In the course of the present century language has passed from being the transparent, presumedly indifferent medium of thought to being a central and intractable problem of philosophy. We have become aware that what we think is conditional on the structure of the language in which we think, and that no communicable thought is possible independently of language. By giving our attention to the medium it turns out that we are giving our attention to the substance of thought. The formulations we were earlier used to, which implied that thought is 'conveyed' by language, are misleading if they cause us to assume the existence of some 'beyond' of language to which it gives us access. 'All philosophy is "critique of language"...' wrote Wittgenstein sixty or more years ago, 1 so helping to inaugurate a philosophical age which has not yet ended and which has elevated the question of meaning – a linguistic question – to be the most important one philosophers can confront. Structuralism, too, is bound up with the nature of meaning and may be seen as a contribution to this scismic shift of philosophical interest.

The extreme claim has been made before now that Structuralism is linguistic or nothing, that it is to be identified with a certain school of linguistics and that when it is applied outside the narrowly linguistic field it investigates its subject-matter, be it historical, anthropological or of some other discipline, as if it were a language. This is a most doubtful analogy which may be discarded at the outset. If I choose to begin this survey of Structuralist method with a chapter on linguistic Structuralism this is because, first of all, language is the central institution of any society and Structuralism is a peculiarly social mode of thought, and, second, because there is no question but that a preponderance of the ideas with which Structuralists in various fields have worked are to be found most clearly formulated in structural linguistics.

There are two distinct strands in structural linguistics, as it has grown since the early 1920s, one European and the other North American. If the

European strand has come to be identified with Structuralism then that is because of the French connection alluded to briefly in the Introduction; but the North American structural linguists also evolved certain views about language which converged with those current in Europe, and even where their views appear radically to diverge, the contrast between the two kinds of Structuralism is most instructive. In the pages which follow I shall, where it seems helpful, relate them one to the other. A particular reason for doing this is to counter the diffusionist argument in respect of Structuralism, whereby this school of thought is regarded as having originated in a single centre and then spread to other, receptive intellectual environments around the world. Of course diffusion of ideas is a reality but it is unlikely that they will be intelligently received unless they are found to fit with ideas already prevalent in the environments they have been carried to. The fact that there was a certain Structuralist tradition in the United States well before any invasion of Structuralist notions from Europe helps to explain why these notions were well received and also helps to bear out the case put by Structuralists themselves that Structuralism is a universal and not a local mode of thought, being anchored in the last resort in human biology.

Both in North America and in Europe Structuralism took root in the study of language in the 1920s. In so far as it concerned itself with language in general it marked a revival of a philosophical interest that had very much lapsed in the nineteenth century. With a few remarkable exceptions, such as Wilhelm von Humboldt in Germany, or W. D. Whitney in the United States, nineteenth-century linguists had lost sight of language in their preoccupation with languages. The facts of existing or once existing languages absorbed them, at the expense of the universal language faculty itself: they had no theory of language, that is. Even today many students of language fail to remark the vast difference in scope between the study of language as a universal faculty of our species and the study of actual languages. It is true that the first can be studied only by way of the second and the nineteenth century may certainly claim credit for having assembled many data from actual languages which, once they were systematically compared from language to language, opened the way for the more ambitious and philosophical students to work out a coherent theory of language. Only when such a theory was developed and tested against the plentiful evidence of existing linguistic practice – evidence hugely enriched in this century by the data gathered by anthropologists - could linguistics be said to have a scientific basis.

The founding father of structural linguistics in Europe, and the man frequently looked on as the patron of the whole Structuralist movement, was the Swiss linguist Ferdinand de Saussure. Saussure was born in Geneva in 1857, studied mainly in Germany, taught for a number of years in Paris, then returned to the University of Geneva in 1891 and died there in 1913. He was by training an Indo-Europeanist, a specialist in Sanskrit and its derivative languages, but more speculative than others of his kind; at the age of fifteen, when he already knew French, German, English, Latin and Greek, he produced for one of his teachers an 'Essay on languages' which attempted to derive certain linguistic universals from phonetic patterns he believed to be common to several of the languages he had met with. This proto-Structuralist exercise was judged presumptuous by its addressee. But at the age of only twenty-one he published in Leipzig a celebrated 'Dissertation on the primitive vowel-system in Indo-European languages' whose method is certainly Structuralist. The object of this essay was to study the various forms taken by the so-called 'Indo-European a', but as the work proceeded Saussure came to appreciate that the question was a wider one than he had foreseen, and that to study one vowel meant studying them all. In the words of the Dissertation's preface: 'it is clear that in fact it is the system of vowels as a whole that falls within the radius of our observation and whose name must be inscribed on the first page.'2

In his lifetime Saussure published very little, but in his later years of teaching he had moved from his special concerns with Indo-European or Germanic languages and given courses of lectures at Geneva in General Linguistics. In 1916, three years after his death, two of his former students published under his name a Course in General Linguistics. This was a text constructed by themselves from their collation of sets of notes taken by a number of students who had attended Saussure's lectures. In the seventy years since then the Course has made its way around the world, quickly in a few countries but with extreme slowness in others - the first English translation was not made until 1959.³ An attentive reading of this, for its time, revolutionary text remains the best introduction there is to the principles on which Structuralism rests. The fact that the text is not the work of Saussure himself but of his students or followers is unimportant, since the soundness or otherwise of the ideas which the text expounds is not dependent on our knowing whether they are given in precisely the form Saussure himself would have wanted. Their worth may be determined without any certainty as to their authorship. I shall use Saussure's name throughout my own text as if he were, unequivocally, the author of the Course, although his uncertain relationship to that book bears interestingly, as we shall see, on the issues raised by Structuralism.

