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Contents

Foreword

THE STUDIES COLLECTED in this volume were chosen from among many others of a more technical nature which the author has published during the last few years. If they are here presented as "problems," it is because individually and as a group they make a contribution to the broad general problem of language as revealed in the principal topics taken up; we have considered the relations between the biological and the cultural, subjectivity and sociality, sign and object, and symbol and thought, as well as problems of intralinguistic analysis. Those who are discovering the importance of language in other areas will thus see how a linguist approaches some of the questions they have been led to ask themselves, and they will perceive how the configuration of language patterns all semiotic systems.

To some readers, certain pages may seem difficult. They should be convinced that language is indeed a difficult subject and that the analysis of linguistic data is achieved by arduous paths. Like the other sciences, linguistics advances in direct proportion to the *complexity* which it recognizes in things; the stages of its development are the stages of this awareness. Moreover, one must bear in mind the truth that reflection on language is fruitful only if it deals first of all with real languages. The study of those empirical, historical organisms which actual languages are remains the only possible access to the understanding of the general mechanisms and functioning of language.

In the first chapters we outline the trends in recent research in the theory of language and the prospects which have been opened up. We then go to the central problem of communication and its modalities: the nature of the linguistic sign, the distinctive characteristics of human language, relations

between linguistic categories and categories of thought, and the role of language in the exploration of the unconscious. Notions of structure and function are the topics of the following essays, which deal successively with the variations of structure in languages and with the intralinguistic manifestations of some functions; among others, the connections between form and meaning are related to the levels of analysis. A separate series is devoted to syntactical phenomena: here we look for syntactic constants in very diversified linguistic types and set up specific models of certain sentence types to be recognized as universals: the nominal sentence and the relative clause. "Man and Language" is the title of the following part; here it is the mark of man upon language, defined by the linguistic forms of "subjectivity" and the categories of person, pronouns, and tense. In contrast, in the last chapters, it is the role of meaning and culture which is emphasized; there we study methods of semantic reconstruction as well as the origin of some terms of importance in modern culture.

The unity and coherence of the whole will emerge from this survey. We have purposefully refrained from bringing in any later material, whether in the presentation or in the conclusions of the various chapters. Otherwise it would have been necessary to add an extended postscript to each of them, either with regard to the state of studies (for example, to indicate the most recent developments in theoretical research), or as the historian of our own research—the latter in order to give an account of the reception of these articles and to point out that "The Nature of the Linguistic Sign" (p. 43) provoked a lively controversy and brought forth a long series of articles, and that our pages on tense in the French verb (p. 205) were taken up and confirmed in the statistics of H. Yvon on the use of tense in modern writers, etc. But this would have been to initiate a new investigation each time. Other occasions will occur for coming back to these important questions and treating them anew.

I should like to express my appreciation here to Messrs. P. Verstraeten and N. Ruwet for their part in the preparation of this volume.

E. B.

Translator's Note

The few changes or additions to the text necessitated by shifting from a French to an English frame of reference have been placed in square brackets.

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M. E. M.

Publisher's Note

This translation was thoroughly checked and in some instances revised by the author. Certain editorial changes were also made in organization (such as placing all of the notes at the end of the volume) and in styling.

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Changes in Linguistics

ONE

Recent Trends in General Linguistics

DURING THE COURSE of the last decades, linguistics has developed so rapidly and extended its domain so far that even a cursory summary of the problems which it takes up would have to assume the proportions of a major work or else be condensed into a dry enumeration of individual efforts. It would take pages simply to sum up what has been learned and even then an essential development might be missing. The huge increase of productivity in linguistics is such that a thick volume is not enough to contain all the annual bibliography. The major countries now have their own publications, their collections, and also their methods. Efforts at description have been pursued and extended throughout the whole world; the recent edition of *Les Langues du monde* gives an idea of the work that has been accomplished and of the even greater amount that remains to be done. Linguistic atlases and dictionaries have multiplied. In all areas the accumulation of information produces works of ever increasing bulk: a description of the language of children in four volumes (W. F. Leopold), a description of French in seven volumes (Damourette and Pichon) are typical examples. It is possible today for an important review to be devoted exclusively to the languages of the American Indians. In Africa, in Australia, and in Oceania, research is being undertaken which is enriching considerably the inventory of linguistic forms. Parallel to this is the systematic exploration of the linguistic past of mankind. A whole group of ancient languages in Asia Minor has been brought within the province of Indo-European and this modifies the theory. The gradual reconstruction of proto-Chinese, common Malay-Polynesian, and of certain Amerindian prototypes will perhaps permit new genetic groupings, etc. But even if a much more detailed enumeration of research could be given, it would show that the work is proceeding very unevenly; here studies are continued which would have been the same in 1910, there even the term "linguistics" is rejected as being out of date, and elsewhere whole books are devoted just to the idea of the "phoneme." This multiplication of effort does not immediately reveal, but rather conceals, the profound changes which the

methodology and spirit of linguistics have undergone in past decades, and the conflicts which divide it today. When one has opened his eyes to the importance of what is at stake and to the consequences which the current discussions might have for other disciplines, one is tempted to think that discussions about questions of methodology in linguistics may be only the prelude to a revision which will finally include all the sciences dealing with man. That is why we shall lay special stress, in nontechnical terms, on the problems which are today at the center of research in general linguistics, on the idea of their subject which linguists are developing and on the direction in which they are moving.

Moreover, even as early as 1933, the volume published by the *Journal de Psychologie* under the title of *Psychologie du langage* demonstrated a remarkable burgeoning of theories and assertions of doctrine. There one could read the first expositions of principles which, like those concerning "phonology," are now taught everywhere. There also one could see the emergence of conflicts which have since led to reorganizations, such as the distinction between the synchronic and diachronic approaches and between phonetics and phonology, conflicts that disappeared when the terms were better defined. Certain convergences reconciled independent theories. When, for instance, Sapir brought to light the psychological reality of phonemes, he discovered on his own an idea which Trubetskoy and Jakobson had been working to establish. But one could not then foresee that in an ever broadening section of linguistics, research would, in appearance at least, run counter to the aims which linguistics had pursued up to then.

It has often been noted that the approach which characterized linguistics during the nineteenth century and at the beginning of the twentieth was exclusively historical. History as the necessary perspective and successivity as the principle of explanation, the splitting up of language into isolated elements and the investigation of the laws of evolution peculiar to each one of them—these were the dominant characteristics of linguistic doctrine. It was admitted, to be sure, that some principles of a completely different nature, like analogy, could disturb the regularity of the evolution. But in ordinary practice, the grammar of a language consisted of a presentation of the origin of each sound and of each form. This was the result both of the pervasiveness of evolutionism in all branches of learning and of the conditions under which linguistics came into existence. The novelty of the Saussurian point of view—one of those which has had the most profound effect—was to realize that language in itself does not admit of any historical dimension, that it consists of synchrony and structure, and that it only functions by virtue of its symbolic nature. It is not so much the historical point of view which is thus condemned as a certain way of "atomizing" language and of

making history mechanical. Time is not the agent of evolution; it is only its framework. The reason for the change that affects a certain element of a language lies, on the one hand, in the nature of the elements of which it is made up at a given moment, and on the other hand, in the structural relationships among those elements. The mere observation of the change and the formula of correspondence that sums it up make way for a comparative analysis of two successive states and of the different arrangements that characterize them. The legitimacy of diachrony, considered as a succession of synchronies, is thus reestablished. This brings out the prime importance of the idea of system and of the reestablishment of interdependence among all the elements of a language.

These views are today classic and were anticipated throughout the work of Meillet, and although they are not always applied, one would no longer find anyone to dispute them. If, from here on, the direction in which linguistics seems to be extending them today could be characterized in one word, it could be said that they mark the beginning of linguistics conceived of as a *science*, on account of its cohesiveness, its autonomy, and the aims which are assigned to it.

This trend is indicated above all by the fact that certain types of problems have been abandoned. No one now seriously raises the question of the monogenesis or polygenesis of languages, or, in a general way, that of absolute origins. One no longer yields as easily as formerly to the temptation to erect the individual characteristics of a language or a linguistic type into universal qualities. The horizon of linguists has expanded. All types of languages have acquired equal rights to represent language in general. At no moment of the past and in no form of the present can one come upon anything "primordial." The exploration of the most ancient attested languages shows them to be just as complete and no less complex than those of today; the analysis of "primitive" languages reveals a highly individualized and systematic organization in them. Far from constituting a norm, the Indo-European type appears instead to be rather the exception. All the more reason for turning away from research on a specific category recurring in most or all languages and believed to illustrate some universal tendency in "the mind of man"; we have seen how difficult it is to describe the whole system of a single language and how fallacious certain analogies of structure described by means of the same terms are. Great importance must be attached to this ever-broadening experience of the linguistic diversity of the world. Several lessons have been extracted from this. First, it has become apparent that the conditions of evolution do not differ fundamentally according to the levels of culture, and that the methods and criteria that hold for languages of the written tradition could be applied to unwritten languages. From another

point of view, it has been noticed that the description of certain linguistic types, notably of the Amerindian languages, raised problems which the traditional methods could not solve. The result has been a refurbishing of the procedures of description which, by a chain reaction, has been extended to languages which were thought to have been described for all time and which have taken on a new appearance. Still another consequence is the realization that the inventory of morphological categories, as diverse as it seems, is not without limits. One could thus imagine a sort of logical classification of these categories which would show their arrangement and laws of transformation. Finally, and here we touch upon questions whose range extends beyond linguistics, it can be seen that "mental categories" and "laws of thought" in large measure do nothing but reflect the organization and the distribution of linguistic categories. We imagine a universe which our language has first shaped. The varieties of philosophical or spiritual experience depend unconsciously on a classification which language brings about only for the reason that it is language and that it is symbolic. These are some of the topics that a cognizance of the diversity of linguistic types reveals, but to tell the truth, none of them has been thoroughly explored.

To say that linguistics is becoming scientific is not only to stress the need for rigor which is common to all disciplines. It is a matter, first of all, of a change of attitude towards the subject, which could be defined as an effort at formalization. A double influence can be recognized at the beginning of this trend: that of Saussure in Europe and that of Bloomfield in America. The ways of their respective influences are as different as the works from which they proceeded. It is difficult to imagine a more marked contrast than that between these two works: the *Cours de linguistique générale* by Saussure (1916), a posthumous book put together from the notes of students, an ensemble of brilliant insights, each one of which calls for explication and certain of which still stir up controversy, setting language on the plane of a universal semiology and opening up views to which the philosophical thought of today is just awakening; and *Language* by Bloomfield (1933), which has become the *vade mecum* of American linguists, a "textbook" completely finished and matured, remarkable as much for its determined rejection of philosophy as for its technical rigor. Nevertheless, Bloomfield, although he does not refer to Saussure, would have certainly subscribed to the Saussurian principle that "The single true aim of linguistics is language envisaged in and of itself." This principle explains the trends which linguistics shows everywhere, even if it does not account for the reasons that make it wish to be autonomous and the ends it pursues thereby.

Cutting across the differences of schools, the same preoccupations appear among linguists who try to systematize their procedures; these may be

formulated in three fundamental questions: (1) what is the task of the linguist, what does he reach, and what will he describe under the name of language? It is the very object of linguistics which is in question. (2) How will that aim be described? Tools must be forged that could grasp all the features of a language in all the known languages so as to describe them in identical terms. What then will be the principle of these procedures and of these definitions? This shows the importance which linguistic technique assumes. (3) For the naïve speaker as for the linguist, the function of language is "to say something." What exactly is this "something" in regard to which language is articulated, and how is it defined with respect to language itself? The problem of meaning is raised.

Simply listing these questions shows that the linguist wishes to break away from connections with or dependence upon previously established frames of reference or related disciplines. He rejects all a priori views of language in order to construct his notions directly from the object of his investigation. This attitude should put an end to the subordinate position, conscious or unconscious, in which linguistics found itself with regard to history on the one hand and to a certain psychology on the other. If the science of language has to choose models, it will be in the mathematical or deductive sciences, which completely rationalize their subject by reducing it to a set of objective characteristics subject to fixed definitions. That is to say that it will become more and more "formalistic," at least in the sense that language will consist of the totality of its observable "forms." Starting with native linguistic expression, one proceeds analytically to a thorough decomposition of each utterance into its elements, then by successive analyses to a decomposition of each element into increasingly simpler units. This operation will aim at bringing out the *distinctive* units of a language, and this is already a radical change in methodology. While objectivity formerly used to mean total acceptance of data, which led to both the admission of the graphic norm in written languages and the minute recording of all the articulatory details for oral texts, today one strives to identify the elements insofar as they are distinctive at all levels of analysis. In order to recognize them, which is in no case an easy task, one is guided by the principle that there is nothing in a language but differences and that language avails itself of a system of discriminatory means. Only the features which are meaningful are retained by separating out, after having identified them, those which are simply variants. Great simplification results from this, and it now becomes possible to recognize the internal organization and the laws of arrangement of these formal features. Each phoneme or morpheme becomes relative to each of the others, in that it is both different from and bound up with them, and each delimits the others, which in their turn delimit it, distinctiveness and solidarity being

related conditions. These elements are organized in series and display in each language specific arrangements. It is a structure in which each part has its reason for being in the totality which it serves to compose.

Structure is one of the essential terms in modern linguistics, one of those which still have a programmatic value. For those who use it on good grounds, and not simply for the sake of fashion, it can mean two very different things. By structure is meant, especially in Europe, the arrangement of a whole in parts and the demonstrable coherence of these reciprocally conditioned parts in the whole; for most of the American linguists, it is the distribution of the elements as it is observed, and the capacity of these elements for association or substitution. Because of this, the expression "structural linguistics" receives different interpretations; different enough, anyway, for the procedures derived from them not to have the same meaning. By the term *structure*, a "Bloomfieldian" will describe an arrangement of material which he will segmentalize into its constituent elements; he will define each of these elements by its position in the whole and by the variations and substitutions possible in this same position. He will reject as tainted with teleology the notion of balance and drift which Trubetskoy added to that of structure and which has since shown itself to be fruitful. It is indeed the only principle that makes the evolution of linguistic systems comprehensible. A state of a language is above all the result of a certain balance among the elements of a structure, a balance which, however, never leads to a complete symmetry, probably because dissymmetry is built into the very heart of language through the asymmetry of the organs of speech. The mutual dependence of all the elements causes every alteration at one point to have the repercussions throughout the system and sooner or later to produce a new arrangement. Consequently, diachronic analysis consists of setting up two successive structures and of stating their relationships, thereby showing what parts of the former system were altered or threatened and how the solution brought about by the later system was prepared. In this way the conflict between the synchronic and diachronic approaches so vigorously asserted by Saussure is solved. This concept of totally organized structure is completed by the notion of a hierarchy among the elements of the structure. A remarkable illustration of this is found in the analysis made by R. Jakobson of the acquisition and loss of the sounds of language by children and by aphasiacs respectively; the sounds that the child acquires last are the first the aphasiac loses, and those which the aphasiac loses last are the first to be articulated by children—the order of the disappearance is the reverse of that of acquisition.

In any case, an analysis thus conceived is possible only if the linguist is able to observe in full, to control, or to vary at will the operation of the language described. Only living languages, written or not, offer a field large

enough and facts ascertainable enough for the investigation to be conducted with exhaustive rigor. The preponderance has been given to spoken languages. This condition has been imposed on certain linguists for empirical reasons. For others, in America, it was primarily the necessity of noting and analyzing the difficult and varied Indian languages, which was quite properly the point of departure for a revision in the methods of description and then in the general theory. But little by little the reorganization has been extended to the ancient languages. It has even become possible to reinterpret in the light of the new theories the data furnished by the comparative method. Works like those of J. Kurlyowicz on the reconstruction of the phases of Indo-European show how much can be expected of an analysis so oriented. A master of historical linguistics, J. Vendryes, also argues for a "static" linguistics that would be a comparative inventory of the resources which the different languages supply for the same requirements of expression.

We can understand why the type of study that has predominated during these last years should be the systematic description, partial or total, of a particular language, with a more meticulous concern for technique than ever before, for the linguist feels constrained to justify his procedures from beginning to end. He puts forward an array of definitions that must account for the status he confers on each of the defined elements, and the operations are presented explicitly in such a way as to remain verifiable at all stages of the procedure. This results in an overhauling of the terminology. The terms employed are so specific that the informed linguist can recognize the approach of a particular study from its first lines, and certain discussions are intelligible to supporters of a method only when translated into their own terminology. One requires of a description that it be explicit and consistent and that the analysis be carried out without regard to meaning and use only formal criteria. It is especially in America that these principles are stated, and they have been extensively treated there. In a recent book, *Methods of Structural Linguistics* (1951), Z. S. Harris has produced a sort of codification of them. His work lists in detail, step by step, the processes for identifying phonemes and morphemes according to the formal conditions of their arrangement—distribution, environment, substitution, complementarity, segmentation, correlation, etc.—each of the operations being illustrated by particular problems treated with an almost mathematical array of graphic symbols. It would seem difficult to go further in this direction. Does it succeed at least in establishing a single and fixed method? The author is the first to agree that other procedures are possible and that certain of them would even be more economical, especially when meaning is introduced, so that one wonders finally if there is not some gratuitousness in this display of the demands of methodology. But, especially, it is to be observed that, in actual fact, all the work of the

linguist deals with discourse implicitly assimilated to language. This point, which is fundamental, should be discussed along with the special concept of structure admitted by partisans of that method. Schemes of distribution, no matter how rigorously they are established, do not constitute a structure, any more than inventories of phonemes and morphemes, defined by means of segmentation in chains of discourse, represent a description of a language. What is given to us, in fact, is a method of transcribing and materially analyzing a language which is represented by a body of oral texts, the meaning of which the linguist supposedly does not know.

Let us emphasize especially that feature which, even more than the special technique of the procedure, characterizes the method; it is the principle that linguistic analysis, in order to be scientific, should ignore meaning and apply itself solely to the definition and distribution of the elements. The conditions of rigor imposed on the procedure require that that elusive, subjective, and unclassifiable element which is meaning or sense be eliminated. All that can be done will be to make sure that a certain utterance corresponds to a certain objective situation, and if the recurrence of the situation elicits the same utterance, they are to be correlated. The relationship between form and sense is thus understood as the relationship between the linguistic expression and the situation, in terms of behaviorist theory, so that the expression might be both response and stimulus. Thus, meaning is practically reduced to a certain linguistic conditioning. As for the connection between the expression and the world, this is a problem to be left to the specialists in the physical universe. Bloomfield defines "the meaning of a linguistic form as the situation in which the speaker utters it and the response which it calls forth in the hearer" (*Language*, p. 139). And Harris stresses the difficulty of analyzing situations: "There are at present no methods of measuring social situations and of uniquely identifying social situations as composed of constituent parts, in such a way that we can divide the utterance which occurs in (or corresponds to) that social situation into segments which will correspond to the constituent parts of the situation. In general, we cannot at present rely on some natural or scientifically ascertainable subdivision of the meaning range of the local culture, because techniques for such complete cultural analysis into discrete elements do not exist today; on the contrary, language is one of our chief sources of knowledge about a people's culture (or 'world of meaning') and the distinctions or divisions which are made in it" (*Methods*, pp. 188–189). It is to be feared that if this method becomes general, linguistics may never be able to join any of the other sciences of man or of culture. The segmentation of the statement into discrete elements does not any more lead to an analysis of language than the segmentation of the physical universe leads to a theory of the physical world. This way of formalizing the parts of the state-

ment may lead to a new atomization of language, for an empirical language is the result of a process of symbolization at several levels, the analysis of which has not even been attempted. The linguistic "datum" is not, considered in this way, a primary datum with which all one has to do is break it down into its component parts; it is actually a complex, some of whose values come from particular qualities of the elements, others from the conditions of their arrangement, still others from the objective situation. One can then conceive of several types of description and several types of formalization, but all of them must necessarily assume that their object, language, is informed with meaning, which gives it its structure, and that that condition is essential to the functioning of language among other systems of signs. It is difficult to imagine the result of segmentalizing a culture into discrete elements. In a culture as in a language, there is a network of symbols whose relationship must be defined. Until now, the science of cultures has remained strongly and deliberately "substantial." Can formal structures of the type of those introduced by Claude Lévi-Strauss into the systems of family relationship be recognized in the apparatus of culture? This is a problem of the future. In any case it can be seen how necessary an investigation of the properties of symbols would be for all sciences that operate with symbolic forms. The research begun by Peirce has not been followed up and this is a great pity. A better understanding of the complex processes of meaning in language and probably outside language could be expected, among other things, from progress in the analysis of symbols. And since this functioning is unconscious, just as the structure of behavior is unconscious, psychologists, sociologists, and linguists would do well to join together in this research.

The orientation which we have just characterized is not the only one to note. Other conceptions, equally systematic, have been advanced. In the psycholinguistics of G. Guillaume, linguistic structure is posited as inherent in an actual language, and the systematic structure discloses itself from the facts of usage which make it explicit. The theory which Louis Hjelmslev, in Denmark, wishes to put forth under the name of "glossematics" is a construction of a logical "model" of language and a body of definitions rather than an instrument for exploring the linguistic universe. The central idea here is roughly that of the Saussurian "sign," in which expression and content (corresponding to the Saussurian "*signifiant*" and "*signifié*") are two correlated planes, each of which comprises a "form" and a "substance". The movement here is from linguistics toward logic. And in this connection can be seen what could be a convergence of sciences which are still largely unaware of one another. At the moment when linguists concerned with rigor seek to borrow the ways and even the apparatus of symbolic logic for their formal operations, it happens that logicians are becoming attentive to

linguistic "meaning" and, following Russell and Wittgenstein, interest themselves increasingly in language. Their paths cross rather than meet, and logicians concerned with language do not always find linguists to converse with. As a matter of fact, those linguists who wish to insure linguistics a scientific status turn rather toward mathematics, seeking transcription devices rather than an axiomatic method, and they give in rather easily to the lure of certain recent techniques like the theories of cybernetics or of information. A more fruitful task would be to consider the means of applying in linguistics certain of the operations of symbolic logic. The logician scrutinizes the conditions of truth that must be satisfied by the statements that shape science. He will not accept "ordinary" language because it is equivocal, uncertain, and vague, and he strives to forge an entirely symbolic language. But the subject of the linguist is precisely this "ordinary language," which he takes as the datum and whose entire structure he explores. It would be to his interest to utilize tentatively, in the analysis of all orders of linguistic classes which he determines, the instruments developed by the theory of sets, in order to see if relationships amenable to logical symbolization can be stated among these classes. One would then at least have some idea of the type of logic underlying the organization of a language, one would see if there is a qualitative difference between the types of relations peculiar to ordinary language and those which characterize the language of scientific description, or, in other words, how the language of action and the language of intellect interreact. It is not enough to observe that one allows itself to be transcribed in a symbolic notation and the other does not, or does not immediately; the fact remains that both the one and the other proceed from the same source and that they contain the same basic elements. It is language itself that suggests the problem.

These considerations appear to take us far away from those topics of research which linguistics was proposing a few decades ago. But these problems are those of all times, even if it is only now that they are being attacked. On the other hand, in the connections which linguists were then seeking with other fields, today we find difficulties which they hardly suspected. Meillet wrote in 1906: "It will be necessary to determine what social structure a given linguistic structure responds to and how, in a general way, changes in social structure are expressed in changes in linguistic structure." In spite of certain endeavors (Sommerfelt), this program has not been completed, for just as soon as it was attempted to compare language and society systematically, disparities emerged. It appeared that the correspondence between them was constantly disturbed by the major fact of diffusion, in language as well as in social structure, so that societies of the same culture may have heterogeneous languages, while languages very closely related may

be used for the expression of entirely dissimilar cultures. In pushing the consideration further, problems inherent in the analysis of language on the one hand and of culture on the other, and problems of "meaning," which are common to them both, were encountered—in short, the very problems mentioned above. This does not mean that the program of studies indicated by Meillet cannot be realized. The problem, instead, is to discover the common basis of language and society and the principles that govern these two structures by first defining the units that in both the one and the other would lend themselves to being compared; it is also to bring out their interdependence.

There are naturally easier ways to approach the question, but actually they transform it; for example, the study of the imprint of culture on language. In practice, one is limited to the lexicon. It is then no longer a language that is dealt with, but the composition of its vocabulary. It is, however, a very rich subject, and, appearances notwithstanding, one which has been turned to hardly any account. Ample repositories of data that will foster many studies are now available, among them, J. Pokorny's *Indogermanisches Etymologisches Wörterbuch* and C. D. Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages*. The study of the variations in meaning during the course of history is another very promising field. Important works have been devoted to the "semantics" of vocabulary in its theoretical as well as in its social or historical aspects (Stern, Ullmann). The difficulty is to identify such constants as will allow the construction of a theory of lexical signification from the growing mass of empirical facts. These facts seem to offer a constant challenge to any predictability. From another point of view, the action of "beliefs" upon expression raises numerous questions, certain of which have been studied: the importance of linguistic taboo (Meillet, Havers), the modifications of linguistic forms to signal the attitude of the speaker toward the things he is speaking of (Sapir), the ceremonial hierarchy of expressions; and all of these bring to light the complex action of social behavior and psychological conditioning in the use of language.

This leads to the problems of "style" in all its acceptations. In the course of these last years, studies of very different but equally important trends have dealt with the processes of style (Bally, Cressot, Marouzeau, Spitzer, Vossler). Since research along these lines makes use, consciously or not, of criteria which are at the same time aesthetic, linguistic, and psychological, it involves all at once the structure of the language, its powers of stimulation, and the reactions it provokes. Although the criteria remain only too often "subjective," care is taken to state precisely the method to deal with the affective contents, with the intention which produces them as well as with the language they spring from. Progress is being made in that direction with studies on word order, the quality of sounds, rhythm and prosody, as well as on the

lexical and grammatical resources of the language. In this regard, psychology has been widely called upon, not only because of the affective notions constantly involved in the analysis, but also for the techniques used to objectify them—tests of evocation, research on color perception of sounds, vocal timbres, etc. It is a whole symbolism which one is slowly learning to decode.

Thus one observes on all sides the effort to submit linguistics to rigorous methods and to banish from it mere approximation, subjective constructions, and philosophical a priori-ism. Linguistic studies are becoming increasingly difficult from the very fact of these demands and because linguists are discovering that language is a complex of specific qualities to be described by methods still to be created. So specific are the conditions peculiar to language that one could lay down as fact that there are not one but several structures of language, each one of which would give rise to a complete linguistics. To become aware of this will perhaps contribute to an understanding of the present conflicts.

Language has, first of all, the eminently distinctive quality that it is always built up on two planes, those of the "significant" and the "signified." The study of that constituent quality of language and of the correlations of regularity or disharmony which it involves, of the tensions and transformations which result from it in each individual language, could alone serve as a basis for a linguistics. But language is also human; it is the point of interaction between the mental and the cultural life in man, and at the same time the instrument of that interaction. Another linguistics could be founded on the terms of this trinomial: language, culture, and personality. Language could also be considered as being contained in a body of articulated utterances, which would provide the basis of a strictly objective study. A language would then be the object of an exhaustive description which would proceed by means of a segmentation of observable data. On the other hand, this language realized in recordable utterances could be considered the contingent manifestation of a hidden substructure. It is, in that case, the seeking out and bringing to light of this latent mechanism which would be the object of linguistics. Language in general admits also of being constituted in a structure of game, like a pattern of "figures" produced by the intrinsic relationships of constant elements. Here linguistics would become the theory of possible combinations among these elements and the universal laws that govern them. Another possibility would be the study of language as a branch of a general semiotics which would cover both mental and social life. The linguist would then have to define the basic nature of linguistic symbols through a rigorous formalization and a distinct metalanguage.

This enumeration is not exhaustive and cannot be. Other conceptions will perhaps appear. We only wish to show that behind the discussions and asser-

tions of principle of which a glimpse has just been given, there is often, without all linguists seeing it clearly, a preliminary choice which determines the position of the object of investigation and the nature of the method. These diverse theories will probably coexist—although at one point or another of their development they must necessarily meet—until the moment when the status of linguistics as a science will impose itself, not as a science of empirical facts but as one of relations and deductions recapturing unity of plan in the infinite diversity of linguistic phenomena.

From *Journal de Psychologie*, Paris, January–June, 1954, pp. 139 ff.

TWO

A Look at the Development of Linguistics

DURING THE COURSE of these last years, extensive changes, whose scope extends even beyond the already very broad horizon of linguistics, have taken place in studies dealing with language and languages. These changes may not be understood all at once—they elude one even as they appear. In the long run, they have made difficult the approach to new works, which bristle with an increasingly technical terminology. It is a fact that great difficulty is experienced in reading linguists and even more in comprehending their concerns. What are they aiming at and what are they doing with what is the property of all men and never ceases to attract their curiosity—language? One has the impression that for the linguists of today, the facts of language have been transformed into abstractions, becoming the inhuman materials of algebraic constructions or serving as evidence in arid discussions of methodology; that linguistics is getting away from the realities of language and isolating itself from the other social sciences. Actually it is just the opposite. We observe at the same time that these new methods of linguistics are taken as examples and even as models for other sciences, that the problems of language are today of interest in very diverse and increasingly numerous fields of specialization, and that there is a trend in the research done in the social sciences toward working with the same mind that inspires linguisitics.

It may then be useful to set forth, as simply as can be done with this difficult subject, how and why linguistics has thus been transformed, starting from its origins.

Let us begin by observing that linguistics has a double scope: it is the science of language and the science of languages. This distinction, which is not always made, is necessary; language, the human faculty, the universal and immutable characteristic of man, is something distinct from particular languages, always individual and variable, in which it is realized. It is with languages that the linguist deals, and linguistics is primarily the theory of languages. But, seen from the point of view we choose here, these different paths will often intertwine and finally mingle, for the infinitely diverse

problems of particular languages have in common that, when stated to a certain degree of generality, they always have a bearing on language in general.

