Third Canadian Edition

An Introduction to Language

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THOMSON NELSON 2006

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CHAPTER 1
What Is Language?

When we study human language, we are approaching what some might call the "human essence," the distinctive qualities of mind that are, so far as we know, unique to man.

Noam Chomsky, *Language and Mind*

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Whatever else people do when they come together — whether they play, fight, make love, or make automobiles — they talk. We live in a world of language. We talk to our friends, our associates, our wives and husbands, our lovers, our teachers, and our parents and in-laws. We talk to bus drivers and total strangers. We talk face to face and over the telephone, and everyone responds with more talk. Television and radio further swell this torrent of words. Hardly a moment of our waking lives is free from words, and even in our dreams we talk and are talked to. We also talk when there is no one to answer. Some of us talk aloud in our sleep. We talk to our pets and sometimes to ourselves.

The possession of language, perhaps more than any other attribute, distinguishes humans from other animals. To understand our humanity, we must understand the nature of language that makes us human. According to the philosophy expressed in the myths and religions of many peoples, it is language that is the source of human life and power. To some people of Africa, a newborn child is a *kuntu*, a "thing," not yet a *muntu*, a "person." Only by the act of learning does the child become a human being. Thus, according to this tradition, we all become "human" because we all know at least one language. But what does it mean to "know" a language?

Linguistic Knowledge

When you know a language, you can speak and be understood by others who know that language. This means you have the capacity to produce sounds that signify certain meanings and to understand or interpret the sounds produced by others. We are, of course, referring to normal-hearing individuals. Deaf people produce and understand sign languages just as hearing persons produce and understand spoken languages.

Everyone knows a language. Five-year-old children are almost as proficient at speaking and understanding as are their parents. Yet the ability to carry out the simplest conversation requires profound knowledge that most speakers are unaware of. This is as true of speakers of Japanese as of English, of Armenian as of Navajo. A speaker of English can produce a sentence having relative clauses without knowing what a relative clause is, as, for example, in this proverb from Dr. Seuss:

> Be who you are and say what you feel because those who mind don't matter and those who matter don't mind.

In a parallel fashion, a child can walk without understanding or being able to explain the principles of balance and support or the neurophysiological control mechanisms that permit one to do so. The fact that we may know something unconsciously is not unique to language.

What, then, do speakers of English or Quechua or French or Mohawk or Arabic know?

Knowledge of the Sound System

Knowing a language means knowing what sounds (or signs, in the case of sign languages of the deaf) are in that language and what sounds are not. This unconscious knowledge is revealed by the way speakers of one language pronounce words from another language. If you speak only English, for example, you may substitute an English sound for a non-English sound when pronouncing "foreign" words. Most English speakers pronounce the name *Bach* with a final *k* sound because the sound represented by the letters *ch* in German is no longer an English sound. If you pronounce it as the Germans do, you are using a sound outside the English sound system. Many French Canadians, though otherwise fluent in English, pronounce words such as *this* and *that* as if they were spelled *dis* and *dat*. The English sound represented by the initial letters *th* is not part of the French sound system, and the French "mispronunciation" reveals the speakers' unconscious knowledge of this fact.

Knowing the sound system of a language includes more than knowing the inventory of sounds: sounds may start a word, end a word, or follow each other. The name of a former president of Ghana was *Nkrumah*, pronounced with an initial sound identical with the single sound spelled *ng* in the English word *sing*. While this sound does appear in English medially and finally before *k*, no word in English begins with it. As

a result, most speakers of English mispronounce Mr. Nkrumah's name (by Ghanaian standards) by inserting a short vowel before or after the nasal (*n*) sound. Children who learn English discover this restriction of *ng* to medial or final positions, while Ghanaian children learn that words in their language may begin with the *ng* sound.

We will learn more about sound systems in Chapters 5 and 6.

Knowledge of Words

> The minute I set eyes on an animal I know what it is. I don't have to reflect a moment; the right name comes out instantly. . . . I seem to know just by the shape of the creature and the way it acts what animal it is. When the dodo came along he [Adam] thought it was a wildcat. . . . But I saved him. . . . I just spoke up in a quite natural way . . . and said, "Well, I do declare if there isn't the dodo!"
>
> Mark Twain, *Eve's Diary*

Knowing the sounds and sound patterns in our language constitutes only one part of our linguistic knowledge. In addition, knowing a language is knowing that certain sound sequences signify certain concepts or meanings. Speakers of English know what *boy* means and that it means something different from *toy* or *girl* or *pterodactyl*. Knowing a language is therefore knowing how to relate sounds and meanings.

If you do not know a language, the sounds spoken to you will be mainly incomprehensible, because the relationship between speech sounds and the meanings they represent in the languages of the world is, for the most part, **arbitrary**. You have to learn (when you are acquiring the language) that the sounds represented by the letters *house* (in the written form of the language) signify the concept  ; if you know French, this meaning is represented by *maison*; if you know Twi, it is represented by *ɔdaŋ*; if you know Russian, by *dom*. Similarly, the concept  is represented by *hand* in English, *main* in French, *nsa* in Twi, and *ruka* in Russian.

The following are words in some different languages. How many of them can you understand?

a. kyinii
b. doakam
c. odun
d. asa
e. toowq
f. bolna
g. wartawan
h. inaminatu
i. yawwa

Speakers of the languages from which these words are taken know that they have the following meanings:

a. a large parasol (in a Ghanaian language, Twi)
b. living creature (in a Native American language, Papago)
c. wood (in Turkish)
d. morning (in Japanese)
e. is seeing (in a California Indian language, Luiseño)
f. to speak (in a Pakistani language, Urdu); aching (in Russian)
g. reporter (in Indonesian)
h. teacher (in a Venezuelan Indian language, Warao)
i. right on! (in a Nigerian language, Hausa)

These examples show that the sounds of words are given meaning only by the language in which they occur, despite what Eve says in Mark Twain's satire *Eve's Diary*. As Shakespeare has Juliet say,

> What's in a name: That which we call a rose
> By any other name would smell as sweet.

A language community tacitly agrees to use a particular sound to convey a certain idea — that is, the linguistic sign is not only arbitrary but also conventional.

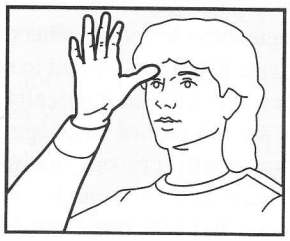
This arbitrary relationship between the **form** (sounds) and the **meaning** (concept) of a word in spoken language is also true of the sign languages used by deaf people. If you see someone using a sign language you do not know, it is doubtful you will understand the message from the signs alone (see Figure 1.1). A person who knows Chinese Sign Language would find it difficult to understand American Sign Language. Signs that may have originally been **mimetic** (similar to miming) or **iconic** (with a non-arbitrary relationship between form and meaning) change historically as do words, and the iconicity is lost. These signs become **conventional**, so knowing the shape or movement of the hands does not reveal the meaning of the gestures in sign languages.

