

# CHAPTER ONE

## Introduction

### 1.1 What is the German Language?

What is the German language? This is the way most textbooks on German start. The answer we want to give is perhaps rather surprising, namely that ‘German’ is not a useful linguistic concept when the question is looked at from the perspective of modern linguistics. First of all, however, we should consider some of the answers other writers have provided (for instance, Barbour and Stevenson 1990; Russ 1994; Stevenson 1997; Barbour 2000) and the different perspectives they involve.

The starting point for most people is that the answer is obvious: German is the language spoken by Germans. In other words language is tied to nationality. But this is not the full picture. Obviously, German is spoken in Austria and Switzerland, too. In addition, there are a small number of citizens of the Czech Republic who speak German as their first language and bilingual French citizens live in Alsace. So, nationality is not really the answer.

There is also the historical dimension: German is the modern development of the language spoken by various Germanic tribes, for instance, the Saxons, the Franks, the Langobards, in the first millennium AD. Certain changes occurred which differentiated German from the parent language. The Germanic languages include English, Dutch, German, Danish, Norwegian and Swedish, and if we compare them we can see consistent relationships of sound in the vocabulary, for instance English [p] as in *pound*, *hop* corresponds to German [pf] as in *Pfund*; *hüpfen*, English [t] as in *ten*, *net* corresponds to German [ts] as in *zehn*, *Netz*. In chapter 8 we shall look at the historical aspect of the language with more examples, but for the moment we have to be aware that languages do not change uniformly and variation of form is the norm. Furthermore, the

different tribes referred to above did not speak a common language and settled in different parts of Europe, too: a group of the Saxons invaded England, the Franks settled in northern France and central Germany and the Langobards ended up in northern Italy, giving their name to Lombardy. So we would not expect uniformity of development in languages as widespread as these. (Consider, for instance, the lack of uniform development evidenced by the differences between British and American English which were separated over 300 years ago.) Another aspect of linguistic history that we should note is that native speakers have little awareness of the history of their language and we shall see instances of this later, but a simple example will suffice here. The German word *fertig* was originally derived from *Fahrt* and meant 'ready to travel'; if this connection was still made by native speakers we would expect the adjective to be spelled *fährtig*. So, historical development will not provide the answer, either, to the question of what constitutes the German language.

In an attempt to overcome some of these problems, writers have tried to define a language using a combination of social and political factors and in some cases have added linguistic considerations such as mutual comprehensibility in order to deal with the problem of variation. But if we consider what are usually regarded as varieties of German, we find that many of them are mutually unintelligible, as much as English and Dutch are. The fact that they are closely related languages does not mean that speakers of each can understand one another. Let us take a speaker from the German side of the Dutch–German border and one from Bavaria. If they are speakers of the local dialects, they will understand one another only with the greatest difficulty. In some respects the Plattdeutsch speaker from the North has more in common linguistically speaking with an English speaker than with a Bavarian. For example, the former may well have initial [p] and [t] as in English, where the latter has [pf] and [ts]. Despite the fact that they live in the same political entity, Germany, pay the same central taxes, owe allegiance to the same flag, serve in the Bundeswehr, if they do military service, they do not seem to speak the same language. So mutual comprehensibility, it seems, is of little help in defining a language. Indeed, northern speakers will be able to understand their Dutch neighbours far better than they can understand their Bavarian compatriots, and in this important sense the North German and the Dutch speaker speak the same language. This means that from a linguistic point of view their national allegiance is irrelevant. Of course, they are each taught a different standard language in school, but this, too, is a political and social matter, not a linguistic one. The picture we end up with, if we look at geographical variation in language, is of a dialect continuum, a slowly changing set of partially overlapping linguistic systems which at the extremities may be very different indeed.

We shall return to the notion of nation and language in chapters 8 and 9 but for the moment we note that social, political and geographical factors will not help us to demarcate what it is we want to describe as the German language.

