

*The* **ABC'S**  
*of*  
**Languages**  
&  
**Linguistics**

A PRACTICAL PRIMER TO LANGUAGE SCIENCE

*CURTIS W. HAYES*      *JACOB ORNSTEIN*  
*WILLIAM W. GAGE*



*The* **ABC'S**  
*of*  
**Languages**  
&  
**Linguistics**

HO  
HCW/2

A PRACTICAL PRIMER TO LANGUAGE SCIENCE

*CURTIS W. HAYES*

*JACOB ORNSTEIN*

*WILLIAM W. GAGE*



**NTC** VOLUNTAD PUBLISHERS, INC., a subsidiary of  
**NATIONAL TEXTBOOK COMPANY**



Copyright © 1987, 1977 by Voluntas Publishers, Inc.  
a subsidiary of National Textbook Company  
4255 West Touhy Avenue  
Lincolnwood (Chicago), Illinois 60646-1975 U.S.A.  
All rights reserved. No part of this book may  
be reproduced, stored in a retrieval system, or  
transmitted in any form or by any means, electronic,  
mechanical, photocopying, recording or otherwise,  
without the prior permission of National Textbook Company.  
Library of Congress Catalog Number: 86-61183  
Manufactured in the United States of America.

6 7 8 9 0 ML 9 8 7 6 5 4 3 2 1

## Preface to the Second Edition

Much has transpired in the field of linguistic science since the publication of *The ABC's of Languages and Linguistics* (Chilton Books, 1964), and hence the need for revision. A new coauthor, Curtis W. Hayes, has joined us, bringing to the revision a great deal of experience and fresh insight in the realms of both pure and applied linguistics. Great effort by all three of us has been made to incorporate new and significant data into this current book.

There is, by now, such a large number of language texts on the market that it is desirable to offer something quite different, to make a unique contribution, lest our effort be redundant. Through our joint endeavors, it has been possible to retain in the present volume a broadness of scope that has been of note in reviews following the first appearance of the *ABC's*. One indication of such breadth may be seen in the chapters that include discussions of the most dynamic linguistic schools of thought. Recent developments in sociolinguistics and psycholinguistics are touched upon, and we also direct the reader's attention to a number of topics in the burgeoning and ever-expanding discipline of applied linguistics. For example, in the latter chapters, we introduce the reader to new trends in language teaching; and there, too, we discuss frankly the decline in language requirements and enrollments. The latest enrollment figures have been received from the Modern Language Association of America, as well as from other authoritative sources. At the same time, positive and encouraging developments in the language teaching field are also detailed.

The *ABC's* has been utilized as a broad orientation to the discipline of language study rather than as an introduction to be employed in technical linguistics classes. Our revision attempts to serve in the same capacity as the original *ABC's*. Above all, the *ABC's* is intended to interest students in pursuing the study of language. For this purpose we have at the end of each chapter thought-provoking, purposeful study questions, and a list of texts and articles which may be consulted for further reference.

All three of us have benefited from the suggestions and criticisms of a number of scholars and teachers. We must express appreciation to Professors Carolyn Kessler, Hassan Sharifi, and Archibald A. Hill for their careful reading of the manuscript, and to Mr. Alfred Pietrzyk of the Center for Applied Linguistics for his valuable suggestions in the chapters in which we discuss the political and social ramifications of language. Our profound gratitude goes to Mr. Richard Brod, member of the Association of the Departments of Foreign Languages (ADFL), for furnishing the most recent figures on language trends based upon Modern Language Association surveys. This information has aided us in providing a valid and comprehensive view of the current foreign language teaching practices in the United States. It is also with deep gratitude that we acknowledge the extremely valuable assistance and insights of the following: Dr. Richard E. Wood of Adelphi University and Dr. Margaret Hagler, Lincoln Land Community College, who shared their expertise for "One Language for the World?" (Chapter 10); Professor Edward L. Blansitt Jr., University of Texas, El Paso, on whom we relied greatly; and Mrs. Sarah B. Boyer, Senior Secretary of the Cross-Cultural Southwest Ethnic Study Center, University of Texas at El Paso, for her assistance.

And finally, to our students, who offered judicious criticism, we give special recognition.

*The Authors*

## A Caveat to the Reader

The science of linguistics, particularly "pure linguistics" (as opposed to its applications), is at present in an extreme state of flux. While the ferment is in its way fascinating to professional linguists, it poses real danger of confusion to those less familiar with the field. Despite the zeal and persuasiveness of certain linguistic theoreticians, almost "charismatic" in their approach, there are few if any categorical or indisputable "truths" in linguistic doctrine.

