Chapter 1

What Is Linguistics?

The field of linguistics, the scientific study of human natural language, is a growing and exciting area of study, with an important impact on fields as diverse as education, anthropology, sociology, language teaching, cognitive psychology, philosophy, computer science, neuroscience, and artificial intelligence, among others. Indeed, the last five fields cited, along with linguistics, are the key components of the field of cognitive science, the study of the structure and functioning of human cognitive processes.

In spite of the importance of the field of linguistics, many people, even highly educated people, will tell you that they have only a vague idea of what the field is about. Some believe that a linguist is a person who speaks several languages fluently. Others believe that linguists are language experts who can help you decide whether it is better to say “It is I” or “It’s me.” Yet it is quite possible to be a professional linguist (and an excellent one at that) without having taught a single language class, without having interpreted at the UN, and without speaking any more than one language.

What is linguistics, then? Fundamentally, the field is concerned with the nature of language and (linguistic) communication. It is apparent that people have been fascinated with language and communication for thousands of years, yet in many ways we are only beginning to understand the complex nature of this aspect of human life. If we ask, What is the nature of language? or How does communication work? we quickly realize that these questions have no simple answers and are much too broad to be answered in a direct way. Similarly, questions such as What is energy? or What is matter? cannot be answered in a simple fashion, and indeed research in physics is carried out in numerous subfields, some of which involve investigating the nature of energy and matter. Linguistics is no different: the field as a whole represents an attempt to break down the broad questions about the nature of language and communication into smaller,
more manageable questions that we can hope to answer, and in so doing establish reasonable results that we can build on in moving closer to answers to the larger questions. Unless we limit our sights in this way and restrict ourselves to particular frameworks for examining different aspects of language and communication, we cannot hope to make progress in answering the broad questions that have fascinated people for so long. As we will see, the field covers a surprisingly broad range of topics related to language and communication.

Chomsky (1965, 1972) proposes that three models are central to the general study of (spoken) language. The first he calls a model of linguistic competence, because it models what fluent speakers know when they know a language: “At the crudest level of description, we may say that a language associates sound and meaning in a particular way: to have command of a language is to be able, in principle, to understand what is said, and to produce a signal with the intended semantic interpretation” (1972, 115). Such a model can be represented as in figure 1.1.

Figure 1.1
A competence model

The second model Chomsky calls a model of linguistic performance, because it models how speakers actually use their linguistic competence. Such a model reflects not just a speaker’s knowledge of his or her language, but also extralinguistic influences on speaking such as memory limitations and the speaker’s purposes: “To study a language, then, we must attempt to dissociate a variety of factors that interact with underlying competence to determine actual performance” (1972, 116). Chom-
Chomsky’s idea is that a performance model should contain a competence model as a part: “Any... model for the production [and comprehension] of sentences must incorporate the system of grammatical rules” (1972, 117). Such a model can be represented as in figure 1.2. Reading this model from left to right gives a model of speech production, and reading it from right to left gives a model of speech comprehension.

Chomsky’s third device is called a language acquisition model, because it reflects the changes in a person’s competence and performance as he or she acquires a language and thus provides a model of the child’s language-learning achievements. Such a model can be represented as in figure 1.3.

The study of performance and acquisition models is traditionally a major concern of psycholinguistics and neurolinguistics. Although originally proposed for spoken languages, these three models have been extended to cover other realizations of language as well, such as sign languages, reading, and writing.

In sum, Chomsky’s three models can be interpreted as frameworks for which the following questions are addressed:

1. What is the nature and structure of human language?
2. How is language put to use in thought and communication?
3. How do language and our ability to use it develop?

Part I of the text contains chapters dealing primarily with the structural components of language. Chapter 2, “Morphology,” is concerned with understanding the relatedness of words and with the way morphological units combine to create new words. Chapter 3, “Phonetics and Phonemic