## 1.2 A Linguistic Description

The perspective of modern linguistics referred to in the first paragraph, sometimes called the generative enterprise, which we are using as the basis for much of what is said in this book, makes a clear distinction between political and social concerns and those that are purely linguistic. This is the view put forward in Chomsky (1980), who explains that for him the expression ‘language X’ (for example, ‘German’) is of no help and of no interest because a linguist’s main concern is with the nature of language itself. This is also our view; and so to take up again the question we asked at the beginning of this chapter, we would reiterate that the notion of the ‘German language’ defined historically, geographically, or socially is simply not helpful in deciding what constitutes a particular language. What we are concerned with are the structural properties and relationships internal to the system. To return to our simple example of initial consonants, what is important is that in one linguistic system [p] contrasts meaningfully with [t] and in another [pf] contrasts with [ts]. It does not matter that we call the first one English and the second one German, as far as linguistics is concerned.

So what sort of a view of language is the one we are putting forward here? Developed from the views of Chomsky and other generative grammarians, it sees language as one of the human cognitive systems, the one that we alone as a species have developed. Human beings develop language because they are genetically preprogrammed to do so; language is a biological function of humans just like bipedal gait. A young child will naturally get up onto her legs and walk. Of course, she has help from her carers but nevertheless at the right time under the right circumstances the child will be ready to walk. So, according to this theory, children will acquire language when they are ready to do so. Help is provided by the surrounding adult language, but we must note that this is not a teaching situation, merely a provision of material (linguistic data) for the children to work on, and they will acquire whichever language they are presented with. There is no gene to learn German; people learn German, rather than Swahili or Malay, as their native language because of an accident of birth.

Since the surrounding adult language determines which specific linguistic system a child learns in the first months of acquisition, we can see quite easily how variation is perpetuated. Many North German children

acquire initial [p] and [t] where Bavarian children acquire initial [pf] and [ts]; similarly, a child from Hamburg will grow up saying *Brötchen* and *Guten Tag*, whereas a child from Munich will say *Semmel* and *Grüß Gott*. It is only at a much later stage, that of schooling, that the influence of the standard language will be brought to bear on the child's linguistic development. Contact with other varieties relates to mobility, too; changing social groups brings speakers from different backgrounds together, whether children or adults. So as a person develops, linguistic development occurs at the same time. In most cases speakers do not have one homogeneous linguistic system, but end up using a number of variants, usually overlapping ones in linguistic terms. These overlapping systems are what are usually referred to as dialects. It is the grammatical systems of these dialects that are the main concern of theoretical and descriptive linguistics.

Linguistic description of the kind we want to introduce in this book is focused on the language itself and its structural characteristics. Out of all the possible features found in human language we want to present those features that are specific to German. This will enable us to offer at least a partial linguistic definition of German. The social and political aspects of German that we considered briefly in the previous section must not be forgotten, though. These are aspects of language use, how the linguistic system we shall be describing is used by native speakers in their everyday lives. We make a clear distinction between the language itself and the use that is made of it. This distinction has a long history, going back to Saussure's (1916) distinction of **langue** (the linguistic system) and **parole** (actual speech). A somewhat similar distinction is made by Chomsky (1965) with respect to an individual speaker: here the terms are **competence** and **performance**. Competence is the term used for a native speaker's knowledge of language, as represented in the mental grammar. Performance is the way this knowledge is put to use. Performance is what we see (or hear); competence is the underlying linguistic system we make inferences about. We shall be looking at the former in particular in chapters 2–3 and 5–7, and in this sense most of what we have to say about the competence of a native speaker of German is contained in these chapters. Chapter 4 is an introduction to basic articulatory phonetics; this enables the linguist to talk about speech in an objective way and carry out phonological analyses. Chapter 8, which discusses the historical dimension, covers both language-internal and external aspects of the linguistic development, that is to say, both general principles of language change and the social and political circumstances that brought about change. In chapter 9 we will be concerned with performance, not just with linguistic performance, but also with communicative performance. The process of socialization gives the native speaker a set of rules to govern his or her behaviour, including linguistic output, according to the

particular situation, and in this sense it is possible to take over the notion of competence to this area by describing such sets of rules as communicative competence. This is not, however, a notion we shall be particularly concerned with in this book.