Everyone knows that western linguistics originated in Greek philosophy. This appears from all the evidence. Our linguistic terminology is made up in large part of Greek terms adopted directly or through their Latin translations. But the interest which the Greek thinkers very early took in language was exclusively philosophical. They argued about its original condition—was language natural or conventional?—instead of studying its functioning. The categories they established (noun, verb, grammatical gender, etc.) always rest on logical or philosophical grounds.

For centuries, from the pre-Socratics to the Stoics and Alexandrians, then during the Aristotelian renaissance, which extended Greek thought until the end of the Latin Middle Ages, language remained an object of speculation, not of observation. No one was concerned with studying and describing a language for itself, or with inquiring whether the categories of Greek or Latin grammar had general validity. This attitude hardly changed until the eighteenth century.

A new phase developed at the beginning of the nineteenth century with the discovery of Sanskrit. It was forthwith discovered that there was a relationship among the languages which have since been called Indo-European. Linguistics was worked out within the framework of comparative grammar with methods which became more and more rigorous as chance findings or decipherings gratified this new science with confirmations of its basic principles and expansions of its range. The work accomplished in a century was considerable and admirable. The methodology tested in the Indo-European field set the pattern. Revised today, it is having new successes. But it should be stated that up until the first decades of our century, linguistics consisted of what was mainly a genetics of languages. It took as its task the study of the *evolution* of linguistic forms. It set itself up as a historical science, its focus being, everywhere and always, a phase of the history of languages.

However, in the midst of these successes, some people were disturbed. What is the nature of a linguistic phenomenon? What is the reality of language? Is it true that it consists of nothing but change? But how does it stay the same and change at the same time? How does it function and what is the relationship of sound to sense? Historical linguistics gave no answers to these questions, having never had to raise them. At the same time, difficulties of a different sort but equally formidable were in the offing. Linguists were beginning to turn to languages which were not written and had no history, especially the Indian languages in America, and they discovered that the traditional frameworks used with the Indo-European languages did not apply to them. They came

upon completely different categories which eluded a historical description and called for a new array of definitions and a new method of analysis.

Little by little, through many theoretical discussions and under the inspiration of the *Cours de linguistique générale* of Ferdinand de Saussure (1916), a new notion of language took shape. Linguists came to realize what was incumbent upon them: to study and describe the present linguistic reality by an adequate technique and not to mix any theoretical or historical presupposition with the description, which should be synchronic, and to analyze the language into its own formal elements.

Linguistics thus entered into its third phase—the present one. It took for its subject not the philosophy of language nor the evolution of linguistic forms, but brought to the fore the intrinsic reality of language, and aimed at making itself a formal, rigorous, and systematic science.

With that, both the historical considerations and the frameworks set up for the Indo-European languages were again called in question. In becoming descriptive, linguistics granted equal importance to all types of languages, written or not, and it had to adapt its methods to them. The problem was indeed to know what a language consisted of and how it functioned.

When, following the lead of F. de Saussure, linguists began to envisage language in and of itself, they recognized what was to become the basic principle of modern linguistics: that language forms a *system.* This holds true for any language, no matter in what culture it is in use, at whatever historical stage we view it. From base to summit, from sounds to the most complex forms of expression, language is a systematic arrangement of parts. It is made up of formal elements put together in variable combinations, according to certain principles of structure. Here is the second key term in linguistics—*structure.* By this is meant primarily the structure of the linguistic system gradually revealed, starting from the principle that a language always has a limited number of basic elements, but that these elements, few in number in themselves, yield a large number of combinations. They are, indeed, only grasped within these combinations. Now, methodical analysis leads to the realization that a language actually uses only a small part of the theoretically numerous combinations that would result from these minimal elements being freely assembled. That restriction makes certain specific configurations take shape, which will vary according to the linguistic systems under consideration. Here is what is meant primarily by structure: particular types of relationships articulating the units of a certain level.

Each one of the units of a system is thus defined by the *relations* which it maintains with the other units and by the *oppositions* into which it enters; as Saussure says, it is a relating and opposing entity. Thus the idea that the data of a language have value in themselves and are objective "facts," absolute

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quantities, susceptible of being considered in isolation, was abandoned. In reality, linguistic entities can be determined only within the system that organizes and governs them, and in terms of each other. They have no value except as elements in a structure. It is first the system which has to be isolated and described. Thus a theory of language as a system of signs and as an arrangement of units in a hierarchy was worked out.

It would seem that such an abstract presentation would take us far away from what we call reality. Quite the contrary, it corresponds to the most concrete linguistic experience. The distinctions obtained by analysis agree with those which the speaker practices instinctively. It has been possible to show by experiment that phonemes, that is to say, the *distinctive* sounds of a language, are psychological realities which the speaker can be led to become conscious of, because when he hears sounds he is in reality identifying phonemes; he recognizes sounds which are sometimes very different as variants of the same phoneme and also recognizes sounds which seem similar as relating to different phonemes.

One sees immediately how this approach to linguistics differs from that which formerly prevailed. The positivist notion of the linguistic *fact* has been replaced by that of *relationship*. Instead of considering each element by itself and seeking for the "cause" in an earlier stage, it is envisioned as part of a synchronic totality; "atomism" gives way to "structuralism." By isolating segments of a variable nature and extent within the linguistic *data*, units of different types are brought out; this leads to characterizing different levels, each one of which is to be described in adequate terms. Hence a great development in the technique and terminology of analysis follows, since all stages have to be explicit.

The units of language belong indeed to two different plans; the *syntagmatic*, when they are taken in a linear relationship within the spoken chain, and the *paradigmatic*, when they are considered in terms of a possible substitution, each at its level and in its formal class. To describe these relationships, to define these plans, is to refer to the formal structure of the language; and to formalize the description in this way is—without paradox—to make it more and more concrete by reducing the language to the distinctive elements of which it is uniquely constituted and by defining these elements by their mutual dependence. Instead of a series of single, innumerable, and contingent "events," we get a finite number of units and we can characterize a linguistic structure by their distribution and their possible combinations.

In proceeding to analyses bearing on different systems, it can be clearly seen that a linguistic form constitutes a definite structure: (1) it is a global unit embracing various parts; (2) these parts are in a formal arrangement that obeys certain constant principles; (3) that which gives the character of a structure

to the form is that the constituent parts serve a *function*; (4) finally, these constitutive parts are units on a certain *level*, in such a way that each unit of a specific level becomes a subunit of the level above.

All the essential stages of language are of a discontinuous nature and combine discrete units. It could be said that language is characterized less by what it expresses than by what it distinguishes at all levels:

—a distinction of lexemes, which makes it possible to list the notions designated;

—a distinction of morphemes, which furnishes the inventory of form classes and subclasses;

—a distinction of phonemes, which gives the inventory of nonsignificant phonological distinctions;

—a distinction of "merisms" or the features which arrange the phonemes into classes.

This is what brings it about that language is a system in which nothing is significant in and of itself, but in which everything is significant as an element of the pattern; structure confers upon the parts their "meaning" or their function. This, too, is what permits unlimited communication; since language is organized systematically and functions according to the rules of a code, the speaker can, with a very small number of basic elements, compose signs, then groups of signs, and finally an unlimited number of utterances, all identifiable for the hearer since the same system exists in him.

It can be seen how the notions of system, distinction, and opposition cling closely together and by logical necessity evoke those of dependence and solidarity. There is a solidarity between the terms of an opposition, so that if one of them is affected, the status of the other varies and, as a result, the balance of the system is affected, which can lead to restoring it through the creation of a new opposition at another point. In this respect, each language offers a particular situation at each moment in its history. This consideration has reintroduced the notion of evolution into linguistics today, by specifying diachrony as the relationship between successive systems.

Descriptive approach, awareness of system, care taken to extend analysis to the elementary units, and the explicit choice among procedures, such are the features that mark modern linguistics works. To be sure, in practice there are many divergences and conflicts among schools, but we restrict our view to the most general principles, and principles are always more interesting than schools.

It has now been discovered that this idea of language had its precursors. It was implicit in the work of the man whom linguists recognize as their first ancestor, the Indian grammarian Pāṇini, who in the middle of the fourth century B.C. had codified the Vedic language into formulae of exemplary

density; it is a formal, complete, and rigorous description which is not blemished by any speculative or mystical interpretation. But also we ought to do justice to those precursors who were not grammarians and whose work survives, usually anonymous, basic, and ignored, so much a part of our lives at every moment that we do not notice it—I mean the inventors of our modern alphabets. That an alphabet could have been invented and that with a small number of graphic signs everything that is pronounced can be put into writing —this by itself demonstrates at once the articulated structure of language. The Latin and Armenian alphabets are admirable examples of the notation which today is called phonemic. A modern analyst would find hardly anything to change in them; real distinctions are recognized, each letter corresponds to a phoneme, and each phoneme is reproduced by one and the same letter. Alphabetic writing differs in principle from Chinese writing, which is morphemic, or from cuneiform writing, which is syllabic. Those who devised such alphabets for noting down the sounds of their language instinctively recognized—as early phonemicists—that the various sounds that are pronounced come down to a rather limited number of distinctive units which must be represented by as many graphic units. Modern linguists do not operate otherwise when they have to reduce oral languages to writing. We have in these alphabets the most ancient models of analysis: the graphic units of the alphabet and their combination into a great number of specific groups give the closest picture of the structure of the linguistic forms that they reproduce.

It is not only linguistic *form* which comes under this analysis; the *function* of language must be similarly considered.

Language *re-produces* reality. This is to be understood in the most literal way: reality is produced anew by means of language. The speaker recreates the event and his experience of the event by his discourse. The hearer grasps the discourse first, and through this discourse, the event which is being reproduced. Thus the situation inherent in the practice of language, namely that of exchange and dialogue, confers a double function on the act of discourse; for the speaker it represents reality, for the hearer it recreates that reality. This makes language the very instrument of intersubjective communication.

At this point some serious problems immediately arise which we shall leave to the philosophers, notably that of the adequacy of the mind to express "reality." The linguist on his part considers that thought could not exist without language and that as a result the knowledge of the world is being determined by the expression it receives. Language reproduces the world, but by submitting it to its own organization. It is *logos*, discourse and reason together, as the Greeks saw it. That is what it is by the very fact of being articulated language, consisting in an organic arrangement of parts, in a formal classifica-

tion of objects and processes. The content to be transmitted (or the "thought") is thus broken down according to a linguistic schema. The "form" of the thought is given its configuration by the structure of the language. And the language in its turn reveals its mediating function in the system of its categories. Each speaker can pose himself as a subject only by implying the other, the partner who, endowed with the same language, shares the same stock of forms, the same syntax for utterance, and the same way of organizing the content. Viewed from the standpoint of the linguistic function, and by virtue of the *I-you* polarity, individual and society are no longer contradictory but complementary terms.

It is, indeed, in and through language that the individual and society define one another. Man has always felt—and poets have often celebrated—the creative power of language, which establishes an imaginary reality, animates inert things, reveals what does not yet exist, and recalls to the present what has disappeared. This is why so many mythologies, having had to explain that at the dawn of time something could be born of nothing, have set up as the creative principle of the world that immaterial and supreme essence, the Word. Indeed there is no higher power, and all the powers of mankind, without exception, spring from it. Society is not possible except through language; nor is the individual. The awakening of consciousness in the child always coincides with the learning of language, which gradually introduces him as an individual into society.

But what is the source of this mysterious power that resides in language? Why are the individual and society, together and of the same necessity, *grounded* in language?

Because language represents the highest form of a faculty inherent in the human condition, the faculty of *symbolizing*.

Let us understand by this, very broadly, the faculty of *representing* the real by a "sign" and of understanding the "sign" as representing the real—the faculty, then, of establishing a relation of "signification" between one thing and another.

Let us consider it first of all in its most general form and apart from language. Using a symbol is the capacity to identify the characteristic structure of an object and to identify it in various contexts. It is that which is peculiar to man and which makes man a rational creature. The symbolizing faculty, then, permits the formation of the concept as distinct from the concrete object, which is only one realization of the concept. Here is the basis for abstraction as well as the principle of creative imagination. Now, this representative capacity, in essence symbolic, which is at the basis of the conceptual functions, appears only in man. It emerges very early in the child, before language, at the beginning of his conscious life. But it is lacking in animals.

Let us, however, make a glorious exception in favour of the bees. According to the memorable observations of K. von Frisch, when a scouting bee has discovered a source of food on her solitary flight, she returns to the hive to announce her find by dancing a special lively dance on the honeycomb, describing certain figures which could be analyzed; she thus indicates to the other bees, who follow slowly behind her, the distance and the direction in which the food is to be found. They then take flight and go unerringly to their objective, which is sometimes quite far from the hive. This is an observation of the highest importance, which seems to indicate that bees communicate among themselves by a particular symbolization and transmit real messages. Should this system of communication be related to the remarkable functioning of the hive? Does the life of social insects imply a certain level of symbolic relationships? It is remarkable even to be able to raise the question. We are hovering, with hesitation and fascination, on the brink of an immense problem: will man be able for the first time to surmount the biological barrier and see into the interior of an animal society and discover its organizing principle?

With this reservation, we can now show more precisely where the difference which separates man from the animals lies. Let us first take great care to distinguish between two notions which are very often confused in speaking of "animal language"—the signal and the symbol.

A signal is a physical fact bound to another physical fact by a natural or conventional relationship: lightning heralding a storm, a bell announcing a meal, a cry proclaiming danger. An animal perceives the signal and is capable of reacting adequately to it. It can be trained to identify various signals, that is to say, to connect two sensations through the correlation of the signals. Pavlov's famous conditioned reflexes show this very clearly. Man also, insofar as he is an animal, reacts to signals. But he uses in addition *symbols* that have been *instituted* by man; one must learn the meanings of the symbols, one must be able to interpret them in their signifying functions and not simply perceive them as sensory impressions, for symbols have no natural correlation with what they symbolize. Man invents and understands symbols; the animal does not. Everything proceeds from this. The failure to recognize this distinction leads to all sorts of confusions or false problems. It is often said that the trained animal understands human speech. In reality, the animal obeys the spoken word because it has been trained to recognize it as a signal, but it will never be able to interpret it as a symbol. For the same reason, the animal *expresses* its feelings, but it cannot *name* them. A beginning or an approximation of language cannot be found in the means of expression used by animals. Between the sensory-motor function and the representative function is a threshold which only human beings have been able to cross.

For man was not created twice, once without language and once with lan-

guage. The emergence of *Homo* in the animal series may have been helped by his bodily structure or his nervous organization, but it is due above all to his faculty of symbolic representation, the common source of thought, language, and society.

This symbolizing capacity is at the basis of conceptual functions. Thought is nothing other than the power to construct representations of things and to operate on these representations. It is in essence symbolic.[1] The symbolic transformation of the elements of reality or experience into *concepts* is the method by which the rationalizing power of the mind is brought about. Thought is not a simple reflection of the world; it categorizes reality, and in that organizing function it is so closely associated with language that from this point of view one could be tempted to equate thought and language.

Actually the symbolizing faculty in man attains its supreme realization in language, which is the supreme symbolic expression, all the other systems of communication—graphic, gesticulatory, visual, etc.—being derived from it and presupposing its existence. But language is a special symbolic system organized on two planes. On the one hand it is a physical fact; it makes use of the vocal apparatus for arising and the auditory apparatus for being perceived. In this material aspect it lends itself to observation, description, and recording. On the other hand, it is an immaterial structure, a communication of things signified, which replaces events or experiences by their "evocation." Such is language—a two-sided entity. That is why linguistic symbols are mediatory. They organize thought and they are brought into being in a specific form; they make the internal experience of one person accessible to another in an articulated and representative expression, and not by a signal such as a modulated outcry; they are realized in a given language belonging to a distinct society, not in a vocal utterance common to the whole species.

Language offers a model of a relational structure, in the most literal as well as the most comprehensive sense. In discourse it brings words and concepts into contact and in this way, as a substitute for objects and situations, produces *signs*, which are distinct from their material referents. It establishes those analogical transfers of designations we call metaphors, which are such a powerful factor in the enriching of concepts. It links the propositions in reasoning and becomes the instrument of discursive thought.

Finally, language is the most economical symbolism. Unlike other representative systems, it does not demand any muscular effort, it does not involve shifting the body, and it does not require laborious manipulation. Let us imagine what a task it would be to bring the "creation of the world" before the eyes if it were possible to represent it at the expense of an incredible effort by painted, sculpted, or other kinds of figures; then let us see what becomes of the same story when realized in a narrative: just a succession of little vocal

noises which vanish as soon as they are uttered, as soon as they are heard, but the soul is exalted by them and generations repeat them, and each time that speech discloses the event, the world begins anew. No power will ever equal that, and it achieves so much with so little.

That such a system of symbols exists reveals to us one of the essential facts —perhaps the most profound—about the human condition; that there is no natural, immediate, and direct relationship between man and the world or between man and man. An intermediary is necessary: this symbolizing apparatus which has made thought and language possible. Beyond the biological sphere, the capacity for symbolizing is the most characteristic of the human being.

It now remains but to draw the inference from these reflections. In placing man in his relationship with nature or in his relationship with man, by the mediation of language, we establish society. This is not a historical coincidence but an inevitable consequence. For language always realizes itself in *a language* in a definite and specific linguistic structure which is inseparable from a definite and specific society. Language and society cannot be conceived without each other. Both are *given*. But both are *learned* by the human being, who does not possess innate knowledge of them. The child is born and develops in the society of men. It is adult human beings, his parents, who inculcate in him the use of words. The acquisition of language is an experience in the child that goes along with the formation of symbols and the construction of objects. He learns things by their names; he discovers that everything has a name and that learning the names gives him control over the things. But he also discovers that he himself has a name and that by this he can communicate with those around him. Thus there awakens in him the awareness of the social milieu in which he is immersed and which little by little will shape his mind by the intermediary of language.

As he becomes capable of more and more complex intellectual operations, he is integrated into the *culture* which surrounds him. I call culture the *human milieu*, all that which, beyond the accomplishing of biological functions, gives form, meaning, and content to human life and activity. Culture is inherent in human society, whatever the level of civilization. It consists of a neat number of notions and prescriptions as well as specific *prohibitions*; what a culture prohibits characterizes it at least as much as what it prescribes. The animal world does not know prohibitions. Now this human phenomenon, culture, is an entirely symbolic phenomenon. Culture is defined as a very complex pattern of representations, organized by a code of relationships and values—traditions, religion, laws, politics, ethics, arts—everything which man, no matter where he is born, will be steeped in within his deepest consciousness and which will direct his behavior in all forms of his activity; what is this then

if not a universe of symbols integrated into a specific structure which language reveals and transmits? By means of his language, man assimilates, perpetuates, or transforms his culture. Now, each culture, as does each language, makes use of a particular set of symbols in which each society is identified. The diversity of languages, the diversity of cultures and their changes, show the conventional nature of the symbolism which links them together. It is definitely the symbol which knots that living cord between man, language, and culture.

Such is, in broad outline, the perspective which the recent development in linguistic studies has opened up. Deepening our knowledge of the nature of language, and revealing its relationships with the intelligence as well as with human behavior or the foundations of culture, this investigation is beginning to bring to light the deep-seated functioning of the mind in all its operations. The related sciences are following this progress and cooperate with it on their part by being inspired by the methods and sometimes by the terminology of linguistics. Everything makes for the anticipation that these parallel researches will engender new disciplines and will converge in a real science of culture which will lay the foundations for a theory of the symbolizing activities of man. In addition, it is known that formal descriptions of languages have had a direct usefulness for the construction of logical machines devised for carrying out translations and, conversely, some clarification regarding the way in which thought is coded into language may be expected from the information theory. In the development of this research and these techniques which mark our epoch, we perceive the result of successive symbolizations, more and more abstract, which have their primary and necessary basis in linguistic symbolism. The growing formalization of thought is perhaps leading us to the discovery of an even greater reality. But we could not even conceive of such representations if the structure of language did not contain their first model and, so to speak, their distant harbinger.

From *Comptes Rendus de l'Académie des Inscriptions et Belles Lettres* (1962), Paris, 1963, pp. 369–380.

THREE

Saussure After Half a Century

FERDINAND DE SAUSSURE died February 22, 1913. Here we are gathered together fifty years later, on the same date, the twenty-second of February in 1963, for a special commemoration in his city and in his university.[1] His figure now takes on its authentic character and appears to us in its true grandeur. There is not a linguist today who does not owe him something. There is not a general theory which does not mention his name. Some mystery surrounded his actual life since he so early retired into silence. It is his work we shall deal with. The only fitting eulogy for such a work is that which explains its origins and causes its influence to be understood.

Today we see Saussure completely differently from the way his contemporaries could see him. A whole part of him, undoubtedly the most important, was not known until after his death. The science of human speech was gradually changed by him. What is it that Saussure brought to the linguistics of his day, and how has he influenced ours?

In order to answer that question, one could go from one of his works to the other, analyzing, comparing, and discussing them. A critical inventory like that is undoubtedly necessary. The admirable and important work of Robert Godel has contributed greatly to this.[2] But this is not our purpose. Leaving to others the detailed description of that work, we shall try to recapture its basic principles in the drive which animated and even formed it.

There is in every creative person a certain drive, hidden and permanent, which sustains him and devours him, guides his thoughts, directs him to his task, spurs him on when he lapses, and shows him no quarter when he attempts to evade it. It is not always to be recognized in the different stages, sometimes tentative, in which Saussure's thought was engaged. But once it has been discerned, it illuminates the meaning of his effort and situates him with regard to his predecessors as well as with respect to us.

Saussure was first and always a man of fundamentals. He went instinctively to the most basic characteristics which govern the diversity of the empirical datum. In the sphere of language, he suspected the existence of certain

qualities which were not met with anywhere else. No matter what it was compared to, language always appeared as something different. But how was it different? Considering that activity, human speech, in which so many factors are brought together—biological, physical and psychic, individual and social, historical, aesthetic, and pragmatic—he asked himself, where does language properly belong?

A more precise form could be given to this question by connecting it to the two following problems, which we see as being at the center of Saussure's teaching:

1. What are the basic data on which linguistics is to be grounded and how can we grasp them?

2. What is the nature of the notions of human speech and by what mode of relationship are they articulated?

This preoccupation can be discerned in Saussure from the moment of his entrance into the science, in his *Mémoire sur le système primitif des voyelles dans les langues indo-européens*, published when he was twenty-one years old and still one of his titles to fame. The brilliant novice attacked one of the most difficult problems of comparative grammar, a question which, as a matter of fact, did not yet exist and which he was the first to formulate in the appropriate terms. Why did he choose, in a field so vast and promising, such a demanding subject? Let us reread his preface. There he shows that his intention had been to study the Indo-European *a* but that he had been led to consider "the system of vowels as a whole." This led him to treat "a series of problems of phonetics and morphology, some of which still await their solution and several of which have not even been posed." And as if to excuse himself for having "to cross the most unexplored regions of Indo-European linguistics," he adds this illuminating justification:

> If we have nevertheless ventured to go there, convinced in advance that our inexperience will go astray many times in the labyrinth, it is because, for anyone engaged in these studies, attacking such questions is not temerity, as has often been said, but a necessity. It is the first school through which one must pass, for it is not a matter of transcendental speculations but of the quest for elementary data, without which everything wavers, everything is arbitrariness and incertitude.

These last lines could serve as an epigraph to his entire work. They contain the program for his future research, they are portents of his orientation and his goal. Until the end of his life, and more and more insistently—painfully, one might say—the farther he advanced in his thinking, the more he sought for those "elementary data" which constitute language, turning away gradually from the science of his time in which he saw only "arbitrariness and incerti-

tude," and this at a period when Indo-European linguistics, confident of its methods, was following the comparative approach with increasing success.

It is indeed the elementary data which must be discovered, even (one would like to write, especially) if the purpose is to go back from a historical state of the language to a prehistoric one. Otherwise, the historical development will not have a rational basis, for if there is history, what is it a history of? What changes and what remains the same? How can we say of a linguistic phenomenon considered at two different moments of evolution that it is the *same* phenomenon? In what does that sameness reside, and, since it links for linguists two different objects, how shall we define it? A body of definitions is necessary. We must state the logical connections established within the data, their features, the points of view from which they can be apprehended. To go thus to the fundamentals is the only way—but the sure way—to explain a concrete and contingent fact. In order to reach what is historically concrete, to see the very inevitability of the contingent, we must locate each element in the network of correlations which determines it and admit explicitly that the fact does not exist except by virtue of the definition which we give it. Such was the conviction that forced itself upon Saussure's mind from the beginning and which his whole life was not enough to introduce into linguistic theory.

But even if he had formulated then what he was to teach later, he would only have deepened the lack of comprehension or hostility with which his first attempts were met. The chief scholars then, confident of their own truth, refused to listen to this rigorous summons, and the very difficulty of the *Mémoire* was enough to discourage most of them. Perhaps Saussure would have lost heart. It required another generation for his ideas slowly to make their way. It was a fortunate destiny which took him then to Paris. He recovered some confidence in himself, thanks to that remarkable chance which caused him to meet at the same time a sympathetic tutor, Bréal, and a group of young linguists like A. Meillet and M. Grammont, who were to be profoundly influenced by his teaching. A new phase of comparative grammar dates from these years in which Saussure inculcated his doctrine, at the same time that he was maturing it, among those who were to develop it. That is why we recall, not only to gauge the personal influence of Saussure but also to assess the progress of the ideas they reveal, the terms of the dedication which Meillet made to his master, Saussure, in 1903, in his *Introduction à l'étude comparative des langues indo-européens*, "on the occasion of the twenty-fifth year since the publication of the *Mémoire* . . . (1878–1903)." The event would have been more clearly marked if it had been up to Meillet alone; an unpublished letter from Saussure tells us that Meillet had first intended to write "for the anniversary of the publication," from which he was dissuaded by Saussure.

But even in 1903, that is to say, twenty-five years after the publication of the *Mémoire* of 1878, it still was not possible to know all the prophetic intuitions it contained. Here is a striking example. Saussure had discerned in the Indo-European vowel system several types of *a*. In point of pure knowledge, the different Indo-European *a*'s are as important as the fundamental particles in nuclear physics. Now one of these *a*'s had the singular quality of behaving differently from the other two. Many discoveries have begun with a similar observation—a disagreement within a system, a disturbance in a field, an abnormal movement in an orbit. Saussure characterized this *a* by two specific traits. On the one hand, it was related to neither *e* nor *o*; on the other, it was a sonantic coefficient, i.e., it was capable of playing the same double role, vocalic and consonantal, as the nasals and the liquids, and it combined with vowels. Let us note that Saussure spoke of it as a phoneme and not as a sound or an articulation. He did not tell us how this phoneme was pronounced, what sound it approximated in any observable system, or even if it was a vowel or a consonant. The phonic substance was not considered. We are confronted with an algebraic unit, a term of the system, what he would later call a distinguishing and opposing entity. We could not say that this remark attracted much interest even twenty-five years after it had been published. It required another twenty-five years for it to compel recognition, under circumstances which the most audacious imagination could not have conceived. In 1927, the phoneme that had been defined fifty years before by Saussure as the Indo-European sonantic phoneme was rediscovered by J. Kurylowicz in a historical language, Hittite, which had just then been deciphered, under the guise of the sound written as *ḫ*. This admirable observation made a reality of the theoretical entity postulated by the argument of 1878.

Naturally, the phonetic realization of this entity as *ḫ* in Hittite brought a new element into the debate, but it was of a different nature. From then on, two directions in research appeared. Some endeavored to push further the theoretical investigation and to bring to light, especially in Indo-European, the effects and combinations of this "sonantic coefficient." Today one feels that this phoneme is not unique, that it represents a whole class of phonemes, called "laryngeals," which are unevenly distributed among the historical languages. Other linguists emphasize, on the contrary, the descriptive analysis of these sounds. By this they seek to define their phonetic features, and since the number of laryngeals is still a matter for discussion, from one year to another interpretations can be seen multiplying and giving rise to new controversies. This problem is today at the center of the theory of Indo-European; it is a matter of passionate interest to the diachronists as well as the descriptivists. All this bears witness to the fruitfulness of Saussure's views, which have been fulfilled only in these last decades, half a century after they were

published. Even those modern linguists who have not read the *Mémoire* are still indebted to it.

Here, then, was Saussure, advancing quite young in his career, with the mark of greatness on him. Welcomed with favor at the École des Hautes Études, where he immediately found disciples whom his thought enchanted and inspired, and at the Société de Linguistique where Bréal soon made him assistant secretary, a comfortable career opened before him, and everything seemed to herald a long train of discoveries. This expectation was not deceived. Let us recall only the fundamental articles on Baltic intonation, which show the depth of his analysis and remain models for whoever tackles the same research. It is a fact, however, which has been stressed—and deplored—by those who have had to speak of the Saussure of these years, that soon his productivity slowed down. He confined himself to some more and more infrequent articles, and then only to meet the requests of his friends. When he went back to Geneva to take up a chair at the university, he gradually ceased completely to write. Nevertheless, he never ceased to work. What was it that deterred him from publishing? We are beginning to find out. This silence hid a drama which must have been painful; it was aggravated with the years and never had an outcome. It was partly the result of personal circumstances, on which the testimony of his family and friends could shed some light. It was above all a drama of the mind. Saussure alienated himself from his period in the same proportion as he made himself more and more master of his own truth, for that truth made him reject everything that was then taught on the subject of language. But, while he was hesitating to undertake that radical revision which he felt was necessary, he could not bring himself to publish the slightest note if he was not assured first of the fundamental bases of the theory. The depths to which this trouble reached and how many times he was close to becoming discouraged is revealed in a remarkable document, a passage from a letter to Meillet (January 4, 1894) in which he confides, apropos of his studies on Baltic intonation:

> But I am very disgusted with all that and with the difficulty there is in general to write ten lines concerning the facts of language which have any common sense. I have for a long time been especially concerned with the logical classification of these facts, with the classification of the points of view from which we treat them, and I see more and more both the immensity of the work which is necessary to show the linguist *what he is doing*, by reducing each operation to its previously specified category; and at the same time the very great vanity of everything which can ultimately be done in linguistics.
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> It is ultimately only the picturesque aspect of a language, that which makes it different from all others in that it belongs to a certain people having certain origins—it is this almost ethnographic aspect which still holds an

interest for me, and as it happens, I no longer can take any pleasure in devoting myself up to this study without remorse and in enjoying a particular fact which depends on a particular environment.

