JOSEPH M. WILLIAMS

ORIGINS OF THE ENGLISH LANGUAGE

A SOCIAL & LINGUISTIC HISTORY

Origins of the English Language

A Social and Linguistic History

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Preface to the Teacher

Because this is primarily a pedagogical history, there are aspects of the evolution of English which I have slighted, particularly the very powerful insights into phonological change provided by generative phonology. But to develop the background for that would have gone far beyond what is possible or needed in a survey of this kind. I have also adapted a rather conservative version of a transformational grammar to deal with syntactic change. A case grammar of the sort proposed by Charles Fillmore or the model of generative semantics offered by James McCawley or George Lakoff is more interesting than the model used here. But again, the problem of striking a balance between what can be done with a class and with a seminar requires a good deal of compromise.

The problems, I would like to think, are the heart of this text. They can be used in several ways:

1. A single student can teach himself the history of English if he merely reads the text and turns in the problems to be checked by an instructor. The text is relatively independent of a teacher.
2. The instructor can assign some problems and entirely ignore others.
3. The instructor can have certain problems turned in as written exercises and use the data in others for class discussions.

4. He can divide the class into groups and have each group do selected problems.
5. He can assign different problems to different students and/or groups and have them present their solutions to the class for discussion.

The most frequent complaint will be from the student who does not understand what "Comment" at the end of many problems requires. I am aware that students are often unable to break away from the need to believe that there are fixed answers to fixed questions. The vagueness of "Comment" is intended precisely to force the student to pose his own questions, to overcome the intellectual rigidity that comes from high schools and junior high schools which teach that all the questions have been asked and that the student's only task is to remember the answer. He will be relieved of a good deal of his own anxiety if he is informed the first day of class that part of his task in the course is to find shape in vagueness.

Incorrect approaches (or no approach) to solutions to the problems are as useful material for class discussion as interesting solutions. A discussion of why a possible solution is not a good one will get to the heart of what education is about if it centers not merely on **what** the better solution is but **why** it might be better and how one might have arrived at that solution.

The Czech formalist critics believe that one function of literature is to "make strange" that which we know too well. Approaching the history of language in the right way can provide the same experience. English need not be as it is now. It could have been otherwise. If some inflections had not disappeared, if more had disappeared, if the Normans hadn't successfully tricked the English at Senlac, if we had never borrowed prefixes, if there were no such phenomenon as metaphor, if the Great Vowel Shift had never occurred, if any of these conditions applied to English and its history, our language would be a very different thing. And if we can bring our students to appreciate these factors, then what is like the air they breathe will become something to be aware of, to be curious about. By awakening their sensibilities, they can expand the frontiers of their imagination.

Some of the more speculative questions (e.g., What **would** we be like if we stored memories not in the brain but in those parts of the body that had the experience?) are designed to make language itself strange. These questions, I would like to think, will permit a moment or two of speculative play.

In any event, the point of this text is to get something going in the classroom beyond the instructor telling his class what is in the text and the students dutifully writing it down in their notebooks.

A criticism that will be made of this text is that it is not "tight," that there is a good deal of repetition. At least some of this redundancy is intentional. This is not a "programmed" text. But many concepts are introduced in one context with the view that they will be useful later or because they are important enough to re-emphasize (behaviorists, read "reinforce"). I men-

PART I

HISTORY AND LANGUAGE

Chapter 1
HISTORY AND LANGUAGE

HISTORY, HISTORIES, AND HISTORIANS

When some people argue that histories should tell the truth, they usually mean by truth the straightforward, unadorned facts of what happened. They believe that historians who select, arrange, and shape their data to make a point about the past or who use the past to prove something about the present are not being objective, and, hence, not telling the "truth." History, they believe, is properly the objective facts the historians can recover from the past arranged just as they occurred to relate what really happened.

Such histories have never existed and never will. The individual mind of the historian, shaped by his times, influenced by his theory of history, and controlled by his unique personal character, must always stand between the leavings of the past and the work that represents his understanding of how those leavings reveal what happened and why. Just choosing what to write about reveals the mind of the historian evaluating and selecting from all the events of the past only those most important to him.

The very material he works with will become one thing for a historian who believes that history turns on the actions of great men and something else for one committed to an economic interpretation of the past. Indeed, the

modern study of history is becoming less the narratives of individual men acting in individual situations and more the analyses of broad economic and social forces that can be discovered only by highly specialized researchers, armed with sophisticated statistical and sociological tools. The intellectual focus of our age has shifted from man the individual free agent to man's part in the overall social fabric.

This shift away from the concrete individual to more abstract social forces has been encouraged by the growth of one academic specialty after another: statistics, demography, sociology, economics, psycho-history. Each has created more and more refined analytical techniques until it is now no longer so easy as it once was for a single person to be the broadly based, general researcher who might have understood an entire age. Thus, as the specialist has narrowed and refined his tools, so conversely have the available tools narrowed and refined the specialist. The existence of sophisticated analytical techniques pushes every investigator—historian, physicist, sociologist, literary critic—to follow the methodological paths his discipline opens up to him. All researchers find not only what their age and interests urge them to find, but what their theories and techniques predispose them to find.

Not surprisingly, the reasons men write histories in the first place are as diverse as the theories that guide them and the methods they use. At its simplest and most elemental level, historians create a past because their community wants to know where it came from and how things got to be the way they are. The earliest myths, the stories of the most primitive peoples about their gods, are a kind of history that explains how the universe and the earth came about—why the sun and the moon, why the animals, why man. The voyage of Mariner 10 beyond Jupiter and out of our solar system represents our curiosity about the origins of the universe. The Bible was once unquestioned history for most Christians. For many it still is. So once for some were the legends of the Plains Indians, and the Greek myths and **Beowulf** and the story of Valley Forge, Gettysburg, Lewis and Clark, and the Alamo. We no longer call all of these history because our age has different criteria for accepting some stories rather than others as satisfying ways to organize and explain our past.

But the most common reason most of us would give for writing about the past is that we think we can learn from it. Santayana's belief that those who do not remember the past are condemned to repeat it may be extreme. But it is a traditional belief. Whether or not we can in fact avoid the mistakes of history, knowing something about the past does make us understand our own condition differently than if we knew nothing about its origins. But if history is to teach us about today, the historian must arrange and shape the past to make it relevant to the present. Only then can he convince us that we should know what has happened if we are to understand what is now happening or anticipate what is about to happen.

Because statements about the past so frequently touch on social values, a historian has to take a position, sometimes explicitly but always implicitly, in regard to the values of his community, accepting and interpreting or rejecting them according to both his own personal standards and those of his time. One has only to recognize how our own history is being rewritten to include the contributions of Afro-Americans to realize how even scholarly values are changing. Only a few years ago, the intellectual-social climate did not encourage most historians to regard the Negro as a significant contributor to American history. That historians everywhere are now investigating Black history reflects a new political and social, as well as intellectual, reality.

When we read any history, then, we must understand the historian's sense of what is important about history. We must understand that the data he selects and how he arranges them depend on his reasons for writing history in the first place, that "truth" depends finally on how his theories interpret what the interests and values of an age allow him to recognize as the truth. (112)

British historian E. H. Carr perhaps put it most simply:

> . . . you cannot fully understand or appreciate the work of the historian unless you have first grasped the standpoint from which he himself approached it; second, that the standpoint is itself rooted in a social and historical background.
>
> E. H. Carr, **What Is History**, Vintage Books, 1967.

HISTORY AND THE STUDY OF LANGUAGE

At first glance, most of these questions may appear irrelevant to a subject seemingly as value-free as a history of the English language. A language is not a series of spectacular events. It was once fashionable to claim that Chaucer, Shakespeare, and Milton strongly influenced the growth and structure of English, but no longer. A language is not the product of great men acting in dramatic situations, but rather something created and shared and recreated every day by an entire people, for the most part something shaped without any forethought or conscious planning.

In fact, a history of a language is significantly different from a history of a series of clearly discrete events. The "events" in a history of the English language are difficult even to define. They are the sequence of changing abstract patterns behind the sum of countless concrete events—of hundreds of thousands of people talking roughly alike on, say, January 1, 450 A.D., in an infinitesimally different way on January 2, and so on up to the present, when hundreds of millions speak billions of words every minute. A historian of English describes not how an individual speaker used language at some moment in the past, but how through time the shared abstract patterns of language have gradually changed since the fifth century A.D., when those first

speak. If we attempt to rationalize why we choose to speak in one way rather than another, we may use the history of English, logic, or dogmatic opinion to justify our usage. But how we speak—whether we say *ain't I* or *aren't I* or *am I not*—finally depends not on rational, logical reasons but on the (usually) unconscious linguistic preferences of those who command our respect and who, by their prestige, silently influence the writing of textbooks and the conduct of education.

In some small way, then, perhaps an understanding of the historical sources of both standard and nonstandard dialects and the social bases by which we decide about standards might qualify some of the historically unjustified responses many of us have toward those who use "ungrammatical, illiterate, uneducated speech."

More significantly influencing the nature of this particular history, however, are its larger pedagogical goals. Most histories of English seek only to summarize the outstanding ways in which the language has changed and some of the causes for those changes, to comment on the rise of dictionaries and changing attitudes towards standards of usage, and to suggest the range of language diversity across geographical space—all presented for the reader's information. If the student succeeds in committing the facts to memory, he has satisfied his responsibility toward the subject and the book.