A further distinction drawn in the theory proposed here was made by Chomsky (1986): that between **E-language** and **I-language**. This has to do with the relevance ascribed to data within linguistics, and its relation with the theoretical orientation of the discipline. E-language is the language outside the speaker, collected as data for analysis. This was virtually the only approach to language before what is generally referred to as the Chomskyan revolution, the radical change in the way language was viewed which was initiated with Chomsky's (1957) work *Syntactic Structures* and led to the development of generative grammar. This is the notion that a set of rules and principles exists which allows all utterances (and only those) of a particular language to be formed, or generated, and that, furthermore, there is an even more general set of universal principles underlying the grammars of all languages. This is why describing natural languages in these terms is often referred to as the generative enterprise. I-language, on the other hand, relates to the knowledge of those specific and general rules and principles of language a native speaker has; it is internal to the speaker and can only be studied indirectly. Characterization of I-language is, for all those concerned with the generative enterprise, the research programme of linguistics. Before linguists can look at how language is used in context or acquired by children, they have to know the nature of the faculty being used or acquired.

### 1.3 The Grammar and Grammatical Knowledge

We referred in the previous section to grammar and to grammatical systems. We must say something more here about what we mean by the term **grammar**. In non-technical and language-teaching contexts this word usually refers to the way in which sentences are put together and the use of the right form of words in the sentence, for example, the appropriate ending on the verb. In modern linguistics, especially that inspired by Chomsky's work, the term has a broader application: it means the whole of the linguistic system stored in the brain of a native speaker. It therefore covers the way in which sentences are constructed, the way words are constructed, the systematic relationships of meaning in words and sentences, and the sound system of a language. As mentioned above, we shall be taking these separately and devoting a chapter to each, in their particular relations to the German language. The technical terms for each are the chapter titles: chapter 2 deals with **syntax**, the way sentences are put together; chapter 3 deals with **morphology**, the internal

structure of words; chapter 4 deals with **phonetics**, or German pronunciation, and chapter 5 with **phonology**, the system of meaningful distinctions of sounds; chapter 6 deals with **lexis**, the structure of the system of words and their semantic relationships; chapter 7 deals with **stylistics**, that is, the additional ways in which the language encodes meaning and creates particular effects.

To return to our notion of grammar as the total native-speaker knowledge of the language, we are assuming that this knowledge is of two types: universal and language-specific. Universal characteristics may themselves be of two types: substantive, which apply identically to all languages and are called **principles**, and variable, which apply in different ways across languages and are called **parameters**. It is the existence of these two types of principle which explains the term ‘principles and parameters theory’, frequently used to define this type of theory. An example of the former type is **structure-dependency**. All human languages have this characteristic; any operation in syntax depends on knowledge of the structure of the sentence. Take, for instance, the relationship between statements and questions in German. (1) and (2) are related in just this way.

- (1) Hans geht morgen in die Stadt  
*Hans will go to town tomorrow*
- (2) Geht Hans morgen in die Stadt?  
*Will Hans go to town tomorrow?*

All native speakers of German know that, in the formation of a question, it is the verb that moves to the front of the sentence. ‘Verb’ is an element of syntactic structure; it does not mean ‘the second word’, for instance, even though in (1) it is the second word. It does not matter how many words occur before the verb, it is still the verb that is moved. Consider examples (3)–(8):

- (3) Die Frau geht morgen in die Stadt  
*The woman will go to town tomorrow*
- (4) Geht die Frau morgen in die Stadt?  
*Will the woman go to town tomorrow?*
- (5) Die alte Frau geht morgen in die Stadt  
*The old woman will go to town tomorrow*
- (6) Geht die alte Frau morgen in die Stadt?  
*Will the old woman go to town tomorrow?*

- (7) Die alte Frau, die eine Freundin meiner Mutter ist, geht morgen in die Stadt  
*The old woman, who is a friend of my mother's, will go to town tomorrow*
- (8) Geht die alte Frau, die eine Freundin meiner Mutter ist, morgen in die Stadt?  
*Will the old woman, who is a friend of my mother's, go to town tomorrow?*

The questions in (4), (6) and (8) all begin with the verb *geht*, even though the corresponding statements in (3), (5) and (7) have different numbers of words before the verb, showing that the verb must be something we define in a way dependent on sentence structure, and not merely in relation to the linear structure – the actual number and position of words – in a sentence. Chapter 2 deals with such matters in detail. All that has to be noted here is that this kind of relationship, structure-dependency, is a characteristic of all languages. It contrasts with simple mathematical operations such as order reversal, as in (9) and (10), which never occur in human languages.