The absolute ineptness of current terminology, the necessity to reform it, and, in order to do that, to show what sort of subject language in general is, come incessantly to spoil my pleasure in history, although I have no dearer wish than not to have to concern myself with language in general.

In spite of myself, this will result in a book, in which I shall, without enthusiasm or passion, explain why there is not a single term used in linguistics to which I grant any meaning whatsoever. And I confess that it is not until after that that I shall be able to take up my work at the point at which I left it.

That is a perhaps stupid state of mind, which should explain to Duvau why I have, for example, delayed for more than a year over the publication of an article which does not present any material difficulty—and still I have not succeeded in avoiding expressions which are logically odious because a decidedly radical reform would be necessary for this.[3]

One can see in what sort of argument Saussure was entangled. The more he probed into the nature of human speech, the less he could be satisfied with the accepted ideas. And so he sought a diversion in studies of ethnolinguistic typology, but he was always brought back to his first obsession. Perhaps it was to keep on escaping from it that he threw himself into that ceaseless quest for anagrams. . . . But we see today what was at stake: Saussure's drama was going to transform linguistics. The obstacles his thinking encountered were to force him to forge the new dimensions which would reorder the facts of language.

From this moment, indeed, Saussure saw that to study a particular language led inevitably to the study of language in general. We believe we can reach a linguistic phenomenon as an objective reality. Actually we can grasp it only from a certain point of view, which it is first necessary to define. Let us cease to believe that in language we have to do with a simple object, existing by itself and capable of being grasped in its totality. The first task is to show the linguist "what he is doing," what preliminary operations he performs unconsciously when he approaches linguistic data.

Nothing could be more alien to his period than this concern with logic. Linguists were then absorbed in a huge effort of historical investigation, in organizing the comparative materials, and in building up stocks of etymologies. These great undertakings, although quite useful, did not leave room for theoretical concerns. Thus Saussure was alone with his problems. The immensity of the task to be accomplished and the radical character of the necessary reform were enough to make him hesitate and sometimes become discouraged. Nevertheless he did not give it up. He contemplated a book in which he would say these things, in which he would present his views and undertake the complete overhauling of the theory.

The book was never written, but it survives in rough sketches, in the form of preparatory notes, remarks tossed out rapidly, and drafts; and when he had to give a course in general linguistics in order to fulfill his obligations to the university, he would take up the same themes and bring them to the point at which we know them.

In the linguist of 1910 we find again, in effect, the same purpose which guided the novice of 1880: to establish the bases of linguistics. He rejected the categories and notions which he saw in use everywhere because they seemed to him to be foreign to the proper nature of language. What was that nature? He explained his position briefly in certain of his notes, fragments of a reflection which could neither be abandoned nor completely settled:

> Elsewhere there are things, certain objects, which one is free to consider afterwards from different points of view. In our case there are, primarily, points of view, right or wrong, but simply points of view, with the aid of which, secondarily, one *creates* things. These creations happen to correspond to realities when the point of departure is right, or not to correspond to them in the opposite case, but in both cases, no thing, no object, is given for a single instant in itself. Not even when the most material fact is dealt with, one which would seem most obviously defined in itself, as would be a series of vocal sounds.[4]
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> Here is our profession of faith regarding linguistic matter: in other fields one can speak of things *from such or such point of view*, certain that one will find oneself again on firm ground in the object itself. In linguistics, we deny in principle that there are given objects, that there are things which continue to exist when one passes from one order of ideas to another, and that one can, as a result, allow oneself to consider "things" in several orders, as if they were given by themselves.[5]

These reflections explain why Saussure considered it so important to show the linguist "what he is doing." He wished to make people understand the error in which linguistics had been engaged from the time it began the study of human speech as a thing, or as a living organism or as a matter to be analyzed by an instrumental technique, or again, as a free and incessant creation of the human imagination. One must get back to the fundamentals and discover that object which is language, to which nothing can be compared.

What then was this object which Saussure set up after having made a clean sweep of all accepted notions? Here we touch upon that which is of prime importance in the Saussurian doctrine, upon a principle which assumes a total intuition of language, total both because it contains the whole of his theory and because it embraces the totality of his subject. This principle is that *human speech*, no matter from what point of view it is studied, *is always a double entity*, formed of two parts of which the one has no value without the other.

There, it seems to me, is the center of the doctrine, the principle from which

proceeds all the array of notions and distinctions that constitute the published course. Everything in language is to be defined in double terms; everything bears the imprint and seal of an opposing duality:

—the articulatory/acoustical duality;
—the duality of sound and sense;
—the duality of the individual and society;
—the duality of *langue* and *parole*;
—the duality of the material and the immaterial;
—the duality of the "memorial" (paradigmatic) and the syntagmatic;
—the duality of sameness and opposition;
—the duality of the synchronic and the diachronic, etc.

And, once again, none of these terms thus placed in opposition has value by itself or refers to a substantial reality; each of them takes its value from the fact that it is in opposition to the other:

> The absolutely final law of language is, we dare say, that there is nothing which can ever reside in *one* term, as a direct consequence of the fact that linguistic symbols are unrelated to what they should designate, so that *a* is powerless to designate anything without the aid of *b*, and the same thing is true of *b* without the aid of *a*, or that both have no value except through their reciprocal difference, or that neither has any value, even through a certain part of itself (I suppose, "the root," etc.) other than through this same plexus of eternally negative differences.[6]
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> Since human speech does not present a substance in any of its manifestations but only combined or isolated *actions* of physiological, psychological, or mental forces; and since, nevertheless, all our distinctions, all our terminology, all our ways of speaking are molded according to that involuntary supposition that there is a substance, one cannot refuse, above all, to recognize that the theory of language will have as its most essential task the disentangling of the real nature of our primary distinctions. It is impossible for us to agree that one has the right to construct a theory without performing this essential labor of definition, although this convenient way seems up to now to have satisfied the linguistic public.[7]

Certainly a material phenomenon can be taken as the object of a linguistic analysis, for instance, some meaningless segment of an utterance, considered as a simple production of the vocal apparatus, or even an isolated vowel. It is an illusion to believe that here we have hold of a substance; as a matter of fact, it is only by an operation of abstraction and generalization that we can delimit such a topic of study. Saussure insisted upon this, that only the point of view creates this substance. All the aspects of language which we take as given are the result of logical operations which we employ unconsciously. Let us then become conscious of this. Let us open our eyes to the truth that there is not one single aspect of language which is given without the others and which

one can place above the others as anterior and primordial. Whence this observation:

> The more one delves into the material proposed for linguistic study, the more one becomes convinced of this truth, which most particularly—it would be useless to conceal it—makes one pause: that the bond established among things is preexistent, in this area, to *the things themselves*, and serves to determine them.[8]

This thesis appears paradoxical and can cause surprise even today. Some linguists reproach Saussure for a propensity to emphasize paradoxes in the functioning of language. But language is actually the most paradoxical thing in the world, and unfortunate are those who do not see this. The further one goes, the more one feels this contrast between oneness as a category of our perception of objects and the pattern of duality which language imposes upon our thought. The more one penetrates into the mechanism of signification, the better one sees that things do not signify by reason of their substantially being so, but by virtue of the formal features which distinguish them from other things of the same class and which it is incumbent upon us to extract.

From these views proceeds the doctrine which the disciples of Saussure put into shape and published. Today scrupulous exegetes devote themselves to the necessary task of restoring the lessons of Saussure in their exact terms, with the help of all the materials they can recover. Thanks to their pains we shall have a critical edition of the *Cours de linguistique générale* which will not only present us with a faithful image of that teaching as it was transmitted in its oral form, but which will allow the Saussurian terminology to be settled with strict accuracy.

This doctrine actually informs in one way or another all of the theoretical linguistics of our time. The influence it has had has been enhanced by the effect of the convergence of Saussurian ideas with those of other theorists. Thus in Russia, Baudouin de Courtenay and his disciple Kruszewski proposed at the same time, but independently, a new concept of the phoneme. They distinguished the linguistic function of the phoneme from its articulatory realization. This teaching approached, on a smaller scale, the Saussurian distinction between *langue* and *parole* and assigned a differentiating value to the phoneme. This was the first germ of what has developed into a new branch of linguistics, phonology, the theory of the distinctive functions of phonemes and of the structures of their relationships. When they founded it, N. Trubetskoy and R. Jakobson expressly recognized Saussure as well as Baudouin de Courtenay as their precursors.

The structuralist trend which emerged in 1928, and which was soon to assume major importance, thus had its origins in Saussure. Although he never

used the term "structure" in a doctrinal sense (and it is a term, moreover, which having had to serve as a banner for very different movements has finally lost any precise meaning), the dependence on Saussure is unquestionable among all those who seek the pattern of the general structure of linguistic systems in the relationship of phonemes among themselves.

It might be useful to stress this point relative to one of these structuralist schools, the one which is most characteristically national, the American school, insofar as it derives from Bloomfield. It is not widely enough known that Bloomfield wrote a very laudatory review of the *Cours de linguistique générale* in which he gave credit to Saussure for the distinction between *langue* and *parole* and concluded: "He has given us the theoretical basis for a science of human speech."[9] Different as American linguistics has become, it still keeps a link with Saussure.

Like all productive thought, the Saussurian concept of language had consequences that were not immediately perceived. There is even a part of his teaching which remained unproductive and inactive for a long time. It is the part which relates to language as a system of signs, and the analysis of the sign into the signifier and the signified. That was a new principle, the one of the two-sided unit. In recent years, linguists have debated the notion of sign: to what extent do the two aspects correspond, how does the unit hold or split through diachrony, etc. Many points of the theory are still to be discussed. Among others, it must be asked if the notion of the sign could be retained as a principle of analysis at all levels. We have stated elsewhere that the sentence as such does not admit of segmentation into units of the type of the sign.

But what we wish to emphasize here is the scope of the principle of the sign when set up as a unit of language. From that it results that language becomes a semiotic system: "The task of the linguist," said Saussure, "is to find out what makes language a special system within the mass of semiological data. . . . But to me the language problem is mainly semiological."[10] We see that this principle is now gaining ground outside linguistics and penetrating into the sciences of man, which are becoming aware of their own semiotics. Far from language being swallowed up in society, it is society which is beginning to recognize itself as "a language." Analysts of society ask themselves if certain social structures, or, in another context, those complex discourses which myths are, should not be considered as signifiers for which one has to search out the signified. These innovating investigations suggest that the basic characteristic of language, that it is composed of signs, could be common to all those social phenomena which constitute *culture*.

It seems to us that one should draw a fundamental distinction between two orders of phenomena: on the one side the physiological and biological data, which present a "simple" nature (no matter what their complexity may be)

because they hold entirely within the field in which they appear and because their structures form and diversify themselves on successive levels in the order of the same relationships; on the other side, the phenomena belonging to the interhuman milieu, which have the characteristic that they can never be taken as simple data or defined in the order of their own nature but must always be understood as double from the fact that they are connected to something else, whatever their "referent" may be. A fact of culture is such only insofar as it refers to something else. The day when a science of culture takes shape, it will probably be founded upon that chief feature, and it will develop its own dualities on the model Saussure gave for language, without necessarily conforming to it. No science of man will be spared this reflection on its subject and its place within a general science of culture, for man is not born in nature but in culture.

What a strange destiny ideas have, sometimes seeming to lead lives of their own, revealing or contradicting or recreating the figure of their creator. One could pause a long time over this contrast: the actual life of Saussure compared with the fortunes of his ideas. A man alone in his thought for almost his whole life, unable to bring himself to teach what he deemed wrong or fanciful, feeling that it was necessary to recast everything but less and less tempted to do it, and finally, after many diversions that could not rescue him from the torment of his personal truth, imparting to a few students some ideas on the nature of language which never seemed to him to be matured enough to be published. He died in 1913, little known outside the narrow circle of his pupils and a few friends, even then almost forgotten by his contemporaries. Meillet, in the moving obituary he then devoted to him, deplored the fact that Saussure's life ended on an unfinished work: "After more than thirty years, the ideas expressed by Ferdinand de Saussure in his early work have not exhausted their vitality. And nevertheless his disciples have the feeling that he has not held anything like the place in the linguistics of his time which his brilliant gifts deserved."[11] And he ended with this poignant regret: "[Saussure] had produced the finest book of comparative grammar that has ever been written, he had sown ideas and laid down firm theories; he had left his mark on numerous pupils, and still he had not completely fulfilled his destiny."[12]

Three years after the death of Saussure, the *Cours de linguistique générale* appeared, edited from the notes of students by Bally and Séchehaye. In 1916, amidst the clash of arms, who could have been concerned with a book on linguistics? Nietzsche's saying, that great events arrive on dove's feet, was never truer.

Today, fifty years have passed since the death of Saussure, two generations separate us from him, and what do we see? Linguistics now holds an important

place among the sciences dealing with man and society and is among the most active of them in theoretical research as well as in technical developments. And this new linguistics has its origins in Saussure, and it is in Saussure that it finds its bearings and takes shape. Among all the currents that cross it, among all the schools into which it is divided, the innovating role of Saussure is proclaimed. That seed of brightness, culled by a few disciples, has become a great light which reveals a landscape filled with his presence.

What we are here asserting is that Saussure belongs henceforth to the history of European thought. A forerunner in doctrines which in the past fifty years have transformed the theory of language, he has opened up unforgettable vistas on the highest and most mysterious faculty of man. At the same time, in placing on the horizon of science and philosophy the notion of "sign" as a bilateral unit, he has contributed to the advent of formal thought in the sciences of society and culture, and to the founding of a general semiology.

Taking in at a glance the half-century that has just elapsed, we can say that Saussure really did accomplish his destiny. Beyond his earthly life, his ideas spread further than he could have imagined, and his posthumous destiny has become, so to speak, a second life which henceforth mingles with ours.

From *Cahiers Ferdinand de Saussure* 20 (1963) : 7–21

Communication

FOUR

The Nature of the Linguistic Sign

THE IDEA OF THE linguistic sign, which is today asserted or implied in most works of general linguistics, came from Ferdinand de Saussure. And it was as an obvious truth, not yet explicit but nevertheless undeniable in fact, that Saussure taught that the nature of the sign is *arbitrary*. The formula immediately commanded attention. Every utterance concerning the essence of language or the modalities of discourse begins with a statement of the arbitrary character of the linguistic sign. The principle is of such significance that any thinking bearing upon any part of linguistics whatsoever necessarily encounters it. That it is cited everywhere and always granted as obvious are two good reasons for seeking at least to understand the sense in which Saussure took it and the nature of the proofs which show it.

In the *Cours de linguistique générale*,[1] this definition is explained in very simple statements. One calls *sign* "the total resultant of the association of a signifier [=sound image] and what is signified [=concept] . . ." "The idea of 'sister' is not linked by any inner relationship to the succession of sounds *s-ö-r* which serves as its signifier in French; that it could be represented equally by just any other sequence is proved by differences among languages and by the very existence of different languages: the signified 'ox' has as its signifier *b-ö-f* on one side of the border and *o-k-s* (Ochs) on the other" (p. 102 [pp. 67–68]). This ought to establish that "The bond between the signifier and the signified is arbitrary," or, more simply, that "the linguistic sign is arbitrary" [p. 67]. By "arbitrary," the author means that "it is *unmotivated*, i.e., arbitrary in that it actually has no natural connection with the signified" (p. 103 [p. 69]). This characteristic ought then to explain the very fact by which it is verified: namely, that expressions of a given notion vary in time and space and in consequence have no necessary relationship with it.

We do not contemplate discussing this conclusion in the name of other principles or by starting with different definitions. The question is whether it is consistent and whether, having accepted the bipartite nature of the sign (and we do accept it), it follows that the sign should be characterized as

arbitrary. It has just been seen that Saussure took the linguistic sign to be made up of a signifier and signified. Now—and this is essential—he meant by "signifier," the *concept*. He declared in so many words (p. 100 [p. 66]) that the "linguistic sign unites, not a thing and a name, but a concept and a sound image." But immediately afterward he stated that the nature of the sign is arbitrary because it "actually has no natural connection with the signified" [p. 69]. It is clear that the argument is falsified by an unconscious and surreptitious recourse to a third term which was not included in the initial definition. This third term is the thing itself, the reality. Even though Saussure said that the idea of "sister" is not connected to the signifier *s-ö-r*, he was not thinking any the less of the *reality* of the notion. When he spoke of the difference between *b-ö-f* and *o-k-s*, he was referring in spite of himself to the fact that these two terms applied to the same *reality*. Here, then, is the *thing*, expressly excluded at first from the definition of the sign, now creeping into it by a detour, and permanently installing a contradiction there. For if one states in principle—and with reason—that language is *form*, not *substance* (p. 163 [p. 113]), it is necessary to admit—and Saussure asserted it plainly—that linguistics is exclusively a science of forms. Even more imperative is the necessity for leaving the "substance," *sister* or *ox*, outside the realm of the sign. Now it is only if one thinks of the animal *ox* in its concrete and "substantial" particularity, that one is justified in considering "arbitrary" the relationship between *böf* on the one hand and *oks* on the other to the same reality. There is thus a contradiction between the way in which Saussure defined the linguistic sign and the fundamental nature which he attributed to it.

Such an anomaly in Saussure's close reasoning does not seem to me to be imputable to a relaxation of his critical attention. I would see instead a distinctive trait of the historical and relativist thought of the end of the nineteenth century, an inclination often met with in the philosophical reflection of comparative thought. Different people react differently to the same phenomenon. The infinite diversity of attitudes and judgments leads to the consideration that apparently nothing is necessary. From the universal dissimilarity, a universal contingency is inferred. The Saussurian concept is in some measure dependent on this system of thought. To decide that the linguistic sign is arbitrary because the same animal is called *bœuf* in one country and *Ochs* elsewhere, is equivalent to saying that the notion of mourning is arbitrary because in Europe it is symbolized by black, in China by white. Arbitrary, yes, but only under the impassive regard of Sirius or for the person who limits himself to observing from the outside the bond established between an objective reality and human behavior and condemns himself thus to seeing nothing in it but contingency. Certainly with respect to a same

reality, all the denominations have equal value; that they exist is thus the proof that none of them can claim that the denomination in itself is absolute. This is true. It is only too true and thus not very instructive. The real problem is far more profound. It consists in discerning the inner structure of the phenomenon of which only the outward appearance is perceived, and in describing its relationship with the ensemble of manifestations on which it depends.

And so it is for the linguistic sign. One of the components of the sign, the sound image, makes up the signifier; the other, the concept, is the signified. Between the signifier and the signified, the connection is not arbitrary; on the contrary, it is *necessary*. The concept (the "signified") *bœuf* is perforce identical in my consciousness with the sound sequence (the "signifier") *böf*. How could it be otherwise? Together the two are imprinted on my mind, together they evoke each other under any circumstance. There is such a close symbiosis between them that the concept of *bœuf* is like the soul of the sound image *böf*. The mind does not contain empty forms, concepts without names. Saussure himself said:

> Psychologically our thought—apart from its expression in words—is only a shapeless and indistinct mass. Philosophers and linguists have always agreed in recognizing that without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas. Without language, thought is a vague, uncharted nebula. There are no preexisting ideas, and nothing is distinct before the appearance of language (p. 161 [pp. 111–112]).

Conversely, the mind accepts only a sound form that incorporates a representation identifiable for it; if it does not, it rejects it as unknown or foreign. The signifier and the signified, the mental representation and the sound image, are thus in reality the two aspects of a single notion and together make up the ensemble as the embodier and the embodiment. The signifier is the phonic translation of a concept; the signified is the mental counterpart of the signifier. This consubstantiality of the signifier and the signified assures the structural unity of the linguistic sign. Here again we appeal to Saussure himself for what he said of language:

> Language can also be compared with a sheet of paper: thought is the front and the sound the back; one cannot cut the front without cutting the back at the same time; likewise in language, one can neither divide sound from thought nor thought from sound; the division could be accomplished only abstractedly, and the result would be either pure psychology or pure phonology (p. 163 [p. 113]).

What Saussure says here about language holds above all for the linguistic sign in which the primary characteristics of language are incontestably fixed.

One now sees the zone of the "arbitrary," and one can set limits to it. What is arbitrary is that one certain sign and no other is applied to a certain element of reality, and not to any other. In this sense, and only in this sense, is it permissible to speak of contingency, and even in so doing we would seek less to solve the problem than to point it out and then to take leave of it temporarily. For the problem is none other than the famous *φύσει* or *θέσει*? and can only be resolved by decree. It is indeed the metaphysical problem of the agreement between the mind and the world transposed into linguistic terms, a problem which the linguist will perhaps one day be able to attack with results but which he will do better to put aside for the moment. To establish the relationship as arbitrary is for the linguist a way of defending himself against this question and also against the solution which the speaker brings instinctively to it. For the speaker there is a complete equivalence between language and reality. The sign overlies and commands reality; even better, it *is* that reality (*nomen/omen*, speech taboos, the magic power of the word, etc.). As a matter of fact, the point of view of the speaker and of the linguist are so different in this regard that the assertion of the linguist as to the arbitrariness of designations does not refute the contrary feeling of the speaker. But, whatever the case may be, the nature of the linguistic sign is not at all involved if one defines it as Saussure did, since the essence of this definition is precisely to consider only the relationship of the signifier and the signified. The domain of the arbitrary is thus left outside the extension of the linguistic sign.

It is thus rather pointless to defend the principle of the "arbitrariness of the sign" against the objection which could be raised from onomatopoeia and expressive words (Saussure, pp. 103–104 [pp. 69–70]). Not only because their range of use is relatively limited and because expressivity is an essentially transitory, subjective, and often secondary effect, but especially because, here again, whatever the reality is that is depicted by the onomatopoeia or the expressive word, the allusion to that reality in most cases is not immediate and is only admitted by a symbolic convention analogous to the convention that sanctions the ordinary signs of the system. We thus get back to the definition and the characteristics which are valid for all signs. The arbitrary does not exist here either, except with respect to the phenomenon or to the *material* object, and does not interfere with the actual composition of the sign.

Some of the conclusions which Saussure drew from the principle here discussed and which had wide effect should now be briefly considered. For instance, he demonstrated admirably that one can speak at the same time of the mutability and immutability of the sign; mutability, because since it is

arbitrary: it is always open to change, and immutability, because being arbitrary it cannot be challenged in the name of a rational norm. "Language is radically powerless to defend itself against the forces which from one moment to the next are shifting the relationship between the signified and the signifier. This is one of the consequences of the arbitrary nature of the sign" (p. 112 [p. 75]). The merit of this analysis is in no way diminished, but on the contrary is reinforced, if one states more precisely the relationship to which it in fact applies. It is not between the signifier and the signified that the relationship is modified and at the same time remains immutable; it is between the sign and the object; that is, in other terms, the objective *motivation* of the designation, submitted, as such, to the action of various historical factors. What Saussure demonstrated remains true, but true of the *signification*, not the sign.

Another problem, no less important, which the definition of the sign concerns directly, is that of *value*, in which Saussure thought to find a confirmation of his views: ". . . the choice of a given slice of sound to name a given idea is completely arbitrary. If this were not true, the notion of value would be compromised, for it would include an externally imposed element. But actually values remain entirely relative, and that is why the bond between the sound and the idea is radically arbitrary" (p. 163 [p. 113]). It is worth the trouble to take up in succession the several parts of this argument. The choice that invokes a certain sound slice for a certain idea is not at all arbitrary; this sound slice would not exist without the corresponding idea and vice versa. In reality, Saussure was always thinking of the representation of the *real object* (although he spoke of the "idea") and of the evidently unnecessary and unmotivated character of the bond which united the sign to the *thing* signified. The proof of this confusion lies in the following sentence in which I have underlined the characteristic part: "If this were not true, the notion of value would be compromised *since it would include an externally imposed element.*" It is indeed an "externally imposed element," that is, the *objective* reality which this argument takes as a pole of reference. But if one considers the sign in itself and insofar as it is the carrier of value, the arbitrary is necessarily eliminated. For—the last proposition is the one which most clearly includes its own refutation—it is quite true that values remain entirely "relative" but the question is how and with respect to what. Let us state this at once: value is an element of the sign; if the sign taken in itself is not arbitrary, as we think to have shown, it follows that the "relative" character of the value cannot depend on the "arbitrary" nature of the sign. Since it is necessary to leave out of account the conformity of the sign to reality, all the more should one consider the value as an attribute only of the *form*, not of the substance. From then on, to say that the values are "relative" means that

they are relative *to each other*. Now, is that not precisely the proof of their *necessity*? We deal no longer here with the isolated sign but with language as a system of signs, and no one has conceived of and described the systematic economy of language as forcefully as Saussure. Whoever says system says arrangement or conformity of parts in a structure which transcends and explains its elements. Everything is so *necessary* in it that modifications of the whole and of details reciprocally condition one another. The relativity of values is the best proof that they depend closely upon one another in the synchrony of a system which is always being threatened, always being restored. The point is that all values are values of opposition and are defined only by their difference. Opposed to each other, they maintain themselves in a mutual relationship of necessity. An opposition is, owing to the force of circumstances, subtended by necessity, as it is necessity which gives shape to the opposition. If language is something other than a fortuitous conglomeration of erratic notions and sounds uttered at random, it is because necessity is inherent in its structure as in all structure.

It emerges, then, that the role of contingency inherent in language affects denomination insofar as denomination is a phonic symbol of reality and affects it in its relationship with reality. But the sign, the primordial element in the linguistic system, includes a signifier and a signified whose bond has to be recognized as *necessary*, these two components being consubstantially the same. *The absolute character of the linguistic sign* thus understood commands in its turn the dialectical *necessity* of values of constant opposition, and forms the structural principle of language. It is perhaps the best evidence of the fruitfulness of a doctrine that it can engender a contradiction which promotes it. In restoring the true nature of the sign in the internal conditioning of the system, we go beyond Saussure himself to affirm the rigor of Saussure's thought.

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FIVE

Animal Communication and Human Language

TO APPLY THE NOTION OF language to the animal world is admissible only at the price of misusing terms. We know that it has been impossible until now to prove that animals enjoy, even in a rudimentary form, a means of expression endowed with the characteristics and functions of human speech. All serious observations made of animal communities, all attempts to establish or verify, by means of various technical devices, any form of speech comparable to that of man have failed. It does not seem that animals which emit certain kinds of calls are thereby displaying any behavior from which we may infer that they are conveying "spoken" messages to one another. The fundamental conditions for a strictly linguistic communication seem to be lacking even in the higher animal world.

The case of the bees, however, is different. At any rate, it has become apparent lately that it may turn out to be different. Everything confirms the belief that the bees possess the means of communicating with one another—a fact which has been observed for a long time. The amazing organization of their colonies, the differentiation and coordination of their activities, their capacity for reacting collectively to unforeseen circumstances, lead us to suppose that they are capable of exchanging real messages. The attention of observers has been drawn particularly to the way in which the bees are informed when one of them has discovered a source of food. Consider, e.g., a foraging bee discovering on its flight a sugar solution, placed at a certain point experimentally in order to attract its attention. It will drink of it, and while it feeds, the experimenter carefully puts a mark on it. Then it flies back to the hive. A few seconds later a flight of bees arrives on the spot, all from the same hive. The bee which discovered the food is not among them. It must have informed the others, and the information must have been quite precise since they are able to reach the spot without any guide, although it often is at a considerable distance from the hive and always out of the bees' sight. There is no error or hesitation in locating it. If the foraging bee has chosen one particular flower among others which could have also attracted it, then the

bees arriving on the scene after its return fly to the same flower, neglecting all others. It seems clear that the scouting bee has indicated to its fellow bees the spot whence it has come. But how?

This fascinating problem has baffled observers for a long time. We owe it to Karl von Frisch (professor of zoology at the University of Munich) and to the experiments he conducted for some thirty years, that we are now in the possession of principles which enable us to solve the problem. His research has revealed the method of communication among bees. Working with a transparent hive, he has observed the conduct of the bee returning after the discovery of honey. It is immediately surrounded by the others. The excitement in the hive is great. They stretch out their antennae toward it to collect the pollen with which it is laden or they drink the nectar which it disgorges. Then, followed by the others, the scouting bee proceeds to perform dances. This is the critical moment and constitutes the act of communication. The bee performs two different dances, according to the kind of information it intends to convey. In the one dance it traces horizontal circles from right to left, then from left to right, in succession (round dance). In the other dance (wagging dance) it wags its abdomen continually and cuts what appears to be a figure eight in the following manner: it flies straight, then makes a full left turn, flies straight again, and begins a full turn to the right, etc. After the dances, one or several bees leave the hive and go straight to the supply spot visited by the first bee. Once they have had their fill they regain the hive, where they, in turn, perform the same dances. This causes fresh departures so that, after a few coming and goings, some hundreds of bees swarm to the spot where the forager discovered the food.

The round dance and the wagging dance, then, appear to be the actual message which announces the discovery to the hive. The difference between the two dances still awaited an explanation. Frisch thought that it refers to the nature of the food: the round dance announcing the nectar, the wagging dance the pollen. These facts and their interpretation, first presented in 1923, have been much publicized, and even popularized, in the meantime.[1] It is easy to appreciate the lively interest which they have aroused. Nevertheless, they do not entitle us to ascribe to the bees a language in the strict sense of the word.