There is some iconicity in language. **Sound symbolism** is found in words whose pronunciation suggests the meaning; for example, the sounds *sn* are associated with the nose as in *sneer, snarl, sneeze, snoot(y), snot,* and *snore*. Other words with this combination — *snow, snip,* and *snoop,* for example — have no such association. A few words in most languages are **onomatopoeic** — the sounds of the words supposedly imitate the sounds of nature. Even here, the sounds differ from one language to another, reflecting the particular sound system of the language. In English, we say *cockadoodledoo* to represent the rooster's crow, but in Russian they say *kukuriku*; dogs bark *amh-amh* in Irish, while pigs "oink" *boo-boo* in Japanese.

Sometimes particular sound sequences seem to relate to a particular concept. In English, many words beginning with *gl* relate to sight, such as *glare, glint, gleam, glitter, glossy, glaze, glance, glimmer, glimpse,* and *glisten*. However, such words are a very small part of any language, and *gl* may have nothing to do with "sight" in another language, or even in other words in English, such as *gladiator, glucose, glory, glycerin, globe,* and so on.

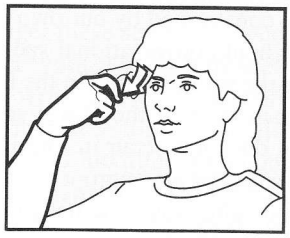
English speakers know the *gl* words that relate to sight and those that do not; they know the onomatopoeic words and all the words in the basic vocabulary of

FIGURE 1.1
Arbitrary relationship between gestures and meanings of the signs for *father* and *suspect* in ASL and CSL.

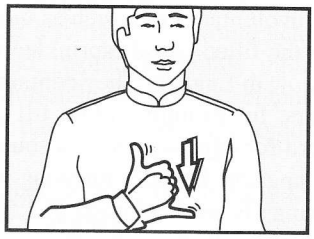


FATHER (ASL)

FATHER (CSL)



SUSPECT (ASL)



SUSPECT (CSL)

From *What the hands reveal about the brain,* by H. Poizner, E. Klima, and U. Bellugi, 1987, Cambridge, MA: MIT Press. Copyright © 1987 MIT Press. Reprinted by permission of the MIT Press.

the language. There are no speakers of English who know all the words listed in *Webster's Third New International Dictionary* or even the many fewer that appear in desk dictionaries such as *The Concise Oxford Dictionary* or *The Nelson Canadian Dictionary*; but even if they did know all the words, they would not know English. Imagine trying to learn a foreign language by buying a dictionary and memorizing words. No matter how many words you learned, you would not be able to form the simplest phrases or sentences in the language or understand a native speaker. No one speaks in isolated words. (Of course, you could search in your traveller's dictionary for individual words to find out how to say something such as "car — gas — where?" After many tries, a native speaker might understand this question and then point in the direction of a gas station. If you are answered with a sentence, however, you probably will not understand what was said or be able to look it up, because you will not know where one word ended and another began.) Chapter 4 will further explore word meanings.

The Creativity of Linguistic Knowledge

Knowledge of a language enables you to combine words to form phrases and phrases to form sentences. You cannot buy a dictionary of any language with all its sentences, because no dictionary can list all the possible sentences. Knowing a

language means being able to produce new sentences never spoken before and to understand sentences never heard before. Noam Chomsky refers to this ability as part of the **creative aspect** of language use. Not every speaker of a language can create great literature, but you, and all persons who know a language, can and do create new sentences when you speak and understand new sentences created by others.

This creative ability is due to the fact that language use is not limited to stimulus–response behaviour. If someone steps on our toes, we will automatically respond with a scream or gasp or grunt, but these sounds are not part of language; they are involuntary reactions to stimuli. After we automatically cry out, we might say "That was some clumsy act, you big oaf," or "Thank you very much for stepping on my toe, because I was afraid I had elephantiasis, and now that I can feel it hurt I know it isn't so," or any one of an infinite number of sentences, because the particular sentence we produce is not controlled by any stimulus.

Even some involuntary cries such as *ouch* are constrained by our own language system, as are the filled pauses sprinkled throughout conversational speech — *er* or *uh* or *you know* in English. They contain only the sounds found in the language. French speakers, for example, often fill their pauses with the vowel sound that starts their word for egg — *oeuf* — a sound that does not occur in English.

Knowing a language includes knowing what sentences are appropriate in various situations. Saying "Roast beef costs $12.50 a kilo" after someone has just stepped on your toe would hardly be an appropriate response, although it would be possible.

Consider the following sentence:

> Jacques Cartier decided to become a pioneer because he dreamed of pigeon-toed giraffes and cross-eyed elephants dancing in pink shirts and green berets on the wind-swept prairies.

You may not believe the sentence; you may question its logic; but you can understand it, although you probably never heard or read it before now.

Knowledge of a language, then, makes it possible to understand and produce new sentences. If you counted the number of sentences in this book that you have seen or heard before, the number would be small. The next time you write an essay or a letter, see how many of your sentences are new. Few sentences are stored in your brain, to be pulled out to fit some situation or matched with some sentence that you hear. Novel sentences never spoken or heard before cannot be in your memory.

Simple memorization of all the possible sentences in a language is impossible in principle. If for every sentence in the language a longer sentence can be formed, then there is no limit to the length of any sentence and therefore no limit to the number of sentences. In English, you can say

> This is the house.

or

> This is the house that Jack built.

or

This is the malt that lay in the house that Jack built.

or

This is the dog that chased the cat that killed the rat that ate the malt that lay in the house that Jack built.

You need not stop there. How long, then, is the longest sentence? A speaker of English can say

The old man came.

or

The old, old, old, old, old man came.

How many "olds" are too many? Seven? Twenty-three?

The longer these sentences become, the less likely we would hear or say them. A sentence with 276 occurrences of "old" would be highly unlikely in either speech or writing, even to describe Methuselah, but such a sentence is theoretically possible. If you know English, you have the knowledge to add any number of adjectives as modifiers to a noun.

All human languages permit their speakers to form indefinitely long sentences; creativity is a universal property of human language.

To memorize an infinite set of sentences would require an infinite storage capacity. However, the brain is finite, and even if it were not we could not store novel sentences.

Knowledge of Sentences and Nonsentences

When you learn a language, you must learn something that is finite — your vocabulary, for example, is finite however large it may be — and that can be stored in the brain. If sentences in a language were formed by putting one word after another in any order, then language could simply be a set of words, but you can see that words are not enough by examining the following strings of words.

1. (a) John kissed the little old lady who owned the shaggy dog.
   (b) Who owned the shaggy dog John kissed the little old lady.
   (c) John is difficult to love.
   (d) It is difficult to love John.
   (e) John is anxious to go.
   (f) It is anxious to go John.
   (g) John, who was a student, flunked his exams.
   (h) Exams his flunked student a was who John.