- (9) 1 2 3 4 5 6  
 (10) 6 5 4 3 2 1

The other kind of universal, a parameter, is a characteristic of all languages which is variable in its manifestation in any particular language. A very good example of this is the **Pro-drop** parameter, which encapsulates the information that all languages can have subjects in sentences, but some do not require the position of subject to be filled. Compare the German example in (11) with the Italian one in (12).

- (11) Ich spreche mit Ihrer Frau  
*I speak with your wife*
- (12) Parlo con la Sua signora  
*I-speak with (the) your wife*  
*I'm talking to your wife*

The German sentence requires the subject pronoun *ich*; Italian does not require *io*; use of the pronoun in Italian indicates an emphatic contrast. Languages can be divided into two sorts: the Pro-drop languages like Italian, Spanish and Arabic, where the subject position need not be filled, and the non-Pro-drop languages like English, French and German. It is assumed that during acquisition of their native language children know that languages can be of either sort and that the input data of the language used around them gives them the evidence as to which type their particular language belongs to. In such cases the parameter is said to

become fixed one way or the other. We shall briefly mention the Pro-drop parameter again in chapter 2 but it will not be a subject of much concern to us; here it is used merely for illustration of what is meant by a parameter.

There are universals at all linguistic levels. There are phonological ones relating to syllable structure, for instance, which we shall consider in chapter 5, and others requiring certain feature co-occurrences; for instance, if a language has nasals, they will be voiced. Semantics in particular is an area of universal features of language structure: meanings and their relationships are for the most part common to all languages, though they are encoded lexically in entirely language-specific ways, as the examples in chapter 6 will show.

Although we have separated out the various levels of linguistic structure, we have not asked the question as to how these levels are incorporated into the grammatical knowledge of the speaker. The traditional divisions are to some extent arbitrary: as we shall show in the chapters that follow, morphology and syntax are not neatly separated, nor are phonology and morphology. Syntactic structure encodes some of the meaning of the sentence. What has to be recognized is that all the different levels interact with one another in a number of ways and this has to be reflected in any model of grammatical knowledge. We shall take up this point again when we discuss modularity below.

It is necessary at this point to say something about linguistic models, which are a type of scientific model. A scientific model is like a metaphor (describing one thing in terms of another) in that it describes an object of study in a way which can be understood. But, unlike a metaphor, it does not merely involve description. It also potentially enables the investigator to make appropriate generalizations about the nature of the object. Some scientific models deal with the physical world, such as molecular structure. In the case of linguistics, however, our theories are about the structure and nature of knowledge, a representation of a mental capacity. There is not necessarily a direct relationship between the model and the object of study, though it could be argued that the more sophisticated a model becomes through constant refinement, the closer it might come to providing an actual picture of the object it represents. But on the whole the way linguistic knowledge is represented is to some extent independent of the knowledge itself, and over the past forty years many competing models have been proposed. In some cases the model may be a convenient way of stating what can be said in normal language; for instance, the observations relating to syntactic structure in (13) and (14) are equivalents.

(13)  $S \rightarrow NP VP$

(14) A sentence is made up of a noun phrase followed by a verb phrase



On the other hand, though representations in particular models cannot claim to mirror directly the structure of the stored knowledge, they do often make theoretical claims about it, and in such cases are not merely equivalent versions of the same claim. An example of this kind is provided by the difference between models that trade on notions of process and those that do not. This can be seen clearly in current theoretical work in phonology (see Lodge 1997). In German, native speakers know that there is a subset of the lexicon in which the stem-final consonant varies between voiceless and voiced, for example, *Rad* ‘bicycle’, ‘wheel’, pronounced [ra:t], of which the genitive is [ra:dəs]. (We consider the details of this phenomenon in chapter 5.) How are we to represent this knowledge? One way is to say that certain voiced consonants are devoiced at the end of a syllable, and that consonants that occur in such words, /b d g v z/, are stored in the **lexicon** (the list of words of the language) as voiced and that there must be a rule changing voiced to voiceless as appropriate. Such a theory claims that native speakers have phonological elements stored complete with their features (such as ‘voiced’) and rules of feature-changing.

