'Language', the title of this book says. But what is meant by 'language'? Consider the following expressions:

- body language
- spoken language
- written language
- sign language
- computer language
- the French language
- bad language
- animal language
- the language of birds
- the language of cinema
- the language of music
- the language of love

Plainly the word is being used in many ways – some technical, some figurative – and the senses go in various directions. If a reviewer were to remark, after an impressive orchestral concert, 'The conductor and the musicians were all speaking the same language', we would interpret this to be a comment about their playing, not their chatting. And the same point applies to other linguistic terms, when used in special settings. I have seen books called *The Grammar of Cooking* and *The Syntax of Sex*. The first was a collection of recipes – as was the second.
How Language Works is not about music, or cookery, or sex. But it is about how we talk about music, cookery, and sex — or, indeed, about anything at all. And it is also about how we write about these things, and send electronic messages about them, and on occasion use manual signs to communicate them. The operative word is 'how'. It is commonplace to see a remarkable special effect on a television screen and react by exclaiming 'How did they do that?' It is not quite so usual to exclaim when we observe someone speaking, listening, reading, writing, or signing. And yet if anything is worthy of exclamation, it is the human ability to speak, listen, read, write, and sign.

An alien visitor to Earth might well wonder what was going on. It would see humans approach each other, use their mouths to exchange a series of noises, and — apparently as a result of making these noises — cooperate in some activity. It would see human eyes look at a set of marks inscribed on a surface, and the eye-owners then behaving in the same way — going out of one door rather than another in a theatre, for instance. Rather less often, it would see some humans using their hands and faces to achieve the same results that others obtain through the use of their mouths. In each case it might think: 'How did they do that?' And in each case the answer would be the same: 'through the use of language'.

But our alien would also observe other kinds of behaviour. It would see humans smiling and frowning at each other, or waving and gesturing, or stroking and kissing. It would notice that the effect of carrying out these actions was similar in some respects to that produced by the use of spoken noises, written marks, and manual signs. It might well reflect: can these actions therefore be called 'language' too?

Our alien would also see apparently similar behaviour among other species. It would see a bee find a source of nectar, return to a hive, and perform a series of dance-like body movements. Other bees would then move off in the direction of the nectar. Animals of all kinds would seem to be sending information to each other in analogous ways. Is this the same sort of behaviour as the humans are displaying, our alien observer might think? Do animals also have language?

These questions involve more than hypothetical extraterrestrials.
Terrestrial observers also need to be able to answer them, as a preliminary stage in the study of language. If we pick up a manual called *How Cars Work*, we do not expect to find in it chapters on bicycles and lawn-mowers. Nor, in *How Language Works*, will there be much space devoted to the use of facial expressions and body movements or to the way animals communicate. Why not?

**Modes of communication**

Because not all of these forms of communication are *language*, in the sense of this book. *Communication* is a much broader concept, involving the transmission and reception of any kind of information between any kind of life. It is a huge domain of enquiry, dealing with patterned human and animal communication in all its modes. Those who study behaviour usually call this domain *semiotics*. *Linguistics*, the science of language, is just one branch of semiotics.

There are five modes of human communication, because there are only five human senses which can act as channels of information: sound, sight, touch, smell, and taste. Of course, if you believe in telepathy, you would need to recognize a ‘sixth sense’ available for communication; and perhaps there are life forms which interact using still other modes, such as the non-visible areas of the electromagnetic spectrum. But the five traditional human sensory modes are all we need to put the subject of this book into a more general perspective.

The information we send and receive using these modes is usually called the *meaning* of our communication. But the five modes are not equally relevant for the transmission and reception of meaning. In fact, two of them play hardly any role at all in human beings – the *olfactory* (smell) and *gustatory* (taste) modes. We do not routinely emit smells in order to communicate with others (the controlled flatulent behaviour of some small boys notwithstanding), and there is a very limited amount of information about the outside world which we can receive through the mediums of smell and taste. By contrast, the use of sound – the *auditory-vocal* mode – is fundamental to the notion of language, and the properties
of this mode will form the major part of this book (§4). Speech is the primary manifestation of language, in all cultures.

The tactile and visual modes fall somewhere between these two extremes. They are often technically described as being channels of nonverbal communication because the way in which we use facial expressions, gestures, and touch behaviour seems to contrast with the words and sentences we describe as verbal language. But ordinary people do not talk about nonverbal communication. Instead, they simply refer to body language.

Is this use of 'language' the same as the one we use when we talk about speech, writing, and signing, or about English, French, and Chinese? Should large sections of this book be devoted to how facial expressions and manual gestures work? The answer is no, and to understand why we need to briefly consider the differences between what is involved in nonverbal tactile and visual communication, on the one hand, and in language, on the other. We shall see that these differences also enable us to disregard animal communication, as well as the other figurative applications of the term. We shall be left with a trinity of mediums - speech, writing, and sign - which manifest our concept of 'language'.