The intention and design of this history are different. It will try not only to transmit information about the history of English but also to suggest in some modest and very incomplete way what historical linguists do when they study and describe the history of a language. It is not a history to be read passively. It will ask the reader to engage himself with historical data presented as problems. In most cases, a discussion follows each problem, so it will be easy for the student to ignore the problems and read just the discussion. I can only urge the student who wants to do more than memorize facts to wrestle with the problems before he goes on to the discussions. The bibliography lists several excellent histories of English that summarize and present many facts about the language in an interesting and scholarly way. For the reader interested only in facts, I recommend them. (7, 58, 95, 172, 182, 209, 244) This history will ask the reader to create much of the history of the language himself. It will force him to become as much of a historical linguist as can practically be managed in a book where all the relevant data has already been culled and the questions at least tacitly formulated.

In addition to acquiring some sense of an intellectual discipline that has its roots in Plato's **Cratylus** and beyond, and of some of the particular fruits of that discipline, the student will, I hope, also come to understand something about language in general. I have already mentioned how important our speech patterns are in our social dealings with one another. We identify ourselves as members of a geographical dialect, a social class, even a particular age group by our speech.

But our language is unique in the animal kingdom. We do not exaggerate

when we say that nothing defines man better than the fact that he is the only animal that uses language creatively. He is the only animal that can create out of a finite number of linguistic units a potentially infinite number of sentences that can correspond to the potentially infinite number of situations he faces in the world:

Lake Erie is polluted.

and, even more importantly, to the equally large number of conceptions that do not yet correspond to the real world:

If we continue to pollute the oceans, maybe they will die.

and, indeed, to those that can never correspond to reality:

The rectangular ontogeny unfurled its insolent symmetry.

Finally, some of the problems will ask the student to exercise his linguistic imagination to create new words, new meanings, new grammatical patterns, new metaphors, to explore new semantic space which his mind must create. One of the current commonplaces of education is that our language creates our world. It provides us with the categories of our experience, and in so doing closes off from us other ways of structuring our cognitive world. So strongly stated, such a claim is wrong. But by flexing his verbal imagination, by creating new linguistic patterns, the student may become more sensitive to some of the creative possibilities of language. These problems have no right or wrong answers.

Finally, much of the data here has been over-simplified, an unavoidable consequence of trying to present a unified view of what is in reality often diverse and contradictory data. Regional and personal variations, inconsistent historical developments, have now and then been ignored in an effort to make the history of the English language coherent enough for one to grasp at least the broad outlines of 1500 years of change. And yet it is probably that wrestling with inconsistency and variation that most characterizes the historical study of a language. A paradigm of verb endings or a dictionary entry or a neat vowel change is the misleadingly tidy product of combing masses of often doubtfully reliable data for evidence, selecting only what is relevant to the problem, resolving contradictions, and, for the sake of a strong generalization, setting aside as exceptions those data which do not fit the generalization. That activity can only be appreciated after one has dealt with the original texts themselves.

Chapter 2
THE NATURE OF LANGUAGE

THE BEGINNINGS

A story often cited to illustrate an idea which some have held about the origin of language is the one Herodotus relates about King Psammetichos of Egypt. To determine whether the Egyptians or the Phrygians were the older race, he ordered two children to be raised entirely isolated from speech. He believed one would, quite on his own, begin speaking one of the languages as the original Ur-language of man. When one day one uttered the sound *bekos*, which meant bread in a dialect of Phrygian, he concluded that Phrygian was the older language. An early Scottish king who performed the same experiment concluded that the first sounds the isolated children uttered were pure Hebrew.

This idea that our language has descended from some older, probably "purer" and more fundamental source is reflected not only in the Roman belief that Latin was corrupt Greek, but that the babel of languages afflicting the human race results from the confusion visited upon the one original, pure language spoken by the builders of the tower of Babel.

The belief persists even today: At some earlier time, language reached a

state of perfection; since then, it has been all decay and corruption. Some have claimed that English is particularly degenerate, for "it has no grammar" to speak of in comparison with the rich inflectional systems of older languages such as Latin and Greek. English inflects nouns for only two cases: genitive—*the boy's hat*, and the general case, distinguished by the lack of any endings—*the boy*. Latin has six inflectional cases: nominative, accusative, dative, genitive, ablative, and vocative. Sanskrit, the oldest fully recorded known language related to English, had eight cases: nominative, accusative, dative, genitive, ablative, vocative, locative, and instrumental.

Obviously, then, English is in the final stages of a decay that began at least 3000 years ago. In a few hundred years perhaps, even the inflected genitive in *boy's* will disappear, along with the third person singular *-s*, the past tense *-ed*, and the comparative *-er* and *-est* endings, leaving us with the rotten hulk of a once richly grammatical language.

If we want an authority to decide a problem of grammar or usage or meaning, then, we should (it is claimed), look to the past, usually to Latin, less often Greek: One does not end sentences with prepositions in English because one does not do so in Latin. Nor does one ask *Who did you see?* because as the object of *see*, *who* should be *whom*, the accusative case. Case agreement, of course, is required in good Latin. (45, 183)

Unfortunately, the real origins of language are as completely unknown as its evolution preceding the last four or five millennia. Assuming we can reject the idea that language was a gift of the gods, we have to ask how it was possible for a hominid that presumably communicated not too much differently from our present primate relatives to evolve into a creature who can do what you and I are now doing.

In the nineteenth century, speculation about the origin of language was so widespread in the scholarly journals that in 1866 the **Société de Linguistique de Paris** finally had to ban the publication of any more articles on the subject. Then for about a century, the question was unfashionable. A few eminent scholars speculated about the origin and evolution of language, but it was not a problem actively pursued. In the last few years, however, the subject has once again become a live issue, particularly among anthropologists.

The problem can be broken down into at least three parts:

1. What are the biological differences between the neurological and peripheral speech mechanisms of man and other primates?
2. What are the important differences in the "design features" of the language of man and other creatures and how can they be related to the biological differences?
3. How could the biological and design features have evolved from those possessed by a creature that was the ancestor of both ape and man?

lips, and so on, in the ape, they are not integrated into a speech system. Even in man, none of these features was originally intended specifically as part of a communications system. Each feature has its own biological function entirely independent of talking. But in the ape, those organs still serve almost exclusively their original functions: breathing, swallowing, closing off the lungs to prevent the escape of air, chewing, and so forth. The laryngeal structure of apes simply does not allow them to articulate human sounds. In fact, it is for this reason that a number of researchers are now attempting to teach, chimps language through some medium other than verbal: sign language, plastic chips, computer panel displays, for example. (68, 168, 186)

So along with the development of brain anatomy, we have to explain how a set of independently functioning organs came to be integrated into a physiological system connected with a cognitive system. Presumably, it did not happen in one great leap across genetic space. Presumably, environmental pressures selected those creatures who were best able to use even the beginnings of such a system toward an end that enhanced their chances for survival.

Design Features of Human Languages

Keeping these very tentative biological possibilities in mind, we might now ask what the crucial design features of human language are and whether any of them depend on what is biologically unique in man. One set that has been proposed is the following (87, 88):

1. **Vocal-auditory:** Although other channels may be used (sign language or braille, for instance), human languages are fundamentally spoken and heard.
2. **Broadcast transmission:** The signal is ordinarily transmitted in all directions simultaneously rather than through a narrow channel (the difference between a smoke signal and spelling letters in the palm).
3. **Rapid fading:** The signal does not remain in the channel. When a word is uttered, it disappears from our perception virtually instantly, unlike the lingering chemical traces of dogs or ants.
4. **Interchangeability:** Ordinarily, all normal users of human languages can both transmit and receive, unlike many insects whose direction of communication is sex-determined.
5. **Complete feedback:** Normal speakers are aware of their own message.
6. **Specialization:** The energy needed to communicate is less than the results intended by the communication. One need not cut down a tree to communicate the idea.
7. **Semanticity:** The signal has meaning. It regularly correlates in some sense with that which is within the perceptual or cognitive universes of the sender and the receiver.

8. **Arbitrariness:** The signal bears no **iconic** relationship to that which is communicated. The angle of a bee dance relative to the sun directly represents the direction of the food source from the hive. The less intense the dance, the farther the food from the hive. The sentence, *The food is a mile north of here* does not represent distance or direction iconically.
9. **Discreteness:** The message has parts. Each word in this sentence discretely represents a bloc of information that combines into larger structures, and those structures into larger structures (phrases and clauses). The three distinct warning cries of a vervet monkey (one for overhead danger, one for large-creature ground danger, one for snake-creature ground danger) holistically communicate each message. They have no decomposable inner structure that could be represented by discrete bits of information:

$$\left[\begin{array}{l}\text{overhead} \\ \text{ground} \quad \left[\begin{array}{l}\text{large} \\ \text{snake}\end{array}\right] \text{danger}\end{array}\right]$$

10. **Displacement:** The message can be communicated at a distance from that which it refers to. Humans can speak of ancient Egyptians, who are displaced in both time and space. The ability of a non-human to "hold" the message associated with a stimulus is distinctly limited.
11. **Openness:** New messages can be constructed about any aspect of experience. Bee dances concern only food and the location of new hives. They do not (cannot) "talk about" the weather, what is happening back at the hive, and so on.
12. **Tradition:** The particular forms of particular human languages are passed on culturally from generation to generation. Bee languages are passed on through the genetic code.
13. **Learnability:** The particular forms of particular languages can be learned. Bees from one species cannot learn to communicate with the bees of another. (Certain birds, however, do acquire the "dialects" of other birds of the same species. When neighboring flocks have slightly different territorial songs, it is possible for them to "learn" the others' dialect.)
14. **Prevarication:** Human speakers can consciously construct messages about that which is counterfactual. Some primates may also have this ability.
15. **Reflexiveness:** Humans can use language to talk about language.
16. **Duality of patterning:** Human communication is materially structured on a phonetic level through the discreteness of a finite number of discernible sound classes, on a grammatical level independently of the phonetic level through part-of-speech, subject-verb structures, and so on, and through an associated semantic level that is partially independent of the grammatical level.

