CHAPTER

1 The study of language

CHAPTER PREVIEW

KEY TERMS

Competence and performance
Functional grammar
Generative grammar
Grammar and pragmatics
Grammaticality and acceptability
Linguistic creativity
Linguistic rules and principles
Modes of linguistic communication
Prescriptive and descriptive grammar
Semiotics

This chapter provides an overview of how linguists approach the study of language. It describes language as one of many different systems of communication, a system that is unique to human beings and different from, for instance, the systems of communication that animals employ. Language exists in three modes: speech, writing, and signs (which are used by people who are deaf). Although all languages (with the exception of sign languages) exist in spoken form, only some have written forms. To study language, linguists focus on two levels of description: **pragmatics**, the study of how context (both social and linguistic) affects language use, and **grammar**, the description of how humans form linguistic structures, from the level of sound up to the sentence.

Introduction

Unless a human being has a physical or mental disability, he or she will be born with the capacity for language: the innate ability to speak a language, or in the case of someone who is deaf, to sign a language (i.e. use gestures to communicate). This capacity does not involve any kind of learning – a young child, for instance, does not need to be taught to speak or sign – and occurs in predictable stages, beginning with the babbling cries of an infant and culminating in the full speaking abilities of an adult.

The study of language is conducted within the field of linguistics. Contrary to popular belief, linguists are not necessarily polyglots – individuals fluent in many languages. Instead, their primary interest is the scientific study of language. Like a biologist studying the structure of cells, a linguist studies the structure of language: how speakers create meaning through combinations of sounds, words, and sentences that ultimately result in texts – extended stretches of language (e.g. a conversation between friends, a speech, an article in a newspaper). Like other scientists, linguists examine their subject matter – language – objectively. They are not interested in evaluating "good" versus "bad" uses of language, in much the same manner that a biologist does not examine cells with the goal of determining which are "pretty" and which are "ugly." This is an important point because much of what is written and said about language is highly evaluative: many teachers tell their students not to use a word like *ain't* because it is "ignorant" or the product of "lazy" speech patterns; similar sentiments are expressed in popular books and articles on English usage. Linguists do have their biases, a point that will be covered later in this chapter in the section on the ideological basis of language, but it is important to distinguish the goal of the linguist – describing language – from the goal of the teacher or writer: prescribing English usage, telling people how they should or should not speak or write.

Because linguistics is multidisciplinary, specialists in many disciplines bring their own expertise to the study of language. Psychologists, for instance, are interested in studying language as a property of the human mind; they have contributed many insights into such topics as how people acquire language. Anthropologists, on the other hand, have been more interested in the relationship between language and culture, and early work by anthropologists provided extremely valuable information about, for instance, the structure of the indigenous languages of the Americas. Prior to the study of these languages in the early twentieth century, most of what was known about human language was based upon the investigation of western languages, such as Greek, Latin, and German: languages that are structurally quite different from the indigenous languages of the Americas. This new knowledge forced linguists to reconceptualize the notion of human language, and to greatly expand the number of languages subjected to linguistic analysis. Other disciplines – sociology, computer science, mathematics, philosophy, to name but a few – have likewise brought their interests to the study of language.

Despite the many influences on the study of language, it is possible to isolate some basic principles that have guided all studies of language, and it is these principles that will serve as the focus of this chapter. The chapter opens with a discussion of language as one part of a larger semiotic system. Semiotic systems are systems of communication and include not just human language but, for instance, gesture, music, art, and dress as well. Like any system, language has structure, and the succeeding sections provide an overview of this structure: the modes (speech, writing, signs) in which language is transmitted, and the conventions (both linguistic and social) for how sounds, words, sentences, and texts are structured. Speakers of English know that the phrase *day beautiful* is not English because as speakers of English they have an unconscious knowledge of a rule of English sentence structure: that adjectives come before nouns (e.g. *beautiful day*), not after them. In addition, speakers of English know not to ask directions from a stranger by saying *Tell me where the museum is* because, according to conventions of politeness in English usage, such an utterance is impolite and would be better phrased more indirectly as *Could you tell me where the museum is?*

Because linguists are engaged in the scientific study of language, they approach language, as was noted earlier, "dispassionately," preferring to describe it in an unbiased and objective manner. However, linguists have their biases too, and the next section explores the ideological basis of language: the idea that all views of language are grounded in beliefs about how language should be valued. The final section describes two competing theories of language – Noam Chomsky's theory of generative grammar and Michael A. K. Halliday's theory of functional grammar – and how these theories have influenced the view of language presented in this book.