Hence it is the better of sanity for readers to peruse those sections concerning linguistic theory open-mindedly, regarding the theories as essentially successive approximations leading to a more profound and sophisticated understanding of universal principles applying to language systems as a whole. In this manner, as in physics, chemistry, botany or another natural science, an ongoing "symbiosis" can be reached; or more simply put, some sort of "consensus" can be achieved, generally acceptable to many, if not all, professional linguists.

Jacob Ornstein, Ph.D.

# Table of Contents

Preface to the Second Edition .....	vii
<b>I. Facts and Fantasies About Language .....</b>	<b>1</b>
The importance of language, its intricacies, and some myths and misconceptions unraveled.	
<b>II. The Beginnings of Language .....</b>	<b>10</b>
An insight into past theories of language origin and the research being done to come to some conclusions about its origin.	
<b>III. Languages and More Languages: A Tour .....</b>	<b>18</b>
Mapping and comparing the many languages of the world, including Indo-European and other language families.	
<b>IV. Winds of Change: The New Linguistics .....</b>	<b>28</b>
Tradition vs. change; grammar viewed through a traditional, structuralist, and generative-transformational perspective.	
<b>V. Phonology: A Sign of Structure .....</b>	<b>36</b>
A comprehensive exploration of language sounds and their distribution: phonemes, morphemes, consonants, vowels, and semivowels.	
<b>VI. Morphology and Syntax: More Signs .....</b>	<b>64</b>
A discussion, viewed through a variety of models, of the two systems which, together with semantics, form the grammar of a language.	
<b>VII. Semantics: The Study of Meaning .....</b>	<b>94</b>
Some inadequacies associated with human communication, including a discussion of Standard Theory and Generative Semantics.	
<b>VIII. Writing Systems of the World .....</b>	<b>109</b>
A tour of orthographies around the globe, including Semitic, Cyrillic, Sanskrit, and Runes, and a discussion of picture-writing systems.	
<b>IX. Other Systems of Communication .....</b>	<b>118</b>
Non-verbal expression through a variety of systems: gestures, body language, kinesics, and codes.	

X. One Language for the World? . . . . .	123
An exploration of man's constant quest to break the language barrier, and some possibilities for a new universal tongue.	
XI. Implications and Applications: Social, Political, and Educational Consequences . . . . .	131
The consequences of linguistic nationalism around the world, and a discussion of first-language teaching in the United States today.	
XII. Second Language Learning and Teaching: Gaps in a Crucial Area . . . . .	148
An historical account of second-language teaching in the United States, its present status, and some conclusions as to future prospects.	
XIII. The X, Y, Z's of Language Learning: Bilingual and Second Language Education . . . . .	155
A practical combination of linguistics, psychology, and teaching techniques for increased language learning motivation and competency, now and in the years ahead.	
Appendix: Languages of the World . . . . .	181
Index . . . . .	191

# I. Facts and Fantasies About Language

## THE IMPORTANCE OF LANGUAGE

In all probability one of our first actions of the day is to talk to someone. What is so remarkable about that? Most of the other three billion people in the world do the same thing. But suppose a dog, or any animal, awoke one morning and started talking. It would make the front page of every newspaper in the world as well as the evening news.

We are so accustomed to talking, and hearing other people talk, that we occasionally forget what a marvelous attribute language is. Only when we consider the plight of *not* being able to talk do we fully appreciate its importance.

Consider an aphasiac, a person, that is, who has lost the ability to talk. He may still understand what is said and even communicate in writing; but such a person is as badly handicapped as one with the most distressing physical impairment. He needs institutional care in the same way as any disabled person, or special training, at least, to enable him to carry on in the outside world.

One of the authors recently communicated with an aphasiac who could say almost nothing, and even said the reverse of what he meant—an intended “No” coming out “Yes,” and vice versa. The man was a wealthy Florida realtor; yet one day he wrote: “Believe me, I’d give all my property and savings if I could only talk again.”

By contrast, reading and writing—marks on paper that stand for speech—are much less important. In fact, half the adults on earth, even in this modern and advanced day, are illiterate or unable to read and write. And many of the world’s languages, probably a large majority, have no writing system at all.

Although literacy is a tremendous advantage in modern industrialized societies, it is by no means essential. That is, we can still get along without being able to read or write. Of course, this does not alter the fact that illiteracy is one of the world’s great social and educational problems. The point is that illiteracy does not incapacitate humans as greatly as aphasia does. People who cannot read and write can still get along reasonably well in our society, but the aphasiac must seek professional help until he is cured or rehabilitated.

