FIFTH EDITION

# Language

## INTRODUCTORY READINGS

Virginia P. Clark
Paul A. Eschholz
Alfred F. Rosa

EDITORS

ITION

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# *Preface*

> The limits of my language mean the limits of my world.
> – LUDWIG WITTGENSTEIN

Our language is central to everything we do. Language, more than any other human attribute, distinguishes us from all other forms of life on earth. Because we cannot function without our language, and because the language we use and how we use it set strict boundaries to what we can do, new discoveries and changes in linguistics can profoundly affect what we think of ourselves and our place in society. In appreciating the complexities of the medium through which we all communicate, we can understand more fully our humanity.

This fifth edition of *Language: Introductory Readings* maintains, with one notable exception, the organizational structure of the fourth edition. On the recommendation of reviewers and teachers, we have combined the old section "Syntax and Language Processing" with "Semantics and Pragmatics" to form the new Part Five, "Syntax, Semantics, and Discourse." In conflating these two sections we are now able to give more extensive coverage to the other seven subject areas.

In addition to providing more focused and in-depth coverage, the selections have been updated. Fourteen of the forty-four readings are new and two—Julia Falk's essay "To Be Human: A History of the Study of Language" and Jeannine Heny's "Learning and Using a Second Language"—were written especially for this edition. Four articles originally written for the fourth edition have been revised and updated: Jeannine Heny's "Brain and Language," William Kemp and Roy Smith's "From Speaking Act to Natural Word: Animals, Communication, and Language," Edward Callary's "Phonetics," and Frank Heny's "Syntax: The Structure of Sentences."

The professional literature of linguistics and related fields ranges greatly in its demands on the reader's knowledge. We have therefore tried to choose selections that are consistent in level of difficulty and that are accessible to undergraduates who have no previous formal study of linguistics but have a serious interest in the subject. The sequence of the eight parts represents one possible syllabus for a course in language.

However, instructors with other preferences will find that the order can easily be rearranged and that all sections may not be needed for some courses. Even so, we do recommend that Part One, "Language and Its Study," be assigned first, and that students read Edward Callary's "Phonetics" in Part Four before tackling any of the selections that make use of the phonetic alphabet (i.e., those by Morris Halle, H. A. Gleason, and Roger W. Shuy).

The new edition retains the teaching aids familiar from its predecessors: an introduction and discussion-and-review questions for each selection, an annotated bibliography and a variety of projects at the end of each part, and a general introduction for each part that describes the topics it covers and relates the readings to one another. In addition, a glossary of frequently used terms and a complex topical index are provided.

We received valuable criticism of the fourth edition and advice toward the fifth from teachers around the country, who, in a real sense, were collaborators in setting the new proportions and coverage of this book: Barbara Abbott, Michigan State University; Helen Aristar-Dry, University of Texas–San Antonio; Linda Armspaugh, University of Cincinnati; Mark Aronoff, SUNY Stonybrook; Janet G. Auten, Bowling Green State University; Guy Bailey, Texas A&M University; Beatrice Bartlett, Stephens College; Byron W. Bender, University of Hawaii; Janet Bing, Old Dominion University; James Blodgett, Indiana University–South Bend; Theodora Bofman, Northeastern Illinois University; Thomas R. Brooks, Wheaton College; Irene Brosnahan, Illinois State University; Thomas J. Buchholz, University of Wisconsin–Stevens Point; Kevin G. Burne, California State University–San Bernardino; Arthur F. Butler, Fort Valley State University; Alexander Butrym, Seton Hall University; Patrice Caldwell, Eastern New Mexico State University; Larry Carucci, Montana State University; Richard Chartier, Framingham State College; Mary Morris Clark, University of New Hampshire; Roger W. Cole, University of South Florida; Ann Charlotte Conway, Holy Names College; Stanley J. Cook, California State Polytechnic University–Pomona; Lucretia Crawford, Lakeland College; Bernard Crook, University of Texas–San Antonio; Helga H. Delisle, New Mexico State University; Robert B. Dewell, Loyola University; Angeline Dufner, College of Saint Benedict; Christopher Dunne, Ohio University; R. Durst, University of Hawaii; Esteban Egea, University of Texas–Dallas; Peter K. Fei, Marshall University; Donald N. Flemming, Keene State College; Antonia Folarin, University of Kansas; Lawrence M. Foley, James Madison University; Susan R. Ford, Northeastern Illinois State University; Virginia Gassner, Moorhead State University; Walker Gibson, University of Massachusetts; Francis G. Greco, Clarion University; Thomas A. Green, Texas A&M University; Dorothy G. Grimes, University of Montevallo; Allan W. Grundstrom, Bucknell University; Christopher Hall, University of Wyoming; Richard Hankins, Baldwin Wallace College; Marta P. Harley, Florida State University; Winifred C. Harris, Delaware State College; Ger-

