2 Conceptions of Language and Grammar

KEY CONCEPTS

The study of language The roles of the English teacher What is a language? Competence and performance Approaches to the study of language

THE STUDY OF LANGUAGE

The study of spoken and written language occupies a significant part of contemporary primary and secondary school and university curricula. The grammars, handbooks of style, and composition texts used in these curricula are based on various assumptions about language and about why it should be studied. It is important that teachers have a critical understanding of these assumptions, which in many instances are either indirectly stated or omitted entirely. These books are designed to help you to:

- develop the critical resources you need as a teacher to respond to many language-related issues;
- understand the many concepts needed to talk appropriately and accurately about language;
- develop skills that you will use in everyday teaching of language, literature, reading, and writing.

In the pages to follow you will encounter ideas about language that may be new to you and which may contradict ideas you've been taught. We cannot guarantee that these new concepts will be easy to master, but we do believe that they are worth your best efforts. We will, as we said earlier, try to begin with what you know about language. For example, you have probably been taught to avoid non-standard expressions such as *seen* or *seed* instead of *saw*, to avoid multiple nouns as modifiers, to make sure that your subjects and verbs agree, to use parallel structures where possible, and the like. These are **usage** rules. They have at least two jobs to do. First, they help define the standard variety of English—recall our question in our introductory chapter that asked you to consider why anything, e.g., electrical outlets, might be standardized. You probably answered by saying that standardization allows the greatest number of people to use it for the greatest number of purposes. You might also have added that if something is standardized, then it can be maintained in that form for a long period of time. Standardizing a language has the same goals: to allow as many people as possible to communicate effectively with each other, and to allow people at any time to read texts that were written perhaps hundreds of years before they were born, much as we read the novels of Jane Austen now. And standardization allows us to write texts that will be understood by many generations to come.

The usage rules help ensure that standard English is used in formal writing and speaking so as to make our writings and speeches clear, efficient, and effective, given our purposes in communicating and the characteristics of our audiences. Rules that tell us which forms to choose (*saw* not *seen* or *seed* as past tense of *see*), or what syntactic patterns to avoid (multiple noun modifiers), or to use (parallel structures) are **prescriptive**. Ideally they prescribe what are taken to be the most generally used formal writing and speaking practices at a particular time.

Usage rules are extremely important. Speakers and writers who violate them are likely to be judged harshly. It is a major part of any teacher's job to ensure that students can write in accordance with these rules. They can be found in composition textbooks, which often devote entire sections to them; they can also be found in writers' handbooks of usage rules, in usage dictionaries, or in selected entries in desk dictionaries. Unfortunately, these handbooks do not always agree with each other and do not always keep up with the accepted writing practices in important genres. Moreover, the conventions differ from one discipline to another.

However, for teachers to be able to teach the usage rules, they must understand the concepts that underlie them and the terminology in which they are expressed. For example, they must know what nouns are, be able to recognize them in texts and to produce examples of them on demand; what "past tense" means and how it is formed; what "agreement" means and how it is expressed; which structures are parallel and which are not; and what participles are so that they will be able to recognize them when they "dangle," or to teach them in order to expand the range of structures their students can use in their writing. And they must be aware of current usage controversies.

You may know about some of these things. For example, you may know about the traditional **parts of speech**, about **subjects** and **predicates**, about **direct** and **indirect objects**. In this book we will develop all these and related ideas by making use of the findings of modern linguistic and discourse studies. Our point of view will be **descriptive** rather than prescriptive. That is, rather than prescribing how someone thinks the language should be, we will attempt to describe as objectively as we can as much of modern standard English as space allows. Our descriptive stance is that of linguistics in general, which tends to think of itself as scientific. We include a chapter on Usage in Book II.

Exercise

Many people think of dictionaries as the final arbiters of usage issues, particularly regarding words. Read the front matter (i.e., all the text before the list of words) of your dictionary and find out how its editors view usage issues. Then look up some words whose usage is controversial, such as hopefully as a sentence adverb, e.g., Hopefully, a solution will be found for the problems in the Middle East; unique as a gradable adjective, e.g., His writing style is very unique; demagogue as a verb, e.g., He demagogued his way into the White House; and lifestyle to mean culture, e.g., The San people of Southwest Africa enjoy a hunter/gatherer lifestyle. How does your dictionary treat these controversies? Is the treatment consistent with the editors' front matter claims? When was your dictionary published? Do you think that the publication date might have an effect on these controversies? Our Usage chapter explores these issues in more detail.

NOTE: For a fascinating story about the OED, you might read Simon Winchester's *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary.* For an excellent history of the development of the dictionary see Winchester's *The Meaning of Everything: The Story of the Oxford English Dictionary.*

THE ROLES OF THE ENGLISH TEACHER

Standard English

We recognize that teachers are caught between apparently irreconcilable forces. They must ensure that their students master the forms of English that are regarded as acceptable, correct, educated, and expected in formal communication, i.e., as **standard**. However, educational linguistic research demonstrates that students will not learn the conventions of standard English unless teachers respect their native ethnic, regional, and social varieties. So how might this impasse be resolved?

First, we must know what is and what is not currently acceptable. Second, we must have a framework of concepts and terminology that will allow us to understand and teach about language. Third, we should adopt the belief that our only legitimate role is to **add** control of standard English to our students' linguistic repertoire, not to eliminate our students' native varieties on such unsupportable grounds as that they indicate laziness or stupidity. They don't! These books are designed to help teachers fulfill these roles.

In addition, teachers should make use of their students' natural language learning abilities and what is known from fields such as linguistics and applied linguistics about teaching language. For example, rather than overwhelming students by red-lining every error, teachers should select those "errors" which seem amenable to correction at the time and bring the students' attention to the similarities and differences between their own practices and the target ones. They should then focus on the target until it is well controlled. (See the work of Rebecca S. Wheeler and her collaborators, e.g., Wheeler and Swords 2004: 470-480; Wheeler 2005: 108-112.)

Linguistic variation and bilingualism

All languages vary. That is, there is no language whose speakers all speak in the same way in all circumstances. Groups of people may speak differently from each other and still be speaking the same language; that is, a language may exhibit **dialect** variation. A simple demonstration of this is to conduct an informal survey about the words people use for soft drinks, such as *soda*, *pop*, and the like, and then identify where in the country the various expressions are used. Languages vary by nation, region, ethnicity, gender, age, and almost every other grouping of people that one can imagine.

Languages also vary according to their uses. An individual speaker will vary his or her **style** of speech according to contextual factors such as the formality of the occasion. For example, on relatively informal occasions we are likely to use abbreviations such as *can't* and *should've* in our speech and writing; on more formal occasions we will use the unabbreviated forms *cannot* and *should have*.

The **mode** or **channel** by which language is transmitted can affect it also. The language of a personal phone call differs from that of a face-to-face conversation and from a radio or TV call-in program. Spoken language differs from written language, though in rather complex ways (Biber et al. 2002).

Occupations may have their own special varieties of a language, that is, they differ in **register**. For example, the technical terms you know or will learn about linguistics and grammar belong to the linguistics register, whereas *corner kick* and *throw-in* belong to the soccer register.