Language as part of a semiotic system

Because language is a system of communication, it is useful to compare it with other systems of communication. For instance, humans communicate not just through language but through such means as gesture, art, dress, and music. Although some argue that higher primates such as chimpanzees possess the equivalent of human language, most animals have their own systems of communication: dogs exhibit submission by lowering their heads and tails; bees, in contrast, dance. The study of communication systems has its origins in semiotics, a field of inquiry that originated in the work of Ferdinand de Saussure in a series of lectures published in *A Course in General Linguistics* (1916).

According to Saussure, meaning in semiotic systems is expressed by **signs**, which have a particular form, called a signifier, and some meaning that the signifier conveys, called the signified. Thus, in English, the word *table* would have two different signifiers. In speech, it would take the form of a series of **phonemes** pronounced in midwestern American English as [teɪbəl]; in writing, it would be spelled with a series of **graphemes**, or

letters: t-a-b-l-e. Signifiers, in turn, are associated with the signified. Upon hearing or reading the word *table*, a speaker of English will associate the word with the meaning that it has (its signified). Other semiotic systems employ different systems of signs. For instance, in many cultures, moving the head up and down means 'yes'; moving the head left to right means 'no.'

Although semiotic systems are discrete, they often reinforce one another. In the 1960s it was common for males with long hear, beards, torn blue jeans, and necklaces with the peace sign on them to utter expressions such as "Far out" or "Groovy." All of these systems – dress, personal appearance, language – worked together to define this person as being a "hippie": someone who during this period lived an unconventional lifestyle in rebellion against the lifestyles of mainstream society. If a delivery person shows up at someone's house with a large box, and asks the person where the box should be placed, the person might respond "Put it there" while simultaneously pointing to a location in his or her living room. In this case, the particular linguistic form that is uttered is directly related to the gesture that is used.

The fact that language and gestures work so closely together might lead one to conclude that they are part of the same semiotic system. But there are many cases where gestures work quite independently of language and therefore are sometimes described as paralinguistic in nature. In the middle of one of the 1992 presidential debates in the United States, the first President Bush was caught on camera looking at his watch while one of the other candidates was answering a question. This gesture was interpreted by many as an expression of impatience and boredom on President Bush's part, and since the gesture had no connection with any linguistic form, in this instance it was clearly part of its own semiotic system.

One of the hallmarks of the linguistic sign, as Saussure argued, is its arbitrary nature. The word *window* has no direct connection to the meaning that it expresses: speakers of English could very well have chosen a signifier such as *krod* or *fremp*. An examination of words for *window* in other languages reveals a range of different signifiers to express the meaning of this word: *fenêtre* in French; *ventana* in Spanish; *Fenster* in German; *ikkuna* in Finnish. Although most linguistic signs are arbitrary, there are instances where signs bear an iconic relationship to the meanings that they express. If in describing a recently viewed movie an individual utters *It was so loooong*, extending the length of the vowel in *long*, the lengthening of the vowel reinforces the excessive length of the movie. In the sentence *The cow mooed for hours*, the verb *mooed* mimics the sound that a cow makes. Likewise, in *The bee buzzed by my ear*, *buzzed* imitates the sound of a bee. English also has phonesthemes: sounds associated with particular meanings. The consonant [ʃ] at the end of a word is suggestive of rapid motion: *crash*, *bash*, *slash*, *smash*, *gash*.

However, not all words ending in this consonant have this meaning (e.g. *fish*, *dish*). Moreover, if there were true iconicity in language, we would find it more consistently cross-linguistically. Sometimes so-called onomatopoeic words occur across languages. For instance, the equivalent of

English *beep* and *click* can be found in French: *un bip* and *un click*. However, *whisper*, which is iconic in English, has equivalents in French and Spanish – *le chuchotement* and *el susurro* – that are different in form but iconic within French and Spanish. Thus, while it is clear that signs can be iconic, for the most part they are, following Saussure, arbitrary in nature.

The modes of language

Signifiers are transmitted in human language most frequently through two primary modes: speech and writing. A third mode, signing, is a system of communication used by individuals who are deaf. Contrary to popular belief, sign languages are not merely gestured equivalents of spoken languages. American Sign Language (ASL), for instance, has its own grammar, and those who use it go through the same stages of language acquisition as speakers of oral languages do. In fact, it is not uncommon for children of deaf parents who are not deaf themselves to learn a sign language as their first language, and a spoken language as a second language.