Like any other innovator Saussure was in reaction against an orthodoxy: in his case the orthodoxy of the later nineteenth century which dictated that language be studied historically and genetically. The questions that linguists

then chose to ask and to answer were chiefly ones of the origins and evolution of particular languages or groups of languages. They were obsessed with change and ignored what it was exactly that was changing. The first great shift which Saussure introduces into his linguistics is intended to go against this emphasis and, as it were, to hold the object of study – language – steady for long enough to enable its permanent structure to be investigated. 'Properly conceived of,' Humboldt had declared, 'language is something persistent and in every instant transitory.' It was the persistent aspect which Saussure meant to uncover.

A language may be studied along two axes, one temporal and the other, in a manner of speaking, spatial. These two axes Saussure named the diachronic and the synchronic. A diachronic linguist studies a language as it changes through time while a synchronic linguist studies it statically, in its given state at a particular moment of time. The premise of the synchronist is that the capacity of a language to alter unceasingly may be set aside for the sake of studying its more or less permanent constitution. The study of language itself, as the hypothetical template of all existing languages, is essentially a synchronic one because it is searching for the constants of language. The structures which Structuralists look for endure, which is not to say that they never change or last for ever. Structures too evolve, except perhaps at that extreme level of abstraction where one believes one has identified the basic constituents without which it could not *be* a structure.

Saussure draws the vital distinction between the two contrasted axes of study in these terms:

Synchronic linguistics will be concerned with logical and psychological connexions between coexisting items constituting a system, as perceived by the same collective consciousness.

Diachronic linguistics on the other hand will be concerned with connexions between sequences of items not perceived by the same collective consciousness, which replace one another without themselves constituting a system.⁵

One of the oddities of the *Course in General Linguistics*, given the influence it has had, is that it nowhere contains the term 'structure'. But 'system', as it occurs in the quotation above, will do well enough instead. A system, like a structure, is formed of elements which coexist; it cannot be formed of elements which are successive. It may today seem a relatively trivial stipulation that language be studied as a system, but that is only because we have become so accustomed to the synchronic point of view. In Saussure's time it

was not a trivial stipulation because it went against the grain among linguists, who resisted the abstraction which it involved of language from history.

The systematic, synchronic perspective opens the way for language-study to be saved from an unambitious atomism, or mere accumulation of linguistic facts, which may be associated with one another but never fully correlated. Structuralism begins on the far side of such limitations as these. As will repeatedly become clear in the present study, it seeks to comprehend linguistic facts as elements in a single system, and it is the profound shift of perspective from the diachronic to the synchronic that enables it to do so. This integration of the linguist's proper subject-matter is located by Saussure, be it noted, within the 'collective consciousness', which is an abstraction, since it is not commensurate with the consciousness of any given individual, however massively knowledgeable or competent in his native language. Language, in the Structuralist sense, is most emphatically an abstract object. It is also the possession of society, which is another name for the 'collective consciousness', never the possession of an individual.

Having laid down the first principle of linguistic Structuralism, which will serve very well as the first principle of Structuralism tout court, it will be as well now to look across at American Structuralism, which was equally committed to the synchronic point of view. But in its earlier stages it was also bound to a largely descriptive and behaviourist account of language. The most energetic practitioners of it had no truck with speculation of Saussure's sort, believing that the truth about language would be found, if at all, only at the conclusion of a mighty effort to identify and classify all existing linguistic forms. Leonard Bloomfield, whose 1933 book on Language was as influential among linguists in America and Britain as Saussure's Course was in Europe, refused to see it as any part of his mandate to move beyond the description of languages to generalization about them:

The only useful generalisations about language are inductive generalizations. Features which we think ought to be universal may be absent from the very next language that becomes accessible...The fact that some features are, at any rate, widespread, is worthy of notice and calls for an explanation; when we have adequate data about many languages, we shall have to return to the problem of general grammar and to explain these similarities and divergences, but this study, when it comes, will be not speculative but inductive. ⁶

This is Anglo-Saxon empiricism at its most stringent; not until all the facts are in is it worth advancing a theory. (That empiricism is itself a theory, and as such determines which linguistic facts are relevant to the inquiry and

which are not, is an admission commonplace enough today, but certainly not in Bloomfield's day.) Bloomfieldian linguistics is often referred to as 'distributional', its aim being to establish a full description of all the contexts in which the various categories of words can be found in everyday usage. Its achievements are thus broadly normative and statistical. What Bloomfield calls the 'fundamental assumption of linguistics' is 'that in every speech-community some utterances are alike in form and meaning' (Bloomfield's italics). This is the minimalist programme of a linguist who believed that the proper study of language should be conducted without concern for 'ideas' or for human consciousness, collective or otherwise. Language was a certain kind of physical event in the world, a response to stimuli from the environment, and its structures, accordingly, were all on the surface, being the sum total of all known grammatical practices.

One very striking difference between American Structuralism and the Saussurean kind is brought out by Bloomfield's equation of the study of language with the study of grammar. The Course in General Linguistics has remarkably little to say about grammar, to which Saussure seems not fully to have turned his mind at the time when he gave the lectures on which the book is based. Where Bloomfield and the other American Structuralists see grammar as the central feature of language, Saussure chooses to see rather its power of signification. In a review of the Course published in 1923 Bloomfield stresses this divergence: 'In detail, I should differ from de Saussure chiefly in basing my analysis on the sentence rather than on the word.'8 And so it has remained: American Structuralism is concerned with syntax, Saussurean Structuralism with the verbal sign or word. Syntactic structures have the advantage of being more conspicuous than the highly abstract structures Saussure finds in language, since syntax is structure, being a conventional arrangement, varying from language to language, whereby words enter into various formal relations with one another. We hear syntax when spoken to and see it when we read. Its structures are conspicuous because they are on the surface of language, a point I shall come back to when turning to the contribution made by Noam Chomsky to Structuralism.