In addition, individuals and groups make use of various **genres** or **text types**. These are extended stretches of language, written or spoken, which have relatively stable and identifiable characteristics. Genre is a well-estab-

lished notion in literature; it refers to novels, shorts stories, poems, and such sub-genres as sonnets and lyrics. More generally, text types include such categories as business letters, term papers, newspaper reports, opinion pieces, and many others, which are characterized by their content, their purposes, their textual structure, their form of argumentation, and level of formality (Crystal 2003: 200-1). These are often divided into descriptive texts, which have to do with the location of entities in space; narrative texts, which have to do with situations and events in time; directive texts, which are concerned with future activity; expository texts, which explain phenomena; and argumentative texts, which attempt to confirm or change the beliefs of their readers (Gramley and Pätzold 2004: 152-5).

Most communities and many individuals around the world are **bi**- or **multi-lingual**; that is, they make use of more than one language. People in the United States make use of many languages. Some languages, like Navajo and Hawaiian, are native to the US; others, like Spanish, French, German, and English, are longtime residents but were brought by colonists; and still others, such as Thai and Hmong, were brought by recent immigrants.

In all communities, some varieties and languages are favored and others denigrated. Children whose native language is not respected in the community or the school are at great risk of failing in school. Because language is such an important component, not just of education, but of an individual's personal, ethnic, and social identities, teachers must tread a fine line between their responsibility to teach the standard variety required for social mobility and respecting students' native varieties as manifestations of their identities. Just as every child has a right to expect teachers to respect their sex, ethnicity, social class, color, and creed, so every child has the right to expect teachers to respect their language. It is a lot easier to accept linguistic variation if we understand it and understand our own attitudes toward it. We deal with this issue in more depth in our chapters on Variation and Usage in Book II.

In the rest of this chapter, we will consider some of the basic ideas about language that inform this book.

WHAT IS A LANGUAGE?

As teachers of language (which we are, whether we teach linguistics, literature, ESL, or physics), we need to have a clear notion of what it is that we teach. Surprisingly, few people have even the most rudimentary conception of what a language is, even though they use (at least) one in nearly every waking moment of their lives. Generally we can lead perfectly adequate lives without conceptions based on serious reflection on important topics. For instance, we do not need a precise understanding of physical notions such as *force*, *work*, or *energy* to hit home runs or drive cars. But education aims to help us understand things that we take for granted. Language is a prime example. It is a device of mind-boggling complexity, but few people have a clear conception of its nature and use.

So, what is a language? What we have in mind here is a natural (i.e., not an artificial or computer-based) system for human communication, such as English, Chinese, Swahili, or American Sign Language (ASL).

In this book, we'll assume that

A language is a set of rules, unconsciously present in the mind, which enables human beings to represent and communicate meanings by producing audible, visible, or tactile symbols that these rules systematically relate to those meanings.

This definition may seem forbidding and abstract, so let's look at it piece by piece.

A language enables its users to communicate meanings by systematically relating perceptible actions and meanings.

Meanings are mental states or activities, and as such cannot be directly observed. If we want to communicate our meanings to someone else, we must use something they can perceive with their senses—for example, noises, gestures, flag waving, or marks on paper. For any of these to communicate successfully, there must be a system that consistently relates the observable signals with the private meanings. For lots of good reasons, sound evolved as the primary mode of human communication. This issue is discussed in the next section.

Most people conceive of meaning in terms of **information**—ideas about the external world or about our thoughts and beliefs. This is called **referential** (**experiential**, **ideational**) meaning. Referential meanings represent events such as *The US women's soccer team won the World Cup* or states such as *The sun is a small star*. They are descriptions of states of affairs, real or imagined. Referential meaning is probably the most commonly communicated type of meaning. However, there are other kinds:

- **Expressive meaning** reflects the emotional state of a speaker. *Ouch!* has no referential status but expresses pain.
- **Persuasive (conative) meaning** refers to the intended effect of an utterance on its hearer; it attempts to get an audience to perform an action or to believe something. *Get out!* is an attempt to get

someone to leave; *I love you. Honest, I really do!* is an attempt to get someone to believe that "I" loves them.

- Social (phatic, interpersonal) meaning, as in expressions such as *Hi!* and *How are you?*, establishes and maintains social contact between communicators.
- **Textual meaning** is communicated by utterances that constitute (part of) a text, e.g., *The dogs were very noisy. The German shepherds were the worst.* Without *very noisy* in the first of these two sentences, it would be impossible to interpret *the worst* as *noisiest*. This meaning derives from the assumption that the two sentences are to be interpreted as a **text**, that is, one or more sentences or utterances intended to be taken as a coherent whole. Some expressions have only textual meanings. For example, in some of its uses *so* indicates that the expression it introduces is to be interpreted as a conclusion drawn from a prior expression or from the context. The retort *So what?* is a demand to know what conclusion to draw from what a speaker has just said.
- **Metalinguistic meaning** addresses matters concerning the language itself. Definitions and word puzzles are metalinguistic, e.g., *What I meant to say was*..., or *What English word has three double letters in a row?* (See the end of this chapter for an answer.)
- **Poetic meaning** reflects nuances of interpretation created by the manner in which information is expressed. It is the aesthetic dimension of language and language use. Advertisers make good use of language's poetic possibilities. They use puns as well as rhythm and rhyme: Wendy's restaurants advertised their extended business hours with the pun, *See ya later!*; a Cheyenne, WY store advertised tires with the rhyme, *Great deals / On tires and wheels*; local authorities attempt to draw drivers' attention to road work with the pun *Give 'em a brake!* and the rhyme *Cone Zone*.

Exercise

1. Explain how each expression below illustrates one (or more) of the meaning types just discussed:

- a. Don't touch me!
- b. There is a bull in that field.
- c. Hello. Are you there? (phone conversation)
- d. No pun intended.
- e. Jeanne is wearing jeans.

- f. I hate broccoli.
- g. Gag me with a spoon.
- h. I've typed teh and langauge again.

2. For each of the following types of meaning, give a brief text that illustrates it:

- a. persuasive (conative) meaning
- b. referential meaning
- c. social (phatic) meaning
- d. textual meaning
- e. poetic meaning
- f. expressive meaning
- g. metalinguistic meaning
- h. referential and conative meaning

A language uses sound as its primary mode of expression

In saying that sound is the "primary" mode of linguistic expression we mean that it is the principal, earliest, and most fundamental mode. Literate people who are not linguists tend to assume that writing is the most important form of language. In fact, they tend to assume that the spoken language should be modeled on its written form. For example, many people will use a word's spelling to resolve a dispute over its pronunciation, and the pronunciation of some words has changed to be more consistent with their spellings. For instance, *often* has historically been pronounced *offen*. However, many people nowadays think that because it is written with the letter <t>, it should be pronounced with a [t] sound.

