makes us human. According to the philosophy expressed in the myths and religions of many peoples, it is language that is the source of human life and power. To some people of Africa, a newborn child is a *kuntu*, a 'thing', not yet a *muntu*, a 'person'. Only by the act of learning does the child become a human being. According to this tradition, we all become 'human' because we all come to know at least one language. But what does it mean to 'know' a language?

P₄ Linguistic knowledge

When you know a language, you can speak and be understood by others who know that language. This means you have the capacity to produce sounds that signify certain meanings and to understand or interpret the sounds produced by others. We are referring here to normal-hearing individ-

uals. Deaf persons produce and understand sign languages just as hearing persons produce and understand spoken languages.

Everyone knows a language. Why write an entire book on what appears to be so simple a phenomenon? After all, five-year-old children are almost as proficient at speaking and understanding as their parents are. Nevertheless the ability to carry out the simplest conversation requires profound knowledge of which speakers are unaware. This fact is as true for speakers of Japanese as for English speakers, for Eskimos as for Navajos. A speaker of English can produce a sentence with two relative clauses, like

My goddaughter who was born in Sweden and who now lives in the USA is named Disa, after a Viking queen.

without knowing what a relative clause is. In a parallel fashion a child can walk without understanding or being able to explain the principles of balance, support, and sequence that permit one to walk. The fact that we know something unconsciously is not unique to language.

What, then, do speakers of English or Quechua or French or Aranda or Arabic know?

Knowledge of the sound system

Knowing a language means knowing what sounds are in that language and what sounds are not. This unconscious knowledge is revealed by the way speakers of one language pronounce words from another language. If you speak only English, for example, you may substitute an English sound for a non-English sound when pronouncing 'foreign' words. Most English speakers pronounce the name *Bach* with a final *k* sound because the sound represented by the letters *ch* in German is not an English sound. If you pronounce it as the Germans do, you are using a sound outside the English sound system. French people speaking English often pronounce words like *this* and *that* as if they were spelt *zis* and *zat*. The English sound represented by the initial letters *th* is not part of the French sound system, and the French mispronunciation reveals the speakers' unconscious knowledge of this fact.

Even some involuntary cries are constrained by our own language system, and the filled pauses that are sprinkled through conversational speech—like *er* or *uh* or *you know* in English—contain only the sounds found in the language. French speakers, for example, often fill their pauses with the vowel sound that starts their words for egg, *oeuf*—a sound that does not occur in English.

Knowing the sound system of a language includes more than knowing the **inventory** of sounds: it includes knowing which sounds may start a word, end a word, and follow each other. The name of the former president of Ghana was *Nkrumah*, pronounced with an initial sound identical to the sound ending the English word *sing* (for most Australians). Most speakers of English mispronounce it (by Ghanaian standards) by inserting a short vowel

before or after the *n* sound. Similarly, the first name of the New Zealand mystery writer Ngaio Marsh is usually mispronounced in this way or by simply ignoring the *g* altogether. The reason for these 'errors' is that no word in English begins with the *ng* sound. Children who learn English discover this fact about our language, just as Ghanaian and Maori children learn that words in their language may begin with the *ng* sound.

We will learn more about sound systems in Chapters 2 and 3.

Knowledge of the meaning of words

The minute I set eyes on an animal I know what it is. I don't have to reflect a moment; the right name comes out instantly . . . I seem to know just by the shape of the creature and the way it acts what animal it is. When the dodo came along he [Adam] thought it was a wildcat . . . But I saved him . . . I just spoke up in a quite natural way . . . and said 'Well, I do declare if there isn't the dodo!'

Mark Twain, *Eve's diary*

Knowing the sounds and sound patterns in our language constitutes only one part of our linguistic knowledge. In addition, knowing a language is knowing that certain sound sequences **signify** certain concepts or **meanings**. Speakers of English know what *boy* means and that it means something different from *toy* or *girl* or *pterodactyl*. Knowing a language is therefore knowing how to relate sounds and meanings.

If you do not know a language, the sounds spoken to you will be mainly incomprehensible, because the relationship between speech sounds and the meanings they represent is, for the most part, an **arbitrary** one. You have to learn (when you are acquiring the language) that the sounds represented by the letters *house* (in the written form of the language) signify the concept



If you know French, this same meaning is represented by *maison*; if you know Twi, it is represented by *ɔdaŋ*; if you know Russian, by *dom*; if you know Spanish, by *casa*. Similarly, the concept



is represented by *hand* in English, *main* in French, *nsa* in Twi, and *ruka* in Russian.