There is a well-known story in the Bible that reflects the importance of language in human society. According to the Old Testament, mankind spoke only one language until Nimrod began to build a tower that was to reach heaven. “And the Lord said, ‘Behold, they are one people, and they have all one language, and this is only the beginning of what they will do; and nothing that they propose to do will now be impossible for them. Come, let us go down, and there confuse their language, that they may not understand one another’s speech.’”

Some scholars attribute the source of this legend to the many languages of the slaves who were gathered together to build the famous “hanging gardens” of Babylon. The name “Babel” is said to be a variation of the word “Babylon,” rather than the Hebrew *balal*, meaning “to confuse.”



Some people believe there is nothing men could not do if they really understood each other's language. Utopia requires far more than that, no doubt, but it is true that a shared language tends to unite people, while different languages divide them. Those of us who have ever lived in an environment in which we did not understand the language know from personal experience how welcome a few words of our native speech can sound. Even in the strange accents of strangers, our native language seems lovely to us; and we have a shared feeling for those who speak as we do.

George Bernard Shaw said that England and America are two countries separated by the same language. The wit of this remark results, partly, from the way it clashes with our conviction that the same language really unites people. A New York psychiatrist's experience corroborates this. By learning the argot of emotionally disturbed hot-rodgers, he was able to communicate with them by discussing drag racing and other "tribal customs."

### LANGUAGE: AN INFINITE, HUMAN CAPABILITY

While the legend of the Tower of Babel shows how speaking different languages divides people, an even sharper distinction is that between users and non-users of language. The ability to learn languages is, perhaps, the chief difference separating man from all other animals. Let us first briefly approximate what we feel to be the attributes of a language. One traditional (pre-1960) linguistic definition of language is that *a language consists of a structural system of vocal symbols by which a social group cooperates*. But this definition is not too helpful, since animals may have social groups, and they may interact through a system of vocal sounds. A study of porpoises indicates that this interaction may go much further in complexity than we ever imagined. A more recent definition is that *a language consists of a system of rules which relate sound sequences to meanings*. The terms "system of rules," "sound sequences," and "meaning" we will define and discuss later. All languages—it is important for us to point out at the onset—have distinctive sets of sounds called *phonemes*; these sets are grouped together into utterances called *morphemes* (phonemes containing meaning); and morphemes fit into patterns called words, phrases, clauses, and sentences.

The concept of a *sentence* is especially vital in linguistic studies today. Some linguists believe that a language is an unbounded set of sentences. The important term is "unbounded." More specifically, a speaker or hearer has control over and knowledge of an indefinitely large number of sentences. The idea that a set may be indefinite may boggle the mind for the moment; but if we consider that we "know" more sentences than we can hope to hear or speak in our lifetimes, the concept becomes clearer. Many of the sentences that we speak or hear (or even read) are new sentences, never having been spoken or heard before. As a test, how many sentences in this book, or even on this page, are new? And if these sentences are new, consider all of the sentences that we have not heard or spoken that will be new. In fact, tomorrow's sentences are new, as are the next day's. There is the possibility that each sentence represents a creative act. What is basic, however, is that there is no end to the sentences of a language.

If we were to put a limit on the capability of a human being to understand sentences, then we would not have a language. He would not only run out of things to say but the capability to say something new would be absent. Yet a limit is precisely what we have in animal communication. In fact, since the noises that animals make do not constitute an unbounded set, linguists would say that animals do not have language. Animal noises—be they of chimpanzees, porpoises, dogs—are a closed set. Bees have been said to have language. A bee—forgetting for the moment that bees are unvocal—can communicate the direction and distance of nectar to other bees, but that is all the information that it can communicate. It cannot say anything about the weather, flowers, or the presence of animals in the near vicinity, all of which, it would seem, are important for the successful taking of nectar. A chimpanzee may be conditioned to make noises or to move symbols about in response to a number of

stimuli, but there is a limit to what a chimpanzee can communicate; and we must *teach* him to communicate. More basically, he cannot understand or speak novel utterances, a capability within the competence of a normal human being. By way of contrast, a child is not taught his language; he has only to be exposed to a language to learn it. In fact, we cannot prevent children from learning the language(s) of their environment.

Except in those cases in which brain damage has occurred, or in which a child is severely retarded, language learning (the more technical term is *acquisition*) occurs. Even in the retarded, as Eric Lenneberg has demonstrated in his study of mongoloid children, language development takes place. If we consider the size of the brain, we find that even nanocephalic dwarfs have the ability to learn language. Language, as far as we can determine, is species-specific. The reason that higher-ordered primates cannot learn language is that they are not human.