Linguists, in general, believe that sound is the primary medium of language, because it precedes writing in evolutionary and individual development; because letters represent sounds, not vice versa; and because we use spoken language more frequently in our lives, so it is arguably more important to us. To support their claim, linguists point out facts such as the following:

- children learn to talk before they learn to read and write
- children learn to talk naturally, that is, without being expressly taught; reading and writing must be taught
- there are many languages that have no writing systems
- writing is a comparatively recent historical development (it has been around for only a few thousand years); spoken language is at

least 60,000 years old (see Aitchison 1996, 1997 ch. 2)

• all writing systems are attempts to represent aspects of spoken language, generally individual consonants and vowels, less frequently syllables, less frequently still, words

We do not deny the importance of other modes of expression. Written language is extremely important in modern societies, and we all spend many years mastering it. The sounds speakers produce and which are (partially) processed by hearers' ears fade away very rapidly. Writing attempts to overcome this **rapid fading**.

There is always a dynamic relation between spoken and written language. Each influences the other to various degrees. For example, currently we tend to allow more speech-like forms into our writing than our grandparents did, e.g., contractions such as *can't*, *I've*, and *she's*.

Sign languages of the deaf, which use the hands to express meanings, are another important language type. But while they can express whatever a signer wishes to communicate, just as a spoken language can, they are a relatively uncommon form of language.

If we group together sounds, written symbols, and manual gestures as linguistic **forms**, then we can think of a language as a system for relating forms to meanings.

Exercise

1. Find and discuss three differences between spoken and written English (or any other language that you are familiar with). For example, you might consider "tone of voice."

2. What advantages or disadvantages do you think spoken language has over other forms of communication (such as written language, manual language, waving flags, scratching signs in dirt or rocks, etc.)? Think both in terms of our distant ancestors and of practical contemporary needs. As a concrete example, you might consider how to explain, without speaking or writing, how to bake bread, wash a car, upgrade a computer, or use a phone keypad to respond to commands from a company's computerized answering system. (Consult actual texts, such as recipe books, labels on bottles, or users' manuals). Refer to your personal experience wherever possible. (You might also look at software that turns speech into typed text, e.g., Dragon Naturally Speaking.)

The relation between meaning and sound is conventional and arbitrary

According to Ferdinand de Saussure (1983 [1916]) and accepted by the vast majority of linguists, the relation between a word's sound and its meaning is **conventional**. That is, the speakers of a language tacitly agree on which meanings to associate with which sounds. For example, the fruit we make apple jelly from is called *apple* in English, *pomme* in French, *manzana* in Spanish, *úll* in Irish, and other names in other languages.

This conventional relationship is **arbitrary**. That is, speakers of a language, as a group, are free to associate any sounds with any meaning. It doesn't matter which sounds they associate with which meanings. Thus the sound of the word *I* is arbitrarily (though not randomly, i.e., without purpose) chosen by English speakers to represent the speaker of an utterance; we could equally designate the speaker by the sounds *je* as in French, or *yo* as in Spanish, or *ich* as in German, or *wo* as in Chinese, or any other sound(s) we agreed on.

From the claim that sound/meaning relationships are both conventional and arbitrary, it follows that there need not be any similarity between sound and what it refers to. The word *pigeon* bears no resemblance to the birds it refers to. Similarly, the words *yell* and *whisper* can be said either loudly or softly, even though they refer to loud and soft sounds. *Giant* and *dwarf* have the same number of sounds, despite the different sizes of the things they refer to. *Lilliputian* is a big word meaning "small," but *big* is a small word meaning "large."

Finally, there is no **natural** or **causal** connection between words and their meanings. That is, words and their meanings are not connected in the way that smoke and fire, or explosions and noise, or cars and air pollution, are. We know that fires cause smoke, and so when we see smoke we can assume that there is also fire. The particular sounds of a word do not cause its meanings in this way, nor do the meanings cause the choice of word sounds.

However, all languages have some expressions that are non-arbitrary. They are said to be **motivated** by some factor other than convention. One motivation is similarity between the word sounds and sounds associated with the things the words refer to. Common examples of these are **onomatopoeic** words for animal noises, e.g., *moo*, *bow-wow*, and *quack-quack*. Note that the last two of these suggest that dogs and ducks normally make noises in pairs and that English speakers can distinguish a dog's *bow* from its *wow*. Note however, that an Irish dog goes *amh-amh* and a Serbo-Croatian one goes *av-av*. This suggests that onomatopoeic words are not perfect imitations; at least some conventionality is at work in them. To appreciate the range of ways in which languages represent animal sounds, go to http://www.eleceng.adelaide.

edu.au/personal/dabbott/animal.html

Another type of motivation is **sound symbolism**, the relatively consistent association of certain sounds with certain meanings. For example, the [ee] vowel sounds of *teeny* suggests something small. We find similar uses of similar vowels in other languages. Spanish, for example, uses the suffix *-ito/a* to designate small things and children. However, it can hardly be said that this vowel always carries this diminutive meaning. For example, no hint of smallness appears in words like *beefy*, *treaty*, *keep*, or *heal*. And similarities with other languages may be purely accidental: *-chen* is a diminutive suffix of German, a language more closely related to English than Spanish is.

While it is true that the vast majority of words that consist of just a single meaningful part, e.g., *lamp* and *post* are arbitrarily related to their meanings, combinations of such words frequently are not. That *lamppost* means "lamppost" is motivated by the fact that it consists of *lamp* and *post*.

Exercise

What apparent motivation occurs in the following English words? What words can you think of that don't fit the patterns?

- a. slop, slime, slush
- b. itsy-bitsy, tinkle, twinkle
- c. slip, slink, slide, slither
- d. moo, meow, cuckoo

Duality of patterning

This strange phrase means that meaningful linguistic units such as words are composed of discrete units that have no meaning. For example, the word *book* clearly has a meaning; but just as clearly, each of its individual sounds, [b], [oo], and [k], has no meaning. Individual sounds like these can be used to create other words. So languages take one or a combination of meaningless sounds and then assign meanings to them. The expressions of nonhuman animals, even those with relatively large numbers of expressions, seem not to be designed like this, with the result that their call repertoires cannot be readily expanded.

Displacement

Human language allows human beings to talk about anything, regardless of whether what they talk about is in the immediate context, occurred in the past, will occur in the future, or, indeed, did not, may not, or will not ever occur. This freedom from the here and now is called **displacement**. Non-human communication is typically tied to the time and place at which it occurs. As a result, we are far better liars than other animals.

A language is distinctively human

This is a remarkably controversial topic. When we speak of language in this book what we have in mind are systems such as English, French, Swahili, or Navajo. However, the word *language* is often used loosely to indicate any means of conveying meaning—e.g., the language of dance, the language of flowers, animal languages. The discipline of **semiotics** developed to study the language-like characteristics of various forms of communication. The range of semiotic (meaningful) systems is great, encompassing natural languages, gestures, spatial relations, animal communication, film, advertising logos, traffic signals, clothing, and many other modes of communication. Much semiotic research draws on linguistic concepts.

Semiotic and other linguistic studies have demonstrated the richness of human communication, but have never uncovered any means of communication superior to human language in the complexity, range, or precision of its meanings. This is not surprising. One could hardly imagine translating the Constitution of the United States into body language or the language of clothing. While semiotics has dramatically enlarged our awareness of the scope of meaningful systems, it has produced no challengers to language either on quantitative or qualitative grounds.