If you were asked to put a star or asterisk before the examples that seem to be "odd" or "no good" (the conventional way of indicating unacceptable examples), you would probably select (b), (f), and (h). Our "intuitive" knowledge of what is

or is not an acceptable sentence in English allows us to recognize such ungrammatical sentences with little difficulty. Most fluent speakers of English will agree that the following starred strings of words are unacceptable sentences even if they have difficulty explaining why this is so

2. (a) What he did was climb a tree.
   (b) *What he thought was want a sports car.[1]
   (c) Drink your beer and go home!
   (d) *What are drinking and go home?
   (e) I expect them to arrive a week from next Thursday.
   (f) *I expect a week from next Thursday to arrive them.
   (g) Linus lost his security blanket.
   (h) *Lost Linus security blanket his.

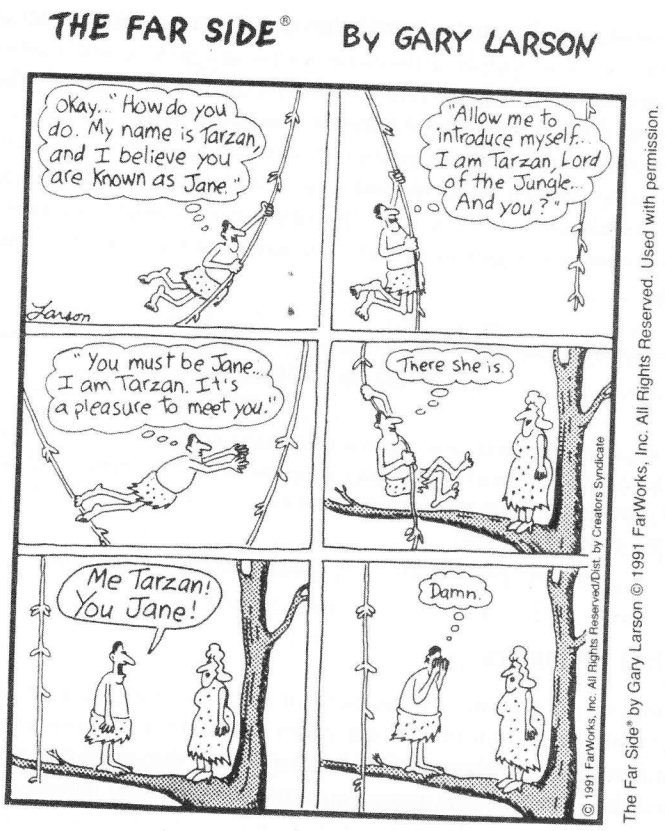
As you can see, not every string of words constitutes a well-formed sentence in a language. Knowledge of a language determines which strings of words are sentences and which are not. Therefore, in addition to knowledge of the words of the language, linguistic knowledge includes **rules** for forming sentences and making judgments such as those made about the examples in (1) and (2). These rules must be finite in length and finite in number so that they can be stored in our finite brains; yet they must permit us to form and understand an infinite set of new sentences. They are not rules determined by a judge or a legislature or even rules taught in a grammar class. They are unconscious constraints on sentence formation that are learned when language is acquired in childhood.

A language, then, consists of all the sounds, words, and possible sentences. When you know a language, you know the sounds, words, and rules for their combination.

Linguistic Knowledge and Performance

> "What's one and one and one and one and one and one and one and one and one and one?"
>
> "I don't know," said Alice. "I lost count."
>
> "She can't do Addition," the Red Queen interrupted.
>
> Lewis Carroll, *Through the Looking-Glass*

Speakers' linguistic knowledge permits them to form longer and longer sentences by joining sentences and phrases together or adding modifiers to a noun. Whether you stop at three, five, or eighteen adjectives, it is impossible to limit the number you could add if desired. Very long sentences are theoretically possible, but they are highly improbable. Evidently, there is a difference between having the knowledge necessary to produce sentences of a language and applying this knowledge. It is a difference between what you *know*, which is your **linguistic competence**,



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and how you *use* this knowledge in actual speech production and comprehension, which is your **linguistic performance**.

Speakers of all languages have the knowledge to understand or produce sentences of any length. When they attempt to use that knowledge, though — when they perform linguistically — there are physiological and psychological reasons that limit the number of adjectives, adverbs, clauses, and so on. They may run out of breath, their audience may leave, they may lose track of what they have said, and, of course, no one lives forever.

When we speak, we usually wish to convey some message (although it seems that some of us occasionally like to talk just to hear our own voices). At some stage in the act of producing speech, we must organize our thoughts into strings of words. But sometimes the message gets garbled. We may stammer, or pause, or produce **slips of the tongue**. We may even sound like Tarzan in the cartoon by Gary Larson, who illustrates the difference between linguistic knowledge and the way we use that knowledge in performance.

For the most part, linguistic knowledge is not conscious knowledge. The linguistic system — the sounds, structures, meanings, words, and rules for putting them all together — is learned subconsciously with no awareness that rules are being learned. Just as we may be unconscious of the rules that allow us to stand or walk, to crawl on all fours if we choose, to catch a baseball, or to ride a bicycle, our unconscious ability to speak and understand and to make judgments about sentences reveals our knowledge of the rules of our language. This knowledge represents a complex cognitive system. The nature of this system is what this book is all about.

What Is Grammar?

> We use the term "grammar" with a systematic ambiguity. On the one hand, the term refers to the explicit theory constructed by the linguist and proposed as a description of the speaker's competence. On the other hand, . . . [it refers] to this competence itself.
>
> N. Chomsky and M. Halle, *The Sound Pattern of English*

Descriptive Grammars

The sounds and sound patterns, the basic units of meaning, such as words, and the rules to combine them to form new sentences constitute the **grammar** of a language. The grammar, then, is what we know; it represents our linguistic competence. To understand the nature of language, we must understand the nature of this internalized, unconscious set of rules, which is part of every grammar of every language.

Every human being who speaks a language knows its grammar. When linguists wish to describe a language, they attempt to describe the grammar of the language that exists in the minds of its speakers. There may be some differences among speakers' knowledge, but there must be shared knowledge, because it is this grammar that makes it possible to communicate through language. To the extent that the linguist's description is a true model of the speakers' linguistic capacity, it will be a successful description of the grammar and of the language itself. Such a model is called a **descriptive grammar**. It does not tell you how you should speak; it describes your basic linguistic knowledge. It explains how it is possible for you to speak and understand, and it tells what you know about the sounds, words, phrases, and sentences of your language.

We have used the word *grammar* in two ways: the first in reference to the **mental grammar** speakers have in their brains; the second as the model or description of this internalized grammar. Almost 2,000 years ago, the Greek grammarian Dionysius Thrax defined grammar as that which permits us either to speak a language or to speak about a language. From now on, we will not differentiate these two meanings, because the linguist's descriptive grammar is an attempt at a formal statement (or theory) of the speakers' grammar.