Before that, however, another of Saussure's cardinal distinctions must be brought in: that between *langue* and *parole* or, as they are usually given in English, 'language' and 'speech'. This distinction follows on from that between the synchronic and diachronic axes of language-study: *langue* is the term Saussure gives to the 'system' or totality of language stored in the 'collective consciousness'. The grammar of the language, obviously, makes up a large part of that system, which also includes the full vocabulary or lexicon of the language. The *langue* thus comprises a full catalogue of the

elements of a language together with the rules for their combination. *Parole* on the other hand is the use which individuals make of the total resources of the language they are born into. It is actual utterance, in speech or in writing. If *langue* is a structure then *parole* is an event. The first is an abstraction, the second is real. Without the events there would be no way in which we could know of or investigate the structure, and without the structure the event would be formless and without meaning: the two are wholly interdependent.

The contrast between *langue* and *parole* is one which extends everywhere in Structuralism, sometimes expressed in a more modern way as the contrast between the 'code' and the 'message' (although it can be misleading to equate the language-system with a 'code' when it is characterized by being primary and open to all, rather than secondary, like most codes, and restricted in its use). It is, before all else, a contrast between the collective and the individual. This is a contrast of which Structuralism makes much, championing as it is bound to do the collective at the expense of the individual. For Saussure the *langue* is a social bond:

It is a fund accumulated by the members of the community through the practice of speech, a grammatical system existing potentially in every brain, or more exactly in the brains of a group of individuals; for the language is never complete in any single individual, but exists perfectly only in the collectivity.¹⁰

The fact that a language is a structure which is realized only partially and imperfectly in those who use it raises the key problem of the articulation of *langue* with *parole* or system with event. How is it that the system comes to be sufficiently represented in our brains so that we can, without being at all aware of it, exploit it in our daily use of language? This is not a problem Saussure himself faces up to but it is one which has been placed at the heart of contemporary linguistics by Chomsky. Chomsky would certainly not wish to be thought of as a Structuralist because his career as a linguist has been spent in vigorous and fruitful reaction against the Structuralism of Bloomfield and others in America. But he may be claimed for Structuralism because Chomskyan linguistics is structural through and through and bears importantly on some of the issues raised by Saussure.¹¹

Like Saussure, Chomsky strives to go beyond the data available to him from everday language-use, to construct a theory of, in his case, grammar. He has elaborated a practice of linguistics which he declares to be 'qualitatively' different from the Structuralism that prevailed among American linguists in his young days – a Structuralism which collected facts and

classified them, but forbore to interpret them theoretically. Because it was behaviouristic in its outlook – fanatically so in the case of Bloomfield – it regarded the individual's use of language as habitual: in Bloomfield's words, as 'a composite result of what he has heard other people say'. ¹² (The word 'composite' there begs all the interesting questions which Chomsky was to raise.) According to this model of *parole* we know what to say because we have listened to other people and can proceed either by repetition or by 'analogy' with what we have heard in similar circumstances. Bloomfieldian linguistics calls for the complete elimination of 'mind' and its replacement by a peculiarly extensive notion of 'habit', as if we were, as language-users, incapable of doing more than respond to the situations we find ourselves in.

Chomsky has worked to restore 'mind' to linguistics by showing how starkly a model such as Bloomfield's fails to account for the infinite creativity of our language-use. He argues that we are constantly producing sentences in our language which we have never heard before, which may not be closely conditional on the circumstances in which they are uttered, and which cannot be accounted for by any weak concept like 'analogy'. Language, that is, is far more than habit and could never be satisfactorily acquired in childhood on the behaviourist model of stimulus and learned response.

To account for the acquisition of language is for Chomsky the greatest challenge open to the structural linguist. No one questions that there are structures in language – surface structures are apparent in our syntax; or that to use language successfully demonstrates a command of these, though we might be quite unable to offer any description of the syntactical rules we are observing every time we speak or write. But these surface structures are not enough, Chomsky suggests, because sometimes they are ambiguous or capable of more than one meaningful interpretation. This is the clue to another level of linguistic structure, the 'deep structures' to which Chomsky has over the years given a certain celebrity, though he no longer likes the term 'deep' in view of its unwanted connotations of profundity. The 'deep structures' are not ambiguous, they are open to only one semantic interpretation, and they are turned into surface structures by the rules of what Chomsky calls a 'transformational' or 'generative' grammar. These transformations are, in his phrase, 'structure-dependent... in the sense that they apply to a string of words by virtue of the organisation of these words into phrases.' That is to say that the transformation depends on the syntactical organization. The sentence 'Mary has lived in Princeton' is transformed into the interrogative 'Has Mary lived in Princeton?' by, in Chomskyan terms, interchanging a noun phrase ('Mary') with the first element of the auxiliary ('has'). According to Chomsky no human language allows of any such transformations except in this 'structure-dependent' fashion.

There is no need here to go into the form that these transformational rules take, or the manner in which they operate: Chomskyan grammar is not a pursuit for the lay person because it soon grows algebraic and extremely complex. What concerns us, in this conspectus of Structuralist ideas in linguistics, is the close connection between Chomsky's proposed model of language acquisition and Saussure's distinction between the language-system and everyday language events.

It is tempting to equate Saussure's pair of terms, langue and parole, with the pair which Chomsky introduced to mark his own distinction between system and event: 'competence' and 'performance'. One can see at a glance, however, that there is a significant difference between Saussure's langue and Chomsky's 'competence', in that where the first is specified as something belonging to society or the language-community, the second remains the possession of the individual. Saussure more or less ignores the question of how the individual acquires a mastery of the essentially collective system, whereas Chomsky tackles it very directly. In order to explain the fact of the individual's linguistic creativity he posits a 'tacit knowledge' of the language-system as a whole, an 'internalized' grammar which enables each of us to generate a potentially infinite number of new sentences. Between the stimulus and the response of the old behaviourist model, or the 'input' and 'output' of subsequent, computer-influenced models, Chomsky inserts his own intermediary in the form of an innate mental structure specific to humankind. This structure alone can answer the otherwise insoluble question of how we can each have a considerable, if never a complete mastery of the *langue*:

