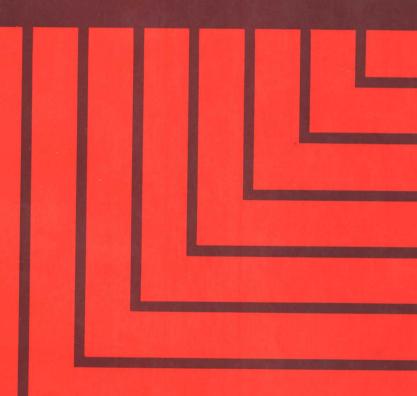# JOHN LYONS

Language and Linguistics

AN INTRODUCTION

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JOHN LYONS

Professor of Linguistics, University of Sussex

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Preface

This book is designed for the course, entitled 'Language and Linguistics', which my colleagues and I teach to first-year students at the University of Sussex. Very few of these students come to the University with the intention of taking a degree in Linguistics. Some of them, having had their interest aroused by the course, do in fact transfer into Linguistics from other subjects. The vast majority, however, go on to complete their degree-work, as we expect that they will, in the discipline which they originally chose as their major subject in applying for admission. Our aim, therefore, in teaching 'Language and Linguistics' is to introduce our students to some of the more important theoretical concepts and empirical findings of modern linguistics, but to do so at a relatively non-technical level and in a way that emphasizes the connections between linguistics and the many other academic disciplines that are concerned, for their own purposes and from their own point of view, with the study of language. I trust that this book will prove to be equally suitable for similar courses on language, which now exist at many universities, polytechnics and colleges of education, both in this country and abroad. I hope that it will be of some interest also to the general reader who wishes to learn something of modern linguistics.

This book is broader in coverage, and less demanding in its central chapters, than my *Introduction to Theoretical Linguistics* (1968). It is correspondingly less detailed in its treatment of many topics. But I have appended to each chapter a list of suggestions for further reading. This should be comprehensive enough for lecturers and instructors using the book to make a selection according to their knowledge of the field and their theoretical preferences; and they can add to my list of books a number of important journal articles which, unless they have been reprinted

in accessible publications, I have as a matter of policy excluded. The Bibliography is geared to the annotated Suggestions for Further Reading and is representative of most, if not all, points of view. For the benefit of students using the book without specialized guidance, and to help the interested general reader who wishes to go further into the subject, I have picked out about twenty general textbooks and collections of articles and asterisked these in the Bibliography. Here too I have been careful to make a representative selection – representative both of different theoretical viewpoints and of different levels of exposition.

Each chapter has associated with it a set of Questions and Exercises. Some of these are straightforward revision questions that can be answered without further reading. Some – especially those containing quotations from other works on linguistics – will oblige the student to consider and evaluate opinions different from those which I put forward myself in this book. A few of the questions are quite difficult; I would not expect students to be able to answer them, without assistance, on the basis of a ten-week course in Linguistics. On the other hand, I think it is important that students taking such courses should be given some sense of what Linguistics is like at a more advanced, though not necessarily more technical, level; and it is surprising what can be achieved by means of a little Socratic midwifery!

I would make the same comment in respect of the one problem that I have included (after the chapter on Grammar). I invented this many years ago, when I was teaching a course at Indiana University, and it has been used since then, by me and by others, as a fairly demanding exercise in linguistic analysis. Anyone who can come up with a solution that satisfies the demands of observational and explanatory adequacy in less than two hours will not need to read the central chapters of this book!

Although *Language and Linguistics* is very different from my *Introduction to Theoretical Linguistics*, it is informed with the same sense of the continuity of linguistic theory from the earliest times to the present day. I have not included a chapter on the history of linguistics as such, but within the limits of the space available for this I have tried to set some of the more important theoretical issues in their historical context. And I have written a

brief chapter on structuralism, functionalism and generativism in linguistics, since the relations among these movements are, in my view, either neglected or misrepresented in most textbooks. In particular, generative grammar is commonly confused, on the one hand, with a certain kind of transformational-generative grammar, formalized by Chomsky, and, on the other, with what I have here called 'generativism', also propagated largely by Chomsky. In my own very brief treatment of generative grammar in this book, as also in my *Chomsky* (1977a) and elsewhere, I have tried to maintain the necessary distinctions. Personally, I am fully committed to the aims of those who use generative grammars as models for the description – for theoretical, rather than practical, purposes – of the grammatical structure of natural languages. As will be evident from this book, I reject many, though not all, of the tenets of generativism. Nevertheless, I have presented them as fairly and as objectively as I can. My aim, throughout, has been to give equal weight to both the cultural and the biological basis of language. There has been a tendency in recent years to emphasize the latter to the detriment of the former.