In linguistics, it is commonly noted that speech is primary and writing secondary. Linguists take this position because all languages are spoken (with the exception of dead languages such as Latin, which now exist only in written form), and only a subset of these languages are written. All children will naturally acquire the spoken version of a language if they are exposed to it during the formative period of language acquisition. However, to become literate, a child will need some kind of formal schooling in reading and writing. In many respects, though, calling speech "primary" and writing "secondary" unfortunately implies that writing has a second-class status when compared with speech. It is more accurate to view the two modes as having different but complementary roles. For instance, in most legal systems, while an oral contract is legally binding, a written contract is preferred because writing, unlike speech, provides a permanent record of the contract. Thus, if the terms of the contract are disputed, the written record of the contract can be consulted and interpreted. Disputes over an oral contract will involve one person's recollection of the contract versus another person's.

While writing may be the preferred mode for a contract, in many other contexts, speech will be more appropriate. Because the most common type of speech – face-to-face conversations – is highly interactive, this mode is well suited to many contexts: casual conversations over lunch, business transactions in a grocery store, discussions between students and teachers in a classroom. And in these contexts, interactive dialogues have many advantages over writing. For instance, individuals engaged in conversation can ask for immediate clarification if there is a question about something said; in a letter to a friend, in contrast, such immediacy is lacking. When speaking to one another, conversants are face to face and can therefore see how individuals react to what is said; writing creates distance between writer and reader, preventing the writer from getting any reaction from the reader. Speech is oral, thus making it possible to use intonation to emphasize words or phrases and express emotion; writing has punctuation,

but it can express only a small proportion of the features that intonation has. Because speech is created "on-line," it is produced quickly and easily. This may result in many "ungrammatical" constructions, but rarely do they cause miscommunication, and if there is a misunderstanding, it can be easily corrected. Writing is much more deliberate, requiring planning and editing and thus taking much more time to produce.

Because of all of these characteristics of writing, if an individual desires a casual, intimate encounter with a friend, he or she is more likely to meet personally than write a letter. Of course, technology has made such encounters possible with "instant messaging" over a computer. And if someone wishes to have such an encounter with a friend living many miles away, then this kind of on-line written "chat" can mimic a face-to-face conversation. But because such conversations are a hybrid of speech and writing, they still lack the intimacy and immediacy of a face-to-face conversation.

While speech and writing are often viewed as discrete modes, it is important to note, as Biber (1988) has demonstrated, that there is a continuum between speech and writing. While speech is in general more interactive than writing, various kinds of spoken and written English display various degrees of interactivity. For instance, Biber (1988: 102, 128) found that various linguistic markers of interactive discourse (or "involved" discourse, to use his term), such as first and second person pronouns, contractions, and private verbs such as *think* and *feel*, occurred very frequently in telephone and face-to-face conversations but less frequently in spontaneous speeches, interviews, and broadcasts. In addition, while various kinds of writing, such as academic prose and official documents, exhibited few markers of interactive discourse, other kinds of written texts, particularly personal letters, ranked higher on the scale of interactivity than many of the spoken texts that were analyzed.

What Biber's findings demonstrate is that how language is structured depends less on whether it is spoken or written and more on how it is being used. A personal letter, even though it is written, will contain linguistic features marking interactivity because the writer of a letter wishes to interact with the individual(s) to whom the letter is written. On the other hand, in an interview, the goal is not to interact necessarily but to get information from the person (or persons) being interviewed. Therefore, interviews, despite being spoken, will have fewer markers of interactivity and contain more features typically associated with written texts.

Studying linguistic structure

Whether it is spoken, written, or signed, every language has structure, which can be described, as Leech (1983: 21–4) notes, by postulating:

(1) **rules** governing the pronunciation of sounds; the ways that words are put together; the manner in which phrases, clauses, and sentences are structured; and, ultimately, the ways that meaning is created;

(2) **principles** stipulating how the structures that rules create should be used (e.g. which forms will be polite in which contexts, which forms will not).

Rules are studied under the rubric of **grammar**, principles within the province of **pragmatics**. To understand what is meant by rules and principles, and why they are studied within grammar and pragmatics, consider why a three-year-old child would utter a sentence such as *I broked it* [ai broʊkt ɪt] to his father, who just entered a room that the child was playing in to discover that the child had broken a wheel off a truck that he had been playing with.

To account for why the child uttered *I broked it* rather than, say, *Breaked it I*, it is necessary to investigate the linguistic rules the child is using to create the structure that he did. Linguistic rules are different from the rules that people learn in school: "Don't end sentences with prepositions"; "Don't begin a sentence with *but*"; "Don't split infinitives." These are **prescriptive rules** (discussed in greater detail in the next section) and are intended to provide guidance to students as they learn to speak and write so-called Standard English. Linguistic rules, in contrast, serve to describe what people know about language: the unconscious knowledge of language they possess that is part of what Noam Chomsky describes as our linguistic competence. Even though the sentence the child uttered does not conform to the rules of Standard English – the past tense form of the verb *break* is *broke*, not *broked* – it provides evidence that the child is aware of the rules of English grammar. He has applied a past tense ending for the verb, spelled *-ed* in writing, but has not reached a stage of acquisition where he is able to recognize the difference between regular and irregular verb forms.