Likewise, research into animal communication has vastly improved our appreciation of the natural communication systems of primates, dolphins, birds, and frogs. But it has presented no rivals to human communication, again either on qualitative or quantitative grounds. A few primates have learned, usually with intensive training, to communicate in language-like ways, through manual signs, plastic symbols, or computers. Their success tells us a good deal about their intelligence (especially of bonobo chimps), but their communicative systems are not equivalent to English or any other human language.

For some people it is not at all surprising that humans have language and animals don't. According to many religions, language was given to humans by a god. For others this topic is intensely controversial. Some claim that our closest animal relatives share some of our linguistic capacities; others insist that there is no continuity between whatever cognition and communication other primates are capable of and human language. (The following items should give you a roller-coaster ride on the research; not all are easy reads: Carstairs-McCarthy, 1999; Gardner, Gardner, and Van Cantfort 1989; Greenfield and Savage-Rumbaugh 1990; Hauser, 1996; Hawkins and Gell-Mann 1992; Hockett, 1960; Lieberman 1984, 1991; Savage-Rumbaugh 1986; SavageRumbaugh and Lewin 1994; Sebeok, 1981; Sebeok and Rosenthal, 1981; Terrace, 1981; Wallman 1992.)

We must add here that all normal human beings can be both producers and receivers of human language, a characteristic known as **reciprocity** or **interchangeability**. In many animal communication systems one sex, usually the male, produces signals while the other merely receives them.

Another perspective on this issue is the relationship between intelligence and language. Assuming (controversially) that IQ provides a reliable index of intelligence, Lenneberg claimed that language abilities are not significantly absent even at dramatically low levels (though he may have overstated the case [Jackendoff 2002: 95 n.13]):

Children whose I.Q. is 50 at age 12 and about 30 at age 20 are completely in possession of language though their articulation may be poor and an occasional grammatical mistake may occur. (Lenneberg 1964: 41-42)

A language is culturally transmitted

No child comes into the world capable of learning only a specific language or set of languages. All normal children can learn any human language. All they need is appropriate learning situations. Languages are transmitted from one generation to the next by **cultural transmission**, not by genetic transmission, as is the case with many animal communication systems.

Having said that, we must add that without the physiological and neurological bases that language depends on, children would be unable to learn any language. So learning a language depends upon having both the right biological bases and the right learning environment.

Knowledge of a language is unconsciously present in the mind

Consider the following questions:

- (1) a. Do you like duckling?
 - b. Do you like snorkeling?
 - c. Do you like Kipling?

Without the slightest bit of thought, you know which one of these questions can be answered *Yes, I like to* ______. You know that *snorkel* but not *duckle* or *Kiple* can occur after *I like to* ______. You can tell all of this without any knowledge of grammatical analysis such as that *snorkel* is a verb. And though you may not know terms such as **morpheme** and **di**- **minutive** (*-ling* in (1a)), you know that *duckling* and *snorkeling* have two meaningful parts but that *Kipling* has only one. You also know the grammatical form and function of *snorkeling* in (1b), though you might not be able to provide a technical description. (See our chapters on Phrases, Basic Clause Patterns, and Multi-clause Sentences.) Knowing a language, then, is not the same as knowing terminology or being able to articulate grammatical descriptions. Your knowledge of language is unconscious knowledge. No amount of introspection, meditation, psychotherapy, or brain surgery will allow you to access it directly.

The clearest sign of unconscious knowledge is the presence of **linguistic intuitions**—gut feelings about language that we could not have without unconscious linguistic knowledge. These intuitions are not the product of education; totally illiterate people have them. They derive from genetic capacities specific to humans and from having acquired a language. One's unconscious knowledge of language is called **linguistic competence.** We will have more to say about linguistic competence below.

A language consists of rules

Unfortunately, the word *rule* conjures up exactly the wrong image of linguistic knowledge, suggesting the prescriptions of right and wrong that we find in handbooks. Linguists, however, use the word to mean two related ideas. First, *A* **rule** *is a part of our unconscious knowledge of our language (our linguistic competence)*. It is a mental pattern about a limited part of a language, *e.g., pronunciation, sentence structure, or what a word means.* For instance, English has a basic subject-verb-object word order:

When we produce sentences of this sort, we are acting as if we were following a rule that says: *Put subjects before verbs and verbs before objects*. If we were not following rules, our speech would be chaotic and unintelligible, not the highly patterned, communicative activity it is.

Second, linguists also use the word *rule* to refer to their attempts to formulate these linguistic patterns in words, that is, to the **model** we build of an unconscious mental rule. Our model is not the rule itself, which remains forever inaccessible.

Exercise

1. What rule would you formulate that would allow English speakers to say that sentences a, b, and c are OK, but that d is not? (The symbol * means **ungrammatical**, i.e., not in conformity with the rules of competence.) Feel free to make use of grammatical terminology and also of terms for meanings.

- a. John looked the address up.
- b. John looked it up.
- c. John looked up the address.
- d. *John looked up it.

2. And what rule would you formulate to explain why (a-c) below are grammatical, but (d) is not?

- a. Harry sent a present to Mary.
- b. Harry sent Mary a present.
- c. Harry sent a package to Boston.
- d. *Harry sent Boston a package. (Can you think of a context or a meaning in which this sentence can be grammatical?)

A language is a system

Rules are not distributed randomly in the mind like potatoes in a sack. Rather, they are systematically related to one another. It is easiest to envision this conception with an analogy. A computer system has a set of **components** (central processing unit, monitor, keyboard, speakers, drives of various types) whose overall function is to process information. The components interact with each other; you can, for instance, play a CD while reading your email. The components also contain smaller parts, all of which interact in precise, though limited, ways with each other and with parts of other components.

Language systems likewise have components. The most commonly cited ones are:

- phonetics/phonology
- morphology
- vocabulary
- orthography/spelling/writing
- syntax
- semantics
- pragmatics
- discourse

Phonetics and **phonology** are concerned with the sounds of language, **morphology** with the structure of words, **vocabulary** with our store of words, **orthography** with the spelling system, **syntax** with the principles of sentence structure, **semantics** with the literal meanings of words and sentences, **pragmatics** with the meanings that arise when expressions are used in specific contexts, and **discourse** with the linguistic and rhetorical patterns in texts of various kinds. As we proceed, you will learn the intricate ways in which the system operates.

For the moment, let us look at one concrete example of how the system creates interdependencies among its rules and components. The syntactic rule for yes/no questions is connected to the rules of pronunciation, specifically the rules for intonation, the musical pattern of speech. Listen to the rise and fall of your voice as you say (3a) as a statement of fact and (3b) as a question:

- (3) a. They're leaving at 6:00.
 - b. They're leaving at 6:00?

The order of words stays the same, but the intonation pattern indicates whether the sentence is to be interpreted as a statement or as a question.