More recently, some linguists have claimed additional universal characteristics of human languages. (31) Among them are the following:

17. **Deep-surface structure:** Sentences are organized on two levels: Their surface level, the observable order of parts of speech, and so on, and a deep level, the underlying grammatical relationships. (This is dealt with more fully later.)
18. **Grammatical categories:** All human languages have grammatical categories which can be generally covered by the terms substantives (or nouns) and verbs. Substantive-verb relationships include actor-action, recipient-action, instrument-action, and a few others.

When we concentrate just on the ability of speakers to **use** language, however, we bring out what may be the most important differences between man and his relatives, making the problem of an evolutionary accounting yet more complex.

19. **Non-instrumental communication:** The message may be freed from any immediate consequences. That is, non-human communications seem always intended to bring about or maintain a state of affairs involving territorial claim, danger, mating, food, or social status. But a human can utter a sentence like *I wonder who's kissing her now* without wanting to bring about a new state of affairs. A further consequence of this is that human messages need have no audience to validate them. Animal signals usually do.
20. **Message isolation:** The message may be communicated independently of the communicator. Even among the most advanced primates, message forms ordinarily consist of not only sound, but a complex of features including facial expression, posture, eye fixation, distance from receiver, and so on. Except for agonistic cries, primates in their natural state usually require a multi-modal transmission of a message. Man can communicate by telegraph, which screens out virtually all paralinguistic signalling.
21. **Cross-modal communication:** The message may be detached from a sign in one channel-type and attached to a sign in another; i.e., we can tap out morse code, read signal flags in reply, and relay the message in braille.
22. **Meaning isolation:** The meaning of a message may be detached from any overt articulation of the message. That is, we can (though we need not) think in language without any obvious enervation of muscles controlling articulation.
23. **Meaningful violation:** Human speakers may consciously violate rules governing the structure of a message, and their audiences can impose an interpretation on them; e.e. cummings' *anyone lived in a pretty how town/*

(*with up so floating many bells down*) does not elicit a blank uncomprehending stare. But if a mutant bee began doing his own dance, the other bees would be unable to impose an appropriate meaning on it.

24. **Sign change:** The form of a word may be separated from its original meaning to take on a new meaning. The word *grasp*, for example, has transferred from the manual to the cognitive sense. Similarly, the meaning of any word may change or the word may disappear entirely: *Meat* once meant any food; *scora*, an Old English word for a garment, has disappeared entirely.

Evolution toward Language

Now the great problem with all of this is to synthesize what we know about the biological foundations of language with which of these features we decide must have been among the first steps toward language. We might reasonably assume that the peripheral physical anatomy evolved as a consequence of selection for greater cognitive language ability. It seems difficult to understand how the diaphragm, larynx, tongue, etc. could integrate into a speech system before the neural groundwork had developed in the brain.

The next question is whether the brain changed in one massive genetic mutation or whether different parts of the brain slowly integrated into a linguistic neural system in perhaps the same way the peripheral speech system must have slowly integrated into what it is now.

The crucial innovations toward a language that we would call rational are **displacement** and **openness**. The others—duality of patterning, semanticity, broadcast transmission, and so on—either necessarily follow these two or obviously precede them. As a category, displacement includes the ability to verbalize or not in the presence of a stimulus that might ordinarily elicit verbal behavior: fear, hunger, sexual attraction. The corollary is the ability to produce the signals associated with those stimuli when they are not present. But uttering a signal of some sort when no gratification is involved is such startlingly innovative behavior that it demands a preceding change in neural organization. If indeed we can use our verbal system independently of our limbic system (as apparently we can), then we must postulate a mutation that has had major consequences: A food cry that could be produced when no food was in the immediate perceptual environment could eventually become a signal cry for an intention to find food, and then the "name" of food. This kind of displacement ultimately allows us to hypothesize, to lie, to wish, to predict, to contradict, to contradict a contradiction, and so on, for all of these are speech acts independent of any immediate physical referent. At the same time, however, the other characteristic, openness, the ability to combine a finite repertoire of signals into novel sequences with novel meanings, also had

to develop. Otherwise, we could not now wish for, predict, or lie about that which never was.

It is the combination of these two unique abilities: displacement, which allows us to verbalize about that which is not immediately present either in our environment or in our internal emotional state, and openness, which allows us to create completely new messages never before uttered, that is at the basis of rational language. For if either of these are lacking in a creature, we do not attribute to him the capacity for rational conversation.

Almost certainly, the hominid that was able to use and understand the greatest number of signal cries was best able to hunt, mate, and survive. At some moment, perhaps, one such creature must have uttered two signal cries in succession to create what was, in effect, a new message never before uttered. But now we face the additional problem of explaining how his audience was able to **understand** such a radical communicative innovation. For any advance in communication requires two concurrent abilities: The ability to transmit by means of the innovation, but also the ability to receive and understand it.

Now, what is known about the ecology of our simian ancestors that might have created the selectional pressures leading to openness and displacement? Because their period of existence has repeatedly been pushed back farther and farther into the mists of pre-history, explanations based on changing environmental conditions in any given era must be suspect. For a time, it was believed that our distant ancestors descended from the trees when a climate change caused their forests to disappear, leaving them grasslands as a new habitat, a more differentiated world than their forest. Because more open spaces may have required a greater capacity to deal with new visual experiences, visual sensitivity came to be much more highly valued. Perhaps (a favorite word, along with *possibly* and the phrase *it may have been*, when anthropologists come to the crucial moment in their argument), perhaps those hominids needed a great many more signal cries in the grasslands than they originally needed in the trees. Finally overburdened with too many discrete cries, even while larger brains (i.e., larger cerebral cortexes) were being selected for memory, a creature or creatures "hit" on combining cries as the answer. As the brain grew, its organization changed, allowing the cries to be used in contexts where they were not intended as immediately relevant signals. Perhaps as the cerebral cortex grew, it also assumed a larger share of control over behavior, replacing the limbic system to a greater and greater extent, allowing those creatures to utter a signal independently of limbic involvement.

One possible context in which such signal cries might have been used without their "referents" being present is play. If the young of our hominid ancestor played as the young of all primates play, they "acted out" a good deal of adult behavior. Part of that behavior may (Note the equivocation) have included play hunting, with appropriate signal cries. (No reader should be unaware of the leap through evolutionary space in that sentence.) The

different geographical dialects. But we would not have records reflecting the speech of the ordinary speaker, or, for that matter, even the casual speech of the person who did the writing.

Spoken Language

Another aspect of languge that writing preserves at best imperfectly is the way a language sounds. Much has been made of the fact that humans vocalize their language. In fact, one common definition of language among the school of linguists called **descriptivists** it that it is a set of arbitrarily structured uttered sounds. Modern linguistics in the first half of this century strongly emphasized this aspect of language for two reasons.

First, they inherited a rich tradition from nineteenth-century philologists who had achieved great success in establishing through parallel sound patterns the fact that the Germanic languages (English, German, Dutch, and the Scandinavian languages), the Romance languages (Latin, French, Spanish, Italian, Portuguese, Rumanian), Greek, the Slavic languages (Russian, Polish, Czech, and so on), Persian, the ancient language, Sanskrit, and some modern languages spoken in Northern India were all descended from a hypothetical common ancestor, Indo-European. The detailed analysis of sound changes showed, for example, that English *brother*, German *bruder*, Latin *frāter*, Greek *phrater*, and Sanskrit *bhraatr* were **cognates**, or words descended from an earlier word that can only be theoretically reconstructed as **bhrāter* (the * indicates that the word has never been found in any recorded text, that it is a **reconstruction**). It was one of the great intellectual achievements in the history of language study. (163, 183)

Second, and more importantly, in the second quarter of this century, a new breed of linguists emerged from an anthropological discipline built around the questions anthropologists faced when they first walked into a village that spoke a language completely unlike any of the Indo-European languages. Before they could begin their research, they had to decode what they heard. Because the first aspect of the language accessible to them was its sound, descriptive linguists from the twenties to the present have labored to devise ways to discover and describe sound patterns. They were also influenced by an attitude among other social scientists that valued most highly that data which was objectively measurable. (235)

As we shall see, because linguists have devised many ways to recover from writing the general outlines of past phonological systems, we are not completely cut off from the sound patterns of a dead language. But the imperfect relationship between spelling and sound in English should make it clear how difficult it is to use writing to discover pronunciation.

One aspect of sound that is almost completely lost, however, is the rising and falling of our voices in questions, statements, etc., the different ways we

accent one syllable rather than another as in *PERvert* and *perVERT*, *John ALso found some money* and *John also FOUND some money*. Again, there are ways to approximate what these **suprasegmentals** may have been like—particularly through the meter of poetry—but these ways are imperfect at best. And of course, it is just about impossible to determine what sorts of vocal signals speakers of an extinct language used to express surprise, anger, bewilderment, sadness, and so on. We cannot assume that all speakers of all languages use the same signals to indicate these emotions, for **paralinguistic** features of language vary from culture to culture.