Specifically, we must ask how, on the basis of the limited data available to him, the child is able to construct a grammar of the sort that we are led to ascribe to him, with its particular choice and arrangement of rules and with the restrictive principles of application of such rules. What, in other words, must be the internal structure of a learning model that can duplicate this achievement? Evidently, we must try to characterise innate structure in such a way as to meet two kinds of empirical conditions. First, we must attribute to the organism, as an innate property, a structure rich enough to account for the fact that the postulated grammar is acquired on the basis of the given conditions of access to data; second, we must not attribute to the organism a structure so rich as to be incompatible with the known diversity of languages. We cannot attribute knowledge of English to the child as an innate property, because we know that he can learn Japanese as well as English. We cannot attribute to him merely the ability to form associations, or to apply the analytical procedures of structural linguistics, because...the structures they yield are not those that we must postulate as generative grammars.¹⁴

Chomsky's innate mental structure has met with strong objections in its time, especially when it has been reformulated as the language-user's 'tacit knowledge' of his language, since knowledge that is tacit, and which most of us would be incapable of making explicit under any conditions, seems like a luxury, even granting Chomsky the distinction philosophers recognize between 'knowing-that' and 'knowing-how'. (As a hypothesis, such a 'knowledge' of language is susceptible of the perplexing question put by Wittgenstein: 'Suppose it were asked: "When do you know how to play chess? All the time? or just while you are making a move? And the whole of chess during each move? How queer that knowing how to play chess should take such a short time, and a game so much longer!",15) However, by insisting on the need for a structural 'competence' to make sense of the facts of language-use, Chomsky brought to the study of language a dynamism and a popularity it would otherwise have lacked. His version of Structuralism has considerable implications for the view that we take of human capacities, as well as strengthening the belief common to all versions of Structuralism that the human mind is Structuralist because it cannot be anything else, that the structures it finds in what it analyses match in some sense innate mental structures, in a pattern reminiscent of Leibniz's 'preestablished harmony'. Chomsky, indeed, has used the term 'pre-set' to describe the mind of the human infant in its first exposure to the language of its community, meaning that it is biologically fitted to acquire any language at all and that the acquisition of a particular language thus represents a restriction of its capacity, not a growth.

Chomsky has followed in the tradition of American Structuralism in taking the sentence to be the basic unit of language and in showing relatively little interest in the word. With Saussurean Structuralism the reverse is the case. Following the example of Saussure himself, it has fixed its attention on the word in its function as linguistic *sign*. The definition of language offered by a Saussurean Structuralist would be that it is a system formed of linguistic signs, and for the sake of argument we can say that the terms 'word' and 'sign' are here interchangeable. ¹⁶

If signs, however, are the basic elements of the language system, they are not *simple* elements. Language, by any definition, is a correlation of sounds with meanings and in Saussure's analysis of the linguistic sign this correlation is paramount. He analyses the sign into two aspects or faces: a phonetic or acoustic aspect and a semantic one. The sign is both sound and sense – though one needs to be careful in using terms such as 'phonetic', 'acoustic' or 'sound' since these apply to signs only in their spoken form; in their written form they need be neither pronounced nor heard. Given

which caveat – it will return in full force in the last chapter of this book, on post-Structuralism – I shall continue to follow Saussure in characterizing the twin aspects of the sign as acoustic and conceptual. *Both* these aspects, be it noted, are mental, for the good reason that they are indissoluble; the sign is a unity and its two aspects exist in total dependence one on the other. Sound without sense is not a part of language, it is, in the telling description found by modern theorists of communication, mere 'noise'; and sense without sound (or without its material manifestation as writing) is impossible.

For the two aspects of the sign Saussure found the terms *signifiant* and *signifié* or, as they are usually translated into English, 'signifier' and 'signified'. ¹⁷ This terminological complex of Sign, Signifier and Signified is perhaps Saussure's most influential gift to Structuralism, providing as it does the wherewithal to analyse the process of signification and to distinguish readily between the manifest and the abstract faces of the sign. Once it has been successfully understood, this distinction provides an unrivalled tool in linguistic as well as literary and other kinds of textual analysis. Struggling, indeed, to decide what it was that all those thinkers labelled in the popular mind as Structuralists might have in common, Roland Barthes concluded that it was 'probably the serious resort to the lexicon of signification...look to see who uses signifier and signified, synchrony and diachrony, and you will know whether the structuralist view of things has taken shape. ¹¹⁸ The word 'serious' is worth stressing here, since not all resorts to Saussure's lexicon qualify as that.

The Saussurean sign, then, is an abstract object, it is not to be confused with whatever it is the sign of, with something in the world. This something is what philosophers know as the referent. Structuralists do not always keep hold as they should of the distinction between the conceptual aspect of the sign, or signified, and the referent, and remarkably, Saussure himself appears to confuse them in the text of the Course. The first principle which he lays down there concerning the linguistic sign is that it is 'arbitrary', by which he means that its form is not determined or 'motivated' by the thing it is the sign of, or referent. The proof of this is the enormous variety of signs to be found in different languages for the same referent, from which one can conclude that these signs could have taken a different form from that which they in fact have; though it has to be realized that the arbitrariness of the signs of our language does not set us free to change them: they are arbitrary but also fixed, by a consensus which has accrued over the centuries of a language's history and which we are powerless as individuals to change. A demonstration of arbitrariness is the fact that the animal which on one side of the English Channel is referred to as *horse* is referred to as *cheval* on the other side. These are two signs with a common referent, but we cannot and must not conclude

from that that they are two signifiers with a common signified, because the signified of *horse* is to be found in the 'collective consciousness' of the English language-community and the signified of *cheval* in that of the French language-community; neither signified is to be found standing in a field.