I must here record my appreciation of the assistance given to me in the writing of this book by my colleagues, Dr Richard Coates and Dr Gerald Gazdar. They have both read the whole work in draft and made many helpful critical comments, as well as supplying me with advice in areas where their expertise is greater than mine. Needless to say, they are not to be held responsible for any of the opinions expressed in the final version, the more so, as – I am happy to affirm publicly – we still disagree on a number of theoretical issues.

I should also like to express my indebtedness to my wife, who has not only given me the necessary moral support and love while I was writing the book, but has also served as my model general reader for several chapters and has corrected most of the proofs for me. Once again, I have had the benefit of the specialized and sympathetic editorial advice of Dr Jeremy Mynott and Mrs Penny Carter of Cambridge University Press; and I am very grateful to them.

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Contents

I
Language

1.1 *What is language?*

Linguistics is the scientific study of language. At first sight this definition – which is one that will be found in most textbooks and general treatments of the subject – is straightforward enough. But what exactly is meant by 'language' and 'scientific'? And can linguistics, as it is currently practised, be rightly described as a science?

The question "What is language?" is comparable with – and, some would say, hardly less profound than – "What is life?", the presuppositions of which circumscribe and unify the biological sciences. Of course, "What is life?" is not the kind of question that the biologist has constantly before his mind in his everyday work. It has more of a philosophical ring to it. And the biologist, like other scientists, is usually too deeply immersed in the details of some specific problem to be pondering the implications of such general questions. Nevertheless, the presumed meaningfulness of the question "What is life?" – the presupposition that all living things share some property or set of properties which distinguishes them from non-living things – establishes the limits of the biologist's concerns and justifies the autonomy, or partial autonomy, of his discipline. Although the question "What is life?" can be said, in this sense, to provide biology with its very reason for existence, it is not so much the question itself as the particular interpretation that the biologist puts upon it and the unravelling of its more detailed implications within some currently accepted theoretical framework that nourish the biologist's day-to-day speculations and research. So it is for the linguist in relation to the question "What is language?"

The first thing to notice about the question "What is language?" is that it uses the word 'language' in the singular without the indefinite article. Formulated as it is in English, it thus differs

grammatically, if not in meaning, from the superficially similar question "What is a language?" Several European languages have two words, not one, to translate the English word 'language': cf. French 'langage' : 'langue', Italian 'linguaggio' : 'lingua'; Spanish 'lenguaje' : 'lengua'. In each case, the difference between the two words correlates, up to a point, with the difference in the two senses of the English word 'language'. For example, in French the word 'langage' is used to refer to language in general and the word 'langue' is applied to particular languages. It so happens that English allows its speakers to say, of some person, not only that he possesses a language (English, Chinese, Malay, Swahili, etc.), but that he possesses language. Philosophers, psychologists and linguists commonly make the point that it is the possession of language which most clearly distinguishes man from other animals. We shall be looking into the substance of this claim in the present chapter. Here I wish to emphasize the obvious, but important, fact that one cannot possess (or use) natural language without possessing (or using) some particular natural language.

I have just used the term 'natural language'; and this brings us to another point. The word 'language' is applied, not only to English, Chinese, Malay, Swahili, etc. – i.e. to what everyone will agree are languages properly so called – but to a variety of other systems of communication, notation or calculation, about which there is room for dispute. For example, mathematicians, logicians and computer scientists frequently construct, for particular purposes, notational systems which, whether they are rightly called languages or not, are artificial, rather than natural. So too, though it is based on pre-existing natural languages and is incontrovertibly a language, is Esperanto, which was invented in the late nineteenth century for the purpose of international communication. There are other systems of communication, both human and non-human, which are quite definitely natural rather than artificial, but which do not seem to be languages in the strict sense of the term, even though the word 'language' is commonly used with reference to them. Consider such phrases as 'sign language', 'body language' or 'the language of the bees' in this connection. Most people would probably say that the word 'language' is here being used metaphorically or figuratively. Interestingly enough, it is 'langage', rather than 'langue', that

would normally be used in translating such phrases into French. The French word 'langage' (like the Italian 'linguaggio' and the Spanish 'lenguaje') is more general than the other member of the pair, not only in that it is used to refer to language in general, but also in that it is applied to systems of communication, whether they are natural or artificial, human or non-human, for which the English word 'language' is employed in what appears to be an extended sense.

The linguist is concerned primarily with natural languages. The question "What is language?" carries with it the presupposition that each of the several thousand recognizably distinct natural languages spoken throughout the world is a specific instance of something more general. What the linguist wants to know is whether all natural languages have something in common not shared by other systems of communication, human or non-human, such that it is right to apply to each of them the word 'language' and to deny the application of the term to other systems of communication – except in so far as they are based, like Esperanto, on pre-existing natural languages. This is the question with which we shall be dealing in the present chapter.