So in addition to excluding much of the variation of language across social, stylistic, and geographical boundaries, writing also partially cuts us off from the patterns of its sounds. Relying on the past to construct a theory of language would severely limit the power of our theory.

PROBLEM 2.1: Man could conceivably have developed a communication system based on any of his senses: sight, smell, feeling, taste, hearing. Assuming that evolution tends to work towards the most efficient biological system possible within the genetic limitations of the organism, how would you justify sound over any of the other sensory systems that might have evolved to an extremely high level of complexity as a basis for communication? That is, assuming that our sense of smell might have evolved to a very high degree, what disadvantages would it still have in comparison to hearing?

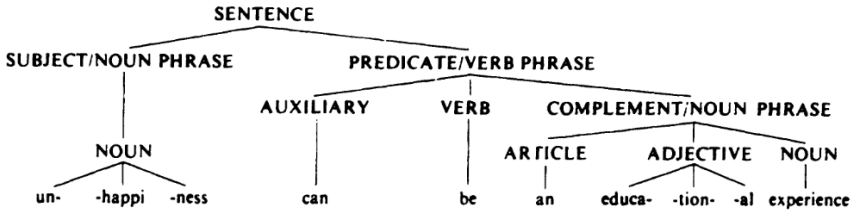
PROBLEM 2.2: Review the design features and capabilities of human languages. Then outline a science fiction plot in which humans confront a society that lacks any two of the features. For example, what would happen in a society which communicated by producing balloons with sentences spelled out, as in a comic strip? And suppose those balloons did not have the characteristic of rapid fading but rather dissolved over a period of an hour or so. Where would choral societies have to practice? How would secrets be transmitted? What would **Hamlet** feel like? What would Beethoven's **Ninth** smell like? What would Homer taste like?

PROBLEM 2.3: What features of language can writing communicate which speech cannot?

GRAMMAR AND GRAMMARS

More about a dead language can be found in its written form when we investigate its grammar, or the ways words are made up out of smaller pieces

and then put together into larger phrases and clauses, the way *unhappiness* is made up of *un-*, *-happi-*, and *-ness*; the way a sentence like *Unhappiness can be an educational experience* can be structured:



But now a multitude of questions arise when we ask what is involved in formulating the grammar of a language we all speak, much less one we don't.

Traditional Grammars

Traditionally, writing a grammar has meant first identifying parts of speech, usually by means of semantic definitions: A **noun**, like *boy*, is the name of a person, place, or thing; an **adjective** modifies or restricts the idea of boy: *big* boys; a **verb** shows action: big boys *play*. These parts of speech are then placed into **paradigms**, or lists that show the inflectional endings they occur before: *boy–boys–boy's–boys'*; *walk–walked–walked–walking*, for example. Even though English has a very limited paradigmatic inflectional system, traditional grammarians have emphasized these patterns and their meanings (past, future, present, perfect, progressive, and so on, for verbs; singular, plural, possessive for nouns) because grammars of highly prestigious languages like Latin and Greek depend heavily on elaborate inflectional paradigms. Without considering whether a new conception of grammar might be appropriate for English, the least enlightened of the traditionalists simply force English into those molds.

Once the individual words are classified, traditional grammarians list and define, again semantically, the ways in which word classes relate to one another in phrases and clauses: Noun–Verb (*boys play*) is a **subject-verb** construction in which the subject is typically the "actor." Verb-Noun (. . . *play ball*) is often a **verb-object** construction in which the object is the "receiver" of the action. The largest unit of all, the **sentence**, is again semantically defined as a "complete thought." Sentences are then classified, again semantically, according to whether they ask questions, give commands, make statements, or express an optative (*Oh, that he would stop!*)

Traditionalists emphasize semantic definitions so strongly for several reasons, but largely because of a common definition of language on which

they base their analysis: Language is a means to communicate ideas, a definition that makes meaning central to the description of a language.

When a traditionalist sets himself to writing the grammar of a dead language, his first concern is to identify parts of speech in older texts according to the principles he has inherited from many centuries of language study. Once he has identified those parts of speech, he sets to arranging them in paradigmatic orders that will show what kinds of endings the parts of speech occurred with. His next concern is to describe how those parts of speech function in sentences in terms that will help him explain what those sentences mean.

An area of major concern to the traditional historical grammarian, for example, would be the tense, mood and aspect system of the verb phrase, both because in languages like Latin and Greek it was communicated through a very highly developed inflectional system, and because the system itself communicated a very complex set of meanings. The traditional historical grammarian of the year 2500 would try to explain the grammatical meaning of Modern English verb phrases like *He could have been found, He will be working, He has been being questioned* in terms of the state of the action, the time relative to the present, past, or future, in terms of whether the action is real or unreal. Another of his tasks would be to explain clausal relationships in terms of their meanings: *Because he left* would be a **causal** relationship; *though he left* would be **concessive**; *after he left* would be **temporal**; *if he left* would be **conditional**. (35, 97, 134, 174)

PROBLEM 2.4: The traditional definition of a noun is a word that names a person, place, or thing: *boy, country, rock, aggression, ambition, mind, force, spirit, meaning, love, peace, honesty, coincidence, luck*. The traditional definition of a verb is that it indicates action: *run, jump, imitate, resemble, reflect, weigh, stand, have*. Comment on the usefulness of these definitions in a sentence like *Coincidence resembles luck* or *Honesty has many aspects.*

PROBLEM 2.5: A **subject** is frequently defined as either the "actor" of the sentence, or that which the sentence is "about." How would these definitions apply to the subjects (in bold face) of the following sentences? (1) **My car** *drives easily*. (2) **The key** *opened the door*. (3) **The table** *has a key on it*. (4) **George** *received a wound*. (5) **Bill** *resembles his father*. (6) **He** *lacks intelligence*. (7) **Somebody** *said the world is going to end tomorrow*. (8) **The wall** *crawled with roaches the size of your fist, like the one on your collar.*

PROBLEM 2.6: Rather than defining language as a way to communicate ideas, suppose we began with the following definition: **Language is a way of performing actions with speech.** (1) How would a grammar be organized if it were based on such an assumption? How would units of speech be defined? (2) Are there

any other preliminary definitions of language that would lead to different ways of organizing and writing a grammar?

Descriptive Grammars

The descriptivists, who as we noted came out of an earlier anthropological tradition, rejected the traditionalists and their use of meaning to describe the grammatical structure of a language, first because the temper of the twenties and thirties stressed scientific objectivity, analysis of data without presuppositions, and a materialist, empirical approach in psychology that considered only objectifiable, quantifiable, observable behavior as legitimate data. For behaviorist psychologists and their linguist colleagues, the mind as an observable entity did not empirically exist. Hence theories built around its supposed operations were invalid.

This intellectual atmosphere was reinforced when linguists found that many of the exotic languages they were studying required ways to categorize parts of speech and sentence functions that were quite different from the traditional ways. In some languages, the distinction between nouns and verbs seemed scarcely to exist. Nouns were discovered to be inflected for tense; the traditional categories of prepositions, articles, and adverbs were often impossible to apply consistently. The notion of verbs inflected for past or present was irrelevant for a language whose primary interest in verb inflection was not time but whether the speaker knew from his own experience that an event had occurred, whether it had been reported to him, whether it was an accepted fact. The traditional categories of perfect and progressive were insufficient for a language that inflected its verbs for the physical shape of their objects.

The descriptivists, therefore, adopted the stance of the behaviorist psychologists and tried to devise purely objective, entirely formal ways to discover and describe the structure of any language including English. First, instead of prescribing what English sentences should be like on the basis of their preconceived notions about sentences in Indo-European languages, they collected vast amounts of linguistic data, examples of sentences from letters, newspapers, telephone conversations, and so on. After identifying individual words and parts of words on the basis of how they were pronounced, they grouped the words into parts of speech primarily by what kinds of **inflections** they occurred before or after, and by their typical position in a sentence relative to other parts of speech.

In English, for example, anything that occurs before a possessive or plural marker is (in one grammar) called a Class I word, *noun* being rejected because it is too closely associated with the traditionalists. Any word before a third person *-s* marker, a past tense marker, and an *-ing* ending is a Class II word, *verb* being rejected for the same reason *noun* was. Descriptivists also

correctly structured and others are not. The terms **grammatical** and **ungrammatical** are commonly used here. But they mean something quite different from junior-high-school ideas about "good grammar." We shall use these terms as value-free labels to categorize sentences that do or do not correspond to the possibilities of English sentences that are ordinarily used by any group of English speakers. We do not mean the prescriptions taught in junior high about not ending sentences with prepositions, not using *ain't*, when to use *shall* instead of *will*, and so on. These are problems of **usage**. Many teachers call them grammatical errors. And in a very special and restricted way, perhaps they could on occasion be called that. More accurately, though, they are only grammatical patterns or word choices varying slightly from the patterns that some educated speakers use, often only in their self-conscious moments and usually only when they are writing. Indeed, most educated speakers, quite unselfconsciously, split their infinitives, end sentences with prepositions, use *will* for all persons and numbers.