In this book, we will begin our discussion with a skeletal overview of English grammar, beginning with the largest grammatical units (sentences) and working down to the smallest (sounds and letters). This is the opposite of our presentation of the grammar in the following chapters. There we begin with the smallest units and work our way up to the largest. We hope that by spiraling in this way, readers who have no background in language study will get an initial orientation, and those who have had some background will get a quick refresher before venturing into greater depth.

COMPETENCE AND PERFORMANCE

As we mentioned, modern linguists distinguish between the knowledge that speakers of a language must have in order to be able to use that language, and the actual use they make of that knowledge to speak, understand, read, or write. Linguists call our unconscious knowledge of the rules that constitute the language **competence**, and our linguistic activities that make use of that knowledge, **performance**.

Performance provides ample evidence of competence. We can use our ability to specify what is and what is not **grammatical** (i.e., consistent with the unconscious rules of our language). Consider the following:

(4) *The blocking the entrance protester was arrested.

Though we can certainly make sense of the sentence, we know that it isn't natural English. (The German translation would be grammatical with this word order.) Of course, we may not be able to articulate exactly what makes the sentence unnatural; nor is it likely that we have been taught anything explicitly about sentences like this.

Likewise, you can determine hidden **grammatical relations**, that is, implicit subjects, objects, and the like:

- (5) a. Joan is eager to please.
 - b. Joan is easy to please.

In (5a), Joan will do the pleasing; in (5b) someone else will please Joan. Such "understood" relations are very common in language.

Finally, you can also perceive **ambiguity** (two or more distinct interpretations):

(6) Molly told Angela about herself.

Here Molly is talking either about Molly or about Angela.

Exercise

Advertisers often make use of ambiguity, for example, GE's *We bring good things to life*. Find 4-5 other examples of ambiguity in advertising. Express their ambiguous meanings in non-ambiguous sentences. Why do you think advertisers might like ambiguity? How about poets? You might mull over the last line of Dylan Thomas' poem "A refusal to mourn the death, by fire, of a child in London": *After the first death*, *there is no other*.

The idea of competence depends on certain idealizations. Many linguists, though by no means all, assume that all speakers of a language have the same set of rules in their competence. This is a deliberate simplification, made with full awareness of the variety inherent in natural language. It is done to allow linguists to develop models of competence without being distracted by phenomena that do not appear to affect the model's basic principles. This assumption is not uncontroversial. It has been viewed as an attempt to ignore the social, discourse, and textual functions of language, which some linguists believe to be crucial in understanding language structure. It

has also been viewed, because the majority of linguists are white, male, and middle class, as a thinly disguised attempt to define their variety of English as the basis for the grammatical theory for all languages and all varieties, much as Latin grammar was until recently (and in many situations still is) the model for the grammars of many European languages.

While neither criticism is justified in its extreme version, both point to limitations of the language-as-competence approach. They also point to the need to understand language as a social artifact used by social beings in social contexts for social purposes. We deal with such considerations in our chapters on Variation and Usage in Book II.

A language is acquired

Because many modern theoretical linguists begin from the assumption that what they are modeling is knowledge, it follows that their theories have implications for psychology and ultimately for biology. Many believe that language is a very specialized, perhaps unique, kind of knowledge. They believe that an individual's primary form of language is not acquired in the ways that other kinds of knowledge are acquired, such as writing or arithmetic. In support of this belief, they point out that children learn the language (or languages) of their environments without any instruction or correction from parents or peers. All they need to acquire language is someone to communicate with them. Moreover, they learn a vastly complex system in a very short time, and all create very similar grammars of a given language regardless of the differences in what they hear about them, and (up to a point) regardless of their differences in intelligence.

Most tellingly, linguists point out that when we know a language we know far more than we could have gleaned just from the language we heard around us. Our linguistic competence is far richer in its "depth, variety, and intricacy" (Smith 1999: 41) than the evidence that we used to acquire our languages. For example, English speakers know that sentences like (7a) are ungrammatical while (7b) is fine:

(7) a.*She sang beautifully the song.b. She sang the song beautifully.

No child learning English (as opposed to French or Italian) as their native language has to be taught (indeed, no child can be taught) that sentences such as (7a) are ungrammatical. (How would you articulate the rule that (7a) violates and then explain it to a child?) The idea that we know more than we have evidence for is called the **poverty of the stimulus** argument. The difference between what we know and what we have linguistic evidence for must have come from somewhere. It can only have come from cognitive and brain structures specialized for language acquisition. The linguists who are persuaded by arguments like these hold that human beings do not enter the world as "blank slates," rather, they bring with them **innate ideas** that guide them in acquiring their language(s).

On the basis of these observations, and the similarities between languages, many linguists argue that human beings are genetically endowed with a capacity to acquire languages with particular kinds of rule systems. They argue that linguistic knowledge is of a different type than other knowledge, because it is based on specialized cognitive structures, which in turn appear to be based on specialized brain structures.

In support of this neurobiological claim, linguists point out that first language learning must be accomplished within a "critical period" in a person's life (before the teenage years) if it is to be successful. Moreover, damage to certain parts of the brain, mainly in the left hemisphere, affects people's linguistic abilities, whereas damage to corresponding areas in the right hemisphere need not. Thus the language capacity appears to be (at least partially) localized in the left side of the brain. If this point of view is correct, it explains why, even with intense and specific training, no non-humans (even the most intelligent ones) have ever learned a human language.

In contrast, we must be taught how to write, though we may begin learning it at any age—but generally only after we have already learned a primary form of language.

Exercise

1. What kinds of errors have you observed people make as they learn a second language? Or children as they learn their first language?

2. Find a description of one of the many attempts to teach an ape a human language. Describe the teaching methods and the results. How do they compare to the ways in which children acquire languages? How do these animals' linguistic skills compare with the linguistic skills of ordinary people?

A language is infinite

Our view of language and grammar makes some very important claims about the nature of knowledge, at least of linguistic knowledge. It used to be thought that all knowledge, whether acquired by a human or a bird, was essentially a matter of habit. One learned to respond in specific ways to particular events, and the strength of the habit was a function of the number of times a particular stimulus and response were associated by the learner. From this point of view, understanding a sentence would be a matter of associating a particular response with it. And learning a language would be a matter of learning just which responses go with which sentences. The process was viewed by behaviorist psychologists as in principle identical to the process by which a laboratory pigeon learns to peck at different colors or shapes.

In 1957 Noam Chomsky published a remarkable little book, *Syntactic Structures*, in which he pointed out that the behaviorist approach to language cannot in principle account for language, its acquisition, or its use. This is because language is vast. In fact, the number of sentences in any language is infinite. So no theory that assumes that language learning is habit-formation can, in principle, explain it. You can demonstrate the vastness of language for yourself in a number of ways.

Select what you believe to be the longest sentence of the language. Once you have your candidate, put the words I believe that before it. Now you have created a sentence even longer than the first. This must now be the longest sentence of the language. But even to this we can add Fred thinks that to create an even longer sentence. To make an (infinitely) long story short, there is no longest sentence in English or any other natural language. (Although recent reports on the Amazonian language, Pirahá, call this into question [Colapinto 2007: 118-137].) Language allows us, in principle, if not in actuality, to create infinitely long sentences, and consequently to create an infinite number of sentences. We do this by inserting one sentence within another, within another, within another . . . ad infinitum. This property of inserting a sentence within a sentence is called recursion. It is because natural languages are recursive that they allow for the creation of an infinite number of sentences. All natural human languages have this property. So do all varieties and dialects of all human languages. It follows that all languages and varieties are equal. From a linguist's point of view, the creativity of language is based on its recursiveness.