This is quite different from the alternative view, which excludes such feature-changing rules from the outset as a matter of principle. (This kind of a priori or ‘from the outset’ requirement is usually referred to as constraining a theory.) In such an approach the stored forms have no specification of features such as ‘voiced’, which is added in the appropriate circumstances. Note that the data are the same and they instantiate the knowledge that German speakers have. It is the theoretical models that are different. A similar distinction between approaches to syntax can be found in the transformational approach (Chomsky 1965) and that of Generalized Phrase Structure Grammar (Gazdar et al. 1985).

This book is not the place to pursue these matters any further. It is our intention merely to draw the reader’s attention to the theoretical issues involved. As a general rule, we will not present alternative analyses of the data we discuss.

At this point we should point out that the term **rule** refers to a statement of observable regularities in linguistic structure; it is not used in a prescriptive sense. Thus (13) and (14) are rules to the extent that they specify what we find in all sentences of German. They are not on a par with commands such as ‘Thou shalt not kill’ or ‘Give way’.

We must now turn to a consideration of the status of the different areas (levels) of linguistic structure that are reflected in the separate chapters of our book. One of the assumptions of modern generative grammar is that certain areas of syntax, morphology and phonology are best seen as sub-areas or modules of linguistic knowledge. We are assuming that the brain organizes its knowledge into separate modules. One of these is responsible for sight, one for motor ability, one for

language, and so on. This would explain how a particular area may be damaged while leaving the others intact. A person may have a stroke and be unable to move his or her right arm but be perfectly able to speak. People may even be born with certain abilities impaired while others develop normally or even exceptionally well. See Smith and Tsimpli (1995) for a discussion of a young man with astonishing linguistic abilities but who was unable to carry out simple tasks such as dressing himself.

It seems that not only is the language module separate from other modules in the brain but that it is also specific to humans. As Felix and Fanselow (1987: 105) point out, a dog growing up in the same German family as a child, listening to roughly the same linguistic input, will not begin to speak German, nor will it respond only to German. And despite many attempts to teach animals such as chimpanzees to speak, or, more precisely, use language, the results, though fascinating, indicate that though the animals clearly possess semantic abilities, they cannot manipulate syntax. Syntactic knowledge, at least, is clearly only available to humans.

What we are assuming is thus that there are different levels of modularity. Language, like sight and hearing, is a module (see Smith and Tsimpli 1995: 30ff), but within the language module there are modules of a different type, sub-areas of interacting knowledge, each governed by its own specific universal principles and parametric variation of the kind we exemplified above. Modules at this level can be equated with sub-theories of language, such as the theory governing argument structures of lexical items, known as **theta theory** and discussed in chapter 6, or the theory governing the hierarchical ordering of syntactic phrases, known as **X-bar theory**, which is discussed in chapter 2. Not all linguists working within the principles and parameters theory share the same view about what constitutes a module, but we shall make the assumption here that in fact such sub-theories are autonomous modules of the language, representing separate, though interacting, areas of linguistic knowledge. Which parts of the language are taken to be separate modules has few consequences for the details of the linguistic principles themselves, as many linguists such as, for example, Stechow and Sternefeld (1988: 14ff.) point out.

Because the areas traditionally distinguished in linguistics such as syntax and morphology do not have the status of modules in terms of the overall theory of grammatical knowledge, we would expect to find that some modules of grammar relate to several such areas. Phonology furnishes good examples of the interrelationship of different modules and indeed the separateness or otherwise of a phonological component has been a focus of debate for a long time. For instance, the phonetic realizations of morphemes have to be accounted for. We have to decide

what the status of a phenomenon like Umlaut is. How does it fit into the grammatical structure as a whole? We shall see in chapters 3 and 5 that it is morphologically unpredictable but phonetically regular. Furthermore, it is not merely a question of morphological additions to a basic lexical form, as in *Schuh* – *Schuh+e*, but a phonetic feature, frontness, that carries a grammatical function. Intonation has both a semantic and a pragmatic function. In some instances it is the only means of knowing the meaning of a sentence. If we take the sentence in (15), when spoken it may have a falling intonation and main stress on *morgen* or a rising intonation and main stress in the same place:

