

An Introduction to Language



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P R E F A C E

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, educators, 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, computerized speech production and recognition, the learning of foreign languages, and the simplification of legal language.

For these reasons the first three editions of this text were directed toward students of many disciplines. The book has been used in both nonlinguistic and linguistic courses, for majors in computer science and English, in speech pathology and anthropology, in communication studies and philosophy. This fourth edition continues this approach and adds new material to make it suitable for even a 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 nonhuman communication.

Chapters 2 through 6 in Part Two examine the kinds of linguistic knowledge speakers of Arabic or Zulu, English or Cherokee, 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 third 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. A new section on Hispanic English has been added.

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 virtually exploded; 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 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.

As in the previous editions, the primary concern has been with basic ideas rather than 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. A short bibliography 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 and comprehension of the textual material.

We wish to thank the following reviewers of this edition: Elaine Chaika, Providence College; Richard Veit, University of North Carolina; and Raymond Weitzman, California State University at Fresno. We have also benefited greatly from discussions with and suggestions from friends, colleagues, students, teaching assistants, instructors, 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. We owe special thanks to Geoffrey Pullum, Paul Schachter, Tim Stowell, and Barbara A. Fennell for their incisive comments on the syntax chapter, and to Walter E. Meyers for his on historical linguistics. The new and edited sections on the brain are due to the meticulous help of Antonio and Hanna Damasio; to Hanna, for her beautifully executed and anatomically correct drawings of the human brain, we are deeply grateful. Our continual gratitude goes to John Rea for his feedback, criticism, and suggestions on every section of the book. The responsibility for errors in fact or judgment is of course ours. Finally, we wish to say “thank you” to the instructors who have used the three earlier editions; without them and their students there would be no fourth edition.

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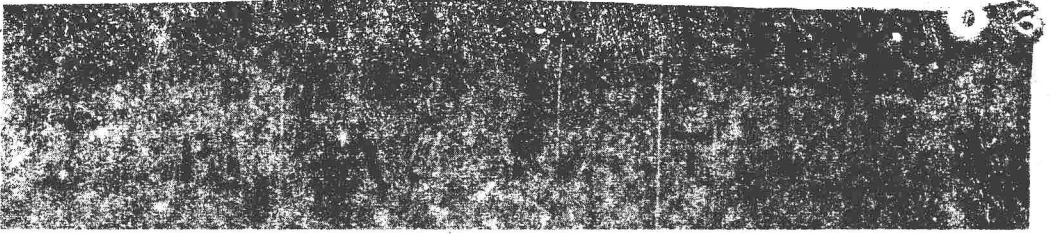
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The Nature of Human Language

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

C H A P T E R

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*

B.C.

Johnny Hart



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Whatever else people do when they come together—whether they play, fight, make love, or make automobiles—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?

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 individuals. 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 Vermont 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 Mohawk 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