Exercise

Can you think of a different set of sentences that demonstrates the infinity of language? For example, start with the sentence *The book that I read was interesting because* . . . Expand the bolded parts. Now, while our sentences may be infinite, our memories are not. Consequently, our knowledge of our language, our competence, cannot be just a set of sentences. It must be a finite set of devices that allow us to create or understand sentences as we need to. Thus we can produce and understand an indefinite number of sentences that we have never heard or uttered before. We do this, partially, by matching what we hear with the rules of language that we keep in our heads.

Exercise

1. Reread several pages of this chapter and list the sentences that you *had* read or heard before reading it the first time. We are confident that your list will be either empty or very short. What does this fact tell you about how you made sense of the sentences that you had never encountered before?

2. Briefly explain and illustrate with at least one appropriate example each of the following concepts:

- a. Metalinguistic meaning
- b. The arbitrariness of the relation between words and their meanings
- c. Linguistic competence
- d. Linguistic performance
- e. The infinity of language

APPROACHES TO THE STUDY OF LANGUAGE

Prescriptive and descriptive viewpoints

Prescriptive grammarians are mainly concerned with the conventions that govern formal, written communication. Their goal is to maintain a standardized variety of a language so that it can function as the variety used for communication by the major domains of a state (such as education, government, commerce, and law), as well as among people separated by great distances, by great cultural differences, and by considerable spans of time. This requires a set of widely accepted conventions that are codified in grammars, dictionaries, and style manuals. These conventions are designed with the goal of ensuring that people using the standard variety will use the same forms in the same ways and with the same meanings, thus presumably facilitating clear and unambiguous communication. Our Usage chapter addresses prescriptive grammar in more detail.

Descriptive linguists are primarily interested in people's actual linguistic knowledge and behavior—in what they say and how they say it—regardless of whether it conforms to the standard prescriptions. They do not judge it to be correct or incorrect. Generally, they believe that if a community of native speakers of a language consistently speaks or writes in such and such a way, then so be it. That, for the descriptive linguist, is correct, regardless of how prescriptive grammarians view the behavior. Descriptive linguists attempt to put aside their own linguistic prejudices (yes, we all have them) and accept and describe what they observe.

Exercise

Using a usage or style manual, find three expressions (e.g., *We was*) that English speakers frequently use but which the manual claims we shouldn't. What, if any, reasons does the manual give for preferring one expression over others? How valid do you think the reasons are?

To make the differences between these two approaches more concrete, let's consider an example. Consider *who* and *whom*. Handbooks claim that *who* and *whom* should be used as illustrated in (8a-c):

- (8) a. Who phoned?
 - b. To whom did you speak?
 - c. Whom did you speak to?

However, in ordinary conversation we are unlikely to use *whom* in sentences like (8c) and far more likely to use *who*:

d. Who did you speak to?

Descriptive linguists comparing (8c) with (8d) would note the different forms and that (8c) with *whom* is used in very formal contexts whereas (8d) with *who* is used in less formal ones. (See Baron 1994: 27-8.) They would also note that the *to* associated with *who(m)* is to its left in (8b) but not in (8c) or (8d). From this they would infer that *to* stays to the left of *who(m)* in formal contexts, and in those circumstances, *whom* is required.

Exercise

Many people use *seen* as the past tense form of *see*; for instance, *I seen him yesterday*. (i) What would (a) a prescriptive grammarian, and (b) a descriptive linguist say about this form/usage? (ii) What would each say about the people who use this form? (iii) What would each say about the contextual circumstances in which it is used?

Descriptive viewpoints: theoretical, analytic, and applied

The descriptive approach to language encompasses a much wider range of inquiry than just grammar. In the following sections we sketch the spectrum of interests that descriptive linguists have pursued. In so doing, we hope to stimulate your curiosity about topics that will one day inform your own teaching.

Theoretical linguistics

Theoretical linguists take a descriptive attitude, but they want to go beyond merely describing language. Their goals are to understand what they observe and to explain why human languages are as they are. To do this they construct **models** or **theories** of language. Models are portrayals (verbal and visual) of the design of languages. For instance, a model might sketch out a syntactic component that includes several different types of rules, as we'll see in our chapter on Modifications of Basic Clause Patterns. In so doing, theoretical linguists try to formulate general statements about what is possible and what is not possible in the syntax of human languages. For example, a theoretical linguist might try to determine why no human language asks questions by simply reversing the word order of statements.

Theoretical linguists thus can identify some very general principles that govern language. In science, as in many other fields, if a statement follows logically from general principles, then it is regarded as **explained**. In linguistics, if the rules proposed for a language follow logically from general assumptions about the nature of human language, they are regarded as explanations, and the general hypotheses are supported.

Theoretical linguists tend to think of themselves as scientists and of their activities as following the methodologies of science. They observe phenomena, make general statements to describe their observations, hypothesize what else should be true if their generalizations are true, and test whether they were correct. If they are correct, they create more hypotheses and test again. If they are incorrect, they revise their generalizations and hypotheses, and test again. In a sense they want to be wrong. When they find where they are wrong, they can improve their original formulation and account for a wider range of data

than before. Linguistic study, from this point of view, is not a hunt for errors, but rather a dynamic, ongoing, creative task, subject to constant criticism and revision. It is important to understand this, because not to do so leads to several misconceptions.

Language rules from this perspective are not a body of immutable laws or conventions discovered or imposed by scholars. They are reflections of our current understanding of the phenomena of natural language.

It is also important not to see this as an endorsement of the view that "anything goes in English these days." In the last two centuries, linguists have discovered an enormous amount about many individual languages and much about natural language in general. Consequently, particularly since the late 1950s, new understandings about the nature of human beings and the human mind have emerged. These have provided far richer models of how human beings learn, remember, and solve problems than were available before. Furthermore, we have discovered a great deal about the relationships between language, culture, and society. It turns out that we (and other creatures) are far more complex than we had given ourselves (or them) credit for.

Exercise

What implications do you think the scientific study of language might have for psychology, computer science, education, and law?

As we noted, we do not believe that "anything goes" in English, or in any language. Languages and language varieties are rule-governed; if they weren't, we wouldn't be able to understand each other. Some forms are meaningful, grammatical, or acceptable; others are meaningless, ungrammatical, or unacceptable. The status of an expression is judged against the rules that constitute the grammar of the language or variety and the rules of appropriateness of utterances to specific situations. If the grammar cannot assign a meaning to the utterance then it will be either completely or partially **meaningless**. If the utterance is not in accord with the structural rules of the language then it will be **ungrammatical**. If the utterance is inappropriate in a given situation or context, then it is **unacceptable**.

Exercise

Consider these sentences:

a. Colorless green ideas sleep furiously.

