# Linguistic anthropology

Nancy Parrott Hickerson.

# NANCY PARROTT HICKERSON

Texas Tech University

|P|

# Linguistic Anthropology

HOLT, RINEHART AND WINSTON, INC.
Fort Worth Chicago San Francisco Philadelphia
Montreal Toronto London Sydney Tokyo

# Foreword

#### THE BASIC ANTHROPOLOGY UNITS

Basic Anthropology Units are designed to introduce students to essential topics in the contemporary study of man. In combination they have greater depth and scope than any single textbook. They may also be assigned selectively to cover topics relevant to the particular profile of a given course, or they may be utilized separately as authoritative guides to significant aspects of anthropology.

This series was planned over a period of several years by a number of anthropologists, some of whom are authors of the separate Basic Units. The completed series will include units representing all the basic sectors of contemporary anthropology, including archeology, biological anthropology, and linguistics, as well as the various subfields of social and cultural anthropology.

#### THE AUTHOR

Nancy Parrott Hickerson is associate professor of anthropology at Texas Tech University in Lubbock, Texas. She majored in anthropology for her bachelor's degree at Barnard College, and received the Ph.D. in anthropology from Indiana University, where she also developed a special interest in linguistics. Hickerson has done fieldwork in both linguistic and cultural anthropology in the Cartiller topics as contopics and teaches courses in linguistic anthropology, ethnology, and anthropological theory.

#### THIS UNIT

Cultural anthropology is as much a study of language as it is the study of nonlinguistic behavior, artifacts, or habitats. For many anthropologists, the study of language and speech is the essential focus of their work and thinking. Humans sort and classify the phenomena of the world about them with words. They think about and interrelate these phenomena with words. They communicate mainly with words. The major distinction between humans and animals is language. The present complex form of our brains is, to a large extent, a result of their evolving as language evolved.

And yet, many students leave the first course in anthropology with an inadequate

#### **FOREWORD**

iv

understanding of the relationship between language and culture, of the structure of language and its role in human evolution, and of its many-faceted appearances in different human groups in different places and times. And for many students in the more advanced levels of study, linguistics is endowed with a sinister and forbidding quality, like statistics is for others.

This is at least partly due to the fact that most writings on linguistics, including textbooks, are not for beginners or for those who simply want to know what anthropological linguistics is about. This Basic Anthropology Unit is written for such people. It describes and explains linguistic anthropology. It can be read and understood by any normally bright and modestly motivated reader. It contains knowledge that every educated person ought to have and furnishes students with a beginning that can lead them on to more advanced understandings and skills.

This unit should be widely used as a supplement to other texts in beginning social and behavioral science courses. It will also serve well as a core text for beginning courses in language and culture and the introduction to anthropological linguistics. The author has written this Basic Anthropology Unit with the beginning student in mind. It is clear, extremely well-organized, and it moves precisely and logically through each progression of linguistic concepts and their application. To help instructors and students formulate useful follow-ups in the study of this text, the author has supplied a list of suggested topics, in the form of questions, at the end of each chapter.

George and Louise Spindler General Editors CALISTOGA, CALIFORNIA

# Preface and Acknowledgments

This module is an introduction to the study of language and an overview of the importance of linguistics for general anthropology. The coverage is not highly technical, but it is broad. Separate chapters treat historical linguistics, the classification of languages, descriptive linguistics, psycholinguistics, sociolinguistics, language and culture, and the origin and evolution of language.

It is intended that this book be used as the text for the linguistics component in a general introductory or survey course in anthropology. It is appropriate, too, as assigned reading in general anthropology courses in which little actual class time is devoted to linguistics. The chapters which deal with linguistics in connection with historical approaches (archeology, social and cultural anthropology, and biological evolution) should help the student see the relevance of the subject to the content of anthropology courses, even when these are not heavily linguistic in content.

Although this book is brief and nontechnical, it can be used as the core text for an undergraduate course in anthropological linguistics, if supplemented by extra illustrative readings. The bibliography at the end of the book can serve as a guide for this purpose; most of the readings listed are drawn from recent collections which are easily available.