### THE UNEXPECTED INTRICACIES OF OTHER PEOPLE'S LANGUAGES

At a party recently a linguist was asked whether people like the Eskimos had a "real" language or whether they just communicated through gestures and grunts. The gentleman who asked this question, a well-educated person with a master's degree, was truly amazed when he learned that the Eskimos not only have a real language but that it is very complex in structure from a linguistic point of view. Then the linguist completely overwhelmed the linguistically-naïve guest by writing for him a single word in Eskimo which is equivalent to an entire sentence in English or any European tongue. It was *a:slisa-ut-issar-si-niarpu-ba*, which simply means "I am looking for something suitable for a fishline."

There is probably no subject about which there are so many errors and downright misinformation as that of language—even among persons of higher education. One of the most widespread of these misconceptions is that the language of technologically underdeveloped or "primitive" peoples must be very simple and crude. The fact of the matter is that from the standpoint of the speaker of English or a European tongue the languages of such groups often contain subtleties that do not exist in his own.

Although English speakers may think it is unusual that certain languages mark verbs for gender, much stranger features may be found. In the Nahuatl (Modern Aztec) language of northern Mexico, for example, it is necessary in certain verbal forms to express whether the purpose of the action affects an animate being or an inanimate object. In English we say "I see the women" and "I see the house," but the verb does not change. In Nahuatl, however, in using the verb "to eat" with the root *cua*, the Aztec speaker makes certain to prefix *tla* to indicate that he is not eating a human being. It has been pointed out that this distinction appears most clearly in such words as *tetlazohtlani*, "one who loves (people)," as contrasted with *tlatlazohtlani*, "one who loves (things)."

In Hupa, an Indian language of northern California, nouns as well as verbs are marked for time. Thus one finds the following distinctions:

*xonta*: house (now existing)

*xontate*: house which will exist in the future

*xontaneen*: house which formerly existed

Even speakers of many non-Western languages have convinced themselves that their language has no "grammar," believing that the users merely make up structure as it comes into their minds. The same sort of impression may hold true for a linguistically naïve, well-educated speaker of a Western language—our party guest for example—who may believe that he does not know the grammar of English. Linguists, in recent times, have made the useful distinction between "knowledge of language" and "knowledge about language." Our knowledge of language is often a tacit or subconscious one that we draw upon when speaking our language. Our knowledge *about* language is usually *taught* knowledge, which makes explicit what we

know implicitly. Native speakers of any language, for instance, have knowledge of their language, but few have knowledge *about* their language, unless they have taken a course on its structural characteristics.

All languages have structure. The linguist's task has been to describe this structure and to make explicit what the native speaker knows subconsciously about his language.

When we attempt to learn a non-Western language, we are usually confronted by a system with many bewildering intricacies and complexities. There may be the necessity for distinguishing between objects which are in sight and those which are not, as in southern Paiute where *ma avaaiaak'a* means "He will give something visible to someone in sight."

There is the possibility of having different verb forms, not only to show whether the principal object involved is an agent or something acted on—as with active and passive voice in some familiar languages—but in addition, as in many Philippine languages, to show that it is the instrument or that it is the beneficiary of an action. Thus, in Maranao:

*somobali so mama sa sapi ko gelat* (emphasis on *so mama*, "the man")

"The man slaughters the cow with a knife."

or

*isomabali o mama so gelat ko sapi* (emphasis on *so gelat*, "a knife")

"With a knife, the man slaughters the cow."

*begen ian reka*.

"He'll give it to you." (give-something he to-you)

or

*began ka ian*

"You he'll give it to." (give-for someone you-he)

Different verb forms may be used to indicate who does what when relating an incident. In English our use of *he*, *she*, *it*, and *they* is often ambiguous: "When Tom went hunting with Harry, he shot a moose." Who shot a moose? In Cree when the "party of the first part," "of the second part," and sometimes "of the third part" are indicated, one says:

*wapamēw* (A saw B); *wāpamik* (B saw A); or *wāpamēyiwa* (B saw C)

Returning to Eskimo, which was thought to be so primitive by the aforementioned guest, we ought to point out that its structure does appear formidable to one acquainted with only Indo-European patterns. Eskimo is what is known as a *polysynthetic* language, which means that entire sentences are incorporated into a single word. Each element of the word carries meaning but does not have an independent existence; that is, it cannot be pronounced alone, like such English words as "king" or "banana" can be. The Eskimo elements are more nearly like the "-ness" of "kindness." We see immediately that the traditional parts of speech of Latin or of English grammar become inadequate or actually misleading in describing a polysynthetic language. For example, "Do you think he really intends to go to look after it?" can be expressed in Eskimo by the word: *takusar-iartor-uma-fahuar-nerp-a*.