This position, however, was changed completely as a result of further experiments by Karl von Frisch, extending and correcting his first observations. He announced his findings in 1948 in technical journals and summarized them in 1950 in a small volume presenting a series of lectures he had delivered in the United States.[2] After conducting, literally, thousands of experiments with truly admirable patience and ingenuity, he succeeded in determining the real meaning of the dances. The essential new information

which he provided is that the dances indicate the distance from the hive to the food and not, as he thought at first, the nature of the food. The round dance announces that the food site must be sought close by within the radius of approximately a hundred meters from the hive. The bees fly out hovering not far from the hive until they have found the spot. The other dance performed by the foraging bee, in which it wags its abdomen and cuts figures of eight, indicates that the point is at a greater distance, between a hundred meters and six kilometers. This message contains two distinct pieces of information, one about the distance, the other about the direction. The distance is indicated by the number of figures traced in a given time. It varies always in inverse proportion to their frequency. For example, the bee describes nine to ten complete cycles of the dance in fifteen seconds when the distance is a hundred meters, seven for two hundred meters, four and a half for one kilometer, and only two for six kilometers. The greater the distance, the slower the dance. As for the direction in which the food is to be sought, this is indicated by the axis of the figure eight and its relation to the sun. According to its inclination right or left this axis gives the angle which the site forms with the sun. By virtue of their particular sensitiveness to polarized light, the bees are capable of finding their bearings even when the sky is overcast. In practice there exist slight variations, in measuring the distance, between one bee and another or between one hive and another, but the variations do not affect the choice of the dance. This interpretation is the result of approximately four thousand experiments which other zoologists, at first inclined to be sceptical, have repeated and confirmed in Europe and in the United States.[3] We now have the means of ascertaining that it is in fact the dance with its two variations which the bees use to inform their fellow bees about a discovery and to guide them to the spot by giving information about direction and distance. The nature of the food, furthermore, is disclosed to the other bees by the scent on the scouting bee or by the nectar which it has drunk and which they now absorb from it. Then they take wing and infallibly reach the spot. The experimenter thus can predict the behavior of the hive and verify the information given, according to the type and rhythm of the dance.

The importance of these discoveries for the study of animal psychology need not be stressed. We should like to dwell here on a less obvious aspect of the problem, which Frisch, intent on describing objectively his experiments, has not touched on. We are, for the first time, in a position to ascertain with precision the methods of communication used in an insect colony. We can, likewise, for the first time envisage the working of an animal "language." It may be well to examine briefly if and in what sense it can or cannot be called a language and how these observations on the bees could help us to find, by contrast or resemblance, a definition of human speech.

The bees appear to be capable of giving and receiving real messages which contain several data. They can register reports concerning the position and distance of a certain object. They can store these data in some kind of "memory." They can, furthermore, communicate them by means of symbols, using different somatic movements. Indeed, the most remarkable thing is that they show an aptitude for symbolizing: there is undoubtedly a "conventional" relation between their behavior and the facts it conveys. This relation is perceived by the other bees in the terms in which it is transmitted to them and becomes an actuating force.

So far we find among bees the very conditions without which no language is possible, i.e., the capacity for formulating and interpreting a "sign" which refers to a certain "reality," the memory of an experience undergone, and the ability to decompose the remembered experience.

The message passed on contains three items of information, or, more precisely, only three have been identified until now: the existence of a source of food, its distance, and its direction. These elements could be arranged in a somewhat different way. The round dance indicates simply the presence of food and merely implies the fact that it is not far away. It is based on the mechanical principle of "all or nothing." The other dance conveys a real communication. The existence of food, this time, is implicit in two data (distance and direction) which are explicitly announced. There are thus several points of resemblance with human language. An effective, though rudimentary, symbolism is brought into play. Through it objective data are turned into formalized gestures conveying variable elements and an invariable "meaning." We are faced here with a language in the strict sense of the term, considering not only the way it functions but also the medium in which it takes place: the system is operative within a given community, and each member of the community is capable of using and of understanding it.

But the differences between the bee language and human language are considerable, and they help us to understand the truly distinctive characteristics of the latter. It should be noted, above all, that the bee's message consists entirely of physical motion, a dance, without the intervention of any "vocal" organ, whereas there can be no real language without the exercise of voice. This leads us to another difference of a physical nature. Effectuated as it is without the exercise of voice, by means of gestures only, communication between bees necessarily occurs under conditions which permit visual perception, i.e., in daylight. It cannot be made effective in darkness. Human language is not subject to this limitation.

A very important difference exists, furthermore, with regard to the circumstances in which the communication is made. The bee's message does not call for any reply from those to whom it is addressed, except that it evokes a

particular behavior which is not strictly an answer. This means that the language of the bees lacks the dialogue which is distinctive of human speech. We speak to others who speak to us: such is the nature of human intercourse. This reveals yet another contrast. Because the bees are incapable of dialogue, the communication concerns only a certain objective fact. No "linguistic" information is involved, there being no reply. For a reply is a linguistic reaction to a linguistic manifestation. Moreover, the bee's message cannot be reproduced by another bee which has not seen for itself what the first bee has announced. There is no indication, for example, that a bee goes off to another hive with the message it has received in its own hive. This would constitute a kind of transmission or relay. Human language is different; for in the dialogue the reference to the objective experience and the reaction to its linguistic manifestation mix freely and without limitation. The bee does not construe a message from another message. Each bee, once advised by the scouting bee's dance, flies out and feeds at the spot indicated, reproducing the same information on its return, not with reference to the first message but with reference to the fact it has just verified itself. Now the characteristic of language is to produce a substitute for experience which can be passed on *ad infinitum* in time and space. This is the nature of our symbolism and the basis of linguistic tradition.

If we now consider the content of the message it is easy to see that it always concerns only one fact, namely, food, and that the only variations of this theme concern the question of space. The contrast with the boundless possibilities of human language is obvious. Furthermore, the behavior which expresses the bee's message is a special form of symbolism. It consists in tracing off an objective situation of fact, the only situation which can be translated into a message, without any possibility of variation or transposition. In human language, on the contrary, the symbol as such does not trace out the facts of experience in the sense that there is no necessary relationship between the objective reference and the linguistic form.

Many more distinctions could be made here from the standpoint of human symbolism, the nature and function of which have as yet been little studied. But the difference is already sufficiently indicated.

Finally, one more feature of the communication among bees should be mentioned which distinguishes it sharply from human language. The bee's message cannot be analyzed. We can see in it only an overall reference to a total content; the only possible differentiation pertains to the spatial position of the reported object. But it is impossible to resolve this content into its constituent "morphemes" and to make each morpheme correspond to an element of what has been enounced. This is precisely where the distinctive character of human speech manifests itself. Each enunciation made by man

can be reduced to elements which combine easily and freely according to definite laws so that a small number of morphemes admits of a great number of combinations. Hence proceeds the variety of human language—which has the capacity of expressing everything. A more searching analysis of language reveals that this restricted number of morphemes, or elements of meaning, can be reduced to even less numerous "phonemes," or elements of articulation, devoid of meaning. It is the selective and distinctive grouping of these elements of articulation which produces the sense units. These "empty" phonemes, organized in systems, constitute the basis of every language. It is evident that no such constituent parts can be isolated in the language of the bees. It cannot be reduced to identifiable and distinctive elements.[4]

All these observations bring out the essential difference between the method of communication discovered among bees and our human language. This difference can be stated summarily in one phrase which seems to give the most appropriate definition of the manner of communication used by the bees: it is not a language but a signal code. All the characteristics of a code are present: the fixity of the subject matter, the invariability of the message, the relation to a single set of circumstances, the impossibility of separating the components of the message, and its unilateral transmission. Nevertheless, it is significant that this code, the only form of language found so far among animals, is the property of insects which live in a society. Society is likewise the condition of human language. One of the most interesting aspects of the discoveries of Karl von Frisch is that, apart from the insights into the life of the insect world, he has indirectly enlightened us as to the conditions of human language and its underlying symbolism. It is likely that further progress of this research will bring a further penetration of the possibilities and nuances of this form of communication. But the mere discovery of its existence, its nature, and its way of functioning is a contribution toward a better understanding of the origins of language and the definition of man.[5]

From *Diogenes*, no. 1 (1952), pp. 1–7

SIX

Categories of Thought and Language

WE USE THE LANGUAGE we speak in infinitely varied ways, a simple enumeration of which would be coextensive with a list of the activities in which the human mind can engage. In their diversity, these uses have, however, two characteristics in common. One is that the reality of language, as a general rule, remains unconscious; except when language is especially studied for itself, we have no more than a very faint and fleeting awareness of the operations which we accomplish in order to talk. The other is that, no matter how abstract or how specialized the operations of thought may be, they receive expression in language. We can say everything, and we can say it as we wish. From this proceeds the conviction, widely prevalent and itself unconscious, as is everything that regards human speech, that thinking and speaking are activities distinct by nature, associated for the practical necessity of communication, but which both have their respective domain and their independent possibilities, those of language consisting of the resources offered to the mind for what is called the expression of thought. Such is the problem which we are considering briefly here, for the special purpose of clearing up some ambiguities for which the very nature of human speech is responsible.

Certainly speech, being spoken, is used to convey "what we want to say." But "what we want to say" or "what we have in mind" or "our thought" or whatever name it is designated by is the content of thought, very difficult to define in itself, except by the characteristics of intention or as a psychic structure, etc. This content receives form when it is uttered, and only thus. It receives form from language and in language which is the mold for all possible expression; it cannot be dissociated from it and it cannot transcend it. Now this language has a configuration in all its parts and as a totality. It is in addition organized as an arrangement of distinct and distinguishing "signs," capable themselves of being broken down into inferior units or of being grouped into complex units. This great structure, which includes substructures of several levels, gives its *form* to the content of thought. To become transmissible, this content must be distributed among morphemes of certain classes, arranged in

a certain order, etc. In short, this content has to pass through language and conform to its framework. Otherwise thought amounts, if not exactly to nothing, at least to something so vague and so undifferentiated that we have no means for comprehending it as "content" distinct from the form conferred upon it by language. Linguistic form is not only the condition for transmissibility, but first of all the condition for the realization of thought. We do not grasp thought unless it has already been adapted to the framework of language. Without that, there is only obscure volition, impulse venting itself in gestures, or mimicry. That is to say that the question of whether thought can do without language or skirt it like an obstacle emerges as meaningless as soon as one analyzes with any rigor the terms of the problem.

This is, however, still only a *de facto* relationship. To set up these two terms, thought and language, as interdependent and mutually necessary does not say how they are interdependent and why they are judged to be indispensable to each other. Between a thought that can only be materialized in language and a language that has no other function than to "signify," one would wish to state a specific relationship, for it is obvious that the terms in question are not symmetrical. To speak of the container and the contents is to simplify. The image should not delude us. Strictly speaking, thought is not matter to which language lends form, since at no time could this "container" be imagined as empty of its contents, nor the "contents" as independent of their "container."

And so the question becomes the following: while granting absolutely that thought cannot be grasped except as formed and made a reality in language, have we any means to recognize in thought such characteristics as would belong to it alone and owe nothing to linguistic expression? We can describe language by itself. It would be necessary in the same way to apprehend thought directly. If it were possible to define thought by features belonging to it exclusively, it would be seen at once how it accommodates itself to language and what the nature of their relationship is.

It might be convenient to approach the problem by way of "categories," which appear as intermediaries. They present different aspects, depending on whether they are categories of thought or language. This difference might shed light on their respective natures. For example, we immediately perceive that thought can freely specify its categories and invent new ones, while linguistic categories, as attributes of a system which each speaker receives and maintains, are not modifiable according to each person's whim. We also see this other difference: that thought can claim to set up universal categories but that linguistic categories are always categories of a particular language. At first sight, this would confirm the preeminent and independent position of thought with regard to language.

We cannot, however, as so many authors have done, simply pose the ques-

tion in such general terms. We must enter into a concrete historical situation, and study the categories of a specific thought and a specific language. Only on this condition will we avoid arbitrary stands and speculative solutions. Now, we are fortunate to have at our disposal data which one would say were ready for our examination, already worked out and stated objectively within a well-known system: the Aristotle's categories. In the examination of these categories, we may dispense with philosophical technicalities. We will consider them simply as an inventory of properties which a Greek thinker thought could be predicated of a subject and, consequently, as the list of a priori concepts which, according to him, organize experience. It is a document of great value for our purpose.

Let us recall at first the fundamental text, which gives the most complete list of these properties, ten in all (*Categories* 4^1):

> Each expression when it is not part of a combination means: the *substance*, or *how much*, or *of what kind*, or *relating to what*, or *where*, or *when*, or *to be in a position*, or *to be in a condition*, or *to do*, or *to undergo*. "Substance," for example, "man," "horse"; —"how much," for example, "two cubits," "three cubits"; —"of what kind," for example, "white," "educated"; — "relating to what," for example, "double," "half," "larger"; —"where," for example, "at the Lyceum," "at the market"; —"when," for example, "today," "last year"; —"to be in a position," for example, "he is lying down," "he is seated"; —"to be in a condition," for example, "he is shod," "he is armed"; —"to do," for example, "he cuts," "he burns"; —"to undergo," for example, "he is cut," "he is burned."

Aristotle thus posits the totality of predications that may be made about a being, and he aims to define the logical status of each one of them. Now it seems to us—and we shall try to show—that these distinctions are primarily categories of language and that, in fact, Aristotle, reasoning in the absolute, is simply identifying certain fundamental categories of the language in which he thought. Even a cursory look at the statement of the categories and the examples that illustrate them, will easily verify this interpretation, which apparently has not been proposed before. Let us consider the ten terms in order.

It does not matter here if one translates οὐσία as "substance" or "essence." What does matter is that the category gives to the question "what?" the reply, "man" or "horse," hence the specimens of the linguistic class of nouns indicating objects, whether these are concepts or individuals. We shall come back a little later to the term οὐσία to denote this predicate.

The two following terms, ποσόν and ποιόν, make a pair. They refer to 'being of what degree' [*être-quantième* < OF *quant* < Lat. *quantus* 'how great', < *quam* 'to what degree'], hence the abstraction, ποσότης 'quant-ity' [*quant-ité*

'how-much-ness'], and to being of what sort [*être-quel* < Lat. *qualis* 'of what sort'], hence the abstraction, ποιότης 'qual-ity' [*qual-ité* 'what-sort-ness']. The first does not properly imply "number," which is only one of the varieties of ποσόν, but more generally everything capable of measurement; thus the theory distinguishes discrete "quantities" like number or language, and continuous "quantities" like straight lines or time or space. The category of ποιόν includes the what-ness [*qual-ité*] without the acceptation of species. As for the three following words, πρός τι, ποῦ, and ποτέ, they refer unambiguously to 'relationship,' 'place,' and 'time.'

Let us focus our attention on these six categories in their nature and in their grouping. It seems to us that these predications do not refer to attributes discovered in things, but to a classification arising from the language itself. The notion of οὐσία points to the class of substantives. That of ποσόν and ποιόν cited together does not only correspond to the class of adjectives in general but in particular to two types of adjectives which are closely associated in Greek. Even in the earliest texts, and before the awakening of philosophical thought, Greek joined or opposed the two adjectives πόσοι and ποῖοι, with the correlative forms ὅδος and οἷος, as well as τόσος and τοῖος.[2] These were formations deeply rooted in Greek, both derived from pronominal stems, and the second was productive; besides οἷος, ποῖος, and τοῖος, there are ἀλλοῖος and ὁμοῖος. It is indeed in the system of the forms of the language that these two necessary predications were based. If we go on to πρός τι, behind the "relation" there is again a fundamental property of Greek adjectives, that of having a comparative (such as μεῖζον, given, in fact, as an example) which by function is a "relative" form. The two other examples, διπλάσιον and ἥμισυ, mark "relation" in a different way: it is the *concept* of "double" or "half" which is relative by definition, while it is the *form* of μεῖζον which indicates "relation." As for ποῦ 'where' and ποτέ 'when', they involve the classes of spatial and temporal denominations, respectively, and here again the concepts are modelled on the characteristics of these denominations in Greek; not only are ποῦ and ποτέ linked together in the symmetry of their formation as reproduced in οὗ ὅτε, τοῦ τότε, but they are part of a class which includes still other adverbs (of the type of ἐχθές, πέρυσιν) or certain locative phrases (thus, ἐν Λυκείῳ, ἐν ἀγορᾷ). It is, thus, not without reason that these categories are enumerated and grouped as they are. The first six refer all to *nominal* forms. Their unity is to be found in the particular nature of Greek morphology.

By the same consideration, the four following also form a set: they are all from *verbal* categories. They are even more interesting for us since the nature of two of them does not seem to have been identified correctly.

The last two are clear immediately: ποιεῖν 'to do,' with the examples,

τέμνει and καίει 'he cuts,' 'he burns'; πάσχειν 'to undergo,' with τέμνεται, καίεται 'he is cut,' 'he is burned,' show the two categories of the active and passive, and this time the examples themselves are chosen in such a way as to emphasize the *linguistic* opposition. It is that morphological opposition of two "voices," present in a great number of Greek verbs, which shows through the polar concepts of ποιεῖν and πάσχειν.

But what about the first two categories, κεῖσθαι and ἔχειν? The translation does not even seem certain: some take ἔχειν as 'to have.' What interest could a category like "position" (κεῖσθαι) possibly have? Is it a predication as general as "the active" or "the passive"? Is it even of the same nature? And what can be said of ἔχειν with examples like "he is shod," and "he is armed"? The interpreters of Aristotle seem to consider that these two categories are episodic; the philosopher only expressed them to exhaust all the predications applicable to a man. "Aristotle," says Gomperz, "imagines a man standing before him, say in the Lyceum, and passes in successive review the questions which may be put and answered about him. All the predicates which can be attached to that subject fall under one or other of the ten heads, from the supreme question, What is the object here perceived? down to such a subordinate question, dealing with mere externalities, as: What has he on? What equipment or accoutrements, e.g., shoes or weapons? . . . The enumeration is intended to comprise the maximum of predicates which can be assigned to any thing or being."[3] Such, as far as we can see, is the general opinion of scholars. If they are to be believed, the philosopher did not distinguish clearly between the essential and the accessory and even gave these two secondary notions precedence over a distinction like that between the active and passive.

Here again, these notions seem to us to have a linguistic basis. Let us first take the κεῖσθαι. What could a logical category of κεῖσθαι answer to? The answer is in the examples cited: ἀνάκειται 'he is lying down' and κάθηται 'he is seated.' These are two specimens of *middle* verbs. From the standpoint of the Greek language, that is an essential notion. Contrary to the way it appears to us, the middle voice is more important than the passive, which is derived from it. In the verbal system of ancient Greek, such as it still existed in the classic period, the real distinction was between the active and the middle.[4] A Greek thinker could with good reason set up in the absolute a predication expressed by means of a specific class of verbs, those which are only middles (the *media tantum*) and mean, among other things, "position" or "attitude." Equally divided from either the active or the passive, the middle denotes a manner of being just as specific as the two others.

Much the same is true of the predication called ἔχειν. It cannot be taken in the usual sense of ἔχειν 'to have,' a "having" of a material possession. What is peculiar and at first sight misleading about this category is brought to

light by the examples: *ὑποδέδεται* 'he is shod' and *ὥπλισται* 'he is armed' and Aristotle stresses this when he returns to the subject (*Categories*, 9); he uses the same examples a propos of *ἔχειν*, this time in the infinitive: *τὸ ὑποδεδέσθαι, τὸ ὡπλίσθαι*. The key to the interpretation is in the nature of these verbal forms; *ὑποδέδεται* and *ὥπλισται* are *perfects*. They are even, to speak precisely, middle perfects. But the characteristic of the middle was already expressed, as we have just seen, by *κεῖσθαι*, whose derivatives, *ἀνάκειται* and *κάθηται*, given as examples, do not, incidentally, have perfects. In the predication *ἔχειν* and in the two forms chosen to illustrate it, it is the category of the perfect which is to the fore. The meaning of *ἔχειν*, both 'to have' and, used absolutely, 'to be in a certain state,' agrees best with the diathesis of the perfect. Without embarking upon a commentary which could easily be prolonged, let us only consider that for bringing out the value of the perfect in the translation of the cited forms, we must include in it the notion of "to have"; they will then become, *ὑποδέδεται* 'he *has* his shoes on his feet,' *ὥπλισται* 'he *has* his armor on him.' Let us notice again that these two categories, such as we understand them, follow one another in the enumeration and seem to form a pair, just like *ποιεῖν* and *πάσχειν* which follow. There are, indeed, various relationships, both formal and functional, between the Greek perfect and the middle voice, which, as inherited from Indo-European, formed a complex system; for example, an active perfect, *γέγονα* goes with middle present *γίγνομαι*. These relationships created many difficulties for the Greek grammarians of the Stoic school; sometimes they defined the perfect as a distinct tense, the *παρακείμενος* or the *τέλειος*; sometimes they set it with the middle in the class called *μεσότης*, intermediate between the active and the passive. Surely in any case the perfect is not easily inserted into the tense system of Greek and remains apart as indicating, as the case might be, either a mode of temporality or a manner of being in the subject. For that reason, it is understandable in view of the number of notions expressed in Greek only by the perfect, that Aristotle made it into a specific mode of being, the state (or *habitus*) of the subject.

The ten categories can now be transcribed in linguistic terms. Each of them is given by its designation and followed by its equivalent: *οὐσία* ('substance'), substantive; *ποσόν*, *ποιόν* ('what, in what number'), adjectives derived from pronouns like the Latin *qualis* and *quantus*; *πρός τι* ('relating to what'), comparative adjective; *ποῦ* ('where'), *ποτέ* ('when'), adverbs of place and time; *κεῖσθαι* ('to be placed'), middle voice; *ἔχειν* ('to be in a state'), the perfect; *ποιεῖν* ('to do'), active voice; *πάσχειν* ('to undergo'), passive voice.

In working out this table of "categories," Aristotle intended to list all the possible predications for a proposition, with the condition that each term be meaningful in isolation, not engaged in a *συμπλοκή*, or, as we would say, in a

syntagm. Unconsciously he took as a criterion the empirical necessity of a distinct *expression* for each of his predications. He was thus bound to reflect unconsciously the distinctions which the language itself showed among the main classes of forms, since it is through their differences that these forms and these classes have a linguistic meaning. He thought he was defining the attributes of objects but he was really setting up linguistic entities; it is the language which, thanks to its own categories, makes them to be recognized and specified.

We have thus an answer to the question raised in the beginning which led us to this analysis. We asked ourselves what was the nature of the relationship between categories of thought and categories of language. No matter how much validity Aristotle's categories have as categories of thought, they turn out to be transposed from categories of language. It is what one can *say* which delimits and organizes what one can think. Language provides the fundamental configuration of the properties of things as recognized by the mind. This table of predications informs us above all about the class structure of a particular language.

It follows that what Aristotle gave us as a table of general and permanent conditions is only a conceptual projection of a given linguistic state. This remark can be elaborated further. Beyond the Aristotelian terms, above that categorization, there is the notion of "being" which envelops everything. Without being a predicate itself, "being" is the condition of all predicates. All the varieties of "being-such," of "state," all the possible views of "time," etc., depend on the notion of "being." Now here again, this concept reflects a very specific linguistic quality. Greek not only possesses a verb "to be" (which is by no means a necessity in every language), but it makes very peculiar uses of this verb. It gave it a logical function, that of the copula (Aristotle himself had remarked earlier that in that function the verb did not actually signify anything, that it operated simply as a synthesis), and consequently this verb received a larger extension than any other whatever. In addition, "to be" could become, thanks to the article, a nominal notion, treated as a thing; it gave rise to varieties, for example its present participle, which itself had been made a substantive, and in several kinds (*τὸ ὄν, οἱ ὄντες, τὰ ὄντα*); it could serve as a predicate itself, as in the locution *τὸ τί ἦν εἶναι* designating the conceptual essence of a thing, not to mention the astonishing diversity of particular predicates with which it could be construed, by means of case forms and prepositions. . . . Listing this abundance of uses would be endless; but they really are facts of language, of syntax, and of derivation. Let us emphasize this, because it is in a linguistic situation thus characterized that the whole Greek metaphysic of "being" was able to come into existence and develop—the magnificent images of the poem of Parmenides as well as the dialectic of *The Sophist*. The language did not, of course, give direction to the metaphysical definition

of "being"—each Greek thinker has his own—but it made it possible to set up "being" as an objectifiable notion which philosophical thought could handle, analyze, and define just as any other concept.

That this is primarily a matter of language will be better realized if the behavior of this same notion in a different language is considered. It is best to choose a language of an entirely different type to compare with the Greek, because it is precisely in the internal organization of their categories that linguistic types differ the most. Let us only state that what we are comparing here are facts of linguistic expression, not conceptual developments.

In the Ewe language (spoken in Togo), which we have chosen for this contrast, the notion of "to be," or what we shall designate as such, is divided among several verbs.[5]

First of all there is a verb, *nyé*, which we would say serves to equate subject and predicate; it states, "to be someone, to be something." The curious fact is that *nyé* behaves like a transitive verb and governs as a complement in the accusative what for us is a predicate nominative.

A second verb is *le*, which properly expresses "existence": *Mawu le* 'God exists.' But it also has a predicative use; *le* is used with predicates of situation, of localization, "to be" in a state, in a time, in a quality: *e-le nyuie* 'he is well'; *e-le a fi* 'he is here'; *e-le ḥo me* 'he is at home.' All spatial and temporal determination is thus expressed by *le*. Now, in all these uses, *le* exists in only one tense, the aorist, which fulfils the functions of a narrative past tense and also of a present perfect. If the predicative sentence involving *le* has to be put into another tense, like the future or the habitual, *le* is replaced by the transitive verb *no* 'to remain, to stay'; that is to say, depending on the tense employed, two distinctive verbs are necessary: the intransitive *le* or the transitive *no*, for the same notion.

A verb, *wo* 'to accomplish, produce an effect,' with certain nouns denoting substances, behaves in the manner of our "to be" followed by an adjective denoting substance: *wo* with *ke* 'sand,' gives *wo ke* 'to be sandy'; with *tsi* 'water,' *wo tsi* 'to be wet'; with *kpe* 'stone,' *wo kpe* 'to be stony.' What we take as a "being" by nature is in Ewe a "making," like the French "il *fait* du vent."

When the predicate is a term of function or of rank, the verb is *ḍu*, hence *ḍu fia* 'to be king.'

Finally, with certain predicates of physical quality or of state, "to be" is expressed by *ḍi*; for example, *ḍi ku* 'to be thin'; *ḍi fo* 'to be a debtor.'

In practice there are thus five distinct verbs which correspond approximately to the functions of our verb "to be." This does not mean that the same semantic area is divided into five portions; it is a distribution which brings about a different arrangement, even extending into neighboring notions. For instance, the two notions of "to be" and "to have" are as distinct for us as the terms that

express them. Now, in Ewe, one of the verbs cited, *le*, the verb of existence, when joined to *asi* 'in the hand,' forms the locution *le asi*, literally, 'to be in the hand,' which is the most usual equivalent for our "to have"; *ga le asi-nyé* (literally, 'money is in my hand') 'I have money.'

This description of the state of things in Ewe is a bit contrived. It is made from the standpoint of *our* language and not, as it should have been, within the framework of the language itself. Within the morphology or syntax of Ewe, nothing brings these five verbs into relationship with one another. It is in connection with our own linguistic usages that we discover something common to them. But that is precisely the advantage of this "egocentric" comparison: it throws light on ourselves; it shows us, among that variety of uses of "to be" in Greek, a phenomenon peculiar to the Indo-European languages which is not at all a universal situation or a necessary condition. Of course the Greek thinkers in their turn acted upon the language, enriched the meanings, and created new forms. It is indeed from philosophical reflection on "being" that the abstract substantive derived from *εἶναι* arose; we see it being created in the course of history: at first as *ἐσσία* in Dorian Pythagorism and in Plato, then as *οὐσία*, which won out. All we wish to show here is that the linguistic structure of Greek predisposed the notion of "being" to a philosophical vocation. By comparison, the Ewe language offers us only a narrow notion and particularized uses. We cannot say what place "being" holds in Ewe metaphysics, but, a priori, the notion must be articulated in a completely different way.

It is the nature of language to give rise to two illusions of opposite meaning: being learnable, consisting of an always limited number of elements, language gives the impression of being only one of the interpreters possible for thought, while thought, being free, autarchical, and individual, uses language as its instrument. As a matter of fact, whoever tries to grasp the proper framework of thought encounters only the categories of language. The other illusion is the opposite. The fact that language is an ordered totality and that it reveals a plan, prompts one to look in the formal system of language for the reflection of a "logic" presumably inherent in the mind and hence exterior and anterior to language. By doing this, however, one only constructs naïvetés or tautologies.

Surely it is not by chance that modern epistemology does not try to set up a table of categories. It is more productive to conceive of the mind as a virtuality than as a framework, as a dynamism than as a structure. It is a fact that, to satisfy the requirements of scientific methods, thought everywhere adopts the same procedures in whatever language it chooses to describe experience. In this sense, it becomes independent, not of language, but of particular linguistic structures. Chinese thought may well have invented categories as specific as the *tao*, the *yin*, and the *yang*; it is nonetheless able to assimilate the concepts

of dialectical materialism or quantum mechanics without the structure of t
Chinese language proving a hindrance. No type of language can by itself alo
foster or hamper the activity of the mind. The advance of thought is link
much more closely to the capacities of men, to general conditions of cultu
and to the organization of society than to the particular nature of a langua
But the possibility of thought is linked to the faculty of speech, for language
a structure informed with signification, and to think is to manipulate the sig
of language.