When we say in later chapters that there is a rule in the grammar — such as "Every sentence has a noun phrase subject and a verb phrase predicate" — we posit the rule in both the mental grammar and the model of it, the linguist's grammar. When we say that a sentence is **grammatical**, we mean that it conforms to the rules of both grammars; conversely, an **ungrammatical** (unacceptable) sentence deviates in some way from these rules. If, however, we posit a rule for English that does not agree with your intuitions as a speaker, then the grammar we are describing is in some way different from the grammar that represents your linguistic competence — that is, your language is not the one described. No language or variety of a language (called a **dialect**) is superior to any other in a linguistic sense. Every grammar is equally complex and logical and capable of producing an infinite set of sentences to express any thought. If something can be expressed in one language or one dialect, then it can be expressed in any other language or dialect. It might involve different means and different words, but it can be expressed. You will learn more about dialectal variation in Chapter 11.

No grammar, therefore no language, is superior or inferior to any other. A dialect may assume a privileged position in a community, but its status is the consequence of the political, social, or economic power of its speakers, not the linguistic merit of the dialect. Languages of technologically undeveloped cultures are not primitive or ill formed in any way.

Prescriptive Grammars

> This is the sort of English up with which I will not put.
>
> Winston Churchill, marginal comment on state document

> I don't want to talk grammar. I want to talk like a lady in a flowershop.
>
> George Bernard Shaw, *Pygmalion*

The views expressed in the section above are not those of all grammarians now or in the past. From ancient times until the present, "purists" have believed that language change is corruption and that there are certain "correct" forms that all educated people should use in speaking and writing. The Greek Alexandrians in the first century, the Arabic scholars at Basra in the eighth century, and numerous English grammarians of the eighteenth and nineteenth centuries held this view. They wished to prescribe rather than describe the rules of grammar, which gave rise to the writing of **prescriptive grammars**.

With the rise of capitalism, a new middle class emerged who wanted their children to speak the dialect of the "upper" classes. This desire led to the publication of many prescriptive grammars. In 1762, an influential grammar, *A Short Introduction to English Grammar with Critical Notes*, was written by Bishop Robert Lowth. Lowth, influenced by Latin grammar, logic, and personal preference, prescribed a number of new rules for English. Before the publication of his grammar, practically everyone — upper-class, middle-class, and lower-class speakers of English — said *I*

don't have none, You was wrong about that, and *Mathilda is fatter than me*. Lowth, however, decided that "two negatives make a positive" and therefore that one should say *I don't have any;* that even when *you* is singular it should be followed by the plural *were;* and that *I* not *me, he* not *him, they* not *them,* and so forth, should follow *than* in comparative constructions. Many of these prescriptive rules were based on Latin grammar, which had already given way to different rules in the languages that developed from Latin. Because Lowth was influential and because the rising new class wanted to speak "properly," many of these new rules were legislated into English grammar, at least for the **prestige dialect**.

The view that dialects that regularly use double negatives are inferior cannot be justified if one looks at the standard dialects of other languages in the world, as the following examples from French and Italian illustrate:

French:	Je	ne	veux	parler	avec	personne.
	I	not	want	speak	with	no-one.
Italian:	Non		voglio	parlare	con	nessuno.
	not		I-want	speak	with	no-one.

English translation: "I don't want to speak with anyone."

Grammars such as Lowth's — with their appeal to Latin, logic, and writing — are different from the descriptive grammars we have been discussing. Their goal is not to describe the rules people know but to tell them what rules they should know.

In 1908, a grammarian, Thomas R. Lounsbury, wrote that "There seems to have been in every period in the past, as there is now, a distinct apprehension in the minds of very many worthy persons that the English tongue is always in the condition approaching collapse and that arduous efforts must be put forth persistently to save it from destruction."

Today our bookstores are filled with books by language "purists" attempting to do just that. Edwin Newman, for example, in his books *Strictly Speaking* (1974) and *A Civil Tongue* (1976), rails against those who use the word *hopefully* to mean "I hope," as in "Hopefully, it will not rain tomorrow," instead of using it "properly" to mean "with hope." What Newman fails to recognize is that language changes in the course of time and that words change meaning, and the meaning of *hopefully* has been broadened for most English speakers to include both usages. Incidentally, neither "I hope" nor "with hope" captures the useful sense of this sentence adverb (like *incidentally*, incidentally) in making a hopeful prediction (*I say/pray hopefully . . .*). Other "saviours" of the English language blame television, the schools, and even teachers of English for failing to preserve the standard language, and they mount attacks against those college and university professors who suggest that other dialects are viable, living, complete languages. The authors of this textbook would clearly be among those criticized by these new prescriptivists.

There is even a list of banished words that has been produced every year since 1976 by a group at Lake Superior State University in Michigan. Words deserving "banishment" that were chosen from public nominations in 2005 included "blog"

for personal journals appearing on the Internet, "carbs" as a shortened form of "carbohydrates," and "improvised explosive device" for "bomb" or "mine." At least these guardians of the English language have a sense of humour, but they as well as the other prescriptivists are bound to fail. Language is vigorous and dynamic and constantly changing. All languages and dialects are expressive, complete, and logical, as much so as they were 200 or 2,000 years ago. If sentences are muddled, it is not because of the language but because of the speakers. Prescriptivists should be concerned more about the thinking of the speakers than about the language they use. Hopefully, this book will convince you of this idea.

We as linguists wish you to know that all languages and dialects are rule governed and that what is grammatical in one language may be ungrammatical in another (equally prestigious) language. While we admit that the grammars and usages of particular groups in society may be dominant for social and political reasons, they are neither superior nor inferior, from a linguistic point of view, to the grammars and usages of less prestigious segments of society.

Having said all this, it is undeniable that the **standard** dialect (defined in Chapter 11) may indeed be a better dialect for someone wishing to obtain a particular job or achieve a position of social prestige. In a society where "linguistic profiling" is used to discriminate against speakers of a minority dialect, it may behoove those speakers to learn the prestige dialect rather than wait for social change. But linguistically, prestige and standard dialects do not have superior grammars.

Finally, all of the preceding remarks apply to *spoken* language. Writing (see Chapter 13), which is not acquired through exposure, but must be taught, follows certain prescriptive rules of grammar, usage, and style that the spoken language does not, and is subject to little if any dialectal variation.

Teaching Grammars and Reference Grammars

> At painful times, when composition is impossible and reading is not enough, grammars and dictionaries are excellent for distraction.
>
> Elizabeth Barrett Browning

The descriptive grammar of a language attempts to describe everything speakers know about their language. It is different from a **teaching grammar**, which is used to learn another language or dialect. Teaching grammars are those we use in school to fulfil language requirements. They can be helpful to those who do not speak the standard or prestige dialect but find it would be advantageous socially and economically to do so. Teaching grammars state explicitly the rules of the language, list the words and their pronunciations, and aid in learning a new language or dialect. It is often difficult for adults to learn a second language without being instructed, even when living for an extended period in a country where the language is spoken. Teaching grammars assume that the student already knows one language and compare the grammar of the target language with the grammar of the

native language. The meaning of a word is given by providing a **gloss** — the parallel word in the student's native language, such as *maison*, "house" in French. It is assumed that the student knows the meaning of the gloss "house" and so the meaning of the word *maison*.