This brings us to the familiar and commonplace notion that all languages can be analyzed as one would analyze Latin, Greek, French, or English. A school of American linguists, those associated with *structural* or *descriptive* linguistics, and who have taken the descriptive label "Bloomfieldian" after Leonard Bloomfield, the eminent and brilliant linguist who gave direction to this school, did extensive research and field work on this subject in such remote areas as Africa and Malayo-Polynesia. Bloomfield also worked on North and South American Indian languages, and helped to dispel a particular version of universal grammar: that all languages were similar to Latin and Greek, a notion which emanated from the 18th century and was based upon the notion of a universal logic. Bloomfield and his fellow structural linguists

believed that each language was in a way an island, a unique entity unto itself, and should be approached as such. Any similarity among such diverse languages was purely accidental. They felt that the 18th century tendency to describe all languages as having derived from one source, in this case Latin or Greek, obscured important differences in other, less well-known languages. The tendency to look for logical similarities among diverse languages was misdirected but not, as we shall find, misguided.

Linguists who broke away from the influence of European grammatical practices and models to approach each language without prejudice found that distinctions that are important in one language or group of languages may be insignificant or entirely lacking in another. For example, in Hungarian and the Uralic languages *gender* (masculine, feminine, or neuter), which is so important in the Romance languages and German, is for the most part not signaled. This is carried so far that no separate words exist for "he" and "she," both of which are expressed by *Ő*. Within a sentence, however, it becomes clear that one is talking about a female, of either the human or animal species. While the Romance languages, as well as English, make the distinction between present and past *tense* (time of action), such as "I looked" and "I look," Chinese has basically only one form for the verb, such as *kan*, "look," "looked." However, suffixes may be added to Chinese verbs to indicate various *aspects* (*aspect* refers to distinctions of duration of time, continuity of time, and completion of time). *Kan-le* can mean "had looked," "have looked," or "will have looked." Chinese *aspect* parallels English *aspect*, usually termed *perfective* and signaled by forms of *have*, which may be found in the past ("had looked"), the present ("have looked"), and the future ("will have looked")—though the English speaker, including many who have learned Chinese or have studied Chinese grammar, is inclined to feel that *-le* equates with the English past tense. There are other *aspects* in Chinese, but we leave the analysis of these to those who may wish to study in more detail the grammar of the Chinese language.

In summary, it remains interesting, and even fascinating, to observe the distinctions that some languages make, which in others may be nonexistent. One of the commonest of these is between a "we" that includes "you" and a "we but not you," distinguished in the Maranao tongue:

inclusive

*tano*

exclusive

*kami*

Let us consider another example of linguistic variety: the Turkish language makes a strict distinction between hearsay and personally observed or attested past. For instance, to express the sentence, "His daughter was very beautiful," one of the two following forms must be used:

hearsay

*kiz cok güzel imis*

attested

*kiz cok güzel idi*

In the first example *imis* is used because the speaker does not know the statement to be a fact since he has no personal knowledge of it, while in the second *idi* is employed because he has personally verified that the young lady in question was beautiful.

### MISCONCEPTIONS ABOUT LANGUAGE

Perhaps we assume that other people must express their thought precisely the way it is done in English, German, or other European languages, because for centuries we have been under the influence of the classical traditions. It was the custom in centuries past to regard Greek and Latin as ideal languages, the *proto*-types (the first or parent) for other languages, and to speak of other languages as being derived, albeit imperfectly, from these two classical languages. It is not difficult to understand the reason for the preeminence of Greek and Latin. Most of the learned manuscripts, including translations of the Bible, were written in Latin and Greek. Implicit was the assumption that, since the Roman Catholic Church used Latin in its liturgy,

even God spoke Latin. This particular, biased orientation to language was partially changed with the advent, in the first part of the 20th century, of various modern approaches to the description and analysis of language.

That other people must necessarily express a given thought as we do in English is far from the case. No two languages in the world express all concepts and thoughts in exactly the same way. We say in English "I am hungry," but in French it is *J'ai faim* and in Spanish, *Tengo hambre*—which is more literally in both languages, "I have hunger." All European languages have some way of saying "How are you?", but Burmese has no such expression and one must employ instead one of five or six levels of politeness. We say, "I feel sorry for you," but Japanese renders this expression by *o kinodoku desu*, or literally, "It's a poison for your soul."