Grave misunderstandings of the nature of Structuralism follow if signifieds and referents are taken to be synonymous, as they are at one point in the text of the Course in General Linguistics, where one can read that 'the signified "ox" has as its signifier boeuf on one side of the frontier, but Ochs on the other side'. 19 This mis-statement of the case, which contradicts the very terminology Saussure has himself introduced, is typical of many similar ones made since by others. In Saussure's case, the confusion can certainly be put down to the way in which the text of the Course was constructed by its editors, collating material dating from different stages in the evolution of his ideas, ²⁰ but in the case of others who have repeated the same error, we have evidence of something else, which is the considerable difficulty we all face in preserving the conceptual aspect of the sign as an abstraction indissociable from its complementary acoustic or graphic aspect. We are led into error by a certain idealism, whereby we dissociate the two aspects of the sign and take the conceptual aspect to have precedence over the acoustic or graphic aspect. Many people assume that signifieds pre-exist signifiers, or that meanings 'await' expression. The effect of that assumption is to assimilate the signifieds, stored up as they must be in some pre-verbal repository, to the infinite number of potential referents in the world, which undeniably do pre-exist their human investment by language. This is a question that comes very much to the fore in post-Structuralism and in the work of Jacques Derrida, and I shall return to it at the appropriate point.

The 'arbitrariness' of the linguistic sign is a more radical matter than is sometimes realized, because it establishes the autonomy of language in respect of reality. Natural languages differ very markedly from each other not only in their vocabulary, as in the case of *boeuf* and *Ochs*, but also in their grammatical structure. The Structuralist point of view in language is fundamentally opposed to that old but still quite popular conception of language which sees it as a nomenclature or a conventional item-by-item naming of the contents of the world around us. It is possible to argue plausibly that a language is a nomenclature only for as long as one restricts the inventory of things waiting to be named to straightforward categories of physical objects or actions. If a language were all nouns and verbs, the argument might hold. But because languages contain other categories of sign, and because the signs enter into complex logical relations with one another when they are used, the nomenclature argument becomes wholly inadequate.

Structuralism tends to reverse the precedence which a nomenclaturist accords to the world outside language, by proposing that far from the world determining the order of our language, our language determines the order of the world. Because no two languages order the world in quite the same way - a disparity soon appreciated by anyone who tries to translate from one language into another - no two language-communities can understand the world in quite the same way. This profound consequence of 'arbitrariness' is neatly summed up by John Passmore in the dictum, 'Languages differ by differentiating differently'. 21 This is the prime lesson to be learned from all the comparative work done on languages in the period which preceded Structuralism and of the linguistic field- work done by anthropologists in cultures strikingly different from their own. American structural linguistics relied heavily on the great deal that had been learned of the grammatical structure of American-Indian languages, which often strikes an English mind as most eccentric, because the formal relations which it chooses to express are not those we are used to. Structuralism of this comparative kind does not presuppose that any one linguistic structure is superior to any other, only that all are greatly or slightly different from one another. There is no 'master' structure by which to evaluate other, 'lesser' or more 'primitive' structures. In the words of the first great American linguist, to whom Saussure paid due tribute:

There are no relations to which a language must necessarily give expression; there are only certain ones which are more naturally suggested, of which the expression is more practically valuable than others: and what these are, we can learn only from the general study of languages; our own educated preferences are no trustworthy guide to them.²²

Whitney here maintains a relativism more extreme than that of other structural linguists, who would not concede that 'there are no relations to which a language must give expression'. Edward Sapir, for example, whose views generally come closest among the earlier school of American Structuralists to those of Saussure, holds that certain of the relations expressed in grammatical structure are 'essential' and therefore presumably universal:

If I wish to communicate an intelligible idea about a farmer, a duckling, and the act of killing...I can find no way of dodging the issue as to who is doing the killing. There is no known language that can or does dodge it, any more than it succeeds in saying something without the use of symbols for the concrete concepts.²³

Whether or not the relational categories of agent and action are universal, as Sapir claims them to be, one can say that what *is* universal is the need for relations, or for a structure. There can be no language or thought that is not structural.

It is possible and tempting to posit, beyond any structure, an inaccessible and undifferentiated process in the human mind of which language is the manifestation and to which it actually *gives* a structure. Saussure makes this assumption:

Psychologically, setting aside its expression in words, our thought is simply a vague, shapeless mass. Philosophers and linguists have always agreed that were it not for signs, we should be incapable of differentiating any two ideas in a clear and constant way. In itself thought is like a swirling cloud, where no shape is intrinsically determinate. No ideas are established in advance, and nothing is distinct, before the introduction of linguistic structure.²⁴

It is rash to strive to reach, by means of metaphors, beyond language in this way, when by doing so *in* language one can produce only a paradox: a systematic or structural formulation of the supposedly formless. However, the hypothesis of a formless substratum, of thought as somehow opposed to language, or to the communicable ideas which represent the articulation of thought, enables one at least to take a dynamic view of linguistic structure. In this model, language has something *to* structure, and the term 'structure' itself enters service as a verb and leads us on to the notion, dear to some Structuralists, of *structuration* (the basic faculty of the human intelligence according to Piaget).

The remarkable degree of autonomy which language enjoys in respect of reality follows from its systematic nature. We should think of the language-system as being applicable to reality as a whole instead of in its separable elements. To conceive of it as the sum of very many one-to-one correspondences of words and world is to misconceive it utterly. The form taken by the constituent elements of the system is determined not by their referents, as we have seen, but by the place they occupy within the system. Each element is, as Saussure insists, 'a form, not a substance'. This is perhaps hard to grasp, but it is the radical consequence of the 'arbitrariness' of signs and of language as a whole. Signs are forms because they determine one another, as fellow members of the one integral system. It is their place within the system which decides what Saussure calls their 'value', which he is careful to distinguish from their 'signification'. This latter term he reserves for the actual application of a sign to the world, in an act of reference; it is a relation between language and reality. The 'value' of a sign, on the other

hand, is an internal relation, depending as it does on that sign's multiple relations with other signs of the language.