Unfortunately, except when past rhetoricians specifically commented on usage, it is almost impossible to discover much about the distant history of prestigious and non-prestigious speech patterns. A few comments about the appropriateness of the London dialect as a linguistic standard and the use of certain dialects for comic purposes in Chaucer and elsewhere have come down to us from Middle English. But not until the sixteenth century do we find any specific observations about contemporary attitudes toward usage, and even then, the comments are often contradictory. It is a problem we will (shall?) deal with again. (131)

PROBLEM 2.10: Here are some sentences that deviate from standard English, some because they belong to a non-standard dialect, others because they violate a basic core of English structure. If you can identify those that would be used by non-standard speakers, how would your ability to do so serve as evidence that such sentences are in fact regularly structured with their own grammar? (1) *He ain't can't have no money.* (2) *He ain't got no money.* (3) *He be have may gone.* (4) *He gone now.* (5) *She can may go.* (6) *She may can go.* (7) *Him and me done finished now.* (8) *They done may be finished with he and she.* (9) *Can't nobody tell him nothing.* (10) *Isn't somebody tell him anything?*

Structure

A more significant kind of ungrammaticality is that which violates the central core of grammatical structures shared by all speakers of a language. These next sentences, for example, would not be uttered by a native speaker of English. Or, if they were, he would either correct himself, or, on reflection, recognize that they were somehow "odd":

1. *Street went down man the.*
2. *The man walked the down street.*

3. *The man went not down the street.*
4. *Went the man down the street?*

All of them are wrong for speakers of Modern English. But while the pattern of (1) and (2) would have been wrong at any time, (3) and (4) would have been correct for Shakespeare.

The second part of that conclusion is not difficult to arrive at since we find lines in Shakespeare's plays like

5. *Know'st thou Fluellen?* **Henry V.** III.1.
6. *Stands Scotland where it did?* **Macbeth.** IV.iii.
7. *I know not by what power I am made bold.* **MSND.** I.i.
8. *Nay, goe not from me . . .* 3 **Henry VI.** I.1.

But the first part or the conclusion has to be entirely inferential because we cannot ask any speaker of ModE what a speaker of OE or ME (Middle English)[1] would think about such sentences as (1) and (2). We can only conclude that such sentences would probably have been ungrammatical because we can find no sentences similar to them.

The problem becomes much more difficult, however, when we wonder whether a sentence like *He should have been working* would have been grammatical for, say, Chaucer. It is perfectly grammatical for a ModE speaker, but nowhere in ME do we find a combination like *should + have + been + V-ing*. Does that mean it was ungrammatical and therefore never used? Or does it mean it just never happened to be written down?

This is not a serious problem for the descriptivist or traditionalist who concerns himself primarily with describing the language found only in extant texts. It is a serious problem for a historical linguist if he looks upon evidence from the past as only a very small part of what a speaker **might** have written or said, and his intention is to create a grammar that will account for more than just extant data. He must constantly ask himself whether structures that are possible for him in ModE but not attested to in OE or ME are missing from the texts accidentally or because they were not part of the grammar. "What might have been" is a crucial problem for such a linguist. (231)

Ambiguity and Relatedness

Another ability that a modern transformationalist is concerned with is demonstrated in a sentence like *The chicken is ready to eat* and in the pair of sentences *John is easy to please* and *To please John is easy*. The first sentence is grammatically **ambiguous**. It can mean either that the chicken is about to eat or be eaten. The fact that any native speaker of English can recognize such

1 The dates assigned to OE and ME are arbitrary; most linguists put the end of OE at about A.D. 1100, the end of ME at about A.D. 1500.

an ambiguity illustrates that we are able to recognize how the observable surface order of elements that make up the grammatical structure of what we hear or read can communicate very different underlying relationships among linguistic elements.

This implies that a sentence has two levels of grammatical structure. There is the observable order of words and their observable connections, or the **surface structure** of a sentence. And there is a **deeper structure** that relates elements on a more abstract level. In *The chicken is ready to eat*, nothing in the form of the sentence reveals that *chicken* can be either the subject or object of *eat*. But at some level of structure deeper than the simple order of elements in that sentence, we know that that is the case. Otherwise, we could not detect the ambiguity.

PROBLEM 2.11: All these sentences have two different meanings that depend on different grammatical deep structures. How are they ambiguous?

1. *The man was too old to help.*
2. *Flying planes can be dangerous.*
3. *They called him a butler.*
4. *He didn't marry her because he loved her.*
5. *In conclusion, he said many foolish things.*
6. *George was cooking in the kitchen.*

We come to the same conclusion about grammatical surface structures and grammatical deep structures if we ask how it is we know that the sentences, *John is easy to please* and *To please John is easy* are synonymous. They have very different surface structures, very different word orders, yet at a deeper level, they mean precisely the same thing; they have precisely the same set of abstract relations among their elements. In other words, relatedness is the other side of the coin from ambiguity: Ambiguous sentences have one surface structure and at least two different deep structures. Related sentences have two surface structures and one deep structure. (94, 132)

And here again, if we take as one of the goals of our grammar a description of this fact, we raise some very difficult problems for the historian of language. Because these relationships can become very abstract and very difficult to describe even for a speaker of a modern language, they are even more difficult to describe for languages which no one any longer speaks.

The point of this brief summary of the kinds of concerns linguists have when they ask questions about the grammar of a language is that as new theories of language come to dominate the thinking of those writing grammars of contemporary languages, historians of languages are forced to ask new kinds of questions about the data they are examining, indeed, to "see" data that linguists of other persuasions do not. As their understanding of what a living language is like changes, so do their goals in describing a language no longer spoken.

But perhaps the most crucial point is that modern linguists no longer look primarily to the past to help them understand the grammar of a language, but into their own intuitions as native speakers of a human language. In other words, we will understand our linguistic history only when we understand our linguistic present.

LANGUAGE AND MEANING

In addition to the sounds and structures of the past, of course, we are concerned with words, their meanings, and the meanings of the sentences they occur in. But we have only to think how inadequate any dictionary definition is for words like *love*, *peace*, or *democracy* to realize that most of what we call meaning cannot be written down. And when those words are combined into sentences like *Peace with honor is justice in a democracy*, we recognize that even if we could define individual words, those words in grammatical structures add up to a total meaning that is not the mere sum of the individual meanings.

Traditional grammarians have always been concerned with meaning, but meaning of a rather narrow kind: verb tenses, clausal relationships, kinds of nouns (common and proper, abstract and concrete), and so on. Descriptive grammarians set aside the problem of meaning in order to concentrate on observable forms and how they occur with one another. They talk in terms of grammatical meaning that can be abstracted from lexical meaning, of the grammatical meaning of *'Twas brillig, and the slithy toves | Did gyre and gimble in the wabe....* More recently, however, transformational linguists have turned back to lexical meaning because they have set as their task a description of how semantic content is "mapped" onto syntactic and phonological forms.

Unfortunately, no area of language study is more obscure, more difficult to formulate in terms that would let us study it. The meaning of "meaning" has been debated at least since the pre-Socratic philosphers of ancient Greece. It is a question that has so preoccupied modern thought that some philosophers have claimed that philosophical problems are really linguistic problems and that the proper task of philosophy is to untangle linguistic confusions in the way we pose our questions.

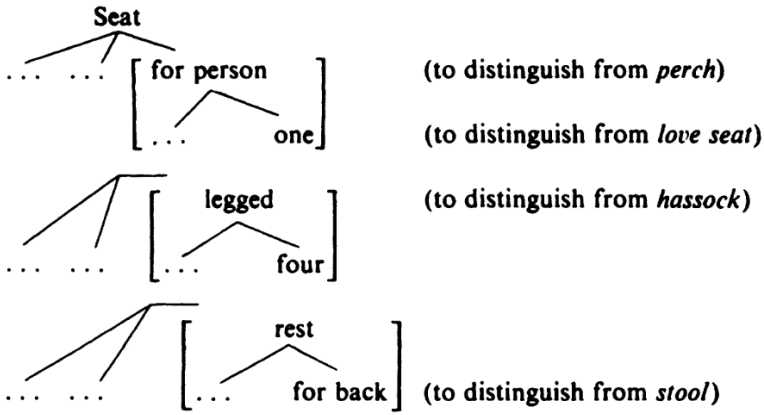
Because different disciplines have approached the problem of meaning differently, it is no surprise that there are as many different ways to describe meaning as there are disciplines. Neurologists define meaning as the selective activation of neural networks at varying amplitudes and frequencies in response to linguistic and nonlinguistic stimuli, resulting in chemical changes in the molecular structure of large molecules. Psychologists have defined meaning variously as mental images, as conditioned substitutions for word referents, as dispositions to behave, as the network of associations a word is

part of. Philosophers have defined meaning in a multitude of ways: as how a word or sentence is used, in what is necessary to confirm its truth, in the existence of word-referents, in the "essence" of a referent. . . . (191, 207)

When a question about the meaning of a **particular** word arises, though, we usually think first of the dictionary, where along with a good deal of additional information about spelling, pronunciation, etymology, and so on, we can find its "meaning." A typical entry minus all irrelevancies might look like this:

> Chair: A seat for one person; now usually the four-legged seat with a rest for the back.

Typically, the definition puts the word to be defined into a larger or **superordinate** class, in this case *seat*. *Seat* names the larger class of concepts to which the concepts covered by *chair* belong, along with the concepts covered by *stool*, *bench*, *hassock*, *settee*, *perch*, and so on. Once the superordinate category, *seat*, is named, those features which distinguish the word *chair* from those other words organize the definition into finer and finer subordinate classes:



We may choose different kinds of subset differentia to distinguish members of the superordinate set, choosing criteria by what the object is used for, as we would have to with *hammer*; how it is made, for *net*; what it is made of, for *glacier*; what it does, for *heart*, and so on. But if the word is not defined merely by listing synonyms or pointing to a picture, the pattern of definition is invariably the same: The word to be defined is placed in a superordinate set and then distinguished by subordinate differentia.