Sounds of the target language that do not occur in the native language are often described by reference to known sounds. Thus, the student might be aided in producing the French sound *u* in the word *tu* by instructions such as "Round your lips while producing the vowel sound in *tea*."

The rules on how to put words together to form grammatical sentences also refer to the learners' knowledge of their native language. Thus, the teaching grammar *Learn Zulu* by Sibusiso Nyembezi states that "The difference between singular and plural is not at the end of the word but at the beginning of it" and warns that "Zulu does not have the indefinite and definite articles 'a' and 'the.'" Such statements assume that students know the rules of English. Although such grammars might be considered prescriptive in the sense that they attempt to teach the student what is or is not a grammatical construction in the new language, their aim is different from grammars that attempt to change the rules or usage of a language already learned.

Another kind of grammar that might be mentioned here is a **reference grammar**, which tries to be as comprehensive as possible so that it might serve as a reference for those interested in establishing grammatical facts (Crystal, 1997). Examples include several great European grammars of English, especially Otto Jespersen's (1964) seven-volume *Modern English Grammar on Historical Principles* (1909–1949) and the monumental English grammar of Randolph Quirk et al., *A Comprehensive Grammar of the English Language* (1985), some 1,779 pages in length.

This book is not primarily concerned with either prescriptive or teaching grammars. The matter is considered in Chapter 11, however, in the discussion of standard and nonstandard dialects.

Language Universals

> In a grammar there are parts which pertain to all languages; these components form what is called the general grammar. In addition to these general (universal) parts, there are those which belong only to one particular language; and these constitute the particular grammars of each language.
>
> Du Marsais (c. 1750)

The way we are using the word *grammar* differs in another way from its most common meaning. In our sense, the grammar includes everything speakers know about their language — the sound system, called **phonology**; the system of meanings, called **semantics**; the rules of word formation, called **morphology**; and the

rules of sentence formation, called **syntax**. It also, of course, includes the vocabulary of words — the dictionary or **lexicon**. Some people think that the word *grammar* applies primarily to morphology and claim that Latin has "more grammar" than English because of its many grammatical endings (inflections). Still others think of the grammar of a language as referring solely to the syntactic rules. This latter sense is what students usually mean when they talk about "English grammar."

Our aim is more in keeping with that stated in 1784 by John Fell in his *Essay towards an English Grammar*: "It is certainly the business of a grammarian to find out, and not to make, the laws of a language." This business is just what the linguist attempts — to find out the laws of a language and the laws that pertain to all languages. Those laws that pertain to all human languages, representing the universal properties of language, constitute a **universal grammar**.

About 1630, J.H. Alsted, a German philosopher, first used the term *general grammar* as distinct from special grammar. He believed that the function of a general grammar was to reveal those features "which relate to the method and etiology of grammatical concepts. They are common to all languages." Pointing out that "general grammar is the pattern 'norma' of every particular grammar whatsoever," he implored "eminent linguists to employ their insight in this matter" (Salmon, 1969).

Three and a half centuries before Alsted, Robert Kilwardby held that linguists should be concerned with discovering the nature of language in general. So concerned was Kilwardby with universal grammar that he excluded considerations of the characteristics of particular languages, which he believed to be as "irrelevant to a science of grammar as the material of the measuring rod or the physical characteristics of objects were to geometry" (Salmon, 1969). Kilwardby was perhaps too much of a universalist; the particular properties of individual languages are relevant to the discovery of language universals, and they are of interest for their own sake.

Someone attempting to study Latin, Greek, French, or Swahili as a second language may assert, in frustration, that those ancient scholars were so hidden in their ivory towers that they confused reality with idle speculation; yet the more we investigate this question, the more evidence accumulates to support Chomsky's view that there is a universal grammar that is part of the human biologically endowed **language faculty**. It may be thought of "as a system of principles which characterizes the class of possible grammars by specifying how particular grammars are organized (what are the components and their relations), how the different rules of these components are constructed, how they interact, and so on" (Chomsky, 1979).

To discover the nature of this universal grammar whose principles characterize all human languages is the major aim of **linguistic theory**. The linguist's goal is to discover the "laws of human language," as the physicist's goal is to discover the "laws of the physical universe." The complexity of language, a product of the human brain, undoubtedly means that this goal will never be fully achieved. But all scientific theories are incomplete; new hypotheses are proposed to account for

more data. Theories are continually changing as new discoveries are made. Just as Newtonian physics was enlarged by Einsteinian physics, so the linguistic theory of universal grammar develops, and new discoveries, some of which are discussed in this book, shed new light on the nature of human language.

The Development of Grammar

Linguistic theory is concerned not only with describing the knowledge that an adult speaker has of his or her language, but also with explaining how that knowledge is acquired. All normal children acquire (at least one) language in a relatively short period with apparent ease. They do this despite the fact that parents and other caregivers do not provide them with any specific language instruction. Indeed, it is often remarked that children seem to "pick up" language just from hearing it spoken around them. Children are language learners par excellence — whether a child is male or female, from a rich family or a disadvantaged one, whether she grows up on a farm or in the city, attends day care or is home all day — none of these factors fundamentally affect the way language develops. A child can acquire any language he is exposed to with comparable ease — English, Dutch, French, Swahili, Japanese — and even though each of these languages has its own peculiar characteristics, children learn them all in very much the same way. For example, all children start out by using one word at a time. They then combine words into simple sentences. When they first begin to combine words into sentences, certain parts of the sentence may be missing. For example, the English-speaking two-year-old might say *Cathy build house* instead of *Cathy is building the house*. On the other side of the world, a Swahili-speaking child will say *mbuzi kula majani,* which translates as "goat eat grass," and which also lacks many required elements. Children pass through other linguistic stages on their way to adultlike competence, but by about age five children speak a language that is almost indistinguishable from the language of the adults around them.

In just a few short years, without the benefit of explicit guidance and regardless of personal circumstances, the young child — who may be unable to tie her shoes or do even the simplest arithmetic computation — masters the complex grammatical structures of her language and acquires a substantial lexicon. Just how children accomplish this remarkable cognitive achievement is a topic of intense interest to linguists. The child's success, as well as the uniformity of the acquisition process, point to a substantial innate component of language development. Chomsky, following the lead of the early rationalist philosophers, proposed that human beings are born with an innate "blueprint" for language, what we referred to earlier as Universal Grammar. Children are able to acquire language as quickly and effortlessly as they do because they do not have to figure out all the rules of their language, only those that are specific to their particular language. The universal properties — the laws of language — are part of their biological endowment. Linguistic theory aims to

uncover those principles that characterize all human languages and to reveal the innate component of language that makes language acquisition possible. In Chapter 7 we will discuss language acquisition in more detail.

Sign Languages: Evidence for Language Universals

> It is not the want of organs that [prevents animals from making] . . . known their thoughts . . . for it is evident that magpies and parrots are able to utter words just like ourselves, and yet they cannot speak as we do, that is, so as to give evidence that they think of what they say. On the other hand, men who, being born deaf and mute . . . are destitute of the organs which serve the others for talking, are in the habit of themselves inventing certain signs by which they make themselves understood.
>
> René Descartes, *Discourse on Method*

The **sign languages** of deaf people provide some of the best evidence to support the notion that humans are born with the ability to acquire language and that these languages are governed by the same universal properties.