Saussure is here practising very obviously a linguistics of the word, and not the sentence, but his assertion that the linguistic sign is essentially a form rather than a substance can be corroborated from Sapir, who was certainly a linguist of the sentence and of grammar. For Sapir too, 'The word is merely a form, a definitely molded entity that takes in as much or as little of the conceptual material of the whole thought as the genius of the language cares to allow.'²⁶ In this instance the 'whole thought' – and Sapir does not ask how that can ever be abstracted from the actual forms of its expression – plays the same role as the undifferentiated flux of 'thought' in general plays for Saussure, as what is somehow there to be articulated in whatever form a particular language permits. Sapir's is the attitude of a comparatist, for whom the comparison between different languages is a matter of considering their different formal structures; Saussure is looking beyond the characteristics of existing linguistic structures to the structure of structure itself, to what makes language possible.

The notion of a sign's 'value' leads up to the more embracing notion of a language as a system of differences. No sign is sufficient unto itself: it is what it is, linguistically, by virtue of what it isn't. If it is an 'entity' at all, then it is a negative entity, differential in its nature as well as in its function:

In the language itself, there are only differences. Even more important than that is the fact that, although in general a difference presupposes positive terms between which the difference holds, in a language there are only differences, and no positive terms. Whether we take the signifier or the signified, the language includes neither ideas nor sounds existing prior to the linguistic system, but only conceptual and phonetic differences arising out of that system. In a sign, what matters more than any idea or sound associated with it is what other signs surround it.²⁷

The differential nature of the sign in both its aspects, as sound and as sense, is no impediment to the positive *use* of signs; their differential nature is then eclipsed inasmuch as there is no need for us to be aware of it. Again, one might say that where the system is of a negative, differential nature (though it has been argued against Saussure, notably by Roman Jakobson, that grammatical categories cannot be understood in this differential way), linguistic events are positive. Saussure adopts the analogy (in strikingly similar terms to those later found by Wittgenstein) with the game of chess, games being ideal examples of rule-bound structures. A piece in chess falls under the category of pawn or

bishop not by virtue of what it is independently of the game, which is a carved bit of wood or ivory, but by virtue of the value invested in it by the rules of chess and by the differentiation of pawns from knights from queens and so on. We may not be conscious of this differentiality every time we move a chess piece, but it is very clear that such an 'event' is wholly determined by the structure of the game in which it occurs. The analogy is especially helpful in demonstrating the crucial difference between form and substance, given the insignificance, for someone actually playing chess, of the substantiality of the pieces. In the same way, for someone actually using language, the linguistic substance, which may be of interest to a physiologist or a graphologist, according to whether it is the spoken or the written substance, is of no account, since what the language-user is using is the *forms* of his or her language.

The signs of a language thus become subject to the so-called 'play of differences', a concept popular among post-Structuralists. Because they are mere forms, signs have neither complete stability nor complete identity. Change in one sign will entail changes in those other signs with which it enters into relations in the system, and this is true whether the changes are to the sound of the sign or to its meaning. Changes in a language are of course a diachronic factor, not a synchronic one, but they do not affect the systematic nature of language itself; the synchronic point of view of Structuralism does not at all deny the influence of outside factors working to bring about changes in the grammatical, phonetic or semantic structure of a language, it only insists that these changes themselves be seen as 'structuredependent', that, as Sapir has it, the 'drift' which a particular language displays in its evolution through time is conditioned by the structure of the language and 'constituted by the unconscious selection on the part of its speakers of those individual variations that are cumulative in some special direction'. ²⁸ It is a fact, also, that although the entry into a language of new forms belongs to the diachronic or historical study of that language, when this happens the new forms do not replace old ones straight away; there is sure to be a period when new and old forms coexist and compete until one or other gives way, or until both are preserved and accorded different 'values' in order that they may be differently used. During this period of coexistence linguistic change becomes a synchronic study: indeed, an especially telling example of what linguistic coexistence implies since where a new form and an old compete the differences in 'value' between them may be particularly subtle.

Saussure's recognition that the signs of a language have a 'value' as well as a 'signification' brings in for the first time the 'semiotic' function of language

(the term derives from the Greek word *semeion* meaning 'sign'). Semiotics is the subject of the third chapter of this book and I will not linger over it here except to say that it concerns itself with signs such as those of which a language consists in so far as these belong to a system: with how they mean rather than with what they mean. Semiotics may thus be contrasted with semantics, which concerns itself with the 'signification' of signs or the use we make of them to refer. Semiotics has to do with the word as a unit, semantics with words combined in sentences: 'In semantics "meaning" results from the sequence, appropriateness and adaptation of the different signs among themselves. That is absolutely unpredictable. It opens out on to the world. Whereas in semiotics meaning is turned in on itself and as it were contained within itself. 29 As a semiotic item a linguistic sign may be differentiated from others of its kind both by sound and by sense. The English sign *horse*, for example, is defined phonetically by the fact that it resembles but is not identical with hearse, coarse, whores, house, and so on through a long list of such near homophones (including the actual homophone hoarse, from which it is not differentiated phonetically at all but will usually be so semantically by the meaning of the sentence in which it is used). Should the pronunciation or inscription of a sign depart far enough from the norm to render it phonetically or graphically indistinguishable from those adjacent to it in sound or appearance, then, obviously, only the context can disambiguate it. But as an abstract item of the language such identity as a particular sign commands is secured by the small phonetic or graphic differences between it and neighbouring items.

Its conceptual 'value' is rather harder to determine because here we are quick to lose sight of a sign's 'value' in the face of its common 'signification'; its positive use in an act of reference prevents us from attending to its constituent differentiality. A comparison between different languages is often the simplest way in which to demonstrate how semantic 'values' function. The example which Saussure himself provides involves the English word *sheep* and the French word *mouton*, which are two signs used alike to refer to the one animal. But if they are identical in signification they are not so in 'value', because the English language contains another sign mutton to go alongside lamb, to refer to sheep when they are eaten. The French language has no equivalent, but uses the one term mouton to refer to both the living animal and its meat. Hence the incompatibility between the 'values' of the two terms in the two languages, since English in this instance offers a contrast or relation absent from French. There will be more to be said on this matter of structural semantics at a later point; suffice it for now to emphasize that any sign in any sign-system has a 'value' by virtue of belonging to that system.