Finally, instructors who emphasize analytic methods in their teaching of linguistics may find *Linguistic Anthropology* helpful as a supplement because it surveys, in a concise form, a range of topics which are outside the scope of most textbooks in descriptive linguistics.

This book is a product of several years of attempts, by trial and error, to put together a one-semester course on language for undergraduate anthropology students. During this time, I have shifted away from a format which dealt almost exclusively with descriptive linguistics, to increasing the emphasis on the interaction between language and culture, and, finally, to a bias in the direction of sociolinguistics. At the same time, I have increasingly tried to steer clear of specialized vocabulary and, when possible, to introduce linguistic concepts in a way which relates them to a general anthropological framework. I am grateful to several groups of students, graduate and undergraduate, who have read and criticized sections of this book; as I prepared the final version, Penny Gregorie, Helen Clements, and Fern Cuddeback were especially helpful in contributing to the discussion materials which appear at the end of each chapter.

I want to thank Linda Austin, Department of Anthropology, Texas Tech University, for her help in preparing the manuscript; and Robin Gross of Holt, Rinehart and Winston for assistance, especially in securing and preparing the illustrations.

Like many other anthropologist-authors, I am especially grateful to David Boynton of Holt, Rinehart and Winston for friendly editorial advice and persuasion; and to George and Louise Spindler, General Editors of the Basic Anthropology Units series, who have always been patient and positively reinforcing.

N. P. H.

# Contents .

5

Foreword	iii
Preface and Acknowledgments	v
1. Anthropology and the Study of Language  The Place of Language in Anthropology, 1  Aspects of the Study of Language, 2  Linguistics and Cultural Anthropology, 4  Topics for Study and Discussion, 7	1
2. The Origin and Evolution of Language	8
How Did Language Begin?, 8  Language and Biological Evolution, 11  The Vocal Tract, 14  The Language-Specialized Brain, 16  Primate Communication and Language, 17  Experimental Studies of Primate Language Ability, 20  Field Studies of Primate Social Behavior, 23  Comparing Subhuman and Human Communicative Behavior, 24  Topics for Study and Discussion, 26	
3. The Acquisition of Language  Language in Early Childhood, 28  Biological Foundations of Language, 30  Playing the Language Game, 31  Playing with Sounds, 31  The Puzzle of Syntax, 32  A Guessing Game with Words, 33  Who Am I?, 34  The Effects of Social Isolation, 36  Topics for Study and Discussion, 37	27
4. The Comparative Study of Languages  Early Study of Languages, 38  Linguistics in the Nineteenth Century, 40	38

# The Comparative Method in Linguistics, 41 Indo-European, 42 Algonkian, 45 Bantu, 45 Language, Time, and History, 46 Indo-European Origins, 49 The Proto-Algonkian Homeland, 50 The Early History of the Bantu Peoples, 50 Topics for Study and Discussion, 52 5. Description and Analysis of Languages Speech and Language, 53 Approaches to Linguistic Description, 56 Phonology: Language as Sound, 56 Phonetics: An Inventory of Speech Sounds, 57 Phonemics: The Systemics of Speech Sounds, 62 A General View of Phonological Systems, 65 Morphology: Language as Meaningful Units and Sequences, 67 Fieldwork: Obtaining a Corpus of Data, 67 Linguistic Diversity, 70 Morphemic Analysis, 73 Morphemic Typology, 75 Syntax: Sentences and their Transformations, 77 Universals in Syntax, 78 Topics for Study and Discussion, 80 6. Language and Society The Speech Community, 81 Diglossia, 82 Bilingualism, 83 The Social Context of Speaking, 85 Complexities, 86 Speech Correlates of Sex and Age, 88 Variations, 89 Male and Female Differentials, 90 Language, Nationalism, and Ethnic Identity, 92 Language and Writing, 96 Topics for Study and Discussion, 104 7. Language and Culture 107 Language and "World View", 108 Plurality and Numeration, 109 Temporal Forms of Verbs, 109