Deaf children, who are unable to hear the sounds of spoken language, do not acquire spoken languages as hearing children do. However, deaf children of deaf parents who are exposed to sign language learn it in stages parallel to language acquisition by hearing children learning oral languages. These sign languages are human languages that do not utilize sounds to express meanings. Instead, sign languages are visual–gestural systems that use hand and body gestures as the forms used to represent words. Sign languages are fully developed languages, and those who know sign language are capable of creating and comprehending an unlimited number of new sentences, just like speakers of spoken languages.

Current research on sign languages has been crucial in the attempt to understand the biological underpinnings of human language acquisition and use. Some understanding of sign languages is therefore essential.

About one in a thousand babies is born deaf or with a severe hearing deficiency. One major effect is the difficulty deaf people have in learning a spoken language. It is nearly impossible for those unable to hear language to learn to speak naturally. Normal speech depends to a great extent on constant auditory feedback. Hence, deaf children will not learn to speak without extensive training in schools or programs designed especially for them.

Although deaf people can be taught to speak a language intelligibly, they can never understand speech as well as a hearing person can. Seventy-five percent of spoken English words cannot be read on the lips with any degree of accuracy. The ability of many deaf individuals to comprehend spoken language is therefore remarkable; they combine lip reading with knowledge of the structure of language, the meaning redundancies that language has, and context.

If, however, human language is universal in the sense that all members of the human species have the ability to learn a language, then it is not surprising that non-spoken languages have developed as a substitute for spoken languages among non-hearing individuals. The more we learn about the human linguistic ability, the clearer it is that language acquisition and use are dependent not on the ability to produce and hear sounds but on a much more abstract cognitive ability, biologically determined, that accounts for the similarities between spoken and sign languages.

American Sign Language (ASL)

The major language used by deaf people in North America is **American Sign Language** (or **ASL** or AMESLAN). ASL is an independent, fully developed language that is an outgrowth of the sign language used in France and brought to the United States in 1817 by the great educator Thomas Hopkins Gallaudet. Gallaudet was hired to establish a school for deaf people, and, after studying the language and methods used in the Paris school founded by the Abbé de l'Epée in 1775, he returned to the United States with Laurent Clerc, a young deaf instructor, and established the basis for ASL.

ASL, like all human languages, has its own grammar that includes everything signers know about their language — the system of gestures equivalent to the phonology of a spoken language; the morphological, syntactic, and semantic systems; and a mental lexicon of signs. The term *phonology*, first used to describe the sound systems of language, has here been extended to include the gestural systems of sign languages.

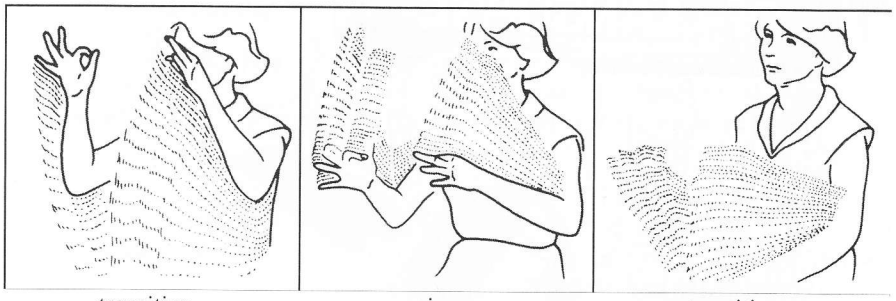
The other sign language used in North America is called Signed English (or Siglish). Essentially, it consists of the replacement of each spoken English word (and grammatical elements such as the *-s* ending for plurals or the *-ed* ending for past tense) by a sign. The syntax and semantics of Signed English are thus approximately the same as those of ordinary English. The result is unnatural in that it is similar to speaking French by translating every English word or ending into its French counterpart. Problems result because there are not always corresponding forms in the two languages.

If there is no sign in ASL, signers utilize another mechanism, the system of **finger spelling**. This method is also used to add new proper nouns or technical vocabulary. Sign interpreters of spoken English often finger spell such words. A manual alphabet consisting of various finger configurations, hand positions, and movements gives visible symbols for the alphabet and ampersand.

Signs, however, are produced differently than are finger-spelled words. "The sign DECIDE cannot be analyzed as a sequence of distinct, separable configurations of the hand. Like all other lexical signs in ASL, but unlike the individual finger-spelled letters in D-E-C-I-D-E taken separately, the ASL sign DECIDE does have an essential movement, but the hand shape occurs simultaneously with the movement. In appearance, the sign is a continuous whole" (Klima & Bellugi, 1979). This sign is shown in Figure 1.2.

An accomplished signer can sign at a normal rate, even when there is a lot of finger spelling. Television stations sometimes have programs that are interpreted

FIGURE 1.2
The ASL sign DECIDE. (a) and (c) show transitions from the sign; (b) illustrates the single downward movement of the sign.



transition a. sign b. transition c.

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in sign in a corner of the TV screen. If you have ever seen such a program, you may have noted how well the interpreter kept pace with the spoken sentences.

Language arts are not lost to the deaf community. Poetry is composed in sign language, and stage plays such as Richard Brinsley Sheridan's *The Critic* (1779) have been translated into sign language and acted by the National Theatre of the Deaf (NTD).

Deaf children acquire sign language much in the way that hearing children acquire a spoken language. Deaf children often sign themselves to sleep just as hearing children talk themselves to sleep. Deaf children report that they dream in sign language as French-speaking children dream in French and Hopi children dream in Hopi. Deaf children sign to their dolls and stuffed animals. Slips of the hand occur similar to slips of the tongue; finger fumblers amuse signers as tongue twisters amuse speakers. Sign languages resemble spoken languages in all major aspects, showing that there truly are universals of language despite differences in the modality in which the language is performed. This universality is predictable because regardless of the modality in which it is expressed, language is biologically based.

In the Beginning: The Origin of Language

> Nothing, no doubt, would be more interesting than to know from historical documents the exact process by which the first man began to lisp his first words, and thus to be rid for ever of all the theories on the origin of speech.
>
> M. Muller (1871)

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One question that has long fascinated people is, how did language first arise? All religions and mythologies contain stories of language origin. Philosophers through the ages have argued the question. Scholarly works have been written on the subject. Prizes have been awarded for the "best answer" to this eternally perplexing problem. Theories of divine origin, evolutionary development, and language as a human invention have all been suggested.

The difficulties inherent in answering this question are immense. Anthropologists think that the species has existed for at least one million years and perhaps for as long as five or six million years. But the earliest deciphered written records are barely 6,000 years old, dating from the writings of the Sumerians of 4000 B.C.E. These records appear so late in the history of the development of language that they provide no clue to its origin.