A sign's 'value' becomes especially apparent when it is one of several alternatives which might be substituted for one another in an act of reference; thus the 'value' of *horse* is made more apparent by the existence in English of such other signs as *nag*, *mount*, *pony*, *steed* and the like, all of which might be chosen to refer to an actual horse and all of which clearly possess meanings additional to the mere 'horse-ness' of the creature in question. These additional meanings are the sign's 'connotations', of which there will be more to be said when we turn to the matter of semiotics. The question of a sign's semantic 'value' brings us up against the encyclopedic nature of the semantic structure of a language, which is a network so rich in relations between terms that it will perhaps always defeat analysis.

The systematic nature of language introduces into its use what might be called a 'vertical' dimension, since each sign which finds its way into an actual utterance, in speech or in writing, invokes, potentially, all the other signs to which it bears a relation. This dimension of language Saussure calls the 'associative' and he contrasts it to the other, 'horizontal' dimension of language: the linear or 'syntagmatic' one. Since Saussure's own time, the associative dimension has come more and more to be known as the 'paradigmatic', which makes it sound more formal than what Saussure appears to have had in mind, since many of the associations which particular signs carry for those who use them may be private and thus less than paradigmatic, if by this term we mean sets of substitutable signs common to the whole language- community. However, Saussure's insistence that language works in both dimensions simultaneously marks him off once again from the grammatical tradition of American Structuralism, which is concerned more or less exclusively with the syntagmatic dimension of language.

The contrast which Saussure makes is between the actually uttered and the unuttered, or, once again, the language-event and the language-system. The multiple associations of which signs are simply the node are not to be identified with the language-system in its entirety, but they are as it were the living proof that such a system exists, and that one sign leads inescapably to another. This conception introduces the notion of *absence* into the account of language: 'Syntagmatic relations hold *in praesentia*. They hold between two or more terms co-present in a sequence. Associative relations, on the other hand, hold *in absentia*. They hold between terms constituting a mnemonic group.'³⁰ These 'absent' associations with which most if not all of the linguistic signs we use are invested may of course be brought to presence and inserted into a syntagma – this process is the one which, Jakobson argues, characterizes the 'poetic' use of language as opposed to the everyday use (see the chapter on Literary Structuralism). Students of language are perhaps entitled to leave it out of account, as they mostly have

done, on the grounds that what is 'absent' is a wasteful distraction from the problems posed by what is present. But there is a less creditable reason also for this neglect of the associative dimension of language-use, which is the fear we may feel at discovering how influential it is. Many of us like to think that when we use language we control it more or less totally and that it is we who determine the sequence of words or thoughts each time we write or speak; we are not happy to allow that language itself can prove more powerful than we are and that the associations of the signs we have already used may be determining the choice of the signs to come. This loss of authority in the 'speaking subject' or language-user is a most important and contentious aspect of Structuralism, exploited to the full in post-Structuralism as I shall hope to show, and it can be traced back to this insistence of Saussure that the language-system impinges at every moment on language-events.

If it is possible to codify all the syntagmatic associations of signs – this is what American 'distributionalist' grammarians sought to do - the same is not true for their paradigmatic associations. '[An] associate group has no particular number of items in it; nor do they occur in any particular order,' declares Saussure.³¹ The most one can do is to divide them into the two necessary classes of phonetic and semantic associations, while hoping that there is not a third class, peculiar to linguists, of grammatical associations. The phonetic associations of a given sign such as horse might eventually be listed, starting with those I have already suggested and pursuing the catalogue ever further from the sign with which one began. A similar catalogue for the semantic associations of the same sign is out of the question, for the reasons I have indicated, that there is no end to them and no definitive or commonly agreed order in which they can be placed. Phonetic associations are impersonal, being determined by the phonetic structure of the language (some people are much more alert to them than others, naturally, and could produce longer lists of valid associations) but semantic ones allow for an infinitely greater freedom, even if in the end they too must be bounded by the semantic structure of the language because what lies outside that is literally inconceivable. All that Saussure himself will say of the 'associative relations' of a sign is that they form a 'constellation'. 32

I have already pointed to the fact that the word 'structure' occurs nowhere in the *Course*. It was indeed not until some twelve years after that book was first published that European Structuralism may be said to have begun as a distinctive school of linguistic thought. The occasion for the first true airing of the term 'structure' in the sense we now give it was a conference of linguists held at The Hague in 1928, and the branch of linguistics it was

then applied to was phonetics. The innovators were three Russian linguists working outside Russia: Roman Jakobson, S. Karčevsky and N. Troubetskoy, whose base was Prague. Prague Structuralism, which was innovative in the fields both of language and literature, and of art in general, and which survived in Czechoslovakia even after its early leaders had either died or left the country, is a most important if rather neglected tributary to the stock of doctrines which have come to constitute Structuralism.

In 1929, the year after their intervention at The Hague, these three linguists published, in French and anonymously, their so-called *Theses*, or manifesto, whose overall title proclaimed their affiliation with Saussure: 'Problems of method stemming from the conception of language as a system'. The system they were concerned with was one on which Saussure had had relatively little to say, though what he did say was impeccably Structuralist: the phonetic or phonological system of language. The method which the Prague linguists intended to follow was to 'characterize the phonological system by necessarily specifying the relations existing between the phonemes, that is, by tracing the plan of the structure of the language under consideration'³³ – a method which they declared could be followed equally fruitfully in studying other systems of the language. Hence-forward the study of language could be explicitly Structuralist.