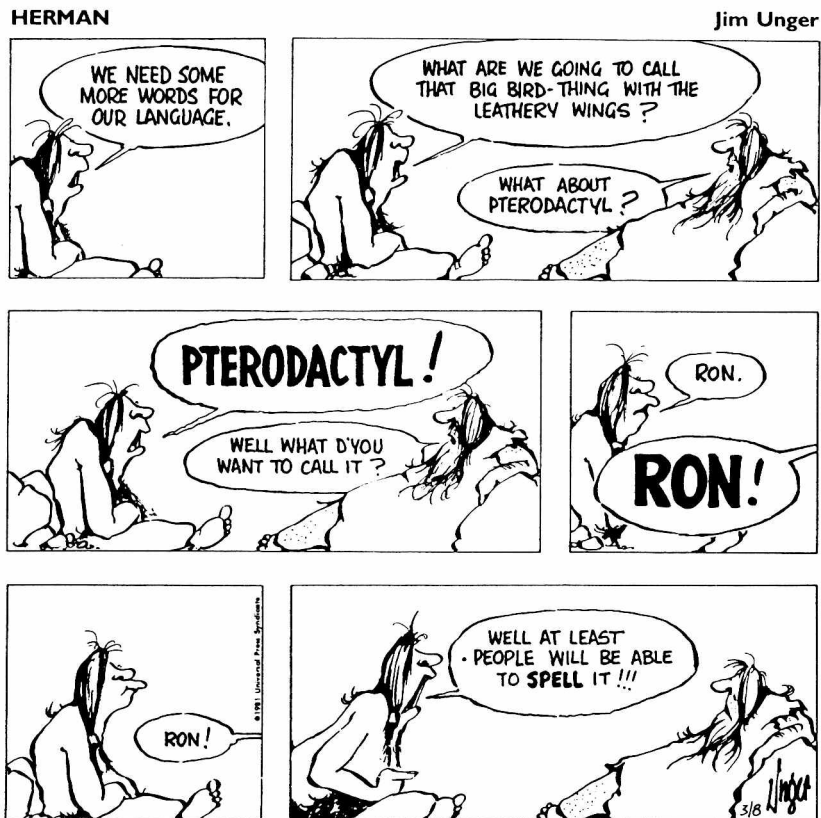
The following are words in some different languages. How many of them can you understand?

- | | | |
|-----------|------------|--------------|
| a. kyinii | d. asa | g. wartawan |
| b. doakam | e. nyinngi | h. inaminatu |
| c. odun | f. bolna | i. yanna |

Speakers of the languages from which these words are taken know that they have the following meanings:

- a. a large parasol (in a Ghanaian language, Twi)
- b. living creature (in the native American language, Papago)
- c. wood (in Turkish)
- d. morning (in Japanese)
- e. snake (in an Australian Aboriginal language, Pitjantjatjara)
- f. to speak (in a Pakistani language, Urdu); ache (in Russian)
- g. reporter (in Indonesian)
- h. teacher (in a Venezuelan Indian language, Warao)
- i. right on! (in a Nigerian language, Hausa)

These examples show that the sounds of words are only given meaning by the language in which they occur. Mark Twain satirises the idea that something is called X because it looks like X or called Y because it sounds like Y in the quotation at the beginning of this section. Neither the shape nor the other physical attributes of objects determine their pronunciation in any language. As illustrated below, a pterodactyl could have been called a ron.



This arbitrary relationship between the **form** (sounds) and **meaning** (concept) of a word in spoken language is also true of the sign languages used by the deaf. If you see someone using a sign language you do not know, it is doubtful that you will understand the message from the signs alone. A person who knows Chinese Sign Language would find it difficult to understand Australian Sign Language. Signs that may have originally been **mimetic** (similar to miming) or **iconic** (with a non-arbitrary relationship between form and meaning) change historically as do words, and the iconicity is lost. These signs become **conventional**, so knowing the shape or movement of the hands does not reveal the meaning of the gestures in sign languages.

There is, however, some '**sound symbolism**' in language—that is, words whose pronunciation suggests the meaning. A few words in most languages are **onomatopoeic**—the sounds of the words supposedly imitate the sounds of nature. Even here, the sounds differ from one language to another, reflecting the particular sound system of the language. In English we say *cockadoodledoo* to represent the rooster's crow, but in Russian they say *kukuriku*.

Sometimes particular sound sequences seem to relate to a particular concept. In English many words beginning with *gl* relate to sight, such as *glare, glint, gleam, glitter, glossy, glaze, glance, glimmer, glimpse, and glisten*. However, such words are a very small part of any language, and *gl* may have nothing to do with 'sight' in another language, or even in other words in English, such as *gladioli, glucose, glory, glycerine, globe, and so on*.

English speakers know the *gl* words that relate to sight and those that do not; they know the onomatopoeic words, and all the words in the basic vocabulary of the language. There are no speakers of English who know all 415 000 words listed in the twelve volumes of *The Oxford English Dictionary*, or even the 90 000 in *The Macquarie Dictionary*. But even if there were and that were all they knew, they would not know English. Imagine trying to learn a foreign language by buying a dictionary and memorising words. No matter how many words you learned, you would not be able to form the simplest phrases or sentences in the language or understand a native speaker. No one speaks in isolated words. (Of course, you could search in your tourist's dictionary for individual words to find out how to say something like 'car—petrol—where?' After you have repeated this question a number of times, a native speaker might understand you and point in the direction of a service station. If you were answered with a sentence, however, you probably would not understand what was said or be able to look it up, because you would not know where one word ended and another began.) Chapter 4 will further explore word meanings.

The creativity of linguistic knowledge

Knowledge of a language enables you to combine words to form phrases, and phrases to form sentences. You cannot buy a dictionary of any language with all the sentences, because no dictionary can list all the possible sentences.