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As with the previous editions of *Language: Introductory Readings*, St. Martin's Press provided us with an excellent editorial team—Cathy Pusateri, Karen Allanson, and Nicholas Webb. Their individual efforts made our work on this new edition a pleasure. Special thanks go to Julie Young, our graduate research assistant, for her work on this new edition. Finally, we'd like to acknowledge our students at the University of Vermont, whose continued enthusiasm for language study and responses to and evaluations of materials included in this edition, as well as in the first four, have been most helpful.

VIRGINIA CLARK
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ALFRED ROSA

# *Contents*

PART ONE

# LANGUAGE AND ITS STUDY

Language is not only the principal medium that human beings use to communicate with each other but also the bond that links people together and binds them to their culture. To understand our humanity, we must understand the language that makes us human. The study of language, then, is a very practical, as well as a very challenging, pursuit. In beginning this study, we must consider some fundamental questions: What is language? What are its unique characteristics? Are there some commonly held misconceptions that impede our understanding of language — and if so, what are they? What effect does language have on people and on their culture? The selections in Part One raise these basic questions and suggest some answers.

Most people take their language ability for granted; speaking and understanding speech seem as natural as breathing or sleeping. But human language is extremely complex and has unique characteristics. In the first selection in this section, W. F. Bolton discusses the properties of human language that make it species-specific and explains the intricate physiological adaptations that make speech and hearing possible. He also points out that all languages are systematic and that no language is "simple" or "primitive," and he alerts us to the harm of ethnocentric attitudes.

Following this definition of human language and introduction to the physiology of speech and hearing, Harvey A. Daniels discusses nine "facts" about human language that most contemporary linguists believe to be demonstrably true. These ideas are important in their own right; in addition, understanding them will make the selections in other parts of this book more enjoyable and meaningful.

In the third essay, Lewis Thomas, noted physician and essayist, speculates on the origins of language and the ways in which humans acquire it. Of particular interest is his emphasis on the importance of childhood and adolescence as the period in which our brains are

receptive to the creative and humanizing power of language. In the concluding essay, Julia Falk provides a comprehensive historical overview of the study of language today, all of which increases, as she writes, "the depth of our understanding of what it is to be human."

The selections in Part One provide an introduction to the study of language: its physiology and unique properties, and facts that refute nine commonly held misconceptions about language. Reading these four articles should help us begin to understand the complexity of both human language and the problems involved in studying it. Moreover, doing so should make it impossible to take for granted the unique and complicated phenomenon that is human language.

# 1

# *Language: An Introduction*

W. F. Bolton

*The ability to use language is the most distinctive human characteristic, and yet most people take this ability for granted, never considering its richness and complexity. In the following selection, W. F. Bolton, professor of English at Douglass College, analyzes the intricate physiological mechanisms involved in speech production and in speech reception, or hearing. Especially interesting is his discussion of the differences between "speech breathing" and "quiet breathing." Professor Bolton also explains the "design features" that characterize human language; this explanation is important for understanding many of the later selections in this book. His concluding warning against ethnocentricity is particularly important today.*

Language is so built into the way people live that it has become an axiom of being human. It is the attribute that most clearly distinguishes our species from all others; it is what makes possible much of what we do, and perhaps even what we think. Without language we could not specify our wishes, our needs, the practical instructions that make possible cooperative endeavor ("You hold it while I hit it"). Without language we would have to grunt and gesture and touch rather than tell. And through writing systems or word of mouth we are in touch with distant places we will never visit, people we will never meet, a past and a future of which we can have no direct experience. Without language we would live in isolation from our ancestors and our descendants, condemned to learn only from our own experiences and to take our knowledge to the grave.