Information about the world is organized according to the linguistic patterns of a given language community in ways which, while not totally arbitrary, are not according to the canons of Western logic. All grammars contain a great deal that is contrary to what we would regard as the "sensible" ways of organizing experience, and it would be a mistake to believe that any language is particularly logical or that the more exotic languages are, as a whole, less logical than the more familiar ones.

This divergence in patterns of expression accounts for the fact that many of us "feel" that every language has its own soul or spirit. No matter how well done a translation may be some meaning will always be lost from the original because every language is inextricably interwoven with the peculiar culture of its speakers. As the late Dr. W. R. Parker of Indiana University remarked, when observing in Goethe's *Faust* that Dr. Faustus stops addressing Margaret by the formal *Sie* (for "you") and uses the intimate *du*, this subtle yet significant change in tone, so much a part of the German language, could not be signaled in English by the same grammatical means. Here again, the individual who in learning a language goes beyond its basic everyday expressions and becomes acquainted with its nuances and fine distinctions is in the best position to analyze what makes its speakers tick linguistically—and perhaps to a large extent, psychologically.

Yet the practice of structural linguists to seek and to emphasize differences between and among languages rather than similarities led to a further misconception: that a language may differ from any other in an infinite number of ways. This view distorted, as it were, an important 17th century notion, expressed by the language philosopher Descartes and his followers, who believed that languages are far more alike than they are different. Since languages are learned by human beings, and since human beings do not appear more predisposed to learn one language than another, and since all human beings seem to be equipped with the same neurological equipment, then it must follow, according to Descartes, that languages share a number of important features (features that are now called language *universals*). Noam Chomsky has resurrected this 17th century notion of universal grammar in his book *Cartesian Linguistics* and has made it a premise of his own brand of linguistic analysis.

It is a sign of a healthy and viable science, surely, that such questions as universal grammar are being reexamined and that earlier theories, such as the theory of innate ideas, are being given explicit characterization. Suffice it for us to say here that languages which appear, upon superficial examination, to be totally different may, upon a closer, deeper analysis, be more similar than different.

Still another misconception is the one regarding the superiority and inferiority of languages. There is in fact a tremendous body of folklore built up about most languages. Regarding French, there is the legend that it possesses special attributes which enable it to express thoughts more clearly than any other language. There is even a saying in French, *Ce qui n'est pas clair, n'est pas français*: "What is not clear, is not French." Nationalistic Germans have attributed to their language mystic qualities that supposedly give it special powers of vigorous expression. About Italian there exist many beliefs regarding its seniority and musicality. Incidentally, in this vein the Spanish emperor Charles V once said that English was the language

to speak with merchants, German with soldiers, French with women, Italian with friends, and Spanish with God!

These beliefs have no basis in scientific linguistic fact any more than the assertion that any given language is prettier than another. Like the beauty of a painting or that of a woman, the charm of any language lies solely in the eyes—or ears—of the beholder. One often hears that German is not as beautiful as Spanish or Italian because it is “guttural,” and in the aesthetic judgment of some people gutturalness sounds harsh. From the linguistic viewpoint this judgment is meaningless; a linguist would merely say that German has more “guttural sounds” than English, French, or Italian, or in more technical phraseology, that German has a high number of sounds produced with the velum, the flap of soft flesh that is part of the back of the mouth and that cuts off the breath stream between the oral and nasal cavities. Yet to many speakers of Semitic languages, gutturalness is not only not a defect but is a positive virtue. In Israel to speak Hebrew with a markedly “guttural” pronunciation is considered very chic. Arabic has an unusually high number of “guttural” sounds but few persons who claim Arabic as their mother tongue would consider it one iota less beautiful than French or English.

It is equally false to believe that the sounds of a particular language are in themselves easy or difficult to the native speaker, although some sounds encountered by young children learning their language appear to be harder to learn than others. The degree of difficulty is dependent on the language background with which we start, and there are probably no sounds with which the native speakers of other languages would not have trouble. Incidentally, children of, say, a year and a half, who have not yet mastered their own language, often make use of many sounds that the adults of their speech communities would class as extremely difficult. Learning the sounds of a first language is in part a process of eliminating sounds that do not belong to it.

At the root of many linguistic misconceptions is the undeniable fact that many people regard language as static and inflexible rather than as dynamic and ever-changing. It is common to hear and read statements to the effect that a certain language is incapable of expressing the concepts of modern society. This is a fallacy, and from the evidence of linguistic research there does not appear to be any language that cannot be harnessed to serve any verbal communication need. In fact, any linguistic system can be “developed” to accommodate new terminology and concepts by means of its *rule system*. The fact that languages may express concepts through different patterns or rules does not alter this principle at all. When Wycliffe was told that English was too “rude” for the Scriptures to appear in, he retorted, “It is not so rude as they are false liars.”