## viii CONTENTS

Language and Cultural Emphasis, 111
Lexicon, 111
Metaphor and Extension of Meaning, 114
Our Own Metaphors, 117
Taxonomy, 119
Some Topics in Ethnolinguistics, 120
Color, 120
The Lexicon of Environment, 127
Personal Names, 130
Topics for Study and Discussion, 135

# 8. Language Maps and Classifications

Languages and Language Families, 136
Geography and Language Boundaries, 138
A Study of Dialect Distance, 139
Language Areas of the World: A.D. 1500, 143
Eurasia, 145
Africa, 148
Oceania, 150
North America, 152
South America, 156
The Language Map of the Modern World, 158
Topics for Study and Discussion, 161

Bibliography

163

136

# Anthropology and the Study of Language

## THE PLACE OF LANGUAGE IN ANTHROPOLOGY

5

A newcomer to anthropology—a beginning student, or an amateur who has become interested in anthropology through reading about primitive or prehistoric peoples, by participating in archeological "digs," or by visiting museums and historical sites—often has only a vague or partially accurate idea of the total scope of this field. Students in introductory anthropology courses are usually told that there are four subfields: biological anthropology, archeology, cultural anthropology (or ethnology), and linguistic anthropology (or linguistics). These four subfields are seldom given equal treatment in a general or introductory course; linguistic anthropology is sometimes slighted, and can appear to be highly specialized and marginal to other areas of anthropological interest. However, it should be noted that contemporary approaches in anthropology give an increasingly important place to the study of language.

Anthropology is a comprehensive field of study which deals with the human species in its biological aspects, and with the entire range of human social behavior. It deals as well with the products of human behavior, material and nonmaterial, and with the plans and concepts which underlie and organize behavior. If anthropologists were asked where, in all of this, language is involved, the answer would have to be that it is everywhere.

40cms

Humans talk, and in this we see ourselves as unique. Animals, including the other primates, communicate, but we usually reserve the word language for our own human brand of communication. Special physical characteristics, both in gross anatomy and in neurology, shows us that adaptation for the use of language is a part of the evolutionary endowment of our species. Our human penchant for language makes possible most of the other behavior which we think of as uniquely human: cooperating in hunting, farming, or sports; counting kin or arranging marriages; conducting religious rituals or organizing military expeditions—all of these depend on the use of language.

Language, then, meets a universal human need for an infinitely subtle and precise system of communications, a system which can convey a great deal of information of a sort not needed by other species of animals. That information is, roughly, whar is called *culture*. Like language, culture is a distinctively human phenomenon. Human beings categorize and classify the features of their environments, and they

## 2 ANTHROPOLOGY AND THE STUDY OF LANGUAGE

invest their daily activities with an enormous variety of meanings and motivations. They people the universe with unseen beings—gods and spirits—and come to understand the forces of nature in a diversity of ways. Each human society has its literature, philosophy, and theology. All of this would be impossible without the medium of language.

Surely, then, anthropologists must take language into account and must study languages in order to analyze and describe human populations and their social behavior. The study of language is, as we have seen, one of the major subfields of modern anthropology. Like other areas of specialization, linguistic anthropology has its special methods, analytic procedures, technical terms, and concepts. Proficiency in linguistic study requires special courses, field training, and practice in methods and techniques. Linguistic anthropologists must beware of becoming too specialized to maintain contact with other subfields of anthropology, while at the same time, other anthropologists tend to lose sight of the bearing which language has on their own special domains.

For students, especially, there is a need to maintain the integration of anthropology, to show the relevance of linguistics, and to synthesize information in such a way that biology, prehistory, ethnology, and linguistics all contribute to a whole study of human life. This book is an attempt to stimulate interest in and to answer questions about linguistic anthropology, and to demonstrate that this is not a marginal subfield, but one which is essential to the anthropological perspective. Language, as communication, is the basis for human society; it is also the medium which binds together and integrates the diverse interests and specialized knowledge of anthropologists.