- b. Rusty old cars deteriorate rapidly.
- c. We ate quickly our lunches.
- d. Hi Dubya! (To President Bush.)

Are these sentences meaningful? Grammatical? Appropriate (in some context)? Explain your reasoning. (Regarding (a), you might track down Sister Mary Jonathan's poem, "You, Noam Chomsky," when you answer this question.)

Analytic linguistics

Language theorists do not work in a vacuum. Rather, they base their hypotheses on the careful examination of language done either by themselves or by others, including philosophers, psychologists, and sociologists. Linguistic analysis draws upon various theories and their analytic tools to provide a description of the facts and rules of entire languages or of portions of a language. For example, modern traditional grammars, such as the series developed by Randolph Quirk and his colleagues (e.g., Quirk et al. 1985), and the recently published comprehensive Cambridge Grammar of the English Language (Huddleston and Pullum 2002) are based primarily on traditional grammatical concepts, but they are influenced by developments in more recent grammatical theories and methods. Many modern grammars (and dictionaries), such as Cambridge Grammar of English: A Comprehensive Guide: Spoken and Written English Grammar and Usage (Carter and McCarthy 2006) and Longman Student Grammar of Spoken and Written English (Biber, Conrad, and Leech 2002), make use of huge databases of spoken and written language (corpora) that can be searched with special computer programs (concordancers); the sentences and other forms found by these searches can then be used as both data for analysis and for illustration (see Biber et al. 1992; Carter and McCarthy 2006). Authentic data are particularly important for materials designed for second language students of English, as well as for teaching the conventions of various genres to native speakers.

Linguistic analysis extends into many fields. The study of regional variation (**dialectology**) and of social variation (**sociolinguistics**) has contributed much to our awareness of the diversity of English (see our chapter on Variation in Book II). Corpus research has broadened our understanding of first and second language acquisition, as well as of the role of language in psychological, legal, and computer contexts. In education, analytic linguistics has contributed to areas such as syntax, lexicography, usage, reading, writing, and literature. These accomplishments mostly concern the present state of the language, a perspective called **synchronic linguistics**. Analysis also extends to the historical study of languages, a perspective called diachronic linguistics.

Applied linguistics

Applied linguists draw upon theoretical models and analytic work for practical purposes. Computer parsers, artificial intelligence (e.g., speech recognition and synthesis), and machine translation form the computational side of the applied linguistics family. Linguists have been hired as consultants to help in the simplification of legal documents and in documenting the identities of tape-recorded human voices in trials (**forensic linguistics**). They have helped the governments of emerging nations devise writing systems and establish public policies on language (**language planning**). In education, they have provided the bases for methods of language teaching (e.g., foreign languages, including English as a foreign or second language, and bilingual education). And there are linguistic underpinnings to designs for English curricula, ranging from phonics to Whole Language.

In spite of its many contributions, linguistics has not had its full impact on education. Perhaps teachers fear the technicalities of a discipline that claims English study to be a science. Some may see linguistics as a threat to traditional values in teaching. The reason may be that mainstream linguistics is an independent discipline with its own objectives and methods and which has not embraced the poststructuralist and postmodernist approaches adopted in literature and composition studies. This is an ironic turn, because the roots of all of these approaches lie in early twentieth century linguistics. In spite of this divergence of interests, we are convinced that teachers are best served by an understanding of the nature of language and the ways it is approached by linguists.

One of the aims of this book is to initiate you into the linguistic point of view and to provide you with the linguistic literacy that you will need in the contemporary classroom. As we have tried to show in this section, applied work grows out of theoretical and analytical frameworks. Moreover, theoretical and analytic notions can provide us and our students with intellectually stimulating and rewarding classroom activities. Many of the exercises in this book exemplify such activities.

Exercise

1. Go to your college library and visit the language section. Identify three areas that interest you (e.g., child language acquisition, regional dialects) and report on the books available on these subjects. Try to find journals on the topic too and note the types of articles that appear in them. Consult the ERIC (Educational Resources Information Clearing House) system; you may do so either with hard copy or on a computer. See the ERIC thesaurus of descriptors under the heading "language." For a broader spectrum of research on language, you can consult the LLBA (Linguistics and Language Behavior Abstracts), also on computer or in hard copy. (Note: this exercise is a good way to get started on a course project or paper.)

2. Search the Web for sites dealing with English and other languages. A good starting point is Richard Lederer's website. Just enter "verbivore" on your search engine. The Linguistic Society of America (LSA) website (www.lsadc.org) contains essays on many aspects of language and fields of linguistics. The TESOL (Teachers of English to Speakers of Other Languages) site provides lots of information useful to ESL or EFL teachers. The LINGUIST List provides information on a very broad range of linguistic topics and links to many valuable sites. Report on what you find.

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GLOSSARY

ACCEPTABLE: in accord with *both* descriptive and prescriptive rules. See GRAMMATICAL, UNACCEPTABLE.

ACQUISITION OF LANGUAGE: a process by which children develop the rules of competence in their native language; based on genetic predisposition and exposure to language rather than on formal teaching.

AMBIGUITY, AMBIGUOUS: having two or more clearly distinct interpretations. **ANALYTIC** (also called **DESCRIPTIVE**) **LINGUISTICS:** that branch of language study that attempts to analyze whole languages or parts of languages, proposing descriptive rules.

APPLIED LINGUISTICS: that branch of language study that (ideally) employs theory and description for practical purposes—e.g., first language teaching, especially composition; second language teaching; translation; language policy; etc.

ARBITRARY, **ARBITRARINESS**: the idea that languages may associate any meaning with any sounds.

BILINGUAL (also MULTILINGUAL): personal or societal use of two or more languages.

CAUSAL: one thing causes another, e.g., exams cause stress.

COMPETENCE: (native) speakers' unconscious knowledge of the rules of their language.

COMPONENTS OF LANGUAGE: the interrelated sub-parts of a model of language, specifically phonology, morphology, orthography, syntax, semantics, and pragmatics. Each component is made up of rules.

COMPOSITION TEXT: a book designed for teaching the various skills of writing at the junior high, high school and college level; may combine features of prescriptive grammar and conventional rules. Also offers suggestions about the process of writing.

CONVENTION, CONVENTIONAL, CONVENTIONALITY: the idea that the speakers of a language agree on which meanings are associated with which sounds.

CORPUS LINGUISTICS: linguistic analysis based on collections of language data, usually stored as computerized data bases and analyzed by computer programs.

CREATIVITY OF LANGUAGE: the capacity of language to express an infinite number of sentences.

CULTURAL TRANSMISSION: the idea that human beings learn their native language(s) from speakers around them, rather than by being genetically preprogrammed with a language, as is the case with some animals.

DESCRIPTIVE LINGUISTICS: concerned with actual patterns of language and language use.

DIACHRONIC LINGUISTICS: the study of historical change in languages.

DIALECT, DIALECTAL, DIALECTOLOGY: (the study of) regional variation in a language.

DIMINUTIVE: a part of a word indicating smallness or youth, e.g., Billy.

DUALITY OF PATTERNING: the idea that the smallest meaningful linguistic units are composed of reusable, meaningless sounds.