Rules of grammar operate at various levels:

Phonetics/Phonology: This level focuses on the smallest unit of structure in language, the phoneme. Linguistic rules at this level describe how sounds are pronounced in various contexts. For instance, there is a rule of **voicing assimilation** in English that stipulates that when a past tense marker is added to the stem of a verb, the last sound in the stem determines whether the marker is **voiced** or **unvoiced** (i.e. whether or not the vocal cords vibrate when the consonant is pronounced). Thus, even though the child uses the wrong past tense form, the past tense marker is pronounced as /t/ because the last sound in the stem, /k/, is unvoiced. Had the stem been *kill*, which ends in voiced /l/, the past tense marker would have been voiced /d/. The sound system of English and the rules that govern it are discussed in detail in Chapter 7.

Morphology: The next level of structure is the morpheme, the smallest unit of meaning in language. Rules of morphology focus on how words (and parts of words) are structured. At the beginning of the sentence, the child uses the pronoun *I* rather than *me* because English has rules of case assignment – pronouns functioning as subject of a sentence take the **subjective form** (sometimes referred to as the nominative case)

rather than the **objective form** (or accusative case). And because the number of the subject is singular, *I* is used rather than the plural form *we*. Rules of morphology describe all facets of word formation, such as how prefixes and suffixes are added, and are described in Chapter 6.

Syntax: The largest level of structure is the clause, which can be analyzed into what are called **clause functions**: subject, predicator, object, complement, and adverbial. The child's utterance, *I broked it*, is a **main clause** – it can stand alone as a sentence, as opposed to a subordinate clause, which has to be part of an independent clause – and can be analyzed as containing a subject (*I*), a predicator (*broked*), and a direct object (*it*). At the level of syntax, there are many rules stipulating how constituents within a clause are grouped. For instance, all languages have constraints on how constituents should be ordered. Because English is an SVO (subject–verb–object) language, the utterance is *I broked it* rather than *I it broked* (an SOV word order, found in languages such as Japanese). Chapter 5 contains an extensive discussion of the syntax of English, specifically how words, phrases, clauses, and sentences are structured.

Semantics: Because meaning is at the core of human communication, the study of semantics cuts across all of the other levels thus far discussed. At the level of sound, in the words *kick* /kɪk/ and *sick* /sɪk/, the choice of /k/ vs. /s/ results in words with two entirely different meanings. At the level of morphology, placing the prefix *un-* before the word *happy* results in a word with an opposite meaning: *unhappy*. At the level of syntax, the sentence *Jose wrote to Carla* means something entirely different than *Carla wrote to Jose* because in English, word order is a crucial key to meaning. But even though meaning is present at all levels of linguistic structure, the study of semantics is typically focused on such topics as the meaning of individual words (**lexical semantics**) and the ability of words to refer to points in time or individuals in the external world (**deixis**). For instance, the verb *broked* in the child's utterance has a specific meaning (e.g. the *Merriam-Webster Online Dictionary* defines *break* as "to separate into parts with suddenness or violence"), and is marked as occurring during a specific time (the past, as indicated by the past tense verb ending *-ed*). The utterance also contains the first person pronoun *I*, which refers to the speaker (in this case the child), and the pronoun *it*, which refers to something not in the text but in the context (the wheel on the child's car). Lexical semantics, deixis, and other topics related directly to the study of semantics are discussed in Chapter 6.

The various rules that were described above are part of the study of grammar. Grammar is a word with many meanings. To some, it involves mainly syntax: a study of the parts of speech (nouns, verbs, prepositions, etc.) or syntax in general ("I studied grammar in High School"). To others, it covers usage: correct and incorrect uses of language ("My grammar isn't very good"). For many linguists, however, grammar involves the study of

linguistic rules that are part of our linguistic **competence**: the unconscious knowledge of the rules of a language that any fluent speaker possesses. Writing a grammar of a language therefore involves codifying the rules that are part of any speaker's linguistic competence: making explicit that in English, for instance, the voicing of a past tense marker depends upon whether the sound preceding it is voiced or unvoiced, or that when a pronoun is used as subject of a sentence the subject form of the pronoun will be used rather than the objective form.