A problem of theory in regard to dictionary definitions is that every definition depends on words the reader already knows and the words that happen to be in the language. This, of course, finally leads to theoretical

may be to probe and represent in a written grammar—such assumptions will strongly determine the kind of theory we construct.

SOME CAUSES AND EFFECTS OF LANGUAGE CHANGE

Now these theories will provide us with a way to describe what has changed in the internal structure of our language. But a grammar (including phonology and semantics) is only one component in what we might term a theory of **language**. Language is more than its grammar. It is an instrument by which we perform most of the social acts that constitute a society. It reflects, indeed may on occasion **determine**, our social class. Some believe that it even determines how we structure our perceptions of reality. In short, language is part of a larger set of interlocking cultural and social structures that we move in from the moment the doctor announces *It's a* _____, with all the social values the terms *boy* and *girl* entail, to the obligatory final ritual (most stereotypically expressed in westerns and nautical movies, when someone is required to "say a few words" over a body). We can recognize how highly valued language is in our culture when we celebrate the first word a child utters and make collections of the last words of great men. In such a context, language will change when culture and social conditions change. And it is in these external changes that we may be able to find **some** of the causes of internal linguistic change.

We have already touched on one obvious source of linguistic change: external social forces. The invasion of England by the Danes and Normans profoundly affected our language. So did printing. So did the social turmoil of the fourteenth century. So has our science and technology. Another important social source of linguistic change is the differences among geographical and social dialects. Inevitably, given several social/geographical dialects, a prestige dialect will emerge to influence and be influenced by other dialects. In order to explore this aspect of language, we must describe the social conditions in which language is used and the elements that may cause a rigid social structure to become fluid, so that speakers from different classes will come into contact with one another.

But other sources of change may be found in the internal structure of the grammar itself. This will be a very difficult question to discuss because we have to treat the structure of the grammar as if it were a real model of the speaker's mind. Once a native speaker unconsciously formulates in his mind the grammar of his language, that grammar may be very well organized and very well integrated. But at certain points, it may also be unnecessarily complex or redundant. The simplest example of this kind of inefficient complexity in English is found in our verbs. The most economical rule that would

account for the past tense of verbs would be something like this: *Verb + past→ verb-ed.* In ModE, though, we have to list well over a hundred exceptions to this rule: *buy–bought, sell–sold, sing–sang,* and so on. But in OE, there were hundreds of exceptions. We seem to be very slowly simplifying a point of unnecessary complexity in the grammar.

The reason speakers simplify their grammars is undoubtedly to be found in some kind of principle of least effort that all humans rely on when they construct schema or models for their behavior and understanding But this principle probably operates most powerfully among children as they learn a language. Children, for example, often go through four stages when they learn irregular verbs. In the first stage, they often are able to use irregular verbs correctly: *He saw.* In the second and third stages, they combine the irregular past or the infinitive with the *-ed* ending: *He sawed* and *He seed.* Finally, they learn to use the verbs as they are used in the dialect they grow up in. If it happens to be standard English, then they will eventually learn to say *He saw* again. But between every generation there is probably a slight grammatical discontinuity. The language is not passed on from parent to child perfectly. The child will make some mistakes. If enough similar mistakes are made by enough children, then those mistakes may become part of the grammar for that generation of children, a grammar that will be passed on to the next generation.

These, then, are the kinds of problems we shall investigate. Because we have to understand the social and cultural contexts in which changes occur, we shall begin by examining those contexts through the sources of our vocabulary, an aspect of language particularly sensitive to cultural change. Then in Chapter Six we shall deal with how we create words out of the basic material of our lexicon, and in Chapter Seven how the meanings associated with those forms evolve. In Chapters Nine through Fourteen, we shall examine how the grammar and sound patterns of our language have changed.

PROBLEM 2.14: (1) What are some occasions in our culture, other than birth and death, where the use of language is essential, where if certain words are not spoken, the moment loses its significance or becomes entirely invalid? (2) Why does the Gospel according to John begin as it does? (3) What would it feel like, do you suppose, to be an adult and literally have no name? Not to have forgotten it or to be unable to find it, but literally to have been given no name ever? (4) Are there any social situations or events where speech is tacitly forbidden?

PROBLEM 2.15: Between the bee and man there is a great linguistic gap. In a series of minimal steps, evolve the language of bees until it approximates the communicative capacity of man. Bees communicate distance by dancing increasingly less intensely as distance from the hive to the source of food increases. Direction is indicated by translating the axis of the sun–hive to a

vertical line inside the hive and then by dancing at an angle from vertical corresponding to the angle formed between the sun–hive–food source. Their mode of communication, of course, would have to develop out of the intensity of their buzzing and the movements of their dance.

PROBLEM 2.16: What would be the minimal unequivocal evidence that a primate now being trained to communicate via sign language or plastic counters had the ability to communicate on a level approximating human communication? (It is almost certain that the mode would not be verbal, since the laryngeal structure of primates is not well adapted to the production of finely articulated sounds.)

PROBLEM 2.17: The boldface examples in the following sets are considered "ungrammatical." Construct a logical argument that would support the claim that they are preferable to their grammatical counterparts.

1. *Myself, yourself,* **hisself,** *herself, ourselves,* **theirselves.**
2. **I ain't,** *you aren't, it isn't, we aren't, they aren't.*
3. *I wasn't,* **you wasn't,** *it wasn't, we weren't, you weren't, they weren't.*
4. *I jumped, you danced,* **she runned, we singed, you goed,** *they worked.*

PROBLEM 2.18: Here are several words from the semantic field referring to the use of language. They all seem to imply judgment. (1) What can you conclude from these words about our attitudes toward how people use language? (2) Are attitudes toward the use of language the same in all parts of the English-speaking world? Are there stereotyped ethnic or sex differences in language use? (3) What use of language appears to be most highly valued, reticence or non-reticence?

1. *talk, chatter, gab, prattle, gabble, babble, jabber, clack, gossip, chat, converse.*
2. *talkative, gabby, wordy, gossipy, voluble, loquacious, garrulous, prolix, diffuse, bigmouthed, fatmouthed, glib.*
3. *shrew, nag, gossip, fishwife, chatterbox, windbag, bigmouth, fatmouth, magpie, scold, harpy, termagent.*
4. *taciturn, laconic, reticent, concise, trenchant, brief, terse, pointed, pithy, succinct, crisp, sententious, epigrammatic, elliptical, crabbed, curt.*

PART II

WORDS AND MEANINGS

some general preliminary observations if we examine this list of words. Those starred have been completely lost from the language. The others are direct ancestors of the Modern English word found in parentheses. Why have we lost some and retained others?

**corsnæd* (consecrated bread used as a test for truth), **dolgbot* (compensation for wounding), *wif* (wife), *fod* (food), **þoft* (bench for rowers), **scora* (a hairy garment), *stan* (stone), **þeox* (hunting spear), *winter* (winter), **eafor* (tenant obligation to king to convey goods), *god* (good), **flytme* (a blood-letting instrument), *wæter* (water), **feohfang* (the offence of bribe-taking), *broðor* (brother), **eam* (mother's brother), **hræd* (quick), **barda* (beaked ship), *corn* (corn), *blod* (blood), *hand* (hand), *grund* (ground), *land* (land), **faðe* (father's sister), *win* (wine), *heorte* (heart), *heafod* (head), *lufu* (love), *slepan* (sleep), **slæting* (hunting rights), *sittan* (sit), **æwul* (a narrow-necked basket).

A Note on Pronunciation: The letters in OE had roughly the following values. ⟨ð⟩ and ⟨θ⟩ were pronounced like ⟨th⟩ in *thing* when they occur at the beginning or end of a syllable or next to a ⟨p⟩, ⟨t⟩, ⟨c⟩, or ⟨h⟩. Otherwise they are pronounced like ⟨th⟩ in *the*. ⟨f⟩ and ⟨s⟩ were pronounced like ⟨f⟩ and ⟨s⟩ in *fit* and *sit* at the beginning or end of a syllable or next to a ⟨p⟩, ⟨t⟩, ⟨c⟩, or ⟨h⟩. Otherwise they were pronounced like ⟨v⟩ and ⟨z⟩ respectively. ⟨sc⟩ were pronounced like ⟨sh⟩ in *ship* before the letters ⟨i⟩ and ⟨e⟩, like ⟨sk⟩ in *skip* elsewhere. At the end of a word or before a consonant ⟨h⟩ had the German quality of ⟨ch⟩ in *Bach*. Before or after ⟨i⟩ or ⟨e⟩, ⟨g⟩ was like a heavily aspirated ⟨y⟩ in *yield*; before or after back vowels ⟨a⟩, ⟨o⟩, and ⟨u⟩, it was pronounced like the voiced equivalent of German ⟨ch⟩. Otherwise it was like ModE ⟨g⟩ in *grass*. ⟨g⟩ was always pronounced after ⟨n⟩, as in ModE *longer*.