EXPLANATION: linguistic rules that follow logically from general assumptions about the nature of human language are regarded as explanations of the phenomena they describe.

EXPRESSIVE MEANING: meaning that indicates the emotional state of a speaker. **GRAMMAR (DESCRIPTIVE):** (1) an overall systematic description of a language, written by a linguist or some other person; (2) the syntactic part (component) of the overall description, describing the systematic rules of sentence structure; (3) linguistic competence, i.e., the unconscious but systematic knowledge of the rules of one's native language (also called "internalized grammar"); (4) the systematic rules in one's linguistic competence that apply to sentence structure.

GRAMMAR (**PRESCRIPTIVE**): an unsystematic list of language variations with the claim that one of the variants is right/correct/proper and the others are not.

GRAMMAR BOOK: summary of the syntactic structures of a language, including part of speech, word order, sentence structure, and sometimes rules of usage. **GRAMMATICAL** (**DESCRIPTIVE**): (1) in accord with rules of competence; (2) pertaining to linguistic structure.

GRAMMATICAL (PRESCRIPTIVE): in accord with rules of linguistic correctness. See GRAMMAR (PRESCRIPTIVE).

GRAMMATICAL RELATIONS: relationships such as subject, object, or predicate of a sentence.

HANDBOOK OF STYLE: a resource that provides information such as rules of grammatical usage, hints for clarity of expression, and bibliographical formatting.

INFINITY OF LANGUAGE: the capacity of language to express an indefinite number of sentences, as well as an endlessly long sentence. See CREATIVITY OF LANGUAGE.

INTERNALIZED GRAMMAR: See COMPETENCE.

INTERCHANGEABILITY (**RECIPROCITY**): the idea that human beings can both produce and receive/understand their language(s).

LANGUAGE: a system of rules, unconsciously present in the mind, that enables humans to relate sounds (also gestures or graphic symbols) and meanings. LINGUISTIC COMPETENCE: See COMPETENCE.

LINGUISTIC INTUITION: the natural sense of grammaticality, ambiguity, and structure in one's native language.

LINGUISTIC MEANING: meaning that arises from semantic and pragmatic factors of an utterance, as a result of a hearer's perceiving a speaker's intention. MEANINGLESS (DESCRIPTIVE): making no sense.

METALINGUISTIC MEANING: meaning focusing on items of the language system.

MODEL OF LANGUAGE: a linguist's schematic representation of a rule, of a component of language, or of an entire language.

MORPHEME: minimal, meaningful linguistic form.

MORPHOLOGY: linguistic component dealing with the units (**MORPHEMES**) that can be combined to make up words. See chapter on Morphology and Word Structure.

MOTIVATED: having non-arbitrary connections between a sign (e.g., a sequence of sounds) and its meaning.

NATURAL: one thing is associated with another by nature rather than by convention.

OBJECTS OF SENTENCES: parts of the sentence representing the thing(s) affected (direct object) or who receive something or benefit in some way from the situation (indirect object).

ONOMATOPOEIA: a word or phrase whose sound appears to imitate the object(s) it refers to.

PARADOX: a poetic device employing a contradiction that may allow resolution.

PARTS OF SPEECH: categories of words such as nouns, verbs, and adjectives. See chapter on Parts of Speech.

PERFORMANCE: the use of language in specific situations (speaking, writing, listening, reading), subject to interferences such as slips of the tongue, etc.

PERSUASIVE (CONATIVE) MEANING: the intention to get someone to perform an action or believe something.

PHONETICS: study of speech sounds as sounds.

PHONOLOGY: study of speech sounds that distinguish meaningful units in a language.

POETIC MEANING: meanings conveyed through the manner in which a piece of information is expressed.

POVERTY OF THE STIMULUS ARGUMENT: the idea that we know more about our languages than the situations in which we learned them gave us evidence for. This is an important argument for believing that language learning requires substantial help from specialized cognitive and brain structures.

PRAGMATICS: linguistic component dealing with the system of non literal word and sentence meanings in a language. See **SEMANTICS**.

PREDICATE OF A SENTENCE: the phrase that completes a clause or sentence when added to a sentence subject. See chapter on Basic Clause Patterns.

PREPOSITION STRANDING: ending a sentence with a preposition.

PRESCRIPTIVE: ideally, directions for the most generally used formal writing and speaking practices, which help define standard English.

RAPID FADING: the swift disappearance characteristic of speech sounds and manual gestures.

RECIPROCITY: See INTERCHANGEABILITY.

RECURSION: a property of competence and of rules by which they repeat themselves, resulting in an infinity of structures.

REFERENTIAL MEANING: meaning concerned with information about the external world or about internal thoughts or beliefs.

REGISTER: words and expressions particular to occupations, hobbies, etc.

RULE OF LANGUAGE (DESCRIPTIVE): (1) the mental representation in competence of some specific regularity in the language; (2) a statement that attempts to describe that representation—i.e., a model of a part of competence.

RULE OF LANGUAGE (PRESCRIPTIVE): a statement that specifies a correct or an incorrect usage.

SEMANTICS: linguistic component dealing with the system of literal meanings of words and sentences. See **PRAGMATICS**.

SEMIOTICS: the study of communicative (sign) systems, including language but also such systems as gestures, spatial relations, animal communication, film, advertising logos, traffic signals, clothing, etc.

SOCIAL (PHATIC) MEANING: meaning that creates and/or maintains social contact between communicators.

SOCIOLINGUISTICS: the study of language variation according to social class, ethnicity, gender, and formality.

SOUND SYMBOLISM: aspects of the pronunciation of words that suggest aspects of their meaning; e.g., the vowel sounds of *teeny* as suggestive of smallness.

STYLE: the choice of expression that reflects contextual factors such as the formality of the situation.

SUBJECT OF A SENTENCE: The phrase that when integrated with a predicate completes a basic clause. See chapter on Basic Clause Patterns.

SYNCHRONIC LINGUISTICS: the study of a language at a particular time, i.e., as abstracted from historical change.

SYNTAX: linguistic component dealing with the system of sentence structure. **TEXT:** one or more spoken or written utterances that form a coherent whole.

TEXTUAL MEANING: meaning that derives from utterances put together to form (part of) a text.

THEORETICAL LINGUISTICS: that branch of language study that attempts to specify (1) the nature of language, its acquisition, and its use; and (2) appropriate models and other technical devices used to describe language.

THEORY: general statements based on observation that describe the nature of some domain such as language, partially verified by testing hypotheses that derive logically from the statements, and which explain phenomena in the domain.

UNACCEPTABLE: evoking a negative response for *any reason* whatever; the broadest category of disapproval of language.

UNGRAMMATICAL (DESCRIPTIVE): not in accord with linguistic competence, i.e., not natural, normal, or in agreement with the intuitions of the native speaker. UNGRAMMATICAL (PRESCRIPTIVE): not in accord with rules of correctness.

USAGE: rules designed to ensure that standard English is used in formal writing and speaking and to make our writings and speeches clear, efficient, and effective, given our purposes in communicating and the characteristics of our audiences.

Answer: The word *bookkeeper* has three double letters in a row.