- (15) Hans kommt morgen  
*Hans will come tomorrow*

With a falling intonation it is a statement, with a rising one a question. (For a treatment of German intonation, see Fox 1984.) Intonation interacts with syntax and with meaning. In chapter 3 we shall show that syntactic principles might be said to apply to what is traditionally called morphology. And in chapter 6 we shall see that syntactic principles such as those governing the representation of argument structures are at work in areas of what is traditionally assumed to be the lexicon. Terms like ‘morphology’, ‘syntax’ or ‘lexicon’ are therefore convenient terms for talking about language but they are not meant to represent the structure of linguistic knowledge. In this sense, they do not necessarily have what is sometimes referred to as psychological reality in terms of the way linguistic knowledge is organized.

## 1.4 Other Linguistic Knowledge

There is another area generally included in the discipline of linguistics, namely **pragmatics**. Pragmatics is the study of language use and as such is not part of the purely grammatical knowledge of native speakers. It is assumed that there are general principles governing language use, but they are not of the same kind as those we referred to above and will be discussing in chapters 2–3 and 5–7; language use is not subject to purely linguistic principles. Linguistic knowledge interacts with a speaker’s mental encyclopaedia (Sperber and Wilson 1995), whenever we use language in a context. This division between language in isolation and language in use underlies important divisions within linguistics in terms of sub-areas of the discipline such as syntactic theory on the one hand, which is concerned with how humans put sentences together, and sociolinguistics on the other, which investigates the variable linguistic usage in various

contexts, something we discuss in chapter 9. This division is also an area of theoretical debate. For instance, those who have a functional view of language, that is that the forms are determined by the use we put them to (for example, Halliday 1973, 1994), question whether it even makes sense to consider linguistic knowledge as an object of study out of context. Our view is that a cognitive theory of language and a functional one are quite compatible, provided the function is not seen as *determining* the forms of language. The theories in this case relate to different aspects of language, its nature and its use, respectively.

To return to pragmatics, we can see that it has to do with certain types of meaning. We have already noted that semantics deals with meaning, so let us consider the difference between semantics and pragmatics. In (16) we give a simple German sentence:

- (16) Das Wasser ist heiß  
*The water is hot*

As it stands on the page, this sentence has a meaning which is recognizable to all native speakers despite the fact that it is not being used by anyone (except by us as a linguistic example). *Wasser* refers to a particular liquid with the chemical formula H<sub>2</sub>O; *das* means that it is a specific volume of water that is being referred to; *ist* has a relational meaning indicating that the subject noun phrase has the characteristics specified by the following adjective; *heiß* means that some object has a relatively high temperature. These meanings hold good irrespective of context; they may be said to be the linguistic meanings of these words. But now let us consider a context in which this sentence could be used.

One of two people who live together is sitting reading. The other person enters the room and utters (16). We can legitimately ask the question: what does this person mean by that? Note that we are in this case asking about the speaker not the words; a speaker's intentions may be various and they do not equate directly with any one particular sentence or sentence-type. In other words, the speaker of (16) may have any number of intentions, and indeed more than one at a time. The following are at least possible in our context:

- (17) a. It's time for your bath  
 b. Why not make a cup of tea?  
 c. Why not get up off your backside and do something useful like the washing-up?

For the most part people who live together will know what intentions each of them is likely to have when they speak to one another. Notice that linguistic meaning can be found in a dictionary, but speaker meaning

cannot. None of the meanings in (17) would be found in the dictionary entry for any of the constituent words of (16). The former type of meaning is the realm of semantics and the latter of pragmatics. Some of the variation discussed in chapter 9 is pragmatic variation.

We have so far referred to sentences in all circumstances, that is, (16) is in syntactic terms a sentence and it is used by speakers with this form in a context. In this particular instance there is no problem, but in reality a German might equally well produce something like (18):

- (18) Ich . . . du . . . was hat er gesa . . . ?  
*I . . . you . . . what did he sa . . . ?*

It is interrupted, unfinished and clearly indicates two changes of mind. But there is nothing unusual about this; such utterances are commonplace. How does this fit in with our views on grammar presented so far? This question relates directly to the notion of competence that we introduced above. Sentences in the strict sense are abstract entities representing the grammatical knowledge of a native speaker. This is not what speakers actually utter. Real speech may be like (3)–(8), (15) or (16) but it is just as likely to be full of hesitations, false starts, omissions and interruptions. In chapter 2 we give further examples of actual speech and consider how the incompleteness and defectiveness (in grammatical terms) of such utterances affects language acquisition in children. Such characteristics are so common that we as hearers filter them out and ignore them (unless they are used excessively by a particular speaker and then they become a hindrance to communication). Linguists do not generally write grammars which try to see regularities in utterances such as (18); we assume that they are unpredictable and not subject to rule in the same way as sentences, which are abstract entities, are.