## ASPECTS OF THE STUDY OF LANGUAGE

As a universal human attribute, language is an integral part of human biology. The study of the human physical adaptation for language falls within the scope of biological anthropology. Recent contributions to this study have come from medical and natural scientists, such as neurologists and anatomists, as well as from specialists in speech and hearing. The important parts of the body (for language) are the vocal tract (which produces the sounds of speech); the auditory canals (which receive and transmit sound waves to the brain); and, most especially, the brain itself, within which are special localized areas for the encoding and decoding of language, as well as motor areas which control the muscularure used in speech. There have been many recent advances in the biological approach to language. Researchers have learned a great deal about the anatomical and neurological endowments, and the interworkings of these, which enable human beings to formulate messages of greater complexity, transmit them more rapidly, and utilize them in a greater diversity of ways than do membrs of any other species.

Anthropologists have an interest in the biology of language because of its place in the larger context of evolution, an area in which new discoveries continue to be made with great frequency. Two approaches to an understanding of the evolution of our species are human paleontology (the study of fossil humans in comparison

paleoanthropology

to other evolving primate species) and primatology, which deals with both the biology and behavior of living primates. Both of these fields can help us to appreciate the origin and nature of language as a special product of primate evolution. (The evolution and biological aspects of language will be discussed in Chapter 2).

While language is a universal occurrence in human life, human languages are many and diverse. They are systems of learned behavior, transmitted from generation to generation. Like all cultural systems, languages change over time and can be adapted to particular needs and circumstances. Most linguists—those who have a broader interest in anthropology as well as many who do not-devote at least part of their energies to studying, analyzing, and describing the structure and content of particular languages. This approach, descriptive or structural linguistics, takes a view of language as distinct and separable from other systems of behavior, and available to description without any particular reference to the social context or environment in which speaking takes place. Languages, then, can be viewed simply as systems of sounds (phonetic and phonemic units) selected and combined in particular ways, and as systems of larger units (morphemes, words, and sentences) which make up the totality of language. The writing of grammars, or of more specialized studies of particular aspects of grammatical structures, is the objective of this type of study (see Chapter 4 for a discussion of approaches in descriptive linguistics).

Beyond the circumscribed and self-contained approach of descriptive grammars, the study of languages as systems overlaps, and has the potential to contribute to, many other fields of interest. Philosophers have long discussed the attributes of language which underlie logic and reason, world view, and ideology. Poetry, song, and other verbal arts build or elaborate on the grammatical or semantic patterns of the spoken language; structural linguistics provides an objective approach to the analysis of such special uses of language. In this regard, linguistic studies are often undertaken by students of literature and language arts, and they have also contributed methodologically to the teaching of languages.

4

In contrast to the static perspective of the descriptive approach, languages can be studied over time as systems in flux. The differences which can be seen in any language viewed at different periods in its history (Chaucer's English compared with today's, for example) reveal the fact of regular, systematic change. Many linguists are interested specifically in the history and development of certain languages or groups of languages. Language history is fascinating in itself, and also contributes to the study of the history of peoples and civilizations. (This is discussed in Chapter 4; Chapter 8 presents a resumé of languages and language families of the world.)

Language, as a part of human behavior, can contribute to all of the behavioral sciences. Compounded terms identify the special fields of study which emerge from the overlapping interests of linguists and members of other disciplines. *Psycholinguistics* treats the relationship between language and mind. Of special concern is the study of the stages and processes in the child's acquisition of language (this is discussed in Chapter 3). Another type of study which has been quite revealing deals with the effects of various disabilities, such as aphasia, on language. Contributions to psycholinguistics come from psychologists and educators, as well as lin-

# 4 ANTHROPOLOGY AND THE STUDY OF LANGUAGE

guists, and have had an equal impact on linguistic theory and on applied areas such as education and speech pathology.

Sociolinguistics deals with the variations in language within a community which are directly related to the sociological makeup of the community. Speech variations may be regional, and explanations for the differences between rural and urban speech may also be found in the distribution of ethnic groups, the occurrences of migrations, and other historical and sociological factors. Sociolinguistics may be of interest to historians, sociologists, social anthropologists, political scientists, and others (Chapter 6 deals with a variety of topics in sociolinguistics).