1.2 *Some definitions of 'language'*

Definitions of language are not difficult to find. Let us look at some. Each of the following statements about language, whether it was intended as a definition or not, makes one or more points that we will take up later. The statements all come from classic works by well-known linguists. Taken together, they will serve to give some preliminary indication of the properties that linguists at least tend to think of as being essential to language.

(i) According to Sapir (1921: 8): "Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols." This definition suffers from several defects. However broadly we construe the terms 'idea', 'emotion' and 'desire', it seems clear that there is much that is communicated by language which is not covered by any of them; and 'idea' in particular is inherently imprecise. On the other hand, there are many systems of voluntarily produced symbols that we only count as languages in what we feel to be an extended or

metaphorical sense of the word 'language'. For example, what is now popularly referred to by means of the expression 'body language' – which makes use of gestures, postures, eye-gaze, etc. – would seem to satisfy this point of Sapir's definition. Whether it is purely human and non-instinctive is, admittedly, open to doubt. But so too, as we shall see, is the question whether languages properly so called are both purely human and non-instinctive. This is the main point to be noted in Sapir's definition.

(ii) In their *Outline of Linguistic Analysis* Bloch & Trager wrote (1942: 5): "A language is a system of arbitrary vocal symbols by means of which a social group co-operates." What is striking about this definition, in contrast with Sapir's, is that it makes no appeal, except indirectly and by implication, to the communicative function of language. Instead, it puts all the emphasis upon its social function; and, in doing so, as we shall see later, it takes a rather narrow view of the role that language plays in society. The Bloch & Trager definition differs from Sapir's in that it brings in the property of arbitrariness and explicitly restricts language to spoken language (thus making the phrase 'written language' contradictory). The term 'arbitrariness' is here being used in a rather special sense: we will come back to this presently. We will also come back to the question of the relation that holds between language and speech. All that needs to be said at this point is that, as far as natural languages are concerned, there is a close connection between language and speech. Logically, the latter presupposes the former: one cannot speak without using language (i.e. without speaking in a particular language), but one can use language without speaking. However, granted that language is logically independent of speech, there are good grounds for saying that, in all natural languages as we know them, speech is historically, and perhaps biologically, prior to writing. And this is the view that most linguists take.

(iii) In his *Essay on Language*, Hall (1968: 158), tells us that language is "the institution whereby humans communicate and interact with each other by means of habitually used oral–auditory arbitrary symbols". Among the points to notice here are, first of all, the fact that both communication and interaction are introduced into the definition ('interaction' being broader than and, in this respect, better than 'co-operation') and, second, that the term

'oral–auditory' can be taken to be roughly equivalent to 'vocal', differing from it only in that 'oral–auditory' makes reference to the hearer as well as to the speaker (i.e. to the receiver as well as the sender of the vocal signals that we identify as language-utterances). Hall, like Sapir, treats language as a purely human institution; and the term 'institution' makes explicit the view that the language that is used by a particular society is part of that society's culture. The property of arbitrariness is, once again, singled out for mention.

What is most noteworthy in Hall's definition, however, is his employment of the term 'habitually used'; and there are historical reasons for this. Linguistics and the psychology of language were strongly influenced, for about thirty years or so, especially in America, by the stimulus–response theories of the behaviourists; and within the theoretical framework of behaviourism the term 'habit' acquired a rather special sense. It was used with reference to bits of behaviour that were identifiable as statistically predictable responses to particular stimuli. Much that we would not normally think of as being done as a matter of habit was brought within the scope of the behaviourists' term; and many textbooks of linguistics reflect this more or less technical use of the term and, with its adoption, commit themselves, by implication at least, to some version or other of the behaviourists' stimulus–response theory of language-use and language-acquisition. It is now generally accepted that this theory is, if not wholly inapplicable, of very restricted applicability both in linguistics and in the psychology of language.

Hall presumably means by language 'symbols' the vocal signals that are actually transmitted from sender to receiver in the process of communication and interaction. But it is now clear that there is no sense of the term 'habit', technical or non-technical, in which the utterances of a language are either themselves habits or constructed by means of habits. If 'symbol' is being used to refer, not to language-utterances, but to the words or phrases of which they are composed, it would still be wrong to imply that a speaker uses such and such a word, as a matter of habit, on such and such an occasion. One of the most important facts about language is that there is, in general, no connection between words and the situations in which they are used such that occurrence of particular words is predic-

table, as habitual behaviour is predictable, from the situations themselves. For example, we do no: habitually produce an utterance containing the word 'bird' whenever we happen to find ourselves in a situation in which we see a bird; indeed, we are no more likely to use the word 'bird' in such situations than we are in all sorts of other situations. Language, as we shall see later, is **stimulus-free**.