Saussure had foreseen that the study of the sound aspect of language needed to be carefully divided into the study of the production of sounds and the study of their reception. Merely as sounds they are a subject for physiology, which can take up questions of how the speech organs function. But as the sounds of a language, in the ear of a user of that language, they become a subject for the linguist, who can investigate their nature as participants in a language's sound-system. Phonetics may be left to study the physiological side of sound-production, phonology turns instead to the analysis of the sound-system. It is with phonology that Structuralism is concerned.

The units out of which the sound-system of a language is formed had been discovered many years before the Prague Structuralists produced their manifesto: they are the 'phonemes' of the language, which might be defined as the smallest distinctive units of sound that a language possesses. They are the sounds which tell different words apart. Thus, in English *p* and *b* are separate phonemes because *pill* and *bill* are separate words; similarly, *i* and *u* are separate phonemes because *pill* and *pull* are separate words, and *l* and *t* because *pill* and *pit* are separate words. Phonemes must be found by a test of substitution, usually known as 'commutation', whereby changes are induced in the phonetic make-up of the word in order to see at what point it becomes a different word. Phonology thus has to start from the semantic aspect of a sign, or the signified, which determines the permissible extent of

phonetic variation in a sign before it turns into a different sign. The test is one of sense, not sound.

Each language has its own phonological system, recognizing differences which other languages may not recognize. Jakobson gives as a telling example of this the fact that whereas in English r and l are distinct phonemes – rash and lash are distinct English words – in Korean they are not, so that a speaker of Korean can substitute one sound for the other without any loss of sense, hence the regularity with which, when learning English, a Korean speaker may substitute l for r unaware that he has now to deal not with mere sounds but with phonemes.³⁴

The number of phonemes in any given language is unexpectedly small, a fact which makes the phonological system a particularly good model for the systematicity of language as a whole since with a restricted number of elements it is able to generate an enormous number of different signs. In this respect phonemes may be compared with words, whose possible meaningful combinations are certainly innumerable, bearing out the cardinal principle common to Saussurean and Chomskyan Structuralism that language is a structure characterized by a 'constructivity without limit'.³⁵

The phonological Structuralism developed in Prague had as one of its main purposes to *integrate* the phonetic data which had been collected over the years and classified but never grasped as the manifestation of a single abstract scheme, applicable to any language whatsoever. The new Structuralists had higher aims, founded on their conviction that, in Troubetskoy's words: 'A phonological system is not the mechanical sum of isolated phonemes, but an organic whole whose members are phonemes and whose structure is subject to laws.'³⁶

But what the Prague Structuralists did not at first have was a systematic and meaningful way of relating phonemes adequately one to the other. Saussure had written of the 'oppositive' nature of phonemes, thereby assimilating them to the other elements of language, but it is not clear how phonemes can be held to be 'opposed' one to another; they differ from each other but difference is not necessarily a relation of opposition. The discovery in phonology which remained to be made was that phonemes could be analysed, they were not the indivisible atoms ('symbolic atoms' Sapir called them) earlier linguists had imagined them to be. During the 1930s, and chiefly by Jakobson, phonemes, first vowels and then consonants, were further broken down into 'distinctive features'. This deeper analysis established new relations between phonemes according to whether, for example, they were 'voiced' or 'unvoiced', 'nasalized' or 'not nasalized', etc. By such means English b can be shown to stand to English b in a relation of voiced to unvoiced, as does English d to English t. If one then asks whether this means that one or other pair of consonants are the

voiced and unvoiced versions of the 'same' phoneme, the answer is 'no', they are not the voiced and unvoiced versions of anything. They are the two terms of a relation and that is all: opposed phonemes are an ideal example of Structuralism's denial of self-sufficient entities. The analysis of phonemes into distinctive features also represents a further economy for the linguist inasmuch as there are even fewer distinctive features at work in a particular language than there are phonemes – Jakobson allows five only for the sound-system of French, and three among the eight vocalic phonemes of Turkish.

The establishment of this underlying phonological system of 'distinctive features' achieves an ultimate segmentation of a language's sound-system, and lends a new rigour and weight to Structuralism's dependence on pairs of opposed terms, already adumbrated by Saussure. As Jakobson claims: 'The oppositions of such differential qualities are real binary oppositions as defined in logic, i.e., they are such that each of the terms of the opposition *necessarily* implies its opposite.'³⁷ Thus 'voiced' and 'unvoiced', or 'nasalized' and 'not nasalized' are pairs of terms allowing of no middle term between them, the second example showing very usefully that in such a system the absence of a feature is equally as significant as its presence.

'Distinctive features' are the furthest point it is possible to reach in the analysis of language without leaving the language-system for that of the human anatomy. Such terms as 'voiced' and 'unvoiced' look to be drawn from the mechanics of sound production, except that the distinction between them is an acoustic one on which depends our understanding of what we hear. (The analysis of the elements of the written language, or 'graphemes', could presumably be conducted in similar terms to those used in the analysis of phonemes, and the 'distinctive features' of written signs be codified. However, no adequate report seems to exist of research conducted along such lines.)

One needs to be clear, finally, that phonology occupies itself with the study of *langue* and not of *parole*. The phoneme is an abstraction, not an actually uttered sound: 'The phoneme is not to be identified with the sound, yet nor is it external to the sound; it is necessarily present in the sound, being both inherent in it and superposed upon it: it is what remains invariant behind the variations.'³⁸ In Saussurean terms we can say that the phonological system of our language is 'internalized' in our brains, or in Chomskyan terms that it is 'acquired', even though we are seldom or never conscious of it when speaking. 'Distinctive features' are a fact of the linguist's analysis and not of the consciousness of speakers, though we receive indications of the sound-system of language whenever we meet with error in hearing or speaking and one phoneme is mistakenly exchanged for another. The phonological system of a language is a cultural phenom-

enon, not a natural one: it represents indeed the point where nature becomes culture, or where the continuum of naturally produced 'noise' is articulated into the discontinuous and distinct sounds of significant speech. Structuralist phonology is the bridge between linguistics and the sociological uses of Structuralism, which are the subject of the next chapter.