OE vowels were either long or short, but since OE manuscripts did not indicate quantity by diacritical marks or spelling, we have not used length marks here. The vowels have their continental values: ⟨i⟩ as in *see* or *sit*; ⟨e⟩ as in *bate* or *bet*; ⟨æ⟩ as in *bat* or a lengthened pronunciation of *bad*; ⟨a⟩ as in *hot* or a lengthened pronunciation of *hod*; ⟨o⟩ as in *bought* or *boat*; ⟨u⟩ as in *put* or *pool*. In early OE, ⟨y⟩ was like a long or short German ⟨ü⟩, but in later OE it represented the same values as ⟨i⟩.

THE MOST DISTANT ORIGINS: INDO-EUROPEAN

If we can infer a good deal about an older culture from the words it no longer uses, we can also discover a good deal from the words it passes on. From the words in Problem 3.1 and from others, we know that those which have been

preserved cover some of the most basic objects, actions, and concepts of daily life, words like *hand, food, wife, sun, house, stone, go, sing, eat, see, sleep, good, wise, cold, sharp, in, on, off, over*. These concepts are so independent of particular cultures, so basic to human life that it is almost certain we would find in all languages that words for these concepts have been passed on from generation to generation for centuries, pronounced and spelled differently, perhaps, but basically the "same" word. (3, 44, 128)

PROBLEM 3.2: Words from several languages that refer to roughly the same concepts are shown in Table 3.1. What do you conclude from the fact that in some cases, among several languages, roughly the same meaning is represented by words that are rather similar to one another, but in other cases are not? That is, *night* is rather close to Sanskrit *naktam* but very different from Japanese *ban*.

PROBLEM 3.3: Here are some words in various languages for aluminum: French: *aluminium*, Spanish: *aluminio*, Italian: *alluminio*, Dutch: *aluminium*, Danish: *aluminium*, Polish: *aluminjum*, Hungarian: *aluminium*, Turkish: *alüminyom*, Indonesian: *aluminium*, Russian: *alyumíni*, Arabic: *alaminyoum*, Japanese: *aruminyuumu*. Why are they alike?

As Problem 3.3 demonstrates, words can resemble one another from language to language because they have been **borrowed** from some common source. But when we consider the likelihood of borrowing the word for aluminum and the likelihood of borrowing words so basic and common as *snow, night, hundred*, and so on, we can also tentatively reject borrowing as an explanation of widespread similarities among **the most common words** in different languages. The more plausible explanation assumes that in each language, the words must have been inherited from some common ancestor language, and that through time, in different descendant languages, the forms of the words gradually changed.

Once we establish the principle that similar words with similar meanings (or meanings which at one time we might speculate were similar) may be descended from some common but now lost ancestor form, it becomes possible to reconstruct in very rough outline some of those earlier ancestral words. If, for example, we compare the word for *mother* in the languages we suspect are related to a single ancestor, we can create a form from which the recorded ancient and modern words for mother can be consistently derived. Compare these words: English *mother*, Dutch *moeder*, Icelandic *móðir*, Danish *moder*, Irish *máthir*, Russian *mate*, Lithuanian *motė*, Latin *māter*, Persian *mādar*, Sanskrit *mātr*. From the features these share, we could postulate as the parent form this hypothetical root: **mater*. Each letter in the root is a symbol from which we can derive by means of a set of phonological rules

TABLE 3.1 COGNATE AND NON-COGNATE WORDS

English	night	snow	seven	foot	fish	heart	hundred	ten	tooth
German	nacht	schnee	sieben	fuss	fisch	herz	hundert	zehn	zahn
Dutch	nacht	sneeuw	zeven	voet	vis	hart	honderd	tien	tand
Swedish	natt	snö	sju	fot	fisk	hjärta	hundra	tio	tand
Latin	noctis	nīvis	septem	pedis	piscis	cordis	centum	decem	dentis
French	nuit	neige	sept	pied	poisson	cœur	cent	dix	dent
Spanish	noche	nieve	siete	pie	pescado	corazón	ciento	diez	diente
Italian	notte	neve	sette	piede	pesce	cuore	cento	dieci	dente
Rumanian	noapte	zăpadă	şapte	picior	peşte	inimă	sută	zece	dinte
Greek	nuktos	nipha	hepta	podos	psari	kardiā	hekaton	deka	odontos
Polish	noc	śnieg	siedem	stopa	ryba	serce	sto	dziesięć	ząb
Czech	noc	sníh	sedm	noha	ryba	srdce	sto	deset	zub
Russian	noch	snyék	syém	nagá	ríba	syértse	sto	dyésit	zup
Sanskrit	nakta	snēhaś	saptá	pāt	matsyah	hṛd-	śatám	daśa	dánt
Hungarian	éjszaka	hó	hét	láb	hal	szív	száz	tíz	fog
Finnish	yö	lumi	seitsemän	jalka	kala	sydän	sata	kymmenen	hammas
Turkish	gece	kar	yedi	ayak	balik	kalb	yüz	on	diş
Arabic	layla	galid	sabaa	qadam	samak	qalb	maah	ashara	sin
Swahili	usiku	theluji	saba	mguu	samaki	moyo	mia	kuma	jino
Japanese	ban	yuki	shichi	ashi	sakana	shin	hyaku	juu	ha
Chinese	wan	hsueh	chi	chiao	yü	hsin	pai	shih	che

the sounds of cognate words found in descendant languages. It does not necessarily represent the way the ancestor word was actually pronounced at any given moment in our linguistic prehistory, though it very likely is reasonably close to it.

Certainly, **Indo-European**, the name of the reconstructed hypothetical common ancestor language, was itself once a dialect or collection of dialects of some even more distant progenitor. Some linguists have attempted—and failed—to group them with the Hamito-Semitic languages (including Arabic, Hebrew, Aramaic, Coptic, Berber, and the North African Cushitic dialects) or the Finno-Ugric (Finnish and Hungarian). But no one has found enough evidence to confidently relate the large and scattered group of modern Indo-European languages with any other language family.

PROBLEM 3.4: We have seen that from OE words and their meanings, we can deduce something about Anglo-Saxon culture, even if we had no firsthand knowledge of England, its location, or its climate. OE words for referents like the ocean, winter, ships, deer, fish, oak trees, chalk, and so on would lead us to a Northern European location somewhere close to the sea. Numerous words for concepts in law suggest an elaborate legal code based on duty and payments. Words for mother's brother and father's brother suggest a kinship system more complex than ours and one that seems to emphasize male kinship structures.

Here are some data (some of it misleading) about words common to Indo-European languages, plus some geographical, botanical, and sociological data that will allow a rough guess about the general area of the original Indo-European homeland. (1) Sanskrit, the oldest of the IE languages with extensive extant documents (c. 1500 B.C.) was spoken in Northern India. (2) *Tobacco*, referring to a plant now found around the eastern end of the Mediterranean, is found in almost all modern IE languages. (3) Cognates for the following words or other words for their referents are found in a wide variety of IE languages: snow, freezing cold, winter, summer, spring; oak, beech, birch, willow; bear, wolf, otter, beaver, weasel, deer, rabbit, mouse, ox, horse, sheep, goat, pig, dog, snake, tortoise, ant, eagle, hawk, owl, herd, salmon, cow, udder; cheese, mead (a fermented drink containing honey); wheel, axle, door, timber, thatch, yoke, wagon, bronze, ore; seed, sow, sew, weave; father, mother, son, daughter, brother, sister, widow, woman's relatives by marriage; the numbers one through ten and the number one hundred. (4) Cognates for the following words or their referents are **not** found in a wide variety of IE languages: monkey, elephant, camel, tiger; olive, palm tree, desert, rice, bamboo, grain, furrow, wheat, mow; gold, iron, steel; ocean, sea, ship; king, man's relations by marriage such as *son-in-law*. (5) The silver birch is found in thick forest north of 45° north latitude and west of the Vistula River. The beech is indigenous east of Poland and the Ukraine and south of 60° north latitude. (6) Bees are not indigenous to most

of Asia. (7) The salmon is found in northern European waters and a similar fish is found in the Caspian Sea.

(1) What can be reconstructed of the culture of those IE speakers? (2) How might we estimate the approximate age of IE from cognate words?

Exactly what happened five or six thousand years ago is, of course, impossible to reconstruct. But it is likely that for some reason, groups among the IE tribes began migrating first to the east and south, then in all directions from their original homeland. Not long after, their language, probably already more a collection of dialects than a single uniform tongue, began to change until the dialects became mutually unintelligible languages. With no written standard and with virtually no significant contact over what for their speakers must have been immensely long distances, nothing interfered with the natural tendency of every language to change. (7, 8, 23, 62, 218)

Indo-European > West European

It has been thought that IE first split into Eastern and Western branches because of the widespread correspondences of one particular sound change east and west of a line running roughly north and south at about 20° east latitude.

East of this line, the original **k-* sound in IE changed to a **sibilant**, a *s* or *sh* sound. The IE root for hundred, **kmtóm*, became *satam* in Sanskrit, *šimtas* in Lithuanian, *suto* in Old Slavic. In the Western branch, it remained *k*, as in Latin *centum* and Celtic *cant*, then changed to *h* in the Germanic languages: *hundred*, or to *s* or *ch* in Romance languages: *cent*, *ciento*.

PROBLEM 3.5: Does this confirm or contradict your conclusions about the IE homeland? Why?