When studying rules of grammar, one really does not leave the speaker's brain, since the focus of discussion is the abstract properties of language that any human (barring disability) is naturally endowed with. But understanding language involves more than describing the psychological properties of the brain. How language is structured also depends heavily on context: the **social context** in which language is used as well as the **linguistic context** – the larger body of sentences – in which a particular linguistic structure occurs. The study of this facet of language is conducted within the domain of **pragmatics**, which is concerned less with *how* grammatical constructions are structured and more with *why* they have the structure that they do.

Thus, to fully understand the meaning of *I broked it*, it is useful to see the larger context in which this construction occurred, specifically the father's response to it:

Child: I broked it.
Father: That's ok. Let's see if we can fix it.

When individuals communicate, they arrive at interpretations of utterances by doing more than simply analyzing their structure; their interpretations are also based on a variety of purely social considerations: the age of communicants as well as their social class, level of education, occupation, and their relative positions on the power hierarchy (i.e. whether they are **equals**, **disparates**, or **intimates**). In the excerpt above, the form of each utterance is very much determined by the ages of the father and son and the power relationship existing between them. Because the child is young and has not fully mastered the grammar of English, he uses a non-standard verb form, *broked*, rather than the standard form *broke*. And because of the child's age, the father does not respond with an utterance like *Did you mean to say "broke"?* because he understands the child is young and that it would be inappropriate to correct him.

If the child were older (say, in high school), the father may very well have corrected his speech, since in his role as parent, he and his son are disparates: he is a **superordinate** (i.e. is higher on the power hierarchy), his son a **subordinate** (i.e. lower on the power hierarchy). And given this imbalance in power, the father could feel entitled to correct his son's grammar. But other factors, such as education and social class, would also affect language usage in this situation. If both the son and father spoke a non-standard variety of English in which *broked* was commonly used, then a correction of the type described above might never occur. The role that the social context plays in language usage is discussed in Chapter 3.

In addition to describing the effect of the social context on language usage, it is important to also study the linguistic context and its effect on how language is structured. This involves studying language at the level of text. Texts are typically extended stretches of language. They have an overall structure (e.g. a beginning, a middle, and an end) and markers of **cohesion**: linguistic devices that tie sections of a text together, ultimately achieving **coherence** (i.e. a text that is meaningful). The exchange between the son and father above occurs at the start of a text. Many texts have standard beginnings. For instance, a conversation between friends may begin with a greeting: *Hi, how are you? – I'm fine, how are you?* Other texts, like the one between son and father, just start. The son utters *I broked it* simply because this is what he needs to say when his father enters the room. Many texts are highly structured: press reportage begins with a headline, followed by a byline and lead (a sentence or two summing up the main point of the article). Other texts are more loosely structured: while a conversation between friends might have an opening (greeting) and an ending (a salutation), the middle part may consist of little more than speaker **turns**: alternations of people speaking with few restrictions on topics discussed.

But a text will not ultimately achieve coherence unless there are linguistic markers that tie individual parts of the text together. The father responds to the son's utterance by saying *That's ok*. The word *That* is a pronoun that refers back to what the child said in the first utterance. Typically pronouns refer to a single noun phrase (e.g. *it* in the child's utterance refers to the broken wheel on his truck). But in casual conversation it is common to find pronouns with very broad **reference**, in this case a pronoun, *That*, referring to the entire sentence the child utters. This is one type of cohesion, what Halliday and Hasan (1976) refer to as reference: an expression that typically refers back to something said in a previous part of the text, and that serves to provide linkages in texts. The structure of texts is discussed in Chapter 4.

One major difference between the study of grammar and pragmatics is that grammar deals with "structure," pragmatics with "use." The rule of grammar for forming imperative sentences such as *Tell me how to get to the Kennedy Library* is fairly straightforward: the base (or infinitive) form of the verb is used, *Tell*, and the implied subject of the sentence, *you* (*You tell me how to get to the Kennedy Library*), is omitted. Every imperative sentence in English is formed this way (with the exception of first person imperatives like *Let's dance*). Thus, rules of grammar can be posited in fairly absolute terms. This is not to suggest that rules do not have exceptions. The rule of passive formation in English stipulates that a sentence in the **active voice** such as *The mechanic fixed the car* can be converted into a sentence in the **passive voice**, *The car was fixed by the mechanic*, by:

(1) making the direct object of the sentence (*the car*) the subject of the passive,
(2) adding a form of *be* (*was*) that agrees in number with the subject of the passive and retains the same tense as the verb in the active,
(3) converting the verb in the active into a participle (*fixed*),