For these reasons, scholars in the latter part of the nineteenth century, who were interested only in "hard science," ridiculed, ignored, and even banned discussions of language origin. In 1886, the Linguistic Society of Paris passed a resolution "outlawing" any papers concerned with this subject.

Despite the difficulty of finding scientific evidence, speculations on language origin have provided valuable insights into the nature and development of language, which led Otto Jespersen (1964 [1921]) to remind us that "linguistic sci-

ence cannot refrain forever from asking about the whence (and about the whither) of linguistic evolution." A brief look at some of these notions will reveal something of both the difficulty and the value in such speculations.

God's Gift to Humanity?

> 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 living creature, that was the name thereof.
>
> Genesis 2:19

According to Judeo–Christian beliefs, God gave Adam the power to name all things. Similar beliefs are found throughout the world. According to the Egyptians, the creator of speech was the god Thoth. Babylonians believed the language giver was the god Nabu, and the Hindus attributed our unique language ability to a female god; Brahma was the creator of the universe, but language was given to us by his wife, Sarasvati.

Belief in the divine origin of language is closely intertwined with the magical properties that have been associated with language and the spoken word. Children in all cultures utter "magic" words such as *abracadabra* to ward off evil or bring good luck. Despite the childish jingle "Sticks and stones may break my bones, but names will never hurt me," name calling is insulting, cause for legal punishment, and feared. In some cultures, when certain words are used, one is required to counter them by "knocking on wood."

In many religions, only special languages may be used in prayers and rituals. The Hindu priests of the fifth century B.C.E. believed that the original pronunciations of Vedic Sanskrit had to be used. This led to important linguistic study, since their language had already changed greatly since the hymns of the Vedas had been composed. The first linguist known to us is Panini, who, in the fourth century B.C.E., wrote a detailed grammar of Sanskrit in which the phonological rules revealed the earlier pronunciation for use in religious worship.

While myths and customs and superstitions do not tell us very much about language origin, they do tell us about the importance ascribed to language.

There is no way to prove or disprove the divine origin of language, just as one cannot argue scientifically for or against the existence of God.

The First Language

> Imagine the Lord talking French! Aside from a few odd words in Hebrew, I took it completely for granted that God had never spoken anything but the most dignified English.
>
> Clarence Day, *Life with Father*

Among the proponents of the divine origin theory, a great interest arose in the language used by God, Adam, and Eve. For millennia, experiments have reportedly been devised

to verify particular theories of the first language. In the fifth century B.C.E., the Greek historian Herodotus reported that the Egyptian Pharaoh Psammetichus (664–610 B.C.E.) sought to determine the most primitive "natural" language by experimental methods. The monarch was said to have placed two infants in an isolated mountain hut, to be cared for by a mute servant. The pharaoh believed that without any linguistic input the children would develop their own language and would thus reveal the original human language. The Egyptian waited patiently for the children to become old enough to talk. According to the story, the first word uttered was *bekos*, the word for "bread" in Phrygian, the language spoken in a province of Phrygia in the northwest corner of what is now modern Turkey. This ancient language, which has long since died out, was thought, on the basis of this "experiment," to be the original language.

History is replete with other proposals. In the thirteenth century, the Holy Roman Emperor Frederick II of Hohenstaufen was said to have carried out a similar test, but the children died before they uttered a single word. James IV of Scotland (1473–1513), however, supposedly succeeded in replicating the experiment with the surprising results, according to legend, that the Scottish children "spak very guid Ebrew," providing "scientific evidence" that Hebrew was the language used in the Garden of Eden.

But J.G. Becanus in the sixteenth century argued that German must have been the primeval language, since God would have used the most perfect language. In 1830, Noah Webster asserted that the "proto-language" must have been Chaldee (Aramaic), the language spoken in Jerusalem during the time of Jesus. In 1887, Joseph Elkins maintained that "there is no other language which can be more reasonably assumed to be the speech first used in the world's gray morning than can Chinese."

The belief that all languages originated from a single source — the **monogenetic theory of language origin** — is found not only in the Tower of Babel story in Genesis but also in a similar legend of the Toltecs, early inhabitants of Mexico, and in the myths of other peoples as well.

Clearly, we are no farther along in discovering the original language (or languages) than was Psammetichus, given the obscurities of prehistory.

Human Invention or the Cries of Nature?

> Language was born in the courting days of mankind; the first utterances of speech I fancy to myself like something between the nightly love lyrics of puss upon the tiles and the melodious love songs of the nightingale.
>
> Otto Jespersen, *Language: Its Nature, Development, and Origin*

The Greeks speculated about everything in the universe, including language. The earliest surviving linguistic treatise that deals with the origin and nature of language is Plato's *Cratylus*. A common view among the classical Greeks, expressed by Socrates in this dialogue, was that at some ancient time there was a "legislator" who gave the correct, natural name to everything and that words echoed the essence of their meanings.

Despite all the contrary evidence, the idea that the earliest form of language was imitative, or "echoic," was proposed up to the twentieth century. Called the *bow-*

wow theory, it claimed that a dog would be designated by the word *bow-wow* because of the sounds of its bark.

A parallel view states that language at first consisted of emotional ejaculations of pain, fear, surprise, pleasure, anger, and so on. That the earliest manifestations of language were "cries of nature" was proposed by Jean-Jacques Rousseau in the middle of the eighteenth century.

Another hypothesis suggests that language arose out of the rhythmical grunts of people working together. A more charming view was suggested by Jespersen, who proposed that language derived from song as an expressive rather than a communicative need, with love being the greatest stimulus for language development.

Just as with the beliefs in a divine origin of language, these proposals are untestable.

What We Know about Language

There are many things we do not yet know about human languages, their origins, structures, and use. The science of linguistics is concerned with these questions. The investigations of linguists throughout history and the analysis of spoken languages date back at least to 1600 B.C.E. in Mesopotamia. We have learned a great deal since that time. A number of facts pertaining to all languages can now be stated.

1. Wherever humans exist, language exists.
2. There are no "primitive" languages — all languages are equally complex and equally capable of expressing any idea in the universe. The vocabulary of any language can be expanded to include new words for new concepts.
3. All languages change over time.
4. The relationships between the sounds and meanings of spoken languages and between the gestures and meanings of sign language are for the most part arbitrary.
5. All human languages utilize a finite set of discrete sounds (or gestures) that are combined to form meaningful elements or words, which themselves form an infinite set of possible sentences.
6. All grammars contain rules for the formation of words and sentences of a similar kind.
7. Every spoken language includes discrete sound segments such as *p, n,* or *a* that can all be defined by a finite set of sound properties or features. Every spoken language has a class of vowels and a class of consonants.
8. Similar grammatical categories (e.g., noun, verb) are found in all languages.
9. There are semantic universals, such as "male" or "female," "animate" or "human," found in every language in the world.
10. Every language has a way of referring to past time, negating, forming questions, issuing commands, and so on.