Finally, ethnolinguistics (or "language and culture") treats the close connections between the cultural systems of people and the grammatical and lexical systems of their languages. This type of study, more than any other, has been the focal interest of linguistic anthropology for many years. Cultural anthropologists have looked to language as both a practical tool for fieldwork and as a source of insight and inspiration in cultural study. In turn, the study of language in its cultural setting has contributed depth and variety to general linguistics, especially in determining universal features of language and the study of meaning (Chapter 7 deals with the field of ethnolinguistics).

## LINGUISTICS AND THE STUDY OF CULTURE

Today anthropologists who are setting out to do fieldwork in a remote area of the world usually try to prepare themselves with some knowledge of the language or languages with which they will be in contact. With luck, there may already be grammars, dictionaries, and other material (perhaps even tape recordings) available from previous researchers; at least, there may be studies of related languages. It helps, at the beginning of one's residence in a strange community, to have at least a rudimentary vocabulary, to know some useful questions, greetings, and other common expressions, and to be familiar with the grammatical structure of the language, even if one plans on doing most of the real language-learning on the spot.

There are, of course, simpler ways to make contact with other people. Ethnologists may do fieldwork with people whose language they already speak. Even in out-of-the-way locations, it is not unusual to find a few bilingual individuals who have learned some English or French or Spanish in school or while working away from home. If the anthropologist speaks one or more of these European languages, he or she may be able to do research with the assistance of a bilingual translator. However, even when there are number of bilinguals at hand, there is still a great advantage in learning to use the native language of the community; it is, many anthropologists would say, the best way to get to know and understand, and to be accepted by, the people.

An interested amateur can hardly be expected to appreciate the pervasive, yet variable, role that language plays in human life. When we read books or view films that portray the life and customs of exotic and physically remote people, we still get very little insight into their use of language. We may be left wondering:

How do these people communicate with one another? What are their rules of etiquette? How do they greet, advise, encourage, praise, or insult one another? What are their prayers, orations, jokes, and poetry really like?

It may seem just as frustrating to approach the principles of a language by studying its grammar or vocabulary. Lists of words and statements about the grammatical rules of a language appear to be far removed from an ethnologist's description of the culture and society of its speakers. What can speech sounds and grammatical forms, nouns and verbs and syntax, have to do with anthropology? But the raw materials of linguistic and cultural study are very nearly the same materials, and many anthropologists have contributed to both subfields. A linguistic study can give unique insights into cultural "world view" and values, and cultural anthropologists would be unable to study and describe the life of any community of people without somehow dealing with language (whether they study it themselves or rely on the knowledge of others).

One of the early advocates of linguistic study in anthropology was Franz Boas, who set an example for later ethnologists in his own field research and teaching. Boas (1858–1942) was a German scholar who is often considered to be the founder of modern anthropology, and especially of American anthropology. He came to North America as a young man to study the Eskimo of Canada and, later, the Indians of Western Canada and the United States, and was affiliated with American universities and museums for most of his professional career. To American anthropology, Boas contributed a vision of an integrated "study of man," drawing evidence from laboratory, field, and documentary research, and synthesizing the separate historical strands of race, language, and culture. As a teacher at Columbia University, he developed a curriculum in anthropology along these lines, with linguistics as an important component—as it still is, in the 1970s at many American universities.

Boas's greatest research contributions were a cription of American Indian languages a ed volumes of data on the Kwakiutl, a native people of the formula of North America, and also transcribed and translated many kwakiutl tales, orations, life histories, and other texts. Based on this research of the Kwakiutl language, he wrote a grammatical study which is published, along with the work of other researchers (many of them his students and associates), in a famous series called The Handbook of American Indian Languages.