It is, however, undeniable that the Wichita language of an Oklahoma Indian tribe is not suitable in its present state for discussing nuclear physics or celestial navigation. But this is primarily because the speakers of Wichita have never had to cope with such problems. If, however, the roles of Wichita and English were reversed, it predictably would be English that would lack specialized terminology and expressions.

We do not know the details of the origin of language. But we do know that languages have an organic existence, and that they develop semantically according to the needs of the community employing them. The more technologically advanced the speakers are, the more equipped the language will be to cope with science, technology, and the concepts of an industrialized society. Conversely, the languages of such advanced nations as the United States, Germany, and France may and often do lack numerous concepts and nuances referring to the phenomena of nature and to pursuits like herding, hunting, and fishing, which are elaborately present in many languages of people of nonindustrialized cultures. Berber has a far richer vocabulary for discussing camels and livestock and their care than nas Danish or Italian.

There are languages in existence in which there is no way of saying *stereophonic playback recorder* or *nuclear warhead* without a lengthy paraphrase, since no such words or compounds as these exist. But this does not mean that the speakers of these languages could not coin such expressions. The coining of new terms—and this important fact is often not realized—is part of the organic development of any living language in a dynamically growing society. For example,

the reason that Homer had no word for "motorcar" is simply because he did not have such a vehicle to convey him over the hills of ancient Greece. The modern Greeks, however, have coined a word for this useful vehicle, terming it *autokineto*, composed of *autos* (self) and *kinetos* (moving thing). That, after all, is the way the term *automobile*, used in somewhat varying shapes in most European languages, was also conceived and constructed (*autos* plus an original Latin root *mobilis*, through Old French *mobile*). But tastes vary in languages, and although Czech, for example, uses the word *automobil*, Polish has preferred to express the same concept by the word *samochod* (with *sam* roughly meaning "self" and *chod*, "locomotion").

Thai was not equipped until a few years ago with words for most modern innovations. There was a tradition in Thailand of using Sanskrit roots in technical vocabulary, much as we make use of Greek (*astronomy*, *epiglottis*, etc.). With modernization the Thais have avidly set about the business of coining new words, even to the extent of having contests for the best word made up to express some new Western-derived concept. Preferably, the new words should include Sanskrit elements already used in Thai and, ideally, should have some resemblance in sound to the term used in European languages.

The growth and development of languages presents still other opportunities for myth-building. It has been difficult for people to realize that every language is in a constant state of flux and is at any period moving in new directions usually considered to be corrupt and decadent by the purists. The constant mutability of language is obscured because of the tendency for people to think in terms of the standardized written form of a language. People believed that classical Latin was perfect and unchanging even while spoken Latin was becoming French, Spanish, Italian, and the other modern Romance languages. Beliefs in immunity to change on the part of any living language are totally without foundation.

Many of the most persistent myths about language occur in speculations concerning the relation of speech to writing. Commonly, people feel that a language which has never been written is not really a language at all. In point of fact, an unwritten language can have all the attributes of any written language and may have a rich literature, although necessarily a literature limited to what is handed down by oral tradition. In the case of languages which have been written for centuries, people often feel that the written language represents the real language and the spoken form only a pale and probably corrupted reflection of it. Linguists, while understanding the great importance of the written form and recognizing the many ways in which writing and speech interact with each other, nevertheless maintain that speaking is the basic symbol-using activity of human beings, with writing being a superstructure built upon it, and that, while spoken language is an attribute of the species, writing is culturally determined.

Facts, fantasies, and even prejudice exist about languages just as they do about individuals and nations. While some of these beliefs are romantic and many appeal to the imagination, it would seem to be far better to know more about the nature of language as a branch of the cognitive and behavioral sciences than to perpetuate old wives' tales about it. We propose in the following chapters to examine what human language is and what general principles apply to its function and use in the world. We can enjoy this excursion all the more if we rid ourselves of our misconceptions before embarking. Even if we find that we cannot easily discuss the bullish and bearish fluctuations of Wall Street ticker tapes in fluent Eskimo, it may turn out that for the fine points of under-ice fishing Eskimo may be superior to English and French combined.