(iv) Robins (1979a: 9–14) does not give a formal definition of language: he rightly points out that such definitions "tend to be trivial and uninformative, unless they presuppose . . . some general theory of language and of linguistic analysis". But he does list and discuss a number of salient facts that "must be taken into account in any seriously intended theory of language". Throughout successive editions of this standard textbook, he notes that languages are "symbol systems . . . almost wholly based on pure or arbitrary convention", but lays special emphasis on their flexibility and adaptability.[1] There is perhaps no logical incompatibility between the view that languages are systems of habit ('habit' being construed in a particular sense) and the view expressed by Robins. It is after all conceivable that a habit-system should itself change over time, in response to the changing needs of its users. But the term 'habit' is not one that we usually associate with adaptable behaviour. We shall need to look a little more closely at the notion of infinite extensibility later. And we shall then see that a distinction must be drawn between the extensibility and modifiability of a system and the extensibility or modifiability of the products of that system. It is also important to recognize that, as far as the system is concerned, some kinds of extension and modification are theoretically more interesting than others. For example, the fact that new words can enter the vocabulary of a language at any time is of far less theoretical interest than is the fact that new grammatical constructions can, and do, arise in the course of time. One of the central issues in linguistics is whether there are any limits to this latter kind of modifiability and, if so, what the limits are.

(v) The last definition to be quoted here strikes a very different

[1] In earlier editions (1964: 14; 1971: 13), he says: "Languages are infinitely extendable and modifiable according to the changing needs and conditions of the speakers." In the most recent edition 'adaptable' replaces 'infinitely extendable'.

note: "From now on I will consider a language to be a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements." This definition is taken from Chomsky's *Syntactic Structures* (1957: 13), whose publication inaugurated the movement known as transformational grammar. Unlike the other definitions, it is intended to cover much else besides natural languages. But, according to Chomsky, all natural languages, in either their spoken or their written form, are languages in the sense of his definition: since (a) each natural language has a finite number of sounds in it (and a finite number of letters in its alphabet – on the assumption that it has an alphabetic writing system); and (b), although there may be infinitely many distinct sentences in the language, each sentence can be represented as a finite sequence of these sounds (or letters). It is the task of the linguist describing some particular natural language to determine which of the finite sequences of elements in that language are sentences and which are non-sentences. And it is the task of the theoretical linguist who interprets the question "What is language?" as meaning "What is natural language?" to discover, if he can, the structural properties, if there are any, whereby natural languages differ from what, in contrast with them, may be called non-natural languages.

It is Chomsky's belief – and he has stressed this increasingly in his more recent work – not only that there are indeed such structural properties, but that they are so abstract, so complex and so highly specific to their purpose that they could not possibly be learned from scratch by an infant grappling with the problem of acquiring his native language. They must be known to the child, in some sense, prior to and independently of his experience of any natural language, and used by him in the process of language acquisition. It is because Chomsky holds this view that he describes himself as a rationalist, rather than an empiricist. We will come back to this point (cf. 7.4).

Chomsky's definition of 'language' has been quoted here largely for the contrast that it provides with the others, both in style and in content. It says nothing about the communicative function of either natural or non-natural languages; it says nothing about the symbolic nature of the elements or sequences of them. Its purpose is to focus attention upon the purely structural properties of languages and to

suggest that these properties can be investigated from a mathematically precise point of view. It is Chomsky's major contribution to linguistics to have given particular emphasis to what he calls the **structure-dependence** of the processes whereby sentences are constructed in natural languages and to have formulated a general theory of grammar which is based upon a particular definition of this property (cf. 4.6).

The five definitions of 'language' quoted and briefly discussed above have served to introduce some of the properties which some linguists have taken to be essential features of languages as we know them. Most of them have taken the view that languages are systems of symbols designed, as it were, for the purpose of communication. And this is how we will look at languages below, in the section entitled 'The semiotic point of view': semiotics, as we shall see, is the discipline or branch of study that is devoted to the investigation of symbolic and communicative behaviour. The question that will concern us at that point will be whether there is any simple property or set of properties that distinguishes natural languages from other **semiotic** systems. Some of the properties that have been mentioned here are arbitrariness, flexibility and modifiability, freedom from stimulus control, and structure-dependence. Others will be added to this list in due course. The relation between language and speech will be dealt with in 1.4.

1.3 *Language-behaviour and language-systems*

It is now time, however, to draw some necessary distinctions of sense within the term 'language'. I have already referred to the distinction between language in general ('langage', to use the French term) and a particular language ('langue'). The adjective 'linguistic' is similarly ambiguous (even when it is relatable to 'language' rather than 'linguistics'). For example, the phrase 'linguistic competence', which has been employed by Chomsky and, following him, others to refer to a person's mastery of a particular language is no less naturally construed in everyday English as having reference to the ability or facility that someone might have for the acquisition or use, not of a language, but of language. (And whenever the word 'language' is used adjectivally in compound nouns it is subject to the same kind of ambiguity: cf. 'lan-