11. Speakers of all languages are capable of producing and comprehending an infinite set of sentences. Syntactic universals reveal that every language has a way of forming sentences such as the following:

    Linguistics is an interesting subject.
    I know that linguistics is an interesting subject.
    You know that I know that linguistics is an interesting subject.
    Cecilia knows that you know that I know that linguistics is an interesting subject.
    Is it a fact that Cecilia knows that you know that I know that linguistics is an interesting subject?

12. Any normal child, born anywhere in the world, of any racial, geographical, social, or economic heritage, is capable of learning any language to which she is exposed. The differences we find among languages cannot be due to biological reasons.

It seems that Alsted and De Marsais — like many other universalists from all ages — were not spinning idle thoughts. We all possess "human language."

Summary

We are all intimately familiar with at least one language — our own. Yet few of us ever stop to consider what we know when we know a language. There is no book that contains the English or Russian or Zulu language. The words of a language can be listed in a dictionary, but not all the sentences, and a language consists of sentences as well as words. Speakers use a finite set of rules to produce and understand an infinite set of possible sentences.

These rules comprise the **grammar** of a language, which is learned when you acquire the language and includes the sound system (the **phonology**), the structure of words (the **morphology**), how words may be combined into phrases and sentences (the **syntax**), the ways in which sounds and meanings are related (the **semantics**), and the words or **lexicon**. The sounds and meanings of these words are related in an **arbitrary** fashion. If you had never heard the word *syntax*, you would not, by its sounds, know what it meant. The gestures used by deaf signers are also arbitrarily related to their meanings. Language, then, is a system that relates sounds (or hand and body gestures) to meanings; when you know a language, you know this system.

This knowledge (**linguistic competence**) is different from behaviour (**linguistic performance**). If you woke one morning and decided to stop talking (as the Trappist monks did after they took a "vow of silence"), you would still have knowledge of your language. This ability or competence underlies linguistic behaviour. If you do not know the language, you cannot speak it; but if you know the language, you may choose not to speak it.

Grammars are of different kinds. The **descriptive grammar** of a language represents the unconscious linguistic knowledge or capacity of its speakers. Such a

grammar is a model of the **mental grammar** every speaker of the language knows. It does not teach the rules of the language; it describes the rules that are already known. A grammar that attempts to legislate what your grammar should be is called a **prescriptive grammar**. It prescribes; it does not describe, except incidentally. **Teaching grammars** are written to help people learn a foreign language or a dialect of their own language. **Reference grammars** are written to help people find out the grammatical facts of a language.

The more linguists investigate the thousands of languages of the world and describe the ways in which they differ from one another, the more they discover that these differences are limited. There are linguistic universals that pertain to all parts of grammars, the ways in which these parts are related, and the forms of rules. These principles comprise **Universal Grammar**, which forms the basis of the specific grammars of all possible human languages and constitutes the innate component of the human **language faculty** that makes normal language development possible.

A basic property of human language is its **creative aspect** — a speaker's ability to combine the basic linguistic units to form an *infinite* set of "well-formed" grammatical sentences, most of which are novel, never before produced or heard.

The fact that deaf children learn **sign language** shows that the ability to hear or produce sounds is not a necessary prerequisite for language learning. All the sign languages in the world, which differ as spoken languages do, are visual–gestural systems that are as fully developed and as structurally complex as spoken languages. The major sign language used in North America is **American Sign Language** (also referred to as **ASL** or AMESLAN).

The idea that language was God's gift to humanity is found in religions throughout the world. The continuing belief in the miraculous powers of language is tied to this notion. The assumption of the divine origin of language stimulated interest in discovering the first primeval language. There are legendary "experiments" in which children were kept in isolation in the belief that their first words would reveal the original language.

Opposing views suggest that language is a human invention. The Greeks believed that an ancient "legislator" gave the true names to all things. Others have suggested that language developed from "cries of nature," "early gestures," **onomatopoeic** words, or even songs to express love.

All of these proposals are untestable. The cooperative efforts of linguists, evolutionary biologists, and neurologists may in time provide some answers to this intriguing question. Because of linguistic research throughout history, we have learned much about Universal Grammar, the properties shared by all languages.

Note

1. The **asterisk** is used before examples that native speakers, for any reason, find unacceptable. This notation will be used throughout the book.

Exercises

1. An English speaker's knowledge includes the sound sequences of the language. When new products are put on the market, the manufacturers have to think up new names for them that conform to the allowable sound patterns. Suppose you were hired by a manufacturer of soap products to name five new products. What names might you come up with? List them.

We are not interested in the spelling of the words but in how they are pronounced. Therefore, describe in any way you can how the words you list should be pronounced. Suppose, for example, you named one soap powder *Blick*. You could describe the sounds in any of the following ways:

bl as in *blood*, *i* as in *pit*, *ck* as in *stick*
bli as in *bliss*, *ck* as in *tick*
b as in *boy*, *lick* as in *lick*

***2.** Consider the following sentences. Put an asterisk (*) before those that do not seem to conform to the rules of your grammar, that are ungrammatical for you. State, if you can, why you think the sentence is ungrammatical.

a. Robin forced the sheriff go.
b. Napoleon forced Josephine to go.
c. The Devil made Faust go.
d. He passed by a large sum of money.
e. He came by a large sum of money.
f. He came a large sum of money by.
g. Did in a corner little Jack Horner sit?
h. Elizabeth is resembled by Charles.
i. Nancy is eager to please.
j. It is easy to frighten Emily.
k. It is eager to love a kitten.
l. That birds can fly amazes.
m. The fact that you are late to class is surprising.
n. Has the nurse slept the baby yet?
o. I was surprised for you to get married.
p. I wonder who and Mary went swimming.
q. Myself bit John.

3. It was pointed out in this chapter that a small set of words in languages may be onomatopoeic — that is, their sounds "imitate" what they refer to. *Ding-dong, tick-tock, bang, zing, swish,* and *plop* are such words in English. Construct a list of ten new words. Test them on at least five friends to see if they are truly "non-arbitrary" as to sound and meaning.

4. Although sounds and meanings of most words in all languages are arbitrarily related, there are some communication systems in which the "signs" unambiguously reveal their "meaning."

   a. Describe (or draw) five different signs that directly show what they mean. Example: a road sign indicating an S curve.
   b. Describe any other communication system that, like language, consists of arbitrary symbols. Example: traffic signals, where red means stop and green means go.

5. Consider these two statements:

   I learned a new word today.
   I learned a new sentence today.

   Do you think the two statements are equally probable? If not, why not?

6. State a "rule of grammar" that you have learned is the "correct" way to say something but that you do not generally use in speaking. For example, you may have heard that *It's me* is incorrect and that the correct form is *It's I*. Nevertheless, you always use *me* in such sentences, your friends do also, and, in fact, *It's I* sounds odd to you.

   Write a short essay presenting arguments against someone who tells you that you are wrong. Discuss how this disagreement demonstrates the difference between descriptive and prescriptive grammars.

7. Think of song titles that are "bad" grammar, but which, if corrected, would lack effect. For example, the 1929 "Fats" Waller classic "Ain't Misbehavin'" is clearly superior to the bland "I am not misbehaving." Try to come up with five or ten such titles.

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