The Eastern branch then split into two: (1) the **Balto-Slavic**, which includes Lettish, Lithuanian, and Old Prussian among the Baltic; and Bulgarian, Slovenian, Serbo-Croatian, Polish, Czech, and Russian among the Slavic; and (2) the **Indo-Iranian**, which includes modern Persian, Hindi, Bengali, and Romany—the traditional language of the Gypsies (a word adapted from *Egyptian*, from whence the Europeans believed them to have come).

The Western branches split into at least four more branches: **Hellenic**, **Italic**, **Celtic** and **Germanic**. Most scholars also include a dead language discovered in the early years of this century: **Tocharian**, surprisingly found in Central Asia, far to the east of the Western IE languages, which it resembles in some important ways. It was probably spoken by a group that originally

From the common vocabulary, archeological remains, and the observations of Roman historians, we can sketch the outlines of pre-historic Germanic society. Because their common vocabulary included for the first time many words referring to advanced agriculture, farming must have become more important than it had been. More significantly, the ocean had also become important. It would be the Viking long-ships that would carry the Germanic warriors across the seas to raid, plunder, and conquer from Britain to France to the Mediterranean. Their social and economic organization must also have begun to develop. *King*, *earl*, and *borough* indicate a government and an incipient feudal society; *gold*, *silver*, *lead*, *tin*, *buy*, *ware*, and *worth* indicate an economic life beyond trading in kind.

They were a diverse lot, though. They included the Franks, the Goths, the Vandals, and the Lombards, all warlike enough to harass France, Spain, Rome, and Africa and give the Teutons their fierce reputation among the Roman historians. They also included the Germans, who did not wander far from Central Germany, and the Northmen (hence *Norseman*, which finally became *Norman*), who both farmed and sailed. They shared a common mythology of Odin and Thor and an epic poetry that celebrated the values of honor, loyalty to chief and kinsman in return for their generosity with gifts, and bravery and glory in battle. (103)

From certain Latin words borrowed into Germanic before the Anglo-Saxons invaded Britain in the fifth century, we know that they must have had some contact with Rome. (7, 194)

PROBLEM 3.10: From these borrowed words, speculate about the kind of contact the Germanic tribes had with Rome. The first word in the list is the original Latin word. The second is the OE adapted from Latin with a modern translation in parentheses if the word has been lost. The third is the descendant ModE word or its closest equivalent. Where the word has been lost in ModE, the symbol ∅ appears.

campum–camp (field, battle)–∅
tribūtum–trifet (tribute)–∅
mango–mangian (to barter with)–*monger* (as in *fishmonger*)
tolōnēum–toll–toll
pondō–pund–pound
mīlia passum (a thousand steps)–*mil–mile*
monēta–mynet (a coin)–*mint*
calcem–cealc–chalk
cuprum–copor–copper
pic- –pic–pitch (the substance)
būtyrum–butere–butter
cāseus–cese–cheese
ulnum–win–wine

mentha–minte–mint (the plant)
pīsum–pisa–pea
piper–pipor–pepper
prūnum–plume–plum
planta–plante–plant
balteus–belt–belt
soccus–socc–sock
puluinus–pyl(w)e–pillow
*catillus–citel–*Ø (ModE *kettle* is borrowed from Danish, which also borrowed it from Latin)
candēla–candel–candle
pīpa–pipe–pipe
benna–binn–bin
cuppa–cuppe–cup
discus–disc–dish
panna–panne–pan
coquīna–cycene–kitchen
pinna–pinn–pin
gemma–gimm (gem)–Ø (ModE *gem* is borrowed from French)
līnea–line–line
uallum–weall–wall
febris–fefer–fever

Pre-Anglo-Saxon Britain

Long before these northern Germanic tribes attacked the native Britons (or Celts), the Romans had long since raided, invaded, colonized, and deserted the island. Julius Caesar (100 B.C.–44 B.C.) invaded Britain twice, failing the first time in 55 B.C.; but the next year with a larger force, he conquered the island. Though he had invaded Britain to shore up his northern flank, he was also looking for slaves and tribute. Finding neither in sufficient quantity or quality to justify his effort, he turned from Britain to his problems in Gaul, giving the island a brief period of freedom from Roman domination.

Then in A.D. 43, Claudius (10 B.C.–A.D. 54) invaded the island, and after putting down an uprising led by the Celtic Queen Boadicea, finally brought Britain into the Empire. But because Rome was unwilling to expend the men and effort to conquer the Picts in the wilds of Scotland while being harassed from the rear by the still unruly Southern Celts, its sway ended at Hadrian's Wall along the northern bank of the Tyne in the Lowlands. Thus, Roman civilization was limited to what is now known as the Midlands and the Southeast, where Romans built their walled towns and villas and connecting roads in an attempt to reproduce a sunny Mediterranean life on (what was to

become after a global climatic change) a wet and cloudy distant outpost. (13, 34)

ANGLO-SAXON BRITAIN: THE BEGINNINGS

It was to be shortlived. Before the end of the fourth century A.D., Scandinavian raiders from the north had already begin to harry the British coast. Simultaneously, the Picts and Brigantes, Celtic tribes from northern Britain, were burning and looting exposed Roman villas just when Rome had to withdraw more and more troops to reinforce an uncertain empire on the continent. Finally, unable to assist any further a society now accustomed to relying on professional soldiers to defend it, the Roman legions withdrew at the beginning of the fifth century, leaving the colonists and Romanized natives to face the continental Germanic tribes alone.

The Saxons who occupied the area between the Rhine River and what is today Denmark, probably conquered the island in two stages. In the first, beginning around A.D. 449, they swept through Britain in a succession of plundering and looting raids. Beaching their longboats far up the navigable rivers, they crossed the island to the Western Sea and back on some of the same roads the Romans had built to defend themselves with, an irony to be repeated six centuries later when the Normans would use some of the same roads in their conquest of the Anglo-Saxons.

In the second stage, beginning a few years later and lasting until late in the century, groups from what is now northern Germany, from the Rhine to Jutland, arrived to colonize, farm, and trade.

These raiders and colonists spoke West Germanic. But because no hard textual evidence remains from pre-Old English dialects, it is difficult to determine whether they spoke one dialect or several. The traditional account of the invasion is in **Historia Ecclesiastica Gentis Anglorum**, written about A.D. 731, almost 300 years after the event, by the Venerable Bede (c. 673–735).

> Then, about 449 years from our Lord's incarnation, Emperor Martianus seized the kingdom and held it for seven years. He was the 46th Emperor after the Emperor Augustus. Then the Angles and Saxons were invited by the aforementioned king [Vortigern], and came to Britain in three great ships. At the king's request, they took up dwelling in the east part of the island, so that they should fight for their own territory. And they soon battled with their enemies that often before battled them from the north and overran them. And the Saxons won the victory by fighting. Then they sent home a messenger and told them to tell of the fertility of this land and of the Britons' cowardice. And they then soon sent a great naval fleet, stronger with warriors than before. It was an invincible host when they were united. And the Britons bestowed on them a dwelling place on condition that they fight

for peace and for the welfare of their native land and strive against their enemies. And they gave them substance and property for their struggle. They came from three peoples, the boldest of Germany, from the Saxons and the Angles and the Jutes. Concerning the Jutes, in the beginning they are in Kent, and the Isle of Wight; that is, the people who dwell in the Wight Island. From the Saxons, that is from the land which people call Old Saxony, come the East Saxons, and the South Saxons and the West Saxons. And from the Anglia come the East Angles and the Middle Angles and the Mercians and all the Northumbrian people. The land between the Jutes and the Saxons is called the Angulus; it is said that from the time when they departed until today, it remains waste.

So, it was at first thought that the Jutes came from what we now call Jutland; the Angles from the Western side of the Jutish peninsula and the east bank of the Elbe; the Saxons from the Elbe to perhaps the mouth of the Rhine. More recent archeological evidence locates the Angles farther south-east and the Jutes on the coast, near the Frisian Islands off the coast of Germany and the Netherlands (see Figure 3.2).

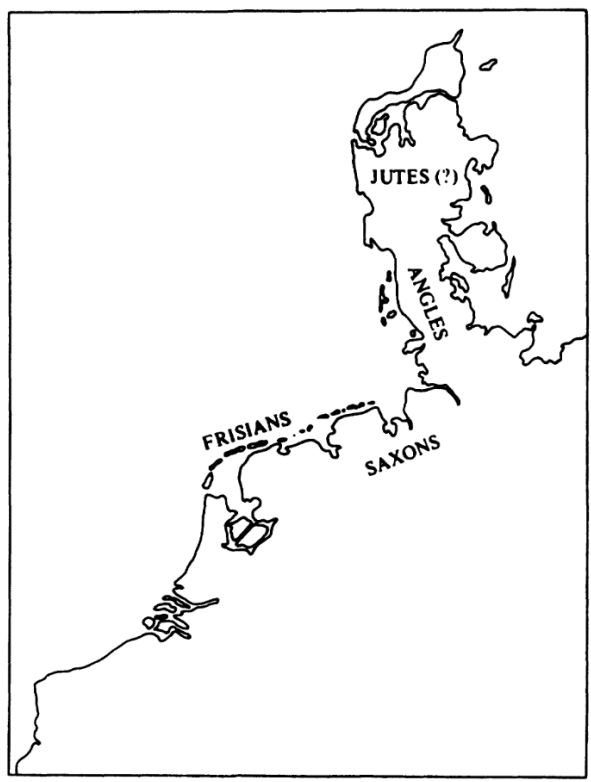


Figure 3.2. Origins of Invaders and Raiders