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SEVEN

Remarks on the Function of Language in Freudian Theory

TO THE DEGREE THAT psychoanalysis intends to establish itself as a science, one is justified in challenging its method, its procedures, and its purpose, and in comparing them with those of the recognized "sciences." Whoever wants to make out the ways of reasoning upon which the analytic method rests is brought to a remarkable observation. From the moment a disturbance is observed until its cure, it looks as though nothing material were in operation. Nothing is done which lends itself to an objective observation. That visible causal relationship which one looks for in scientific reasoning does not appear between one induction and another. When, in contrast to the psychoanalyst, the psychiatrist attempts to relate the disturbance to an injury, at least his procedure has the classic appearance of an investigation which goes back to the "cause" in order to treat it. There is nothing like this in the analytical technique. For the person who knows analysis only from the accounts which Freud[1] has given of it (and this is the case of the author of these pages) and who considers less the practical efficacy, which is not in question here, than the nature of the phenomena and the relationships in which they are set, psychoanalysis seems to be different from all other disciplines. The principal difference is this: the analyst operates on what the subject *says* to him. He considers him in the discourses which he holds with him and examines him in his locutory or "fabulatory" behavior, and through the patient's discourses another discourse slowly takes shape for the analyst, one which he will endeavor to explain: that of the complex buried in the unconscious. The success of the cure depends on bringing this complex to light, and this in turn testifies to the correctness of the induction. Thus, from patient to analyst, and from analyst to patient, the entire process operates through language.

It is this relationship which deserves notice and properly marks this type of analysis. It brings out, it seems to us, that all of the diverse symptoms which the analyst encounters and scrutinizes in succession are the product of an initial motivation in the patient that is unconscious to the utmost and is often transposed into other motivations, conscious and usually misleading. Starting

from this motivation, which has to be brought to light, all the actions of the patient are illuminated by and linked to the disturbance which, in the eyes of the analyst, is both its manifestation and the symbolic substitute for it. We thus perceive here an essential trait of the analytical method; the "phenomena" are governed by a *motivational relationship* which here holds the place of what the natural sciences define as a causal relationship. It seems to us that if analysts acknowledge this view, the scientific status of their discipline, with its special individuality, and the specific character of their method would be better established.

There is a clear indication that in this field, motivation functions as "cause." As we know, the procedure of the analyst is entirely regressive and aims to provoke the emergence, in the memory and in the discourse of the patient, of the actual datum around which the analytic unravelling of the morbid behavior will afterward center. The analyst is thus in search of a "historical" datum which lies hidden and unknown in the memory of the subject, whether or not the latter consents to "recognize" it and identify himself with it. It might be objected that this bringing to light again of an actual fact, of a biographical experience, is really equivalent to the discovery of a "cause." But one sees immediately that the biographical fact cannot bear the burden of the causal connection all by itself, chiefly because the analyst cannot recognize it without the aid of the patient, who is the only one to know "what happened to him." Even if he could, he would not know what value to assign to the fact. Let us even suppose that in a Utopian universe, the analyst could discover, from objective evidence, the traces of *all* the events that make up the biography of the patient; still he would not be able to infer very much from this, not even what is essential, unless by a happy chance. For if he needs the patient to tell him everything and even to express himself at random and aimlessly, it is not in order to recover an empirical fact, which will not have been registered at all except in the patient's memory; it is because empirical facts have no reality for the analyst except in and through the "discourse" which gives them the authenticity of an actual experience, without regard to their historical reality and even (perhaps, especially) if the discourse evades, transposes, or invents the biography which the patient gives himself. This is the case for the very reason that the analyst wishes to unveil motivations rather than identify events. The constitutive dimension of that biography is that it is verbalized and thus assumed by the one who is telling about himself. Its expression is that of language, and the relationship of the analyst to the subject is that of dialogue.

Everything here proclaims the advent of a technique that makes human language its field of action and the special instrument of its efficacy. But then a fundamental question arises: just what is this "language" which acts as much as it expresses something? Is it identical with that which one uses out-

side of analysis? Is it even the same for the two partners? In his brilliant treatise on the function and field of the individual act of speaking [*parole*] and language [*langage*] in psychoanalysis, Lacan said about the analytic method (p. 103): 'Its means are those of *parole* in that it confers a meaning upon the functions, of an individual; its domain is that of concrete discourse as the transindividual reality of the subject; its operations are historical in that it constitutes the emergence of the truth into reality."[2] Starting from these precise definitions, and primarily from the distinction brought up between the means and the domain, we may attempt to delimit the varieties of "language" which are involved.

In the first instance, we recognize the universe of the individual act of speech [*parole*], which is that of subjectivity. All through Freudian analysis it can be seen that the subject makes use of the act of speech and discourse in order to "represent himself" to himself as he wishes to see himself and as he calls upon the "other" to observe him. His discourse is appeal and recourse: a sometimes vehement solicitation of the other through the discourse in which he figures himself desperately, and an often mendacious recourse to the other in order to individualize himself in his own eyes. Through the sole fact of addressing another, the one who is speaking of himself installs the other in himself, and thereby apprehends himself, confronts himself, and establishes himself as he aspires to be, and finally historicizes himself in this incomplete or falsified history. Language [*langage*] is thus used here as the act of speech [*parole*], converted into that expression of instantaneous and elusive subjectivity which forms the condition of dialogue. The subject's language [*langue*] provides the instrument of a discourse in which his personality is released and creates itself, reaches out to the other and makes itself be recognized by him. Now a language [*langue*] is a socialized structure which the act of speaking [*parole*] subjects to individual and intersubjective ends, thus adding to it a new and strictly personal design. *Langue* is a system common to everyone; discourse is both the bearer of a message and the instrument of action. In this sense, the configurations of every act of speaking are unique, realized within and by means of language. There is thus an antinomy within the subject between discourse and language.

But for the analyst, the antinomy establishes itself on a very different plane and assumes another meaning. He must be attentive to the content of the discourse, but no less and especially to the gaps in the discourse. If the content informs him about the image which the subject has of the situation and about the position in it that he attributes to himself, he searches through this content for a new content: that of the unconscious motivation that proceeds from the buried complex. Beyond the innate symbolism of language, he will perceive a specific symbolism which will be formed, without the subject

being aware of it, as much from what is omitted as from what is stated. And within the history in which the subject places himself, the analyst will provoke the emergence of another history, which will explain the motivation. He will thus take the discourse as the translation of another "language," which has its own rules, symbols, and "syntax," and which goes back to the deep structures of the psyche.

These distinctions would require many developments that the analyst alone could state with precision and with attention to all the shades of difference. In marking them we should like above all to clear up certain confusions that could easily become fixed in a field in which it is already difficult to know what one means when investigating "naïve" language, and where analytical concern creates a new difficulty. Freud cast significant light upon verbal activity as revealed in its lapses, in its play aspects, and in its free wanderings when the power of repression is suspended. All the anarchical force that is repressed or sublimated in normal language is rooted in the unconscious. Freud also noticed the deep affinity between these forms of language and the nature of the associations that are made in dreams (another expression of unconscious motivations). He was thus led to reflect upon the functioning of language in its connections with the subconscious structures of the psyche and to wonder if the conflicts which defined this psyche had not left their imprint upon the very forms of language.

Freud posed the problem in an article published in 1910 entitled, "The Antithetical Sense of Primal Words."[3] As a point of departure there was an essential observation from his *Traumdeutung* on the insensitivity to contradiction that characterizes the logic of dreams:

> The attitude of dreams towards the category of antithesis and contradiction is most striking. This category is simply ignored; the word "No" does not seem to exist for a dream. Dreams show a special tendency to reduce two opposites to a unity or to represent them as one thing. Dreams even take the liberty, moreover, of representing any element whatever by the opposite wish, so that it is at first impossible to ascertain, in regard to any element capable of an opposite, whether it is to be taken negatively or positively in the dream-thoughts.

Now Freud believed that he had found in a study by Karl Abel the proof that "this habit of the dream-work to which I refer exactly tallies with a peculiarity in the oldest languages known to us." After giving some examples, he concluded:

> In the agreement between that peculiarity of the dreamwork mentioned at the beginning of this paper and that which philologists have discovered to be habitual in the oldest languages, we may see a confirmation of our supposi-

> tion in regard to the regressive, archaic character of thought-expression in dreams. And we cannot dismiss the conjecture, which forces itself on us psychiatrists, that we should understand the language of dreams better and translate it more easily if we knew more about the development of language.

The authority of Freud is almost enough to validate this demonstration or at least give sanction to the idea that it might lead to fruitful research. An analogy would seem to have been discovered between the workings of dreams and the semantics of "primitive" languages in which the same term states one thing and its opposite as well. The way would seem open to an investigation that would probe into the structures common to the collective language and the individual psyche. In the face of such prospects, it might be useful to state that reasons of fact deny the credibility of the etymological speculations of Karl Abel that intrigued Freud. Here we have to do no longer with psychopathological manifestations of language but with the concrete, general, and verifiable data of historical languages.

It is no accident that no qualified linguist, either at the time at which Abel was writing (and there were some as early as 1884) or since, supported the methods or the conclusions of the *Gegensinn der Urworte*. If one claims to trace the course of the semantic history of words and to reconstruct their prehistory, the first methodological principle is to consider the forms and meanings as attested successively at each period of history all the way back to the earliest date, and to start reconstruction from the most remote point attainable in the investigation. This brings up another principle of the comparative technique, which is to submit the comparisons between languages to regular correspondences. Abel worked without regard for these rules and assembled all the data on the basis of resemblance. From a resemblance between a German word and an English or Latin one of a different or opposite meaning, he concluded that there was a primal relationship between them by means of "opposite meanings," and he neglected all the intermediary stages which would account for the divergence when there really was a relationship or which would rule out the possibility of a relationship by proving that the words were of different origins. It is easy to show that none of the evidence brought forward by Abel could be maintained. In order not to prolong this discussion, we will restrict ourselves to examples taken from western languages which might puzzle readers who are not linguists.

Abel gives a series of correspondences between English and German which Freud quoted as showing how a word in one language can have a meaning opposite to that of its cognate in another, and among which one could presumably observe "a phonetic transformation with the aim of separating the contraries." Without stressing for the moment the grave error in reasoning

hidden behind that simple remark, let us be content with correcting those comparisons. The Old German adverb *bass* 'well' is related to *besser* but has no connection with *bös* 'bad,' just as in Old English, *bat* 'good, better' is not related to *badde* (modern 'bad'). English *cleave* does not correspond to German *kleben* 'to stick,' as Abel says, but to *klieben* 'to cleave' (cf. *Kluft*). English *lock* is not opposite to German *Lücke*, *Loch*; it is just the other way around, for the former sense of *Loch* is 'entrenchment, enclosed and hidden place.' German *stumm* properly means 'paralyzed (in the tongue)' and is connected to *stammeln*, *stemmen*, and has nothing in common with *Stimme*, which means 'voice' in its most ancient form, Gothic *stibna*. In the same way, in Latin, *clam* 'secretly' is linked to *celare* 'to hide,' and not at all to *clamare*, and so on.

A second series of proofs, also erroneous, was drawn by Abel from certain expressions that have opposite meanings within the same language. Such would be the double sense of Latin *sacer* 'consecrated' and 'accursed.' Here the ambivalence of the notion should no longer surprise us since so many studies of the phenomenology of the sacred have made a cliché of its basic duality; in the Middle Ages, a king and a leper were both "untouchables," but it does not follow that *sacer* includes two contradictory senses; it was cultural conditions which determined two opposed attitudes toward the object described as *sacer*. The double meaning attributed to Latin *altus*, 'high' and 'deep,' stems from the illusion that makes us take the categories of our own language as necessary and universal. Even in French one speaks of "the depths" [*la profondeur*] of the sky and of "the depths" of the sea. More precisely, the direction designated by *altus* is measured in an upward direction, e.g., upwards from the bottom of a well or upwards from the foot of a tree, without regard to the position of the observer, while in French, *profond* ['deep'] is defined in opposite directions, starting with the observer and going towards the farthest limit [*le fond*], be it that of a well or of the sky. There is nothing "primal" about these various linguistic constructions of our perceptions. Furthermore, it is not "in the origins of language" that one should search for the explanation of English *without* but simply in the beginnings of English. Contrary to what Abel believed and to what some people still believe, *without* does not include the contradictory expressions "with" and "lacking"; the proper sense of *with* here is "against" (cf. *withstand*) and indicates motion or effort in some direction. Hence, *within* 'toward the interior' and *without* 'toward the exterior,' from which comes 'outside, lacking.' To understand how German *wider* means 'against' and *wieder* (with a simple graphic variation), 'again,' it is enough to think of the same apparent contrast of the *re-* in French between *re-pousser* ['to push back'] and *re-venir* ['to come back']. There is no mystery in any of this, and the application of elementary rules will dissipate these mirages.

But with that, the possibility of an homology between the stages of a dream and the processes of "primitive languages" vanishes. The question here has two aspects. One concerns the "logic" of language. Insofar as it is a collective and traditional institution, every language has its anomalies and inconsistencies, which express a dissymmetry inherent in the nature of the linguistic sign. But it nevertheless remains that language is a system, that it obeys a specific plan, and that it is articulated by a set of relationships capable of a certain formalization. The slow but incessant work that goes on within a language does not operate at random; it bears on those relationships or oppositions which are or are not necessary, in such a way as to renew or multiply distinctions that are useful at all levels of expression. The semantic organization of a language shares in this systematic character. Language is the instrument by which the world and society are adjusted; it operates on a world considered to be "real" and reflects a "real" world. But in this each language is specific and shapes the world in its own way. The distinctions each language brings forth must be explained by the particular logic that supports them and not be submitted straight off to a universal evaluation. In this regard, ancient or archaic languages are neither more nor less strange than those we speak; they only have that strangeness which we attribute to unfamiliar objects. Their categories, oriented differently from ours, are nonetheless consistent. It is thus a priori improbable—and an attentive examination confirms it—that these languages, however archaic they are assumed to be, escape the "principle of contradiction" by using the same expression for two mutually exclusive or simply contrary notions. In actual fact, we are still waiting to see serious examples of this. Let us suppose that a language exists in which "large" and "small" are expressed identically; this would be a language in which the distinction between "large" and "small" literally has no meaning and in which the category of dimension does not exist, and not a language allowing for a contradictory expression of dimension. The claim that the distinction exists but that it is not verbalized would demonstrate the insensitivity to contradiction not in the language but in the researcher, for it is indeed contradictoriness to impute to a language both a knowledge of two notions as opposite and the expression of these notions as identical.

It is the same with the logic of dreams. If we characterize the unfolding of a dream by the total freedom of its associations and by the impossibility of acknowledging an impossibility, it is primarily because we retrace and analyze it within the framework of language, and the quality of language is to express only what it is possible to express. This is not a tautology. A language is primarily a categorization, a creation of objects and of relations between those objects. To imagine a stage of language as "primal" as one would wish, but nevertheless real and "historical," in which a certain object would be

denominated as being itself and at the same time something else, and in which the relation *expressed* would be a relation of permanent contradiction—a non-relating relation—in which everything would be itself and something else, hence neither itself nor the other, is to imagine a pure chimera. Insofar as we can avail ourselves of the evidence of "primitive" languages to go back to the origins of linguistic experience, we have instead to envisage an extreme complexity of classification and a multiplicity of categories. Everything seems to take us far away from an "actual" correlation between oneiric logic and the logic of a real language. Let us note also in passing that, as it happens in "primitive" societies, far from the language reproducing the appearance of a dream, it is the dream which is brought to the categories of the language. The dream is interpreted in connection with actual situations and by means of a set of equivalences that submit it to a real linguistic rationalization.[4]

What Freud asked in vain of "historical" language he could have asked to a certain extent of myth or poetry. Certain forms of poetry can be related to dreams and can suggest the same mode of structuring. They can bring about in the normal forms of language that suspension of meaning which dreams project into our activities. But that means, paradoxically, that Freud could have found in surrealist poetry (which, according to Breton, he did not understand) something of what he was seeking, wrongly, in organized language.

These confusions seem to have arisen in Freud from his constant recourse to "origins": origins of art, of religion, of society, of language. . . . He was constantly transposing what seemed to him to be "primitive" in man into an original primitivism, for it was indeed into the history of this world that he projected what we could call a chronology of the human psyche. Was that legitimate? What ontogenesis allows the analyst to set up as archetypal is only so with respect to what distorts it or represses it. But if one makes of this repression something which is genetically coextensive with society, one can no more imagine a society without conflict than a conflict outside of society. Róheim discovered the Oedipus complex among the most "primitive" societies. If this complex is inherent in society as such, an Oedipus who is free to marry his mother is a contradiction in terms. And in this case, it is nothing other than conflict which is nuclear in the human psyche. But then the notion of "primal" no longer makes sense.

As soon as one posits organized language in correspondence to the elementary psyche, one introduces into the argument a new datum which breaks the symmetry that one had thought to establish. Freud gave the proof of this himself without knowing it in his ingenious essay on negation.[5] He reduced the polarity of linguistic affirmation and negation to the biopsychical mechanism of acceptance within oneself or rejection outside oneself, connected with

the appreciation of good and evil. But animals are also capable of this evaluation which leads to acceptance in the self and rejection outside the self. The characteristic of linguistic negation is that it can annul only what has been uttered, which it has to set up for the express purpose of suppressing, and that a judgment of nonexistence has necessarily the formal status of a judgment of existence. Thus negation is first acceptance. Completely different is the preliminary refusal to accept, which is called repression. Freud himself stated very well what negation shows:

> Thus the content of a repressed image or idea can make its way into consciousness, on condition that it is negated. Negation is a way of taking cognizance of what is repressed; indeed it is already a lifting of the repression, though not, of course, an acceptance of what is repressed. . . . The outcome of this is a kind of intellectual acceptance of the repressed, while at the same time what is essential to the repression persists.

Is it not apparent here that the linguistic factor is decisive in this complex process, and that negation is in some way constitutive of the denied content, hence of the emergence of this content in the consciousness and the suppression of the repression? What then survives of the repression is only a repugnance to be identified with this content, but the subject no longer has power over the existence of this content. Here again, his discourse can produce denials in abundance but it cannot abolish the fundamental property of language, which is to imply that something corresponds to what is uttered, some thing and not "nothing."

We reach with this the essential problem, the immediacy of which all these discussions and the ensemble of analytic procedures bear witness to: that of symbolism. All psychoanalysis is grounded on a theory of symbolism. Now, language is nothing but symbolism. But the differences between the two symbolisms illustrate and sum up all the differences that we have been stressing all along. The profound analyses that Freud gave to the symbolism of the unconscious also illuminate the different ways by which the symbolism of language is realized. In saying that language is symbolic, one states only its most manifest property. It must be added that language is necessarily realized in a specific language, and thus a difference appears which defines linguistic symbolism for man: it is *learned*; it is coextensive with man's acquisition of the world and of intelligence, with both of which he finally becomes unified. It follows that for man the main symbols and their syntax cannot be separated from things and from the experience he has of them; he must master them in proportion as he discovers them as realities. Whoever comprehends the diversity of these symbols as actualized in the various terms of various languages soon realizes that the relationship of these symbols to the

things that seem to underlie them can only be acknowledged, not justified. In comparison with this symbolism which is expressed in infinitely varied signs, combined in formal systems as numerous and distinct as there are languages, the symbolism of the unconscious discovered by Freud shows absolutely specific and different characteristics. Some of these should be stressed. First, its universality. It seems, according to the studies made of dreams or neuroses, that the symbols that translate them constitute a "vocabulary" common to all peoples without respect to language. This is due to the fact, of course, that they are not learned or recognized as language by those who produce them. Furthermore, the relationship between these symbols and what they represent can be defined by the abundance of the signifiers and the uniqueness of the signified; this stems from the fact that the content is repressed and can be released only in the guise of images. On the other hand, in contrast to the linguistic sign, these multiple signifiers and this unique signified are constantly linked by a "motivational" connection. Let us observe, finally, that the "syntax" in which these unconscious symbols are strung together does not obey any logical necessity, or rather, that it recognizes only one dimension, that of succession, which, as Freud saw, also signifies causality.

We are thus confronted with a "language" so special that it is of the greatest importance to distinguish it from what we normally call language. It is by stressing the differences that one can better locate it in the catalogue of linguistic expressions. "This symbolism," Freud said, "is not peculiar to dreams; but is characteristic of unconscious ideation, in particular among the people, and it is to be found in folklore, and in popular myths, legends, linguistic idioms, proverbial wisdom, and current jokes to a more complete extent than in dreams."[6] This sets exactly the level of the phenomenon. In the area in which this unconscious symbolism appears, one could say that it is both infra- and supralinguistic. As infralinguistic, it has its source in a region deeper down than that in which education installs the linguistic mechanism. It makes use of signs that cannot be split up and that admit of numerous individual variants, susceptible themselves of being increased by reference to the common domain of a culture or to personal experience. It is supralinguistic in that it makes use of extremely condensed signs which, in organized language, would correspond more to large units of discourse than to minimal units. And a dynamic relationship of intentionality is established among these signs that amounts to a constant motivation (the "realization of a repressed desire") and that follows the most remarkably indirect paths.

We thus come back to "discourse." By following this comparison, one would be put on the way to productive comparisons between the symbolism of the unconscious and certain typical procedures of the subjectivity manifested in discourse. On the level of speech, one can be precise: these are the

stylistic devices of discourse. For it is style rather than language that we would take as term of comparison with the properties that Freud has disclosed as indicative of oneiric "language." One is struck by the analogies which suggest themselves here. The unconscious uses a veritable "rhetoric" which, like style, has its "figures," and the old catalogue of tropes would supply an inventory appropriate to the two types of expression. One finds in both all the devices of substitution engendered by taboo: euphemism, allusion, antiphrasis, preterition, litotes. The nature of the content makes all the varieties of metaphor appear, for symbols of the unconscious take both their meaning and their difficulty from metaphoric conversion. They also employ what traditional rhetoric calls metonymy (the container for the contents) and synechdoche (the part for the whole), and if the "syntax" of the symbolic sequences calls forth one device of style more than any other, it is ellipsis. In short, to the extent that symbolic images in myths and dreams, etc., will be listed, one will probably see more clearly into the dynamic structures of style and their affective components. What is intentional in motivation obscurely controls the manner in which the inventor of a style fashions common material and, in his own way, releases himself therein. For what is called unconscious is responsible for the way in which the individual constructs his persona, and for what he accepts and what he rejects or fails to recognize, the former being motivated by the latter.

From *La Psychanalyse* 1 (1956) : 3–16

Structures and Analyses

Structures and Analyses

EIGHT

"Structure" in Linguistics

IN THE COURSE OF THE last twenty years, the term "structure" has undergone considerable extension after acquiring a doctrinal and somewhat programmatic value. Moreover, it is not *structure* that seems to be the essential term now so much as the adjective *structural*, used to qualify a kind of linguistics. *Structural* rapidly led to *structuralism* and *structuralist*. Thus an ensemble of designations[1] was created which other disciplines have now borrowed from linguistics in order to adapt them to their own values.[2] Today one cannot glance over the table of contents of a linguistics journal without meeting one of these terms, often in the title of the work. We will readily admit that a concern for being "modern" is not foreign to this widespread use and that certain "structuralist" pronouncements cover works whose novelty or interest is debatable. The object of the present note is not to denounce the abuse but to explain the use. The question is not to assign its field and limits to "structural" linguistics but to clarify what is involved in the concern with *structure* and what meaning this term had for those linguists who first gave it a precise meaning.[3]

The principle of "structure" as a topic for study was asserted a little before 1930 by a small group of linguists who proposed to react thus against the exclusively historical concept of language, against a linguistics that broke language down into isolated elements and was engaged in following the changes that took place in them. It is agreed that this movement had its origin in the teachings of Ferdinand de Saussure at Geneva, as they were put into writing by his students and published under the title *Cours de linguistique générale*.[4] Saussure is rightly called the precursor of modern structuralism.[5] He certainly was, except for the term. It is important to note, for exactitude in describing this movement of ideas which must not be simplified, that Saussure never used the word "structure" in any sense whatever. In his eyes, the essential notion was *system*. In that was the novelty of his doctrine, in the idea —so full of implications that it took a long time to perceive and develop—that language forms a system. That is the way the *Cours* presented it, in statements

that should be recalled: "Language is a system that has its own arrangement" (p. 43 [p. 22]); ". . . language is a system of arbitrary signs" (p. 106 [p. 73]); "Language is a system whose parts can and must all be considered in their synchronic solidarity" (p. 124 [p. 87]). And above everything else, Saussure stated the primacy of the system over the elements which composed it: ". . . to consider a term as simply the union of a certain sound with a certain concept is grossly misleading. To define it in this way would isolate the term from its system; it would mean assuming that one can start from the terms and construct the system by adding them together when, on the contrary, it is from the interdependent whole that one must start and through analysis obtain its elements" (p. 157 [p. 113]). This last sentence contains the germ of all that is essential in the "structural" concept. But it was always to the *system* that Saussure referred.

This notion was familiar to Saussure's students in Paris.[6] Well before it was worked out in the *Cours de linguistique générale*, Meillet had stated it several times, without failing to ascribe it to the teaching of his master, of whom he said, "throughout his whole life what he was trying to determine was the *system* of the languages he was studying."[7] When Meillet said that "each language is a rigorously organized system in which everything holds together,"[8] it was to give Saussure the credit for having shown this in the system of Indo-European vowels. He came back to this several times: "It is never legitimate to explain a detail except in the context of the general system of the language in which it appears";[9] "A language constitutes a complex system of means of expression, a system in which everything holds together. . . ."[10] In the same way, Grammont praised Saussure for having shown "that each language forms a system in which everything holds together, in which the facts and phenomena control one another and can be neither isolated nor contradictory."[11] In discussing "phonetic laws" he stated, "There are no isolated phonetic changes. . . . The whole set of articulations in a language in effect constitutes a system in which everything holds together, in which everything depends strictly on everything else. As a result, if a modification is produced in one part of the system, there is a good chance that the whole system will be affected, for it is necessary that the system remain coherent."[12]

Thus the notion of language as system was accepted long ago by those who were taught by Saussure, first in comparative grammar and then in general linguistics.[13] If one adds to this two other principles which are equally Saussurian: that language is form, not substance, and that the units of language can only be defined by their relationships, one will have indicated the fundamentals of the doctrine which some years later was to show the *structure* of linguistic systems.

This doctrine was first expressed in the proposals for studying phonemic

systems,[14] drawn up in French by three Russian linguists, R. Jakobson, S. Karcevski, and N. Trubetskoy, and addressed to the First International Congress of Linguists at The Hague in 1928. These innovators were themselves to name those whom they considered their predecessors, Saussure on the one hand, and Baudouin de Courtenay on the other. But even then their ideas had taken an autonomous form, and as early as 1929 they formulated them in the theses published in French at Prague for the First Congress of Slavic Philologists.[15] These anonymous theses, which constituted a veritable manifesto, inaugurated the activity of the Linguistic Circle of Prague. It was in them that the term *structure* appeared, with the value which several examples will illustrate. The title speaks of "problems of methodology stemming from the conception of language as a system," and the subtitle, ". . . structural comparison and genetic comparison." They advocated "a method suitable for permitting the discovery of the laws of structure of linguistic systems and their evolution."[16] The notion of "structure" was closely linked with that of "relationship" within the system: "The sensory content of phonological elements is less essential than their reciprocal relationships within the system (*structural principle of the phonological system*)."[17] Hence this rule of method: "The phonological system must be characterized . . . by an obligatory specification of the relationships existing among the said phonemes; that is, by tracing the structural scheme of the language being considered."[18] These principles are applicable to all parts of the language, even to "categories of words, a system whose extent, precision, and internal structure (reciprocal relationships of its elements) must be studied for each language in particular."[19] "One cannot determine the place of a word in a lexical system until one has studied the *structure* of the said system."[20] In the collection containing these theses, several other articles by Czech linguists (Mathesius, Havránek), also written in French, contain the word "structure."[21]

It will be noted in the most explicit of these quotations that "structure" is complemented by the phrase "of a system." Such indeed is the sense of the term when Trubetskoy used it again a little later in an article in French on phonology:[22] "To define a phoneme is to indicate its place in the phonological system, which is impossible unless one takes into account the structure of the system. . . . Phonology, which is universalist in nature, starts with the system as with an organic whole whose structure it studies."[23] It follows that several systems can and should be confronted: "In applying the principles of phonology to several completely different languages in order to show their phonological systems, and in studying the structure of these systems, one soon perceives that certain combinations of correlations recur in the most diverse languages, while others do not exist anywhere at all. These are laws of structure of phonological systems."[24] "A phonological system is not the mechanical

sum of isolated phonemes but an organized whole of which the phonemes are the members and whose structure is subject to laws."[25] According to this, the development of phonology is in accord with that of the natural sciences: "Present-day phonology is characterized above all by its structuralism and by its systematic universalism. . . . The age in which we live is characterized by the tendency in all the scientific disciplines to replace atomism by structuralism and individualism by universalism (in the philosophical sense of these terms, of course). This tendency can be observed in physics, in chemistry, in biology, in psychology, in economics, etc. Present-day phonology is thus not isolated. It has a place in a broader scientific movement."[26]

Granting that language is system, it is then a matter of analyzing its *structure.* Each system, being formed of units that mutually affect one another, is distinguished from other systems by the internal arrangements of these units, an arrangement which constitutes its structure.[27] Certain combinations are frequent, others fairly rare, and still others, while theoretically possible, are never realized. To envisage a language (or each part of a language, such as its phonetics, morphology, etc.) as a system organized by a structure to be revealed and described is to adopt the "structuralist" point of view.[28]

The views of these first phonologists, based on precise descriptions of various phonological systems, gained many adherents within a few years, even outside the Linguistic Circle of Prague, so that it became possible in 1939 to found a journal in Copenhagen, *Acta Linguistica,* which is entitled *Revue internationale de linguistique structurale.* In the preliminary announcement, written in French, the Danish linguist Viggo Brøndal justified the orientation of the journal by the importance "structure" had acquired in linguistics. In this connection he referred to the definition of the word "structure" by Lalande: "To designate, in opposition to a simple combination of elements, a whole formed of mutually dependent elements, such that each depends on the others and can only be what it is by its relationship with them."[29] He also stressed the parallelism between structural linguistics and "Gestalt" psychology, by invoking the definition of the "Gestalttheorie" given by Claparède:[30] "It conceives of phenomena not as a sum of elements which it is of special concern to isolate, analyze, and dissect, but as ensembles (Zusammenhänge) consisting of autonomous units, manifesting an internal cohesiveness, and having their own laws. Hence the mode of being of each element depends on the structure of the ensemble and the laws which govern it."[31]

When Louis Hjelmslev took up the editorship of *Acta Linguistica* in 1944, after the death of V. Brøndal, he defined again the domain of structural linguistics: "By *structural linguistics* is understood an ensemble of *investigations* resting on a *hypothesis* according to which it is scientifically legitimate to describe language as being *essentially* an *autonomous entity of internal de-*

pendences, or, in a word, a *structure*. . . . The analysis of this entity always allows for the disengagement of parts which affect one another reciprocally and which each depends on certain others and would be neither conceivable nor definable without those other parts. This analysis sees its subject matter as a network of dependences, considering linguistic phenomena as related to one another."[32]

Such were the origins of "structure" and "structural" as technical terms.