However, some characteristics of real speech relate to the construction of texts and there are regularities to be observed here. Consider the exchange between two speakers in (19):

- (19) A: Wer kommt morgen?  
*Who is coming tomorrow?*
- B: Hans.  
*Hans.*

If the rule given in (13) applies to German, then B's reply to A is not a sentence. Yet, again, there is nothing unusual about such an exchange. What native speakers of German know is that B's reply 'stands for' example (15). This is what is understood. So B's reply is actually part of (15) and not, for instance, part of (20).

- (20) Hans hat einen neuen Mantel  
*Hans has a new coat*

Note that this specific meaning attaching to *Hans* only occurs in the context of (19); it is context-determined. The rules of text construction tell us not to repeat given information; *kommt morgen* is therefore suppressed in B's reply. (This is usually referred to as **ellipsis**; it is discussed further in connection with **gapping** (deleting only what is recoverable in context) in chapter 7.) The meaning, however, is quite clear. To distinguish between the grammatical system of knowledge and its use in texts we refer to structures in the former as **sentences**, as discussed in chapter 2, and instances of the latter as **utterances**. Strictly speaking, written texts are also utterances, that is, instantiations of the linguistic system, but, as we shall see in chapters 8 and 9, the written form is standardized in a way that makes it seem closer to the structures specified by the system. For instance, most written sentences have complete syntax, so they look like (15), (16) and (20) above. Certainly, they do not look like (18). Similarly, in chapters 4 and 5 we shall show that detailed phonetic descriptions of speech relate to actual utterances, whereas the phonological system deals with the storage of abstract information.

We have given a brief exposition of the approach we are taking in this book. In what follows we can only deal with a fraction of each topic covered in the individual chapters. It is hoped that the reader will follow up the references, both those in the text and those in the 'Further Reading' sections, for herself.

## 1.5 Further Reading

For a discussion of language change, see Aitchison (1981), McMahon (1994) and Trask (1996). On the problems of defining a speech community, see Romaine (1982), and Dorian (1982); see also Fasold (1984), on nations and languages.

Pinker (1994) is an accessible introduction to the broadly Chomskyan view of language we put forward in this book. Cook and Newson (1996) is an introduction to Universal Grammar. Smith and Wilson (1979) discuss what we refer to in section 1.2 as the Chomskyan revolution. Another useful overview of the development of generative grammar is van Riemsdijk and Williams (1986). Studies of generative grammar using German data can be found in Toman (1984) and a specific application of Generalized Phrase Structure Grammar to German is Nerbonne, Netter and Pollard (1994). Recent theoretical work in phonology can be found in Coleman (1995), Kaye (1995), Bird (1995). Discussions of

the differences between derivational and non-derivational (declarative) phonology can be found in Coleman (1995), Kaye (1995) and Bird (1995).

On language change, see Aitchison (1981) or Kiparsky (1982a), Downes (1988) discusses social determinants of language change.

For an interesting study of language and the mind, read Jackendoff (1993). Pinker (1997) is a discussion of the mind which goes beyond linguistics and linguistic knowledge. The relevance of brain damage to linguistic theory is discussed by Pinker (1994), Jackendoff (1993) and Caplan (1987).

Aitchison (1992) gives a survey of attempts to teach language to animals, an issue also discussed by Pinker (1997). Another book which deals with talking animals, though not from a linguistic point of view, is Bright (1990).

For discussion of the general principles governing the use of language, see Blakemore (1992) and Sperber and Wilson (1995). Hymes (1972) has developed notions of communicative competence and communicative performance.

Books (besides this one!) which deal with the linguistic description of the German language are Fox (1990) and Beedham (1995). A good German grammar is Durrell (1996).