Of course other species communicate too, sometimes in ways that seem almost human. A pet dog or cat can make its needs and wishes known quite effectively, not only to others of its own species but to its human owner. But is this language? Porpoises make extremely complex sequences of sounds that may suggest equally complex messages, but so far no way has been found to verify the suggestion. Chimpanzees have been taught several humanly understandable languages, notably AMESLAN (American Sign Language) and a computer language, but there has been heated debate whether their uses of these languages are like ours or merely learned performances of rather greater subtlety than those of

trained circus animals. If the accomplishments of dolphins and chimpanzees remain open questions, however, there is no question but that human uses of language, both everyday and in the building of human cultures, are of a scope and power unequaled on our planet.

It seems likely that language arose in humans about a hundred thousand years ago. How this happened is at least as unknowable as how the universe began, and for the same reason: there was nobody there capable of writing us a report of the great event. Language, like the universe, has its creation myths; indeed, in St. John's Gospel both come together in the grand formulation, "In the beginning was the Word, and the Word was with God, and the Word was God." Modern linguists, like modern cosmologists, have adopted an evolutionary hypothesis. Somehow, over the millennia, both the human brain and those parts of the human body now loosely classed as the organs of speech have evolved so that speech is now a part of human nature. Babies start to talk at a certain stage of their development, whether or not their parents consciously try to teach them; only prolonged isolation from the sounds of speech can keep them from learning.

Writing is another matter. When the topic of language comes up, our first thoughts are likely to be of written words. But the majority of the world's languages have never been reduced to writing (though they all could be), and illiteracy is a natural state: we learn to write only laboriously and with much instruction. This is hardly surprising, since compared with speech writing is a very recent invention—within the past 5,000 years. Still more recently there have been invented complex languages of gesture for use by and with people unable to hear or speak; these too must be painstakingly learned. What do the spoken, written, and sign languages have in common that distinguishes them from other ways to communicate?

## PROPERTIES OF LANGUAGE

Perhaps the most distinctive property of language is that its users can create sentences never before known, and yet perfectly understandable to their hearers and readers. We don't have to be able to say "I've heard that one before!" in order to be able to say, "I see what you mean." And so language can meet our expressive needs virtually without limit, no matter how little we have read or heard before, or what our new experiences call on us to express. Another way of describing this property is to say that language is *productive.* We take this productivity for granted in our uses of language, but in fact it is one of the things that make human communication unique.

Less obvious is the fact that language is *arbitrary:* the word for something seldom has any necessary connection with the thing itself. We say *one, two, three*—but the Chinese say *yi, er, san.* Neither language has

the "right" word for the numerals, because there is no such thing. (It might seem that a dog's barking, or a blackbird's call, were equally arbitrary, as both might be translated into various languages as "Go away!" or "Allez-vous-en!"—but within the species the sound is universally understandable. A chow and a German shepherd understand each other without translation—unlike speakers of Chinese and German.)

Even the sounds of a language are arbitrary. English can be spoken using only 36 significantly different sounds, and these are not all the same as the sounds needed to speak other languages. These 36 sounds are in turn arbitrarily represented by 26 letters, some standing for two or more sounds, others overlapping. (Consider *c*, *s*, and *k*.) And the patterns into which these sounds, and indeed words, may be arranged are also arbitrary. We all know to well what *tax* means but, in English at least, there is no such word as *xat*. In English we usually put an adjective before its noun—*fat man;* in French it's the other way around, *homme gros*. This patterning is the key to the productivity of language. If we use intelligible words in proper patterns, we can be sure of being understood by others who speak our language. Indeed, we seem to understand nonsense, provided it is fitted into proper patterns—the silly nonsense of doubletalk, the impressive nonsense of much bureaucratese.