Today the very development of linguistic studies[33] tends to split "structuralism" into such diverse interpretations that one of those who claim allegiance to this doctrine does not hesitate to write that "under the common and misleading label of 'structuralism' are to be found schools of extremely divergent inspiration and tendencies. . . . The quite general use of terms like 'phoneme' and even 'structure' often serves to camouflage profound differences."[34] One of these differences, undoubtedly the most notable, is the one which may be observed between the American use of the term "structure" and the definitions given above.[35]

To limit ourselves to the use generally made of the word "structure" in European linguistics in works written in French, we shall stress some features which are capable of constituting a minimal definition of it. The fundamental principle is that a language constitutes a system whose parts are all united in a relationship of solidarity and dependence. This system organizes units, which are the articulated signs, mutually differentiating and delimiting themselves. The structuralist doctrine teaches the predominance of the system over the elements, and aims to define the structure of the system through the relationships among the elements, in the spoken chain as well as in formal paradigms, and shows the organic character of the changes to which language is subject.

From *Sens et usages du terme "structure" dans les sciences humaines et sociales*, ed. R. Bastide (The Hague: Mouton & Co., 1962), pp. 31–39

NINE

The Classification of Languages

A LECTURE ON A SUBJECT that would require a whole book in order to be presented and discussed in a manner adequate to its importance can claim neither to cover all the issues nor to found a new method. We are simply proposing to pass in review theories that prevail today, to show what principles underlie them and what results they can obtain. The general problem of the classification of languages can be broken down into a certain number of particular problems which vary in nature according to the type of classification envisaged. But these problems have in common the fact that each of them, formulated with rigor, challenges both the totality of the classification and the totality of the language to be classified. This is enough to make one realize the importance of the undertaking, the difficulties inherent in it, and also the distance that will appear between the goal aimed at and the means at our disposal for attaining it.

The first classification tried by linguists has been that which classifies languages into families supposed to have issued from a common prototype. This is the genetic classification. The first attempts came in the Renaissance, when printing made it possible to know the languages of neighboring or distant peoples. The observations of the resemblances among these languages led rapidly to grouping them into families, which were less numerous than the existing languages, and whose differences were explained by reference to myths. With the discovery of Sanskrit and the beginnings of comparative grammar, the method of classification became rational and, without entirely abandoning the idea of the monogenesis of languages, defined with increasing precision the conditions that must be met by the establishment of a genetic relationship. Today linguists have extended procedures established by the analysis of Indo-European languages to the whole body of languages. They have grouped the majority of idioms into genetic classes. A work describing the languages of the world can hardly find a framework other than this. And while abandoning every glottogenetic hypothesis, and estimating better the limits of the knowable and the demonstrable, linguists have not, for all that,

abandoned the search for the relationships among languages spoken in countries not yet thoroughly explored, like those of South America, for instance, or the attempt to group whole families like Indo-European and Semitic into larger units. Thus it was not the science of languages which permitted the establishment of bases for classification; on the contrary, it was from a classification, however naïve and confused, that the science of languages was gradually developed. The resemblances observed among ancient or modern European languages have been the primary data which have led to a theory of these resemblances.

This observation accounts, to a certain extent, for the conflicts that have arisen around this method of classification. For it is from within an entirely genetic and historical linguistics that a general linguistics has developed in the last several decades. Because this general linguistics wishes today to free itself from the historical perspective and to make the synchronic study of languages prevail, it is sometimes led to take a position against the genetic principle of classification in favor of other methods. It would be of interest to ask to what degree these doctrinal differences affect the problem we are considering.

A classification, no matter what it is, must begin by setting up its criteria. Those of genetic classification are historical in nature. One aims to explain the similarities—and also the differences—that have been observed among languages of a certain area, as well as others which are less apparent, by demonstrating their common origin. Proceeding from the data, the linguist employs a comparative and inductive method. If he can avail himself of ancient, intelligible, and rather extensive pieces of evidence, he endeavors to restore the continuity between successive states of a language or of a whole body of languages. From that continuity it can often be inferred that languages which are distinct today were derived from a single language. The proofs of this relationship consist in regular similarities, defined by equations between complete forms, morphemes, and phonemes. The equations in their turn are arranged in series, the more numerous the closer the relationship. In order for these equations to be conclusive, one must be able to demonstrate that they are due neither to chance coincidences nor to borrowings by one from the other of the languages considered or by these two languages from a common source, nor to the effect of convergences. The proofs will be decisive if they can be grouped into a bundle. Thus the correspondence between Lat. *est* : *sunt*, Germ. *ist* : *sind*, and Fr. *e* : *sõ* implies at one and the same time phonetic equivalences, the same morphological structure, the same gradation, the same classes of verbal forms, and the same meaning; and each one of these identical features can be subdivided into a certain number of features which are equally concordant, each one of which will evoke parallels in other forms of these

languages. In short, there is here a conjunction of conditions so specific that the presumption of relationship is established.

This method is well known and has been tested in the establishing of more than one family. There is proof that it can just as well be applied to languages without a history whose kinship is observed today, whatever their structure may be. A good example was given by Bloomfield in his comparison of the four principal languages of the Central Algonquian group, Fox, Ojibwa, Cree, and Menomini. On the basis of regular correspondences, he had shown that five different consonantic clusters with *k* as their second element had developed in these languages and had reconstructed in Primitive Central Algonquian the prototypes *čk*, *šk*, *xk*, *hk*, and *nk*. But one correspondence, limited to the form, 'he is red,' caused difficulty; it was represented in Fox by *meškusiwa*, in Ojibwa by *miškuzi*, in Cree by *mihkusiw*, and in Menomini by *mehkōn*, with the Fox and Ojibwa *šk* making an anomalous equation to the Cree and Menomini *hk*. For this reason he had postulated a distinct *çk* group in Proto-Algonquian. It was only afterward that he chanced to study a Cree dialect of Manitoba in which the form in question appeared as *mihtkrusiw* with an *-htk-* group distinct from *-hk-*, thus justifying after the event the *-ck-* that he had assumed for theoretical reasons.[1] The regularity of phonetic correspondences and the possibility of predicting certain evolutions are not limited to any one type of language nor to any one region. Thus there is no reason for imagining that "exotic" or "primitive" languages will demand criteria of comparison different from those for the Indo-European or Semitic languages.

The demonstration of primordial kinship implies an effort, often long and difficult, of *identification* applied to all levels of analysis: isolated phonemes, then bound ones, morphemes, complex signifiers, whole constructions. The process is connected to the consideration of the concrete *substance* of the elements compared: in order to justify the grouping together of Lat. *fere-* and Sans. *bhara-*, I must explain why Latin has precisely *f* just where Sanskrit has *bh*. No demonstration of kinship can escape this obligation, and a classification must collect a great number of these substantial points of sameness in order to assign each language to its place. Here again the conditions are valid everywhere and are necessary to the demonstration.

We cannot, however, set up universal conditions as to the *form* a classification will take when applied to languages whose kinship can be proved. The image we have of a genetic family and the position we assign to languages grouped within such a family reflect, in reality—and it is well to be aware of this—a model of a particular classification, that of Indo-European languages. One will readily agree that it is the most complete, and for our purposes, the most satisfying. Linguists seek, consciously or not, to imitate this model each

time they attempt to define the groupings of languages less well known, and it is so much the better if they are urged by this to show themselves increasingly rigorous. First, however, it is not certain that the criteria employed in Indo-European all have universal value. One of the strongest arguments for establishing the unity of Indo-European has been the similarity of the numerals, which remain recognizable today after more than twenty-five centuries. But the stability of these words depends perhaps on specific causes, such as the development of economic activity and exchanges (a development which occurred at a very early date in the Indo-European world), rather than on "natural" or universal reasons. In fact, it sometimes happens that the names of numbers are borrowings or even that the whole series of them is replaced, either for convenience or for some other reason.[2]

Next, and most important, it is not certain that the model constructed for Indo-European is a constant type of genetic classification. What is peculiar to Indo-European is that each language participates to an approximately equal degree in the common language. Even when we take innovations into account, the distribution of the essential features of the overall structure is appreciably similar in languages of the same degree of antiquity, as has been confirmed in the case of Hittite and as can be assumed from the little that is known of languages like Phrygian or Gallic. Let us now see how the characteristics common to the languages of another well-established family, Bantu, are distributed. The Bantu area has been divided into geographic zones and each zone contains groups of languages that share certain phonetic and grammatical features; within these groups certain aggregates have been distinguished which have been subdivided into dialects. The classification is quite provisional, grounded on a very uneven documentation. Let us take it as it is, with some of the characteristics which distinguish those zones:[3]

Northwest zone: monosyllabic prefixes; verbal inflection less developed than elsewhere; nominal prefixes with a particular form;

North zone: dissyllabic nominal prefixes; a prefix-type of locative formation; a great abundance of augmentative prefixal formations;

Congo zone: prefixes generally monosyllabic; vocalic harmony; development of verbal derivatives with an unusual compounding of suffixes; a generally complicated tonal system;

Central zone: monosyllabic and dissyllabic prefixes; nominal classes for the augmentative, diminutive, and locative; a great development of verbal derivatives; a great development of ideophones; a system of three tones;

East zone: a relatively simple phonetic system, a system of three tones, simplified verbal forms, a locative formation intermediate between prefixation and suffixation;

Northeast zone: same characteristics with a more simplified morphology under the influence of Arabic;

East Central zone: forms the transition between the Central and East zones;

Southeast zone: monosyllabic and dissyllabic prefixes; locative and diminutive suffixes; complicated tonal system; complicated phonetics with implosives, lateral fricatives, and sometimes clicks;

South Central zone: transition between the Central and Southeast zones, with a certain resemblance to the East Central zone; system of three tones; particular phonetic phenomena, implosives, africates; monosyllabic nominal prefixes with a latent initial vowel;

West and West Central zones: buffer type between the West and Central zones, with features of the Congo zone; extreme vocalic assimilation; subdivision of the nominal classes into animate and inanimate.

A table like this, even reduced to a few very schematic indications, shows that inside the area one passes from one zone to the other through transitional zones in which certain characteristics become prominent in a particular direction. These characteristics can be arranged in a series from one zone to the other: monosyllabic prefixes, then dissyllabics, with regions in which the two types coexist; development of ideophones; system with three tones, then multiple tones. No matter what the structural complexities are, of which these features give only a partial view, it seems that, from the "semi-Bantu" languages of the Sudan up to Zulu, each zone is defined in relation to the neighboring zone rather than by reference to a common structure.

Still more characteristic in this regard seems to be the linking of the large linguistic units of the Far East:[4] from Chinese to Tibetan, from Tibetan to Burman, then to the languages of the Salwin (Palaung, Wa, Rajang), to Mon-Khmer up to Oceania, one perceives without yet being able to define them exactly, connections of a serial nature, each intermediate unit having certain relationships with the preceding and others with the following, with the result that, from one to the other, one gets far away from the initial type, although all of these languages still retain "a family resemblance." Botanists know well this kind of "kinship by concatenation," and it is possible that this type of classification may be the only usable one among the large units which are the present limits of our reconstructions.

If this should be the case, certain weaknesses inherent in genetic classification might become more marked. In order for this classification to be complete, and since it is by nature historical, it should avail itself of all the members of the family at all the stages of their evolution. As a matter of fact, we know that the state of our knowledge often makes this requirement laughable. We have evidence for only a small number of families, and it is rather old and

only too often defective. Besides, it has happened that whole families have disappeared with the exception of a single member, which becomes unclassifiable; such might be the case of Sumerian. Even when we have a continuous history and fairly abundant evidence, as in the Indo-European family, from the fact that this history is still going on, one may imagine that at a certain future stage, the genetic affiliation of the languages might be definable only in terms of history for each one of them, and no longer in terms of the relationships among them. Indeed, what allows for our classifications is the rather slow evolution of languages and the fact that they do not change identically in all their parts. Hence the retention of those archaic residues which facilitate the reconstruction of prototypes. Even these remnants, however, may in the long run be eliminated, and then there will no longer remain any possible mark of identification at the level of any current language. The classification firmly establishes its criteria only if it makes use of earlier stages, at least for certain of these languages. But in cases where tradition is lacking, the linguist finds himself in the situation in which he would be if he had to pronounce on the kinship between Irish, Albanian, and Bengali, were they assumed to be at an even more advanced stage of their evolution. And when, in addition, one imagines the enormous portion of the linguistic history of humanity that has forever escaped our grasp, and which has nevertheless resulted in the present distribution of languages, one easily discovers the limits of our present classifications and also of our power to classify. All sciences that proceed from empirical data in order to establish an evolutionary genetics are in this situation. The systematics of plants is no better endowed than that of languages. And even if we apply to languages the notion of "kinship by concatenation," of which the botanists have made use, we cannot hide the fact that that notion is above all a means of mitigating our powerlessness to restore the intermediate forms and the articulated connections that would organize the current data. Happily, in practice, this consideration does not always hinder the constitution of linguistic groups with close relationships and should not prevent the systematic attempt to join these groups into larger groups. What we wish to stress above all is that, by the force of circumstances, a genetic classification is valid only between two dates. The distance between these two dates depends almost as much on the rigor brought to the analysis as on the objective conditions of our knowledge.

Can we express this rigor mathematically? Scholars have sometimes attempted to take the number of agreements between two languages as a measure of the probability of their kinship and to apply the calculation of probabilities to a numerical treatment of these concordances in order to decide the degree and even the existence of a genetic kinship. B. Collinder used this method to seek to discover if Uralic was or was not related to Altaic.

But he had to conclude that the choice between kinship, on the one hand, and affinity or borrowing, on the other, remained "imposible to calculate."[5] Just as disappointing has been the application of statistics to the relationships between Hittite and the other Indo-European languages; the authors of this attempt, Kroeber and Chrétien, themselves recognized that the results were strange and unacceptable.[6] It is clear that in operating with these parallels considered as mathematical quantities, and consequently, considering that Hittite can be, a priori, only a deviant or aberrant member of a linguistic family already established for all time, one bars one's way in advance. Neither the number of parallels that demonstrate a genetic kinship nor the number of languages that share in this kinship can constitute the fixed data of a calculation. Thus we must expect to observe variable degrees of kinship among the members of the large linguistic families just as variable degrees of kinship have been observed among the members of the small dialectal units. It is also necessary to foresee that the configuration of a kinship can always change in consequence of some discovery. Hittite is the very example that best illustrates the theoretical conditions of the problem. Since Hittite differs in many respects from traditional Indo-European, Sturtevant decided that the language was related only collaterally to Indo-European, constituting with it a new family designated as "Indo-Hittite." This amounted to taking Brugmann's Indo-European as a natural entity and to relegating to a special category any languages which did not exactly conform to the classic model. On the contrary, we must integrate Hittite into an Indo-European whose definition and internal relationships will be transformed by this new contribution. As we will note further on, the logical structure of genetic relationships does not allow the predicting of the number of elements in a group. The only way to preserve a linguistic sense in the genetic classification will be to consider the "families" open and their relationships always subject to revision.

Any genetic classification, at the same time that it establishes and grades the kinship among certain languages, determines a certain *type* which is common to them. Material identifications among forms and elements of forms result in the designing of a formal and grammatical structure proper to the family defined. From this it follows that a genetic classification is also typological. The resemblances of type can be even more apparent than those of form. A question then arises: what is the value of the typological criterion in the classification? More precisely, can we ground a genetic classification on typological criteria alone? That is the question to be asked when we consider the interpretation of the Indo-European problem which was given by N. Trubetskoy in a suggestive article to which too little attention has been paid.[7]

Trubetskoy asked himself, how does one know that a language is Indo-European? He showed much scepticism with regard to the "material concordances" that could be pointed out between the language in question and others in order to demonstrate their kinship. What he said, in substance, was that the value of this criterion should not be exaggerated, since there is no agreement either on the number or the nature of the correspondences that would decide whether a language belongs to Indo-European, and none of them is indispensable for proving this kinship. He attributed much more importance to an ensemble of six structural characteristics which he enumerated and justified in detail. Each of these structural features, he said, is also to be found in languages which are not Indo-European; but only the Indo-European languages present all six.

It is this part of the demonstration that we wish to examine more closely because of its obvious theoretical and practical importance. There are two questions here that must be considered separately: (1) Do these six characteristics occur together only in Indo-European?; and (2) would they alone suffice to establish the notion of Indo-European?

The first question is one of fact. It can be answered affirmatively only if no other linguistic family possesses the six characteristics Trubetskoy set forth as belonging to the Indo-European languages. In order to verify this, we have taken at random a specimen of a language which is clearly non-Indo-European. The language chosen is Takelma, an Indian language of Oregon of which there is an excellent and easily available description by Edward Sapir (1922).[8] We are going, then, to enumerate these features in the terms in which Trubetskoy defined them, indicating for each one the situation in Takelma:

1. *There is no vocalic harmony.* (Es besteht keinerlei Vokalharmonie.)

There is no mentioned vocalic harmony in Takelma either.

2. *Initial consonantism is no poorer than medial or final consonantism.* (Der Konsonantismus des Anlauts ist nicht ärmer als der Inlauts und des Auslauts.)

Sapir, after having given the complete table of consonants, notes specifically (section 12) that in Takelma "every one of the consonants tabulated may occur initially." The only limitation that he points out in connection with the absence of $'^{w}$ is cancelled when he himself adds that $'^{w}$ does not exist except in connection with *k* and that therefore only k'^{w} is a phoneme. Therefore initial consonantism in Takelma does not show any deficiency.

3. *The word does not necessarily begin with the root.* (Das Wort muss nicht unbedingt mit der Wurzel beginnen.)

Takelma has prefixation as well as infixation and suffixation (examples in Sapir, section 27, p. 55).

4. *Forms are not constituted only by affixes, but also by vocalic gradation within the root morphemes.* (Die Formbildung geschieht nicht nur durch Affixe,

sondern auch durch vokalische Alternationen innerhalb der Stammorpheme.)

In the description of Takelma, a long paragraph (pp. 59–62) is devoted to vowel-ablaut with morphological value.

5. *In addition to the vocalic gradations, free consonantal gradations also play a part in the morphology.* (Ausser den vokalischen spielen auch freie konsonantische Alternationen eine morphologische Rolle.)

In Takelma, "consonant-ablaut, a rare method of word-formation, plays a rather important part in the tense-formation (aorist and non-aorist) of many verbs" (Sapir, section 32, p. 62).

6. *The subject of a transitive verb is treated like the subject of an intransitive verb.* (Das Subjekt eines transitiven Verbums erfährt dieselbe Behandlung wie das Subjekt eines intransitiven Verbums.)

The principle is verified literally in Takelma: *yap'a wílī k'emèi*, lit., 'people house they-make-it' = 'people (*yap'a*) build a house'; *gidī alxalī yap'a* 'thereon they-sit people' = 'people are sitting there,' with the same form, *yap'a*, in the two constructions.[9]

Thus it can be seen that Takelma possesses all six features whose conjunction constituted, in the eyes of Trubetskoy, the distinctive mark of the Indo-European type. It is probable that an extended inquiry would turn up analogous cases in other families. The definition posited by Trubetskoy is, in any case, refuted by the facts. Certainly what he had chiefly in mind was finding the minimal structural criteria that could distinguish Indo-European from the neighboring groups, Semitic, Caucasian, Finno-Ugric. Within these limits, the criteria seem justified. They are not if Indo-European is compared with all the other linguistic types. In this case, characteristics definitely more numerous and more specific are required.

The second question was whether Indo-European could be defined on the sole basis of an ensemble of typological characteristics. Trubetskoy did not go that far; he recognized that some material correspondences remain necessary, even if they are not numerous. We can only agree. Otherwise we would run into endless difficulties. Whether we wish it or not, terms like Indo-European, Semitic, etc., denote both the historical affiliation of certain languages and their typological kinship. We cannot thus keep the historical framework and justify it exclusively by an a-historical definition. The languages historically characterized as Indo-European have, in addition, certain structural features in common. But the conjunction of these features outside history is not enough to define a language as Indo-European. This amounts to saying that a genetic classification cannot be transposed into a typological classification, and vice versa.

One should not misjudge the intention of the critique presented above. It is aimed at an assertion by Trubetskoy which is too categorical, not at the

essence of his thinking. We only wish that a careful distinction be observed between the two notions usually associated in the term "linguistic kinship." Structural kinship can result from a common origin; it can just as well come from developments realized independently by several languages even outside any genetic relationship. As R. Jakobson[10] so well put it apropos of the phonological affinities which often show up in languages that are simply contiguous, "similarity of structure is independent of the genetic relationship of the languages in question and may equally well link languages of the same origin or of different ancestry. Similarity of structure does not, then, oppose itself to but rather superimposes itself upon the 'kinship of common origin' of the languages." The interest of affinity groupings is precisely that they are often associated in the same area with languages that are genetically different. Thus genetic kinship does not hinder the formation of new groupings of affinities; but the formation of groupings of affinities does not efface genetic kinship. It is important to see, nevertheless, that the distinction between affiliation and affinity is only possible under the conditions of our present observation. An affinity grouping, if it has been established pre-historically, would appear to us historically as an indication of genetic kinship. Here again the notion of genetic classification encounters a limitation.

The differences in type between the languages of the world appear so strong and so sharp that linguists thought a long time ago of characterizing the families of languages by a typological definition. These classifications, based on morphological structure, represent an effort toward a rational systematics. Since Humboldt, and often in his spirit—for it is especially in Germany that theories of this kind have been advanced—scholars have attempted to illustrate the diversity of languages by several principal types. Finck[11] was the principal representative of this trend, which still includes some prominent adherents.[12] As we know, Finck distinguished eight principal types, represented by a characteristic language and defined thus: subordinating (Turkish), incorporating (Greenlandic), juxtaposing—anreihend (Subiya, Bantu), root-isolating—wurzelisolierend (Chinese), stem-isolating—stammisolierend (Samoan), root-flectional—wurzel-flektierend (Arabic), stem-flectional—stammflektierend (Greek), group-flectional—gruppenflektierend (Georgian). Each of these definitions, of course, says something about the type being recorded and can briefly state the situation of each of the languages in question. But such a table is neither complete nor systematic nor rigorous. We do not find in it any of the very diverse and complex types of the Amerindian languages or those of the Sudanese languages, which cross several categories; it does not take into account the different processes that could result in the same apparent structure, creating, for example, the illusion that there is a kinship of type between English and Chinese. Furthermore, the

same terms are used for characteristics that do not have the same sense; how can one speak of "roots" for both Chinese and Arabic? And how then would a "root" be defined for Eskimo? To sum up, these distinctions do not seem articulated in a coherent theory that would legitimatize and organize characteristics that are not homogeneous, such as root, incorporation, suffix, stem, juxtaposition, inflection, and group, in which some point to the nature of morphemes and others to their arrangement.

Languages are such complex structures that one could class them in terms of a large number of criteria. A consistent and comprehensive typology should take into account several orders of distinctions and arrange the morphological features that depend on them in a hierarchy. That is the object of the most elaborate classification that has been proposed up to now, that of Sapir.[13] With a profound intuition of linguistic structure and a wide experience of the most peculiar languages that exist, those of the American Indians, Sapir constructed a classification of linguistic types according to a triple criterion: types of "concepts" expressed, dominant "technique," and degree of "synthesis."

First he considered the nature of the "concepts" and recognized four groups of them: I, basic concepts (objects, actions, and qualities, expressed by independent words); II, derivational concepts, less concrete, such as the affixation of nonradical elements to one of the radical elements but without modification of the sense of the utterance; III, concrete relational concepts (number, gender, etc.); IV, abstract relational concepts (purely "formal" relationships that construct the syntax). Groups I and IV are found everywhere. The two others (II and III) can be present or lacking, together or separately. This permits positing four types of languages:

A. Languages possessing only groups I and IV: languages without affixation ("simple pure-relational languages".)

B. Languages possessing the concepts of groups I, II, and IV: using a purely relational syntax but also affixation and internal modification of the roots ("complex pure-relational languages").

C. Languages expressing the concepts of groups I and III: syntactical relationships expressed by elements which are on the whole concrete, but without the radical elements undergoing affixation or internal modification ("simple mixed-relational languages").

D. Languages expressing concepts I, II, and III: "mixed" syntactical relationships as in C but with the possibility of modifying the sense of the radical elements by affixation or internal modification ("complex mixed-relational languages"). In this class are ranged the inflected and many of the "agglutinative" languages.

Into each of these four classes is introduced a quadruple division according

to the "technique" employed by the language: (a) isolating, (b) agglutinative, (c) fusional, (d) symbolic (vocalic gradations), each one capable of being subjected to an evaluation.

Finally, the degree of "synthesis" realized in the units of the language is evaluated by employing qualifications like: analytic, synthetic, polysynthetic.

The result of these operations appears in the table in which Sapir has listed some of the languages of the world with their proper status. It can thus be seen that Chinese represents Group A (simple pure-relational): an abstract relational system, an isolating "technique," analytic. Turkish appears in Group B (complex pure-relational): utilization of affixation, agglutinative "technique," synthetic. In Group C, there is only Bantu (Sapir hesitated between C and D for French), slightly agglutinating and synthetic. Group D (complex mixed-relational) includes in one group, Latin, Greek and Sanskrit, which are both fusional and slightly agglutinating in derivation but with a tincture of symbolism and a synthetic nature; and in another, Arabic and Hebrew as the symbolic-fusional and synthetic type; and finally, Chinook, fusional-agglutinative and slightly polysynthetic.

Sapir had too keen a feeling for linguistic reality to present this classification as final. He purposely gave it a tentative and provisional nature. Let us take it with all the reservations which he himself demanded. Undoubtedly great progress has been made here with respect to the former divisions into inflected, incorporating, etc., cursory and inoperable as they were. This theory has a double merit: (1) it is more complex than all the preceding ones, that is, more faithful to the immense complexity of linguistic organisms; we have here a skillful combination of three series of criteria operating in stages; (2) a hierarchy has been established among these criteria which conforms to the degree of stability of the characteristics described. It has been observed, indeed, that these are not equally subject to change. "Degree of synthesis" is the first to be affected by evolution (the passage from synthetic to analytic); "technique" (the fusional or agglutinative nature of morphological combinations) is much more stable; and finally, "conceptual type" shows remarkable persistence. It is thus possible to make advantageous use of this process of classification in order to label with some precision the salient features of a morphology. But the difficulty is in the handling of this classification, less on account of its complication than because of the subjective judgment it calls for in many cases. The linguist has to decide, guided by some signs, whether a language is this rather than that; for example, whether Cambodian is more "fusional" than Polynesian. The boundary between Groups C and D remains indecisive. Sapir recognized this himself. In these nuances, shaded through several mixed types, it is difficult to recognize so clear-cut criteria as to insure a permanent definition. This Sapir fully realized, stating that "languages,

after all, are exceedingly complex historical structures. It is of less importance to put each language in a neat pigeon-hole than to have evolved a flexible method which enables us to place it, from two or three independent standpoints, relatively to another language."[14]

If even this classification, the most comprehensive and the most refined of all, only imperfectly satisfies the demands of an exhaustive methodology, are we to abandon the hope of forging one that would answer to them? Shall we be resigned to counting as many types as there are genetic families, that is, give up classifying other than in historical terms? Perhaps we could see better what is to be achieved if we detect what is defective about the proposed system. If we compare two languages of different origins classed together by these theories, we realize that an analogy in the manner of constructing forms remains a surface feature as long as the deep structure is not brought to light. The reason for this is that the analysis deals with empiric forms and with empiric arrangements. Sapir rightly distinguished "technique" from certain morphological processes, that is, the material form in which they were presented from the "relational system." But if this "technique" is easy to define and recognize from one language to another, at least in a certain number of cases (for example, if the language uses or does not use significant vocalic gradations or if the affixes are distinct or fused), it is entirely different with the "relational type," which is much more difficult to define and especially to transpose because the description is necessarily interpretation. Everything will thus depend on the intuition of the linguist and the way in which he "feels" the language.

The way to ward off this fundamental difficulty will not be to choose more and more detailed and less and less applicable criteria, but quite the contrary, to recognize first that form is only the possibility of structure and thus to develop a general theory of linguistic structure. Certainly we should proceed by starting from experience, but with the aim of finally fixing a body of constant definitions having as their object on the one hand, the structural elements, and on the other, their relationships. If we succeed in formulating constant statements concerning the nature, the number, and the linking-up of the constituent elements of a linguistic structure, we will have gained the means of arranging the structures of real languages into uniform schemata. The classing will then be done in identical terms and very probably will have no resemblance to the present classifications.