## I. QUESTIONS AND ACTIVITIES

1. How do we "intuitively" know that there is no end to the sentences of a language?
2. Some languages have been described as "primitive." What is meant by that term?
3. Is there a social status associated with the particular language that we speak? What accounts for the fact that certain languages are "prestigious" while others are not?
4. Coining of words: we coined a word for the man who traveled around earth in a space module, "astronaut." What does it mean? Are there other words that have "astro" or "naut" within them?
5. Can you list some of your observations about language? For example, is the statement "There is a 'correct' way to talk" a myth? Why or why not?
6. There are a number of vocabulary items that distinguish American English from British English. "Paving," for instance, may refer to either a "sidewalk" or to "street" depending upon whether our speaker is in England or in the United States. "Bonnet," "boot," and "windscreen" are British terms for parts of the automobile. What are their counterparts in American English? What are some other vocabulary differences?

## I. FOR FURTHER REFERENCE

- Bloomfield, Leonard. 1933. *Language*. New York: Holt.
- Carroll, John B., ed. 1957. *Language, Thought, and Reality*. Cambridge, Mass.: The Technology Press of M.I.T.
- Chomsky, Noam A. 1966. *Cartesian Linguistics*. New York: Harper and Row.
- Fromkin, Victoria and Robert Rodman. 1974. "What is Language," "Animal 'Languages,'" in *Introduction to Language*. New York: Holt, Rinehart and Winston.
- Lenneberg, Eric H. 1967. *Biological Foundations of Language*. New York: John Wiley.
- Lilly, John C. 1969. *The Mind of the Dolphin: A Non-Human Intelligence*. New York: Avon Books.
- Postal, Paul. 1968. "Epilogue," in Roderick Jacobs and Peter Rosenbaum: *English Transformational Grammar*. Lexington, Mass.: Xerox.
- Premack, Ann James and David Premack. 1972. "Teaching Language to an Ape." *Scientific American* October, 92-99.
- Steiner, George. 1971. "A Future Literacy." *The Atlantic Monthly* August, 41-44.
- Von Frisch, K. 1967. *The Dance Language and Orientation of Bees*. C. E. Chadwick, trans. Cambridge, Mass.: Belknap Press of Harvard University Press.
- Wang, William S-Y. 1973. "The Chinese Language." *Scientific American* February, 50-63.



## II. The Beginnings of Language

### HOW DID IT ALL BEGIN?

Before we begin this chapter on the origins of language, perhaps we should point out that there is little evidence available to substantiate any theory on the origin and evolution of language in *Homo sapiens*. Neither is there evidence that language becomes more "effective" or less "effective" with time; nor is there support for the contention that one language is intrinsically better than another, represented by the claim that "French is the most logical language, Italian the most musical, German the most scientific." It has been claimed that languages spoken in primitive societies are less sophisticated, linguistically speaking, than languages spoken in highly developed technological societies. Some have even said that language tends to degenerate through time, from a pure, or standard, language to one that is incapable of expressing subtle nuances. Professor Maynard Mack, a renowned literary scholar, may have had this in mind when, in his presidential address to the members of the Modern Language Association (printed in the May 1971 issue of the *Publication of the Modern Language Association*), he said, "Language is susceptible to pollution, becomes murky, noisome, suffocating. That is the condition we face now. Never, I suspect, has our common tongue been so debased and vulgarized as it is today in commerce, so pretentious, over-blown, and empty as it is in the babble of the learned and bureaucratic jargons, not excepting ours, so tired, mechanical, and unimaginative as it is in the obscenities of the young."

There is no proof that would serve to corroborate Professor Mack's eloquent assertions, just as there is no evidence that would sustain a particular theory on the origin of language. While there continues to be research attempting to distinguish the neural capacities of *Neanderthal* (first man), *Cro-Magnon* (later man), and *Homo sapiens* (modern man), we have no evidence that language has in any sense evolved since the appearance of *Homo sapiens*. Numerous theories have been and continue to be proposed, and, although scholars have debated the issue, sometimes heatedly, we still do not know a great deal about the origin of language. Yet some will likely continue to search for an origin for some time to come.

Many of the books and articles written about the origin of language contain a good deal of fantasy, and occasionally, nonsense. Some linguistic societies will not permit a paper to be read on language origins, believing that any attempt to explain this elusive and frustrating question results in idle speculation and tends to become a vacuous exercise in futility. Yet a few of the theories are interesting, if only for their historical perspective. One of the first Biblical accounts can be found, appropriately, in Genesis, though it does not explain when and how man began to speak, but only that speech (the power to name things) arose through the power of God. The description is an attempt, clearly, to offer an explanation for the unexplainable: "And out of the ground the Lord God formed every beast of the field, and every fowl of the air, and brought them unto Adam to see what he would call them; and whatsoever Adam called every