Franz Boas's "Introduction" in The Handbook of American Indian Languages (1911) is an important statement of the relevance of linguistic study to anthropology. In it, Boas included a discussion of linguistic methods and concepts which foreshadowed much that has developed since. The usefulness of linguistic study to the study of culture is twofold:

(1) It serves a practical need because the anthropologist who knows a native language is not dependent on interpreters or on the use of Pidgin English or some other makeshift means of communicating with his informants. Boas recommended, as well as practiced, the recording of texts—taking down information firsthand in the native language—on all possible subjects. Once recorded, this material could later be translated and analyzed. Some ropics can be approached only through language, such as poetry, prayers, oratory, and personal and local

6

nard to k names. Boas relied on his own skill in transcribing and analyzing Kwakiutl and narro late other Indian languages, and also encouraged and worked in collaboration with natives who became proficient in writing their in linguistic skills was recommended for anthropology students going into the field.

(2) On a more theoretical level, Boas pointed out, there is a close connection between language and thought. There are "unconscious phenomena"—such as the classification of ideas and their expression by the same or related terms, or associations which are apparent in the metaphorical use of terms—which can only be approached through the study of language. In summary, he wrote that the study of language is important to anthropology "from practical, as well as from theoretical, points of view. . . . On the one hand, a thorough insight into ethnology cannot be gained without practical knowledge of language, and, on the other hand, the fundamental concepts illustrated by human languages are not distinct in kind from ethnological phenomena; and because, furthermore, the peculiar characteristics of languages are clearly reflected in the views and customs of the peoples of the world."

Although many anthropologists have done cultural research without making any special use of language, there are others who have pursued and developed principles similar to those of Boas. The British social anthropologist Bronislaw Malinowski (1889-1942), who is considered by many anthropologists to be a key figure in the development of methods of cultural research and description, outlined an approach which emphasized the importance of language for the field ethnologist. Malinowski, who lived for several years in the Melanesian communities on which he based his major studies, advised the coordinated use of three types of field data:

(1) "The organization of the tribe, and the anatomy of its culture." This would include statistical data on such things as marriage and the composition of households, the compilation of kinship charts, measurements of acreage and crop yield,

(2) The observation of "the imponderabilia of actual life"; that is, the detailed description of real instances of behavior, recorded by maintaining daily accounts in a field diary.

(3) The verbatim recording of native terminology, "ethnographic statements, characteristic narratives, typical utterances, items of folklore and magical formulae." Malinowski felt that the publication of a body of this linguistic data should be especially valuable, both as documents of native thinking, supplementing his own cultural study, and as a basis for further study and analysis by other researchers whose interests might be different from his own. Thus, linguistic study is given a role coordinate with observation and the collection of statistical data (Malinowski, 1922).

In recent years, there have been movements in both European and American anthroplogy which give a key role to language in the gathering and interpreting of cultural data. A number of American anthropologists have developed the field of ethnoscience, an approach to the description of culture which relies on terminology as a plan or "mapping" of culture. Investigators using the method of ethnoscience collect words and phrases and ask questions based on them in order to discover how things are classified, or to understand the relationships among them, according to

the members of a speech community. The proponents of this "new ethnography" see it as a revolutionary approach, claiming that it is an "improvement of ethnographic method" which will serve "to make cultural discriptions replicable and accurate" (Sturtevant, 1964).

There are other approaches in contemporary anthropology, such as structuralism, componential analysis, and cultural semiotics which seek in various ways to demonstrate parallels between culture and language, to apply linguistic methods to the study of culture, or to analyze cultures as systems of "signs" or meanings, following the model of linguistic analysis.

These brief references to a few of the many different trends in contemporary anthropology are intended simply to demonstrate the important role which linguistic studies have played and continue to play in the discipline. At various times the study of language has served to assist (as a practical aid to fieldwork), to complement (by demonstrating parallels between language and other types of culture), and to inspire (as a model of description and analysis) other types of anthropological study. In the following chapters we will be concerned with both the study of language itself and with further discussion of its place in the broader field of anthropology.

## TOPICS FOR STUDY AND DISCUSSION

T Property

1. Why is the study of language a part of anthropology? Should it also be relevant to the other social sciences, such as sociology, psychology, and history?

2. Watch portions of an adventure film, a situation comedy, a religious service, and a sports event on television with the sound turned down. Which could you follow the best? Why? How much could you comprehend if you were unfamiliar with American culture?