Let us indicate two conditions for this work, the one touching on its method of approach and the other on the setting of its formulation.

For an adequate formulation of the definitions, it would be well to resort to the procedures of logic, the only ones appropriate to the demands of a

rigorous approach. Of course, there are several types of logic of varying degrees of formalization, even the simplest of which still seem barely usable by linguists for their specific operations. But let us observe that even the present genetic classification in its empiricism is shaped by logic, and that the first thing to do is to become aware of this in order to make it better and more explicit. In the simple enumeration of the successive stages by which a prehistoric prototype is erected from a present-day language, we can recognize a logical construction similar to that which underlies zoological classifications. Very briefly, here are some of the logical principles that can be extrapolated from a classic table like that of the Indo-European languages arranged historically.

Let us take the connection between Provençal and Indo-European. It breaks down analytically into Provençal < Gallo-Romanic < Proto-Romanic < Italic < Indo-European, to limit ourselves to the large divisions. But each of these terms, beyond the individual language to be classified, points to a *class* of languages, and these classes follow each other hierarchically from inferior to superior units, each one of them including the inferior unit and being included in the superior unit, according to a nesting relationship (like that of boxes within boxes within boxes). Their arrangement is governed by their respective extension and intension. It appears, then, that the individual term, Provençal, has the slightest extension and maximum intension, and through this contrasts with Indo-European, which has a maximum extension and the slightest intension. Between these two extremes are arranged a series of classes whose extension and intension always vary in inverse ratio, for each class possesses, in addition to its own characteristics, all those it has inherited from the class above. An intermediary class will have more characteristics than the preceding one, which is more extensive, and fewer than the following one, which is more intensive. It would be interesting, we might note in passing, to reconstruct the affiliation of Provençal with Indo-European in linguistic terms, on this very model, by determining what Provençal has beyond proto-Gallo-Romanic, and then what proto-Gallo-Romanic has beyond proto-Romanic, etc.

In thus arranging the genetic relationships, one can notice certain logical characteristics which seem to define their arrangement. First, each individual member (idiom) shares in the ensemble of hierarchical classes and belongs to each one of them at a different level. By placing Provençal in relationship with Gallo-Romanic, we involve it with Romanic and Latin, etc. In the second place, each of these successive classes is at the same time including and included. It includes that which follows and is included in that which precedes it, between the two extremes of the last class and the individual language to be classified: Romanic includes Gallo-Romanic and is included in Italic. Thirdly,

between the classes defined by the same hierarchical degree, there exists no relationship such that knowing the one permits knowing the other. To state and characterize the Italic language does not give any notion as to the nature or even as to the existence of the Slavic languages. These classes cannot govern one another since they have nothing in common. Fourthly, and as a result, the classes of an ensemble of the same level can never be exactly complementary since none of them tells anything about the totality of which they are a part. One can thus expect new classes to be added to those of a given level. Finally, just as each language uses only a part of the combinations which its phonemic and morphemic systems would allow, so each class, assuming that it is completely known, contains only a part of the languages that could have been realized. In this respect, classes of languages are never exhaustive. It follows from this that it is impossible to make a prediction as to the existence or the nonexistence of a class of this or that structure. Hence this new consequence that each class is characterized in contrast with others of the same level by a sum of features which are present or absent respectively: complex ensembles like Italic and Celtic are only defined by the fact that a certain feature of the one is absent from the other, and vice versa.

These brief considerations give an idea of the way in which one could construct the logical model even of an empirical classification like that of the linguistic families. As a matter of fact, the logical arrangement sketched here, like that of the zoological and botanical species, which is of the same nature, does not seem amenable to a very developed formalization.

One could expect more of a classification dealing this time with the elements of linguistic structure in the sense indicated above, although here the task would be much more arduous and the prospect more distant. The initial condition for such an undertaking would be to abandon that principle—which remains unformulated yet weighs all the more heavily upon contemporary linguistics because it seems to be taken for granted—that there is no linguistics but a linguistics of concrete fact and that language resides entirely in its actual manifestations. If this were so, the way would be definitively closed to any deep inquiry into the nature and the manifestations of language. The linguistic datum is a result, and it is necessary to find out what it is a result of. Even a cursory consideration of the way in which a language, any language, is constructed, shows that each language has a certain number of problems to solve, all of which come down to the central question of "meaning." Grammatical forms express, with a symbolism that is the distinctive mark of language, the response given to these problems: by studying these forms, their individual selection, grouping, and organization, we can infer the nature and the form of the intralinguistic problem to which they respond. This whole process is unconscious, difficult to observe, but essential. For

example, there is a characteristic structural feature in the Bantu languages as well as in many others: the "nominal classes." One could be content to describe the material arrangement of them or one could inquire into their origin. Many studies have been devoted to this. We shall here interest ourselves only in a question which has not yet been posed, that of the function of such a structure. Now, it can be shown, and we shall try to do so elsewhere, that all the various systems of "nominal classes" are functionally analogous to the different modes of expression of "grammatical number" in other types of languages, and that linguistic processes materialized in very dissimilar forms are to be classed together from the point of view of their function. Still we have to begin by seeing beyond the material form and not making the whole of linguistics consist in the description of linguistic forms. If the material arrangements that descriptive linguistics observes and analyzes can be gradually reduced to the various figures of a single operation and explained by reference to a certain number of definite principles, we shall have gained a basis for a rational classification of linguistic elements and forms and, ultimately, ensembles. And if we somewhat optimistically extend this perspective, nothing prevents the thought that linguists will then be able to discover in linguistic structures laws of transformations like those which in the operational schemes of symbolic logic permit the passage from one structure to a derived structure and the definition of their constant relationships. These are admittedly distant prospects and topics for thought rather than practical prescriptions. One thing is certain: since a complete classification means complete knowledge, it is by an ever deeper comprehension and an ever stricter definition of linguistic signs that we shall progress towards a rational classification. The distance to be covered is less important than the direction in which we are headed.

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TEN

The Levels of Linguistic Analysis

WHEN A SUBJECT LIKE LANGUAGE is studied in a scientific spirit, it quickly appears that each linguistic fact raises all the questions at the same time and that they are first raised as to what one has to admit as *fact*, that is, as to the criteria which define it as such. The great change that has taken place in linguistics consists precisely in this: it has been recognized that language should be described as a formal structure, but that this description requires as a preliminary the devising of adequate procedures and criteria and that, in short, the reality of the subject cannot be divorced from the methodology suitable for defining it. In view of the extreme complexity of language, we must thus aim to set up an arrangement both in the phenomena studied, in order to classify them according to a rational principle, and in the methods of analysis, in order to construct a coherent description, ordered according to the same concepts and the same criteria.

The notion of *level* seems to us to be essential in determining the analytical procedure. It alone is suited to do justice to the *articulated* nature of language and to the *discrete* nature of its elements; it alone can lead us to discover within the complexity of the forms the peculiar architecture of the parts and of the whole. The domain in which we shall study it is that of language as an organic system of linguistic signs.

The entire process of analysis tends to delimit the *elements* through the *relationships* that unite them. This analysis consists of two operations which govern one another and on which all the others depend: (1) segmentation; (2) substitution.

No matter what the extent of the text under consideration, it is first necessary to segmentalize it into more and more reduced portions until the elements can no longer be broken down. In similar fashion, one then identifies these elements by the substitutions they permit. For example, one succeeds in segmenting Fr. *raison* into [r]—[ɛ]—[z]—[õ], in which may be made the following substitutions: [s] in place of [r] (= *saison*); [a] in place of [ɛ] (= *rasons*); [y] in place of [z] (= *rayon*); [ɛ̃] in place of [õ] (= *raisin*). These substitutions

can be listed: the class of substitutes possible for [r] in [rɛzõ] consists of [b], [s], [m], [t], and [v]. Applying the same procedure to each of the other three elements of [rɛzõ], one thus sets up an inventory of all the possible substitutions, each of them forming in its turn a segment identifiable in other signs. From one sign to another, the totality of the elements thus obtained, as well as the totality of the substitutions possible for each one of them, is gradually arrived at. Briefly, such is the method of distribution: it consists in defining each element by the ensemble of the environments in which it may occur and by means of a double relationship—the relationship of the element with the other elements simultaneously present in the same portion of the utterance (the syntagmatic relationship) and the relation of the element with the other elements which are mutually substitutable (the paradigmatic relationship).

Let us take note at once of a difference between the two operations in the field of their application. Segmentation and substitution do not have the same range. Some elements are identified with respect to other segments with which they are in a relationship of substitutability. But substitution can also operate on nonsegmentable elements. If the minimal segmentable elements are identified as *phonemes*, the analysis can go further and isolate the *distinctive features* within the phoneme. But these distinctive features of the phoneme are not segmentable, although they are identifiable and substitutable. In [d'] there are four distinctive features: occlusion, dentality, voice, and aspiration. None of them can be realized by itself outside the phonetic articulation in which it occurs. Nor can they be assigned a syntagmatic order; occlusion is inseparable from dentality, and breath from voice. Nevertheless each of them permits a substitution. The occlusion can be replaced by friction, the dentality by labiality, the aspiration by glottality, etc. We arrive thus at distinguishing two classes of minimal elements: those which are both segmentable and substitutable—the phonemes; and those which are only substitutable—the distinctive features of the phonemes. Because they are not segmentable, the distinctive features cannot constitute syntagmatic classes; but because they are substitutable, they constitute paradigmatic classes. The analysis can thus recognize and distinguish a phonemic level, on which the two operations of segmentation and substitution can take place, and a hypophonemic level, that of the distinctive features: which are not segmentable and which are subject only to substitution. Here linguistic analysis stops. Beyond this, the data furnished by recent instrumental techniques belong to physiology or to acoustics—they are infralinguistic.

In this way we reach, by the processes described, the two lowest levels of analysis, that of the minimal segmentable entities, the phonemes, the *phonemic* level, and that of the distinctive features, which we propose to call merisms (Gr. *merisma*, *-atos* 'delimitation'), the *merismatic* level.

We define their relationship empirically according to their mutual position as that of two levels attained successively, the combination of merisms producing the phoneme, or the phoneme breaking down into merisms. But, what is the *linguistic* condition of this relationship? We shall find it if we carry the analysis further and, since we can no longer descend, if we aim at a higher level. We must then work on larger segments of texts and try to find out how the operations of segmentation and substitution are to be realized when it is not a matter of obtaining the smallest possible units, but units of greater extent.

Let us suppose that in an English chain [li:viŋ θiŋz], "leaving things (as they are)," we have identified the three phonemic units, [i], [θ], and [ŋ], in various places. We attempt to see if these units will allow us to delimit a superior unit which will contain them. Proceeding by a logical process to exhaust all possibilities, we envisage the six possible combinations of these three units: [iθŋ], [iŋθ], [θiŋ], [θŋi], [ŋiθ], [ŋθi]. We then see that two of these combinations are actually present in the chain, but realized in such a way that they have two phonemes in common and that we must choose one and exclude the other; in [li:viŋ θiŋz] it will be either [ŋθi] or [θiŋ]. There is no doubt about the answer; we will reject [ŋθi] and select [θiŋ] as our new unit /θiŋ/. Where does the authority for this decision come from? From the linguistic condition of *meaning*, which the delimitation of the new unit of the superior level must satisfy; [θiŋ] has meaning, [ŋθi] does not. To this is added the distributional criterion which we have obtained at one point or another of the analysis in its present phase if we operate with a sufficient number of extended texts; [ŋ] is not admissible in the initial position and the sequence [ŋθ] is impossible, while [ŋ] belongs to the class of final phonemes and [θi] and [iŋ] are equally admissible.

Meaning is indeed the fundamental condition that any unit on any level must fulfill in order to obtain linguistic status. We repeat: on any level. The phoneme has value only as a discriminator of linguistic signs, and the distinctive feature, in its turn, as a discriminator of phonemes. The language could not function otherwise. All the operations to be performed within this chain assume the same condition. The portion [ŋθi] is not acceptable at any level; it can neither be replaced by any other nor replace any other, nor be recognized as a free form, nor be placed in a syntagmatic relationship complementary to the other portions of the utterance; and what has just been said of [ŋθi] is also valid for a portion cut out from what precedes it; for example, [i:vi] or from what follows, [ŋz]. Neither segmentation nor substitution are possible. On the contrary, an analysis guided by meaning will produce two units in [θiŋz], one the free sign /θiŋ/, the other the [z] to be recognized subsequently as a variant of the bound sign /-s/. Instead of skirting the issue

of "meaning" and imagining complicated—and inoperable—procedures in order to leave it out of play while focusing only on formal features, it is better to recognize frankly that it is an indispensable condition of linguistic analysis.

It is only necessary to see how meaning comes into our procedures and what level of analysis it belongs to.

It is clear from these brief analyses that segmentation and substitution cannot be indiscriminately applied at any portion whatever of the spoken chain. In fact, the distribution of a phoneme and its syntagmatic and paradigmatic combinability—indeed, the very reality of a phoneme—could not be defined without reference to a *particular unit* of the higher level that contains it. That is an essential condition, whose importance will be stressed farther on. And so we see that the level is not something exterior to analysis; it is *within* the analysis; the level is an operator. If the phoneme can be defined, it is as a constituent of a higher unit, the morpheme. The discriminating function of the phoneme rests on its inclusion in a particular unit, which from the fact that it includes the phoneme belongs to a higher level.

Let us accordingly stress this: a linguistic unit will not be acknowledged as such unless we can identify it *within* a higher unit. The technique of distributional analysis does not bring out this type of relationship between different levels.

From the phoneme we thus pass to the level of the *sign*, this being identified according to the circumstances with a free form or a bound one (morpheme). For convenience in our analysis, we shall ignore this difference and classify signs as a single species which will, in practice, coincide with the word. May we be permitted—simply for convenience—to keep this term which is so much decried, and so irreplaceable?

The word has an intermediary functional position that arises from its double nature. On the one hand it breaks down into phonemic units, which are from the lower level; on the other, as a unit of meaning and together with other units of meaning, it enters into a unit of the level above. These two properties should be described a little more precisely.

In saying that the word breaks down into phonemic units, we must stress that this breaking down takes place even when the word is monophonemic. For example, it happens that in French, all the vocalic phonemes coincide materially with an autonomous sign of the language. To state it more clearly: certain signifiers in French are realized in a single phoneme which is a vowel. Nonetheless, the analysis of these signifiers will lead to a breaking down; it is the necessary operation to reach a unit of a lower level. And so Fr. *a* or *à* is analyzed into /*a*/; Fr. *est* is analyzed into /*e*/; Fr. *ait*, into /*ɛ*/; Fr. *y* or *hie*, into /*i*/; Fr. *eau*, into /*o*/; Fr. *eu*, into /*y*/; Fr. *ou* into /*u*/; Fr. *eux* into /*ϕ*/.

It is the same in Russian, in which various units have a monophonemic signifier, which can be vocalic or consonantal; the conjunctions *a* and *i*; the prepositions *o*; *u*; and *k*; *s*; and *v*.

The relationships are less easy to define in the inverse situation, between the word and the higher level unit, for this unit is not a longer or more complex word—it belongs to another class of notions; it is a sentence. The sentence is realized in words, but the words are not simply segments of it. A sentence constitutes a whole which is not reducible to the sum of its parts; the meaning inherent in this whole is distributed over the ensemble of the constituents. The word is a constituent of a sentence; it brings about its signification; but it does not necessarily appear in the sentence with the meaning which it has as an autonomous unit. The word can thus be defined as the smallest free unit of meaning susceptible of effecting a sentence, and of being itself effected by phonemes. In practice, the word is envisaged above all as a syntagmatic element, a constituent of empirical utterances. Paradigmatic relationships are less important, insofar as the word with respect to the sentence is concerned. It is otherwise when the word is studied as a lexeme, in an isolated state. Then all the inflectional forms, etc., must be included in the unit.

Continuing to state the nature of the relationships between the word and the sentence, it will be necessary to make a distinction between *autonomous* words, functioning as constituents of sentences (this is the majority), and *synnomous* words, which can only enter into sentences when joined to other words: thus Fr. *le* (*la* . . .), *ce* (*cette*), *mon* (*ton* . . .), or *de*, *à*, *dans*, *chez*; but not all the prepositions—cf. colloquial Fr., *c'est fait pour*; *je travaille avec; je pars sans*. This distinction between "autonomous words" and "synnomous words" does not coincide with the one which, since the work of Marty, has been made between "autosemantic" and "synsemantic." Among the "synsemantic" are to be found, for example, auxiliary verbs, which are "autonomous" for us insofar as they are verbs and especially because they enter directly into the formation of sentences.

With words, then with groups of words, we form *sentences*; this is, empirically stated, the final level, reached by a progression which seems to be linear. In fact, we shall see a very different situation here.

In order to better understand the nature of the change that takes place when we pass from the word to the sentence, it is necessary to see how the units are articulated according to their levels and to make explicit several important consequences of the relationships that link them. The transition from one level to the following brings into play properties which are peculiar and still unnoticed. Linguistic entities being discrete, they admit of two types of relationship: between elements of the same level or between elements of different levels. These relationships must be clearly distinguished. Between

elements of the same level, the relationships are *distributional*; between elements of different levels, they are *integrative*. Only these last need be commented upon.

When we break down a unit, we do not obtain units of a lower level but formal segments of the unit in question. If Fr./ɔm/, *homme*, is reduced to [ɔ]—[m], there are still only two segments. Nothing assures us at this point that [ɔ] and [m] are phonemic units. In order to be certain, it is necessary to consider /ɔt/, *hotte*, and /ɔs/, *os*, on the one hand, and /om/, *heaume*, and /ym/, *hume*, on the other. Here are two complementary operations that work in opposite directions. A sign is substantially the function of its constituent elements, but the only way to define these elements as constituent is to identify them within a given element in which they fulfill an *integrative* function. A unit will be recognized as distinctive at a given level if it can be identified as an "integral part" of the unit of the next higher level, of which it becomes the *integrator*. Thus /s/ has the status of a phoneme because it functions as the integrator of /-al/ in *salle*, of /-o/ in *seau*, of /-ivil/ in *civil*, etc. By virtue of the same relationship transposed to a still higher level, /sal/ is a sign because it functions as integrator in *salle à manger*, *salle de bains* . . .; /so/ is a sign because it functions as integrator in *seau à charbon*; *un seau d'eau*; and /sivil/ is a sign because it functions as integrator in *civil ou militaire*; *état civil*; *guerre civile*. The model of the "integrating relationship" is that of Russell's "propositional function."[1]

In the system of the signs of a language, what is the extent of this distinction between constituent and integrator? It operates between two limits. The higher limit is indicated by the sentence, which is comprised of constituents but which, as will be shown further on, can not integrate any higher unit. The lower limit is that of the "merism," which, being the distinctive feature of the phoneme, does not itself include any constituent of a linguistic nature. Thus the sentence is defined only by its constituents; the merism is defined only as an integrator. Between these two, an intermediate level is easily defined, that of signs—whether autonomous or synnomous, whether words or morphemes—which contain constituents and at the same time function as integrators. Such is the structure of these relationships.

What finally is the function assignable to this distinction between constituent and integrator? It is a function of fundamental importance. We expect to find here the rational principle that in the case of units of different levels governs the relationship between *form* and *meaning*.

At this point the problem that haunts all of modern linguistics arises: the relationship between form and meaning. Many linguists would like to reduce it to the notion of form alone but somehow they cannot succeed in freeing themselves of the correlative, meaning. What has not been attempted in

order to avoid, ignore, or expel meaning? It has been useless; this Medusa's head is always there at the center of language, fascinating those who contemplate it.

Form and meaning must be defined in terms of each other and they must both be articulated within the whole range of the language. The relations between them seem to us to be involved in the very structure of the levels and in the very structure of the functions corresponding to these levels. These functions we have designated here as "constituent" and "integrating."

When we reduce a unit to its constituents, we reduce it to its *formal* elements. As was said above, the analysis of a unit does not automatically produce other units. Even in the highest unit, the sentence, the analysis into constituents brings forth only a formal structure, such as takes place every time a whole is analyzed into its parts. Something analogous that helps us to picture this can be found in writing. In relation to the unit of the written word, the letters that compose it, taken one by one, are only material segments that do not retain any portion of the units. If we compose SATURDAY by assembling eight blocks, each of which bears a letter, the T block, the A block, etc., will not constitute an eighth or any other fraction of the *word* as such. Thus in performing an analysis of linguistic units, we isolate only formal constituents.

What is necessary in order for us to recognize, if need be, units of a certain level in these formal constituents? We must perform the operation in an inverse direction and see if these constituents have an integrating function at the higher level. This is the point: the analysis discloses the formal constituents; the integration discloses meaningful units. The phoneme, which is a discriminator, is the integrator, along with other phonemes, of the units of meaning that contain it. These signs in their turn will be included as integrators in higher units vested with meaning. The steps of the analysis proceed from opposite directions to the encounter either of form or of meaning in the same linguistic entities.

We can thus formulate the following definitions:

The *form* of a linguistic unit is defined as its capacity for being broken down into constituents of a lower level.

The *meaning* of a linguistic unit is defined as its capacity to integrate a unit of a higher level.

Form and meaning thus appear as conjoined properties, given of necessity and simultaneously, and inseparable in the functioning of a language.[2] Their mutual relationships are revealed, thanks to the articulated nature of language, in the structure of the linguistic level as they are traversed by the ascending and descending operations of the analysis.

But the notion of meaning has still another aspect. Perhaps it is because

its aspects have not been distinguished that the problem of meaning has acquired such an impenetrable obscurity.

In language, organized into signs, the meaning of a unit is the fact that it has a meaning, that it is meaningful, which is tantamount to identifying it by its capacity to fill a "propositional function." That is the necessary and sufficient condition for recognizing the unit as meaningful. In a more demanding analysis, one would have to enumerate the "functions" which this unit is suited to serve, and, ultimately, one should cite all of them. Such an inventory would be quite limited for "meson" or "chrysoprase" but immense for "thing" or "a"; no matter, it would always obey the same principle of identification through its capacity for integration. In every case one would be in a position to say whether a certain segment of the language "has a meaning" or not.

A completely different problem would be to ask, *what* is this meaning? Here "meaning" is taken with an entirely different acceptation.

When we say that a certain element of a language, long or short, has a meaning, we mean by this a certain property which this element possesses *qua* signifier: that of forming a unit which is distinctive, contrastive, delimited by other units, and identifiable for native speakers for whom this language is *language*. This "meaning" is implicit, inherent in the linguistic system and its parts. But at the same time, all human speech has reference to the world of objects, both as a whole, in its complete utterances in the form of sentences, which refer to concrete and specific situations, and in the form of inferior units that relate to general or particular "objects" recognized from experience or created by linguistic convention. Each utterance, and each term of the utterance, thus has a referend, a knowledge of which is implied by the native use of the language. Now, to say just *what* the referend is, to describe it and characterize it specifically, is a separate and often difficult task which has nothing in common with the correct handling of the language. We cannot here dwell on all the consequences which this distinction entails. It is enough to have set it up in order to delimit the notion of "meaning," insofar as it differs from "designation." Both are necessary. We find them, distinct but associated, at the level of the *sentence*.

Here is the last level our analysis reaches, that of the *sentence*, of which we said above that it did not simply represent one more step in the extent of the segment being considered. With the sentence a boundary is crossed and we enter into a new domain.

What is new here, first of all, is the criterion relevant in this type of utterance. We can segment the sentence but we cannot use it for integrating. There is no propositional function which a proposition can serve. A sentence

thus cannot serve as integrator to another type of unit. This results primarily from the distinctive characteristic, distinctive beyond all others and inherent in the sentence, of being a *predicate*. All the other characteristics which we can recognize in the sentence come second with respect to this one. The number of signs entering into a sentence does not matter; it is known that one single sign is enough to constitute a predicate. In the same way the presence of a "subject" alongside the predicate is not indispensable; the predicative term of the statement is sufficient unto itself since it is in reality the determiner of the "subject." The "syntax" of the statement is nothing but the grammatical code that organizes its arrangement. Varieties of intonation do not have a universal value and remain a matter of subjective evaluation. Only the predicative character of the statement can thus have value as a criterion. We shall accordingly locate the proposition at the *categoremic* level.[3]

But what do we find at this level? Up to this point the denomination of the level was related to the relevant linguistic unit. The phonemic level is that of the phoneme; concrete phonemes do exist and they can be isolated, combined, and enumerated. But categoremes? Do categoremes exist? The predicate is a fundamental property of the sentence; it is not a unit of the sentence. We do not have several varieties of predication. And nothing would be changed in this observation if one replaced "categoreme" with "phraseme."[4] The sentence is not a formal class that would have as its units "phrasemes" which would be delimited and *opposable among themselves*. The distinguishable types of sentences can be reduced to a single one, the predicative statement, or proposition, and there is no sentence outside predication. It is thus necessary to recognize that the categoremic level contains only one specific form of linguistic utterance, the proposition, which does not constitute a class of distinctive units. That is why the proposition cannot enter as a part into a totality of a higher rank. A statement can only precede or follow another statement in a consecutive relationship. A group of propositions does not constitute a unit of an order superior to the proposition. There is no linguistic level above the categoremic level.

Because the sentence does not constitute a class of distinctive units, which would be potential members of higher units as are phonemes or morphemes, it is fundamentally different from the other linguistic entities. The foundation for this difference is that the sentence contains signs but it is not itself a sign. Once this is recognized, the contrast between the ensembles of signs that we have met at the lower levels and the entities of the present level appears clearly.

Phonemes, morphemes, and words (lexemes) can be counted; there is a finite number of them. Not so with sentences.

Phonemes, morphemes, and words (lexemes) have a distribution at their

respective levels and a use at higher levels. Sentences have neither distribution nor use.

An inventory of the uses of a word might have no end; an inventory of the uses of a sentence could not even be begun.

The sentence, an undefined creation of limitless variety, is the very life of human speech in action. We conclude from this that with the sentence we leave the domain of language as a system of signs and enter into another universe, that of language as an instrument of communication, whose expression is discourse.

There really are two different universes here even though they take in the same reality, and they give rise to two different linguistics, even though their paths cross all the time. On the one hand, there is language, an ensemble of formal signs, identified by rigorous procedures, ordered in classes, combined in structures and in systems, and on the other, there is the manifestation of language in living communication.

The sentence belongs to discourse. It is even by discourse that it can be defined; the sentence is the unit of discourse. We find confirmation of this in the modalities of which the sentence is capable; it is everywhere recognized that there are declarative statements, interrogative statements, and imperative statements, which are distinguished by specific features of syntax and grammar although they are based in identical fashion upon predication. Now these three modalities do nothing but reflect the three fundamental behaviors of man speaking and acting through discourse upon his interlocutor: he wishes to impart a piece of knowledge to him or to obtain some information from him or to give an order to him. These are the three interhuman functions of discourse that are imprinted in the three modalities of the sentence-unit, each one corresponding to an attitude of the speaker.

The sentence is a unit insofar as it is a segment of discourse and not as it could be distinctive with respect to other units of the same level—which it is not as we have seen. But it is a complete unit that conveys both meaning and reference; meaning because it is informed by signification, and reference because it refers to a given situation. Those who communicate have precisely this in common: a certain situational reference, in the absence of which communication as such does not operate, "meaning" being intelligible but "reference" remaining unknown.

We see in this double property of the sentence the condition that makes it analyzable for the speaker himself, beginning with his learning of discourse when he learned to speak and continuing through the incessant exercise of his language activity in every situation. What becomes more or less apparent to him is the infinite diversity of the messages that can be transmitted, contrasting with the small number of elements used. From that, in proportion

to his increasing familiarity with the system, he unconsciously builds up a quite empirical notion of the sign within the sentence, which sign one could define thus: the sign is the minimal unit of the sentence capable of being recognized as identical in a different environment or of being replaced by a different unit in an identical environment.

The speaker may be unable to go further; he has become aware of the sign in the guise of the "word." He has made the beginning of a linguistic analysis starting with the sentence and in the exercise of discourse. When the linguist tries, for his part, to recognize the levels of analysis, he is led by an inverse procedure, starting with the elementary units, to see the sentence as the final level. It is in discourse, realized in sentences, that language [*langue*] is formed and takes shape. There language begins. One could say, in imitation of a classical formula: nihil est in *lingua* quod non prius fuerit in *oratione*.

From *Proceedings of the 9th International Congress of Linguists* (Cambridge, Mass., 1963; The Hague: Mouton & Co., 1964), pp. 266–275

ELEVEN

The Sublogical System of Prepositions in Latin

IN HIS IMPORTANT WORK, *La Catégorie des cas* (1: 127ff), Louis Hjelmslev has broadly outlined the "sublogical system" that underlies case distinction in general and permits the construction of the ensemble of case relationships in an idio-synchronic state. This sublogical system has three dimensions, each one being capable of several modalities: (1) direction (movement to and fro); (2) coherence-incoherence; (3) subjectivity-objectivity. Although occupied solely with case in his analysis, Hjelmslev could not avoid considering prepositions at the same time, at least as a side issue; and with good reason, so close is the functional relationship between the two categories. In this connection it must be emphasized that each preposition of a given idiom reveals in its various uses a certain figure in which its meaning and its functions are coordinated and which it is necessary to reconstruct if one wishes to give a coherent definition to the ensemble of its semantic and grammatical particularities. This figure is governed by the same sublogical system that governs case functions. It goes without saying that a description guided by this principle must include all the prepositions and all the case relationships of one state of a language, in order for it to prove conclusive. Nevertheless we can start it with certain particular facts. We offer here the result of an independent research which has as its chief object the demonstration that such a description permits us to solve the concrete problems which the use of a preposition poses.[1]

Latin has two prepositions for indicating the position "in front of," *pro* and *prae*. Latinists[2] gave them an almost identical meaning, which may suffice for the immediate needs of translation but which conceals their actual linguistic relationship. The profound difference that separates them is effaced by this. It is necessary to delimit this difference exactly in order to define their respective configurations.