This ability to attach meaning to arbitrary clusters of sounds or words is like the use and understanding of symbolism in literature and art. The word *one* does not somehow represent the numeral, somehow embody its essence the way a three-sided plane figure represents the essence of triangularity. Rather, *one* merely stands for the prime numeral 1, giving a physical form to the concept, just as the word *rosebuds* gives a physical form to the concept "the pleasures of youth" in the poetic line, "Gather ye rosebuds while ye may." Thus the sound /wʌn/, spelled *one*, has a dual quality as a sound and as a concept. This can be seen from the fact that /wʌn/, spelled *won*, matches the identical sound to a wholly different concept. This feature of *duality* is both characteristic of and apparently unique in human communication, and so linguists use it as a test to distinguish language from other kinds of communication in which a sound can have only a single meaning. (Such sounds are called signs, to distinguish them from the symbols that are human words.)

Sounds can be made into meaningful combinations, such as language, only if they are first perceived as meaningfully distinct, or *discrete*. We can find an analogy in music. Musical pitch rises continuously without steps from the lowest frequency we can hear to the highest, sliding upward like the sound of a siren. But most of music is not continuous; it consists of notes that move upwards in discrete steps, as in a scale (from *scalae*, the Latin for "stairs"). This is why we can talk about notes being the same or different, as we could not easily do if all possible tones from low to high were distributed along a continuous line. Similarly, in speech we can slide through all the vowels from "ee" in the front of the mouth to "aw" in the throat—but then how could we tell *key* from *Kay* from

*coo* from *caw*? Likewise we distinguish between *v* and *f*, so that *view* is different from *few*. But these distinctions are arbitrary. They are not even common to all languages. For example, in German the letters *v* and *f* both represent the sound /f/, the letter *w* represents the sound /v/—and there is no sound /w/. What all languages do have in common, however, is the property of discreteness.

These four properties, or "design features," of language were first set down by Charles Hockett in 1958 as part of an attempt to see how human language differs from animal communication systems. There are of course other design features—their number has varied from seven to sixteen—but these four (discreteness, arbitrariness, duality, and productivity) appear to be the most important. Among the others:

Human language uses the *channel of sound*, generated by the vocal organs and perceived by the ear, as its primary mode. As a consequence, speech is *nondirectional:* anyone within hearing can pick it up, and we can hear from sources which we cannot see. Our hearing, being stereophonic, can also tell from what direction the sound is coming. Also, our language acts *fade rapidly* (unless recorded on tape or in writing). We do not, as a rule, repeat these acts the way animals often do their signals.

In human language, *any speaker can be a listener and any listener can be a speaker*, at least normally. Some kinds of animal communication, such as courtship behavior, are one-way. And we get *feedback* of our own utterances through our ears and through bone conduction. Nonsound animal communication, like the dances of bees, can often only be invisible to the originator of the message.

Our language acts are *specialized.* That is to say, they have to do only with communication; they do not serve any other function. For example, speech is not necessary for breathing, nor is it the same as other sounds we make, such as a laugh or a cry of pain or fear. Of course, such sounds can communicate, but only by accident to those within earshot. Their main purpose is a reflexive one: they happen more or less involuntarily, like the jerk of a tapped knee.

Italian children grow up speaking Italian; Chinese children learn Chinese. *Human language is transmitted by the cultures we live in,* not by our parentage: if the Chinese infant is adopted by an Italian couple living in Italy, he or she will grow up speaking perfect Italian. But a kitten growing up among human beings speaks neither Italian nor Chinese; it says *meow.* Its communication is determined by its genetic makeup, not by its cultural context.

## NONLANGUAGES

Other kinds of human communication are sometimes called language: body language, or *kinesics*, is one example. The way we use our bodies in sitting, standing, walking, is said to be expressive of things we