# The Origin and Evolution of Language

The word language is, like many of the familiar words which denote key concepts in the social sciences (such as culture and society), a word which has been used in several different ways. It has general and specific, strict and metaphoric usages. We may, for example, speak of "the Russian language," "sign language," "animal languages," "computer language," the language of heraldry," "the language of love." Roughly, language can serve as a synonym for any sort of communication expressed in any medium. However, linguists usually define the term language to apply only to human vocal communication (though even they are not always consistent in using it in this way).

Even with this restriction, there is still a double meaning attached to language. We must make a basic distinction at this point, if we are to put language into anthropological perspective, a perspective which includes the total evolutionary history of mankind. When we discuss the origins and general evolution of language, we are concerned with the first of two levels of meaning and with the fact that human beings—at all times and in all places—speak. As a species, humans have language. Language, in this sense, has a number of common fundamental properties or "universals." In the second sense, we must deal with the diversity of languages which we encounter every day, each one different from the others, and each playing a part in the social, cultural, and ethnic varieties of mankind. It may be as challenging to account for the diversification of languages as to discover their underlying unity.

## HOW DID LANGUAGE BEGIN?

Attempts to answer this question, and to account for the development of language as we know it, are many; none of these answers is completely satisfactory, because there is so much to explain. We would like to understand how and why the vocal tract began to form speech sounds; how the evolution of intelligence led us to begin formulating messages in the form of words and sentences; what psychological motivation led our ancient forebears to begin naming things, asking questions, and giving instructions; and how the use of language fitted into the early social life of genus *Homo*. This is a large order!

There is, very likely, no subject about which there has been so much curiosity,

so much speculation, and so much uncertainty as the origin of language. We can never really find solid evidence to tell us what early language was like, because speech is such an ephemeral thing. We cannot find the remains of ancient words the way we find potsherds or arrowheads. The earliest writing is not very old in terms of human history; written records which can be deciphered go back approximately 5000 years, and it seems likely that some sort of human language has been in use for perhaps 100 times longer.

Scholars, sages, and mythmakers have, over the millennia, developed many explanations for language. Reading the Biblical account of the Creation, we find that Adam had speech from the beginning, and, being made in God's image, he spoke to God just as God spoke to him. This original language was used by Adam and Eve and their descendants until the time of the building of the Tower of Babel, when many languages were created as a divine punishment for human presumptuousness:

"And the whole earth was of one language and one speech. . . . And they said, Come, let us build a city, and a tower whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole world. . . .

"And the Lord said, Behold, the people is one, and they have all one language, and this is only the beginning of what they will do. .... Come, let us go down, and there confound their language, that they may not understand one another's speech. So the Lord scattered them abroad from thence upon the face of the earth. ..." (Gen. XI, 1-8).

Similarly, the sacred literature of many other peoples tells of, or implies, a miraculous origin for language. Very often, we find an explanation for the differences among languages occurring—as at the Tower of Babel—through an arbitrary or punitive act of the creator or a culture hero. For example, among native peoples of California (an area whose population consisted of many small tribes and a number of different languages), the mythology of the Maidu gives a typical explanation for this diversity:

"... [U]p to this time everybody spoke the same language. The people were having a burning (funeral ceremony) ... when in the night everybody suddenly began to speak a different language. Each man and his wife, however, spoke the same. Earth Initiate (the creator) had come in the night to Kuksu (the first man) and had told him about it all, and given him instructions for the next day. So, when morning came, Kuksu called all the people together, for he was able to speak all the languages. He told them each the names of the different animals ... in their languages, taught them how to cook and hunt, gave them all their laws, and set the time for all their dances and festivals. Then he called each tribe by name, and sent them off in different directions, telling them where they were to live (Thompson, 1966).

Though we still hear accounts of the miraculous origins of languages, few educated people today accept them in a literal sense; for one thing, the evidence for human evolution makes them untenable. (However, it is still possible to believe that human language is something of a miracle if we consider, as many people doscientists as well as laymen—that there is a qualitative difference between the intelligence of animals and that of humans.)