(1) *Pro* does not so much signify "in front of" as "outside of, on the exterior"; it is a "forward" realized by a movement of leaving or of expulsion from a place assumed to be inside or covered (cf. *prodeo, progenies*); (2) this

movement creates a separation between the initial position and the *pro* position; that is why *pro*, referring to what has just placed itself "in front of" the point of departure can, depending on the circumstances, indicate cover, protection, or defense; or equivalence, permutation, or substitution; (3) the very direction of this movement creates between the point of departure and the point *pro* an objective relationship which is not subject to reversal if the position of the observer changes.

All these features distinguish *pro* from *prae*, and it is necessary to consider the latter more closely. The following characteristics can be perceived in *prae*: (1) it indicates a position not "in front of" but "ahead of" an object; (2) this object is always conceived of as *continuous*, so that *prae* specifies the anterior portion of the object as compared to that which is posterior; (3) the relationship posited by *prae* implies that the subject is supposed to constitute or occupy the posterior part; from that point begins the movement *prae* towards that which is ahead, in advance, in anticipation or in excess, but without ever breaking the continuity from the rear, the "normal," position, towards the forward "extreme" position.

It is easy to verify this definition in the most ordinary uses. In expressions like *i prae, iam ego te sequar* (Pl. *Cist.* 773) or *praefert cautas subsequiturque manus* 'with precaution he bears ahead of himself his hands which he is following' (Ovid *Fast.* 2. 336), it is a part of internal necessity which causes *sequi* to come up after *prae;* once *prae* has been uttered, the object is imagined as continuous, and the rest must *follow* and cannot fail to follow since it is continuous. It will suffice to look at a few nominal and verbal compounds to confirm the fact that this relationship is constant: *praeeo* 'to be at the head' (on condition that the troop follow); *praeire verbis* 'to precede with a stock response, to say a formula first which another must repeat'; *praecipio* 'to make arrangements in advance' (which will be followed); *praecingo* 'to belt in front'; *praecido, -seco, -trunco* 'to cut off the end'; *praefringere bracchium* 'to break the arm' (considered as an extremity of the body in an accident involving the whole body); *praeacuo* 'to sharpen the point'; *praerupta saxa* 'rocks broken off at the end' (making a precipice); *praehendo* 'seize at the end' (*praehendere pallio, auriculis*, with continuity between the part that has been seized and the rest of the object); *praedico, -divino, -sagio, -scio* '. . . beforehand' (in anticipating the event or in forestalling others); *praeripio* 'remove from the extremity of . . .'; *huc mihi venisti sponsam praeriptum meam* 'to carry her off from under my nose' (Pl. *Cas.* 102); *praescribo* 'to be the first to write' (what someone else has to write), hence, 'to prescribe'; *praebeo*, literally, 'to hold at the end of oneself' (cf. *prae se gerere*), 'to offer' (something which is kept on the body); *praebere collum*, hence, *praebia* 'amulets worn around the neck by children,' literally ,'things which one keeps

before one' (in order to ward off ill fortune); *praefari carmen* 'to preface with a song' (the ceremony that follows); and also *praefari* 'to utter a word (of excuse) before saying' (something improper). Among the nominal compounds: *praenomen* 'that which comes before the *nomen*' (which must necessarily follow); *praefurnium* 'that which precedes the *furnus*, the opening of the furnace'; *praecox, -maturus* 'that which is ripe in advance, which anticipates the (normal) moment of maturity'; *praeceps* 'head foremost' (and the rest follows); *praegnas*, literally, 'in the state which precedes parturition, in which parturition has been ascertained in advance and must follow,' that is, 'expecting'; *praepes*, literally, 'one (a bird) which anticipates its own flight, which swoops down from a rapid flight,' etc.

One adjective deserves to be considered separately: *praesens*. It raises a problem of meaning whose solution has escaped some excellent philologists. *Praesens* is obviously independent of *praesum*. In order to make up for the absence of a participle taken from *esse* and corresponding to Greek ὤν, Latin created compound forms in *-sens* like *absens* from *absum*. And so, corresponding to *adsum*, one would expect **adsens*. But only *praesens* is found, endowed with a meaning which should belong to **adsens*. Why? J. Wackernagel, not being able to discover an internal reason for this anomaly, thought that *praesens* was created in order to form a calque with Greek παρών.[3] But besides the fact that *prae* is not symmetrical with Greek παρά, this leaves unanswered the essential question: while **adsens* was called for by the equation *absum:absens/adsum:x*, what dictated the choice of *prae-*? The solution can only be found in the very meaning of *prae*. But we must first reestablish the exact meaning of *praesens*, which is not that of classical usage. It is seen in a passage like that in Pl. *Pseud.* 502, in which two evils are compared: *illud malum aderat, istuc aberat longius; illud erat praesens, huic erant dieculae*. The connection between *adesse* and *praesens* stands out clearly, but so does their difference. By *praesens* is meant not 'what is there,' but 'what is before me,' hence, 'imminent, urgent,' almost with the image of English 'ahead'; what is *praesens* will not permit delay (*dieculae*), is not separated by an interval from the moment at which one is speaking. Let us cite still others: *iam praesentior res erat* 'the thing became more urgent' (Livy 2. 36. 5); *praesens pecunia* 'ready money,' literally, 'that which is at hand, which is given without delay, immediately'; *praesens poena* 'immediate punishment' (Cicero *Nat. Deor.* 2. 59); *praesens* (*tempus*), *in praesenti* 'a moment which should come immediately.' Hence *praesens* is applied to that which is 'before one's eyes, visible, immediately present' and can be joined to *adesse* without redundancy as in the text quoted from Plautus or in *praesens adsum* (Plautus, Cicero); *lupus praesens esuriens adest* (Pl. *Stich.* 577); *belua ad id solum quod adest quodque praesens est se accommodat* 'that which is present and before its

eyes' (Cicero *Off.* 1. 4). It was thus possible, and very early, to transpose this strong etymological value into the locutions *praesente testibus*, *praesente amicis* (Pomp. *Com.* 47. 168) in which *praesente* has almost become a preposition and does not only signify 'who is here, παρών' but 'who is before one's eyes, immediately present.' From the way it is used, it can be seen how *praesens* made the creation of **adsens* useless without having been an exact equivalent of it, and how it was very early associated with *adesse*. Above all, the proper meaning of *praesens* confirms the definition of *prae*, and that is what is important here.

Up to this point, it has been relatively easy to verify the general sense conferred on *prae* in compounds. The real difficulty begins when one wishes to account for the causal and comparative uses of the preposition. The two categories are independent of each other and have both been present since the most ancient Latin. We know that *prae* is suitable for indicating cause: *cor Ulixi frixit prae pavore* 'his heart froze from fear' (Livius Andr. *Od.* 16). In addition it could mark a comparison: *videbant omnes prae illo parvi futuros* (Nepos *Eum.* 10). We have here some uses of *prae* which *pro* does not have and whose origin can only be sought in the very meaning of *prae*. But their genesis is not apparent at first glance and it must be said that none of the interpretations proposed up till now are of the slightest assistance in understanding them. B. Kranz hoped to settle the difficulty by imagining that the causal *prae* was for *prae*(*sente*), which is hardly likely. According to Brugmann, one should start with the locative sense: "Etwas stellt sich vor etwas und wird dadurch Anlass und Motiv für etwas."[4] Does this not show the error into which an ambiguous definition leads? What does "*vor* etwas" mean? One would think that *prae* could mean the anteriority of one event with respect to another and hence its cause, but that is impossible. The defect in the reasoning is shown as soon as one applies it to the translation of a concrete example, for instance in Plautus: *prae laetitia lacrimae prosiliunt mihi* 'my tears gushed forth for joy.' Could it be said that "something" was placed "in front of" joy? Yet that is what Brugmann's explanation would require. It would assume that in Latin one would say "I cry in front of joy" in order to say "I cry for joy." What language has ever expressed itself thus? It is not only an oddity but a logical contradiction, because if *prae gaudio* means 'in front of joy,' it should be granted that "in front of joy" is the equivalent of "as a consequence of joy," and that a preposition stating cause is used to mark consequence. In other words, if *prae gaudio* means 'in front of joy,' and if *prae* indicates what comes before and what is the cause, it follows that in *prae gaudio lacrimae prosiliunt mihi*, the tears come before the joy and provoke it. That is the result of an explanation which starts from a wrong view and finishes in confusion. It is thus impossible to consider, along with J. B. Hofmann, that

the causal sense of *prae* was developed "aus lokaler-temporaler Grundlage." Neither can the *prae* of comparison be solved by assuming that *prae* 'in front of' could lead to 'opposite to, in comparison to.' Once again an error creeps into the reasoning through this ambiguous translation of 'in front of.' Let us repeat that *prae* never means 'in front of' in the sense of "opposite" and implying a comparison of one object with another, for the chief reason that, indicating the continuity and hence the oneness of the object, it cannot confront two distinct objects. Every interpretation that neglects this fundamental fact misses the point of the problem.

With these pseudosolutions eliminated, the real solution should arise from the already stated conditions of the general meaning of the preposition. The causal *prae* and the comparative *prae* must both be explained by the same sublogical schema which is at the basis of the ordinary uses of *prae*. Within what limits is *prae* capable of stating a cause? Every Latinist knows that *prae* cannot take the place of *ob*, *erga*, or *causā* in their usual functions. It would be impossible to replace *ob eam causam* by **prae ea causa*. How then is the function of *prae* specified? Let us list all the examples found in Plautus:

prae laetitia lacrimae prosiliunt mihi (*Stich.* 466);
neque miser me commovere possum prae formidine (*Amph.* 337);
ego miser vix asto prae formidine (*Capt.* 637);
prae lassitudine opus est ut lavem (*Truc.* 328);
prae maerore adeo miser atque aegritudine consenui (*Stich.* 215);
terrore meo occidistis prae metu (*Amph.* 1066);
prae metu ubi sim nescio (*Cas.* 413);
prae timore in genua in undas concidit (*Rud.* 174);
omnia corusca prae tremore fabulor (*Rud.* 526).

It will appear immediately that this use is subject to strict conditions: (1) the causal *prae* always has an expression of feeling as a complement (*laetitia*, *formido*, *lassitudo*, *maeror*, *metus*, *terror*, *tremor*, *timor*); (2) this expression of feeling always affects the subject of the verb in such a way that the condition stated by *prae* is in an internal and "subjective" relationship with the verbal process, the subject of the process always being the possessor of the feeling. When *prae* marks a cause, this cause is not established objectively outside the subject and connected to an exterior factor, but it resides in a certain feeling belonging to the subject and, more exactly, it is a result of a certain *degree* of this feeling. In effect, all the examples point up the *extreme degree* of the feeling experienced by the subject. Here is the explanation of *prae*, which literally means 'in the van, at the farthest point' of the feeling envisaged, hence 'at the extremity.' And this is indeed the sense which fits

everywhere: *prae laetitia lacrimae prosiliunt mihi* 'in the extremity of my joy, my tears gushed forth'; *cor Ulixi frixit prae pavore* 'the heart of Ulysses froze in the extremity of fear,' etc. One could marshall as many examples as are to be found in the authors and there will be no exception: *vivere non quit prae macie* (Lucr. 4. 1160); *prae iracundia non sum apud me* 'in the extremity of my anger I am beside myself' (Ter. *Heaut.* 920); *prae amore exclusti hunc foras* 'from an excess of love you have shut him out' (*Eun.* 98); *oblitae prae gaudio decoris* 'forgetting decency in the extremity of their joy' (Livy 4. 40); *in proelio prae ignavia tubae sonitum perferre non potes* (*Auct. ad Her.* 4. 21); *ex imis pulmonibus prae cura spiritus ducebat* (id. 4. 45); *nec divini humanive iuris quicquam prae impotenti ira est servatum* (Livy 31. 24); *vix sibimet ipsi prae necopinato gaudio credentes* (id. 39. 49), etc. Everywhere the same "paroxystic" value is shown, and this is nothing but a particular example of the general sense of *prae*. In indicating the movement towards the anterior and advanced part of a continuum, in a way *prae* leaves the rest of the object in a position of inferiority; that is why negative expressions predominate: *non me commovere possum prae formidine* 'in the extremity of my fright I could not move.' It is thus wrong to speak here of a "causal" sense. *Prae* does not make an objective cause intervene; it only marks an extreme point, an excess, which has as a consequence a certain disposition, generally negative, on the part of the subject.

By the same token, the explanation of the comparative *prae* is given. It is important, however, to emphasize at the outset the fact—and as far as I know, Riemann is the only one to have observed this[5]—that "as a general rule, the complement of *prae* designates which of two terms is *superior* to the other." Proceeding from here, one can easily grasp the relationship between this use and the preceding, as for example in this sentence from Caesar: *Gallis prae magnitudine corporum suorum brevitas nostra contemptui est* 'in the eyes of the Gauls, our small size in comparison to their great stature is an object of scorn' (*B.G.* 2. 30. 4). Here also it is from the notion of "extreme" that the comparative function of *prae* results, for *prae magnitudine* signifies 'at the extreme of their tallness = so great is their size' (that we seem little to them). Extending its use, *prae* could then be joined to any type of noun whatsoever and even to a pronoun in order to emphasize a superiority: *omnium unguentum prae tuo nauteast* (Pl. *Curc.* 99); *sol occaecatust prae huius corporis candoribus* (Pl. *Men.* 181); *pithecium est prae illa* (Pl. *Mil.* 989); *te . . . volo adsimulare prae illius forma quasi spernas tuam* (id., 1170); *solem prae multitudine iaculorum non videbitis* (Cicero); *omnia prae divitiis humana spernunt* (Livy 3. 26. 7). And finally one reaches the realization of the comparative expression: *non sum dignus prae te* (Pl. *Mil.* 1140). All this arises from the condition inherent in *prae* and actually differs from the (alleged) causal

prae in only one feature: while in the preceding category *prae* governs an abstract word which denotes the situation of the subject, here, by an extension of use, *prae* relates to an object which is exterior to the subject. Henceforth the two terms become parallel. Starting from *prae gaudio loqui nequit* 'in the extremity of his joy he cannot speak,' one ends with *prae candoribus tuis sol occaecatust* 'in the extremity of your brilliance the sun is obscured' and, finally, with *prae te pitheciumst* 'compared to you, she's an ape.'

All these uses of *prae* are contained within a constant definition. We have tried to show by one example that in the study of prepositions, whatever be the language or the period under consideration, a new technique for description is necessary and is now possible in order to restore the structure of each of the prepositions and to incorporate these structures into a general system. The task entails the obligation of reinterpreting all the acquired data and of recasting the established categories.

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TWELVE

Toward an Analysis of Case Functions: the Latin Genitive

AMONG THE STUDIES PUBLISHED during recent years on the syntax of cases, one of the most notable is A. W. de Groot's article on the Latin genitive.[1] In its concern to achieve a description that would be strictly structural, which in the thinking of the author means strictly "grammatical,"[2] as much as by the abundance of examples and elucidations of theory, this study will not only contribute to the reformation of obsolete categories that still encumber many textbooks, but will also show how syntactic description can be reformed.

In order to expose the confusions that abound in the traditional classifications, de Groot reviews the thirty or so distinct uses of the genitive they record. After discussing them, he rejects most of them, and with reason. His conclusion is that Latin has *eight* regular grammatical uses of the genitive. It is these eight uses that a structuralist theory of the Latin genitive admits as valid. Here they are as the author gives them, divided into five categories:

I. Noun or noun-group is adjunct to a noun:
   A. Proper genitive: *eloquentia hominis.*
   B. Genitive of quality: *homo magnae eloquentiae.*

II. Adjunct to a substantival (pronoun, adjective, etc.):
   C. Genitive of the set of persons: *reliqui peditum.*

III. Conjunct (complement) of a copula:
   D. Genitive of the type of person: *sapientis est aperte odisse.*

IV. Adjunct to a verb (not to a copula):
   E. Genitive of purpose: *Aegyptum proficiscitur cognoscendae antiquitatis.*
   F. Genitive of locality: *Romae consules creabantur.*

IVa. Adjunct to a present participle:
   G. Genitive with a present participle: *laboris fugiens.*

V. Independent:
   H. Genitive of exclamation: *mercimoni lepidi!*

This result is of particular interest for the very fact that the author has eliminated all the extragrammatical varieties of the genitive on principle and has retained only those uses which would satisfy purely "grammatical" criteria. We can also see, however, that at the end of this systematic discussion we are led back to a situation which is very complicated to describe since, without even delaying over the "irregular" uses which the author lists separately, we must admit that the Latin genitive has no fewer than eight different and irreducible uses, all "regular," that is, "freely productive."[3]

One is accordingly tempted to carry the examination a little further, using de Groot's conclusions as a point of departure, in order to see if all the criteria therein utilized are valid, if one should not propose certain others, and if, in consequence, a simplification of the classification of these uses could not be obtained. A reduction of their number is certainly possible.

What de Groot called "the genitive of locality" is the "locative" of traditional syntax, that is, the type *Romae, Dyrrachii.* The classification of this case as genitive satisfies a morphological criterion. But the distribution of the forms is very peculiar, restricted as to class of words (proper names of places), to semantic class (names of cities and islands; regarding names of countries the use is late or brought out by symmetry, as in *Romae Numidiaeque* in Sallust), and to inflectional class (stems in -o- and in -ā-). These limitations are so specific that they challenge the legitimacy of the morphological criterion for the attribution of this use. The feature that seems essential to us here is that this genitive, which is denominated the "genitive of locality," appears only in *proper names* of locality, and even in a very limited portion of these proper names, under precise conditions of inflectional form and designation. We have here to do with a distinct lexical system, that of toponyms, and not just with a simple variety of genitive. It is within the system of proper names that we shall be able to evaluate and define the nature of this use. It is also within this system that the question of conflicts, exchanges, or encroachments between the genitive and the ablative, which are here complementary, will be raised. Place names should even be separated from the other proper names (names of persons, of peoples), and with even more reason from the common nouns, and case functions should be described separately for each of these types of nouns. There is no reason to assume that the cases function in the same way in all these types. There is even every reason for thinking that they function differently in place names and in substantives: First, the "genitive" of the type *Romae* is really confined to a lexical class since there is nothing homologous in the substantive classes; it is not found in the classical period for names of continents, of mountains, etc. Then, the *Thais Menandri* relationship, which in the names of the persons could mean Thais (a) daughter, (b) mother, (c) wife, (d) companion, (e) slave of Menander,[4]

cannot be transposed between any two substantives whatsoever, etc. Hence, in an evaluation of the "genitive of locality," the double criterion of lexical affiliation and the complementary genitive/ablative distribution, to which should be added the restriction in the area of use, must take precedence over the formal agreement of *Romae* and *rosae*. The "genitive of locality" cannot be placed in a classification of the uses of the genitive but only (or at any rate, at first) in the case system of toponyms.

The "genitive of exclamation"—type, *mercimoni lepidi!*—occupies an unusual situation in the enumeration in several respects. It is the only "independent" genitive that is not the determiner of any other term of an utterance, since it alone constitutes in itself a kind of utterance. Besides, it is itself constantly determined by an adjective, which is a restriction of use. It does not apply to a person, which is a new restriction. Finally and especially, it has an "expressive" value which de Groot himself defines as "expression of an emotional attitude of the speaker to something, perhaps always a non-person."[5] It is difficult to make such a use tally with the essentially relational function of the genitive. To all this should be added, as the crowning touch to these anomalies, another feature that lessens the importance of this use: the fact that this "genitive of exclamation" is extremely rare. In all Latin only six or seven examples of it can be cited, only two of which are in Plautus, who otherwise abounds in exclamative locutions, two or three in the learned poets (one, doubtful, in Catullus, one in Propertius, one in Lucan), and two in Christian authors. In our opinion, Riemann correctly evaluated this situation when he wrote:

> The exclamative genitive, so common in Greek to indicate the *cause* of this or that movement of the soul, which is expressed by an interjection (φεῦ, τοῦ ἀνδρός), or by an apostrophe to the Gods (ὦ Ποσειδον, δεινῶν λόγων), etc., does not actually occur in Latin. One could cite Plautus *Most.* 912: "Di immortales, *mercimoni lepidi!*" and some *poetic* examples which are undoubtedly imitated from the Greek. This genitive is always accompanied by an adjective.[6]

This construction, very rare and transposed from Greek, never constituted a regular and productive use of the Latin genitive. One should at most consider it among occasional uses, as a stylistic variant of the accusative.

The exact nature of the "genitive of purpose"[7] would call for a detailed account. Here the criterion of prehistoric comparison is improperly introduced; use has been made of Umbrian features in order to declare that Latin inherited the construction of the type, *Aegyptum proficiscitur cognoscendae antiquitatis*. But even on this ground it is debatable. Umbrian is not Proto-Latin. Furthermore, the syntax of the sole example in the Eugubine Tables,

VI *a* 8, *ocrer peihaner* 'arcis piandae,' is interpreted in different ways; some accept,[8] others reject[9] the connection with the Latin construction. It would be better to put Umbrian aside and to consider Latin in its own right. We cannot here disregard the limitation of this use to the gerundive or to a syntagm of noun + adjective in *-ndus*; nor can we disregard the dependence of this syntagm on a verb which, by its meaning, implies "purpose." How would a case form express by itself alone a value such as "intention"? In fact this value results from the whole of the syntactic constituents which surround this genitive and also from the very function of the adjective in *-ndus*. And there are, in addition, semantic factors, to a greater degree than would seem at first. Let us take Ter. *Ad.* 270, which must be cited in its entirety: *vereor coram in os te laudare amplius/ ne id assentandi magis quam quo habeam gratum facere existumes* 'I do not dare praise you more to your face, for fear that you will consider that I do it out of flattery rather than out of gratitude.' The value of "intention" which is attached to the genitive *assentandi*[10] is induced both by the antecedent *facere* and by the symmetrical member, this time explicit, *quo* (= *ut* or *quia*) *habeam*. Another example is to be found in Livy 9. 45. 18: *ut Marrucini mitterent Romam oratores pacis petendae*. Here account must be taken of *mittere* which orients the syntagm *pacis petendae* toward a function of "destination," and perhaps even more of *oratores*, for in the earliest Latin, *orator* is a term which attracts a nominal determiner to the genitive for semantic reasons: *foederum, pacis, belli, indutiarum oratores fetiales*.[11] An *orator* has a mission to ask or propose something in the name of those who send him; he is necessarily an "orator alicuius rei." That is why one can say without anything more *orator pacis* 'a spokesman charged to ask for peace,' as for example in Livy 9. 43: *ad senatum pacis oratores missi*. Hence the example given above, *ut mitterent Romam oratores pacis petendae*, could even be foreign to the construction discussed if we construe together in a syntagm of determination *oratores pacis petendae*, which is an expansion of *oratores pacis*.

Still more generally, one should, in the same examination, connect the construction of the genitive + gerundive or adjective in *-ndus* to the one that depends on *esse* in an expression like *cetera minuendi luctus sunt* 'the other (legal arrangements) are intended to restrain the mourning' (Cicero), in which the predicate syntagm in the genitive with *esse* stems from the expression of "belonging" (cf. below). There are a number of examples in simple or complex locutions of genitives that depend on immediate syntactical antecedents or on predicative expressions and which approach the construction considered here.[12] It is among them, even if one does not bring in an imitation of the Greek expression τοῦ + the infinitive, that we should place the "genitive of purpose." In the very restrictive conditions in which it appears,

we could not consider it an autonomous use of the genitive; if we disregard the gerundive or the participle in *-ndus*, we simply find a genitive of dependence.

About the "genitive of the type of person," posited by de Groot (pp. 43ff) as denoting a quality typical of a class of persons, we shall observe that it belongs to one single class of expressions: *pauperis est numerare pecus—est miserorum ut invideant bonis; —constat virorum esse fortium toleranter dolerem pati; —Gallicae consuetudinis est . . .*, etc. The semantic feature ("quality typical of a class of persons") is not a primary datum; it seems to us to be a product of the predicative construction of the genitive, which is the principal feature. This puts us on the track of a different interpretation. The genitive predicate of *esse* denotes "belonging": *haec aedes regis est* 'this house beongs to the king.'[13] If the noun subject is replaced by an infinitive, one obtains *hominis est* (*errare*) 'it is a part of man, it is a fact about man.' Thus we see in this use a subclass of the "predication of belonging," in which the syntactical variation (infinitive as subject) changes nothing in the distinctive feature, the use of the genitive, which remains the same. Now this predicative genitive constructed with *esse* is itself nothing but a syntactic derivation of the genitive called "possessive": it is the normal use of the genitive *aedes regis* which makes possible the construction *haec aedes regis est*; the relationship assumed between *aedes* and *regis* remains the same when one passes from the determinative syntagm, *aedes regis*, to the assertive utterance, *haec aedes regis est*, and thence to *pauperis est numerare pecus*, a variant of this utterance.

We do not see, either, sufficient reason to posit a distinct "genitive of the set of persons," which was, moreover, proposed only with reservations,[14] since it does not show any *grammatical* feature that would distinguish it from the normal genitive. Between *arbor horti* and *primus equitum, plerique hominum*, the difference is only lexical since the choice of *unus* (*duo*, etc.) or of *plerique* (*multi*, etc.) makes it predictable that the determiner will denote a "set of persons" (the restriction to "persons" in contrast to "things" being a fact of usage, not of grammar). At the most, one should place these syntagms whose determined member is a pronoun, a numeral, or an adjective of position in a subgroup within the "normal" uses of the genitive, in order to distinguish them from the syntagms with two substantive members.

We encounter an entirely different problem with the genitive determining a present participle: *laboris fugiens; cupiens nuptiarum; neglegens religionis*, etc. De Groot rightly distinguishes this genitive with the present participle from the genitive with the adjective.[15] The connection with the verb is even—one must stress this—a distinctive feature of this use. We see an essential function in this connection. This type of syntagm should be separated from all the others and placed on a distinctive level. What confers its specific character upon it is

that in reality it gives a nominal "conversion" of a transitive verbal construction; *fugiens laboris* comes from *fugere laborem*; *neglegens religionis* < *neglegere religionem*; *cupiens nuptiarum* < *cupere nuptias*. But one should go further. It is necessary to put the syntagm *neglentia religionis* with *neglegens religionis*; the abstract noun *neglegentia* is in the same situation as *neglegens* with respect to the verb and it is determined by the same genitive. We could say then that in this use, differing from all the others, the function of the genitive is to transpose the accusative object of a transitive verb into nominal dependence. It is thus a *genitive of transposition*, which is united by an interdependence of a particular type to a case that is entirely distinct, but here homologous, the accusative, by virtue of their respective functions. To speak precisely, it is not the genitive alone which is the product of a transposition, but the entire syntagm, participle (or noun of action) + the genitive; the term "genitive of transposition" should be understood with this reservation. Such a genitive is different from all the other uses precisely in that it is born of another transposed case, as verbal government has become nominal determination. Since these two classes of nouns (present participles and nouns of action) are dependent on the verb, and not the reverse, the syntagms that they form with the genitive must be interpreted as having been derived by transposition of the government of the personal verb: *tolerans frigoris* and *tolerantia frigoris* are only possible by starting with *tolerare frigus*. We have then to recognize here that the genitive is in a specific function resulting from the conversion of the personal verbal form into a nominal form of the participle or of the abstract substantive.

But from the moment that one includes verbal substantives in this use, there is no reason to limit oneself to those which are taken from transitive verbs. The verbal substantives of intransitive verbs must also enter in here, and their determiner in the genitive is equally to be interpreted with respect to the homologous case form of the verbal syntagm. Now this time the case form transposed into the genitive is no longer accusative but nominative: *adventus consulis* comes from *consul advenit*; *ortus solis* from *sol oritur*. The genitive determiner here transposes not an accusative object but a nominative subject.

A double consequence results from this. Two opposed cases converge by transposition in this use of the genitive: the accusative object of a transitive verb and the nominative subject of an intransitive verb. The nominative: accusative opposition, which is fundamental in the verbal syntagm, is formally and syntactically neutralized in the nominal genitive determiner. But it is reflected in the logical-semantic distinction of the "subjective genitive" and the "objective genitive": *patientia animi* < *animus patitur*; *patientia doloris* < *pati dolorem*.

In the second place, one is led to think that the genitive that comes from a transposed nominative or accusative provides the "model" of the relationship of the genitive in general. The determined member of the nominal syntagm in the preceding examples comes from the transposed verbal form; but once this schema of internominal determination is constituted, the situation of the determined member of the syntagm can be assumed by any substantive, and no longer only by those which come from a converted verbal form. One begins with syntagms of conversion like *ludus pueri* < *puer ludit*; *risus pueri* < *puer ridet*; the relationship can then be extended to *somnus pueri* and finally to *liber pueri*. We consider that all the uses of the genitive are engendered by this basic relationship, which is of a purely syntactic nature and which subordinates the genitive to the nominative and accusative in a functional hierarchy.

Finally, we see that, in the concept sketched here, the function of the genitive is defined as the result of a transposition of a verbal syntagm into a nominal syntagm; the genitive is the case that, between two nouns, assumes for itself alone the function that in an utterance with a personal verb falls to either the nominative or the accusative. All the other uses of the genitive, as we have attempted to show above, are derived from this, as subclasses with a specific semantic value, or as varieties of a stylistic nature. And the particular "meaning" attached to each of these uses is also derived from the grammatical value of "dependence" or "determination" inherent in the original syntactic function of the genitive.

From *Lingua* 11 (1962) : 10–18

brought it about, in this particular syntactic condition, that one made use of the article to take the place of a relative particle.[23] We would naturally also think of the double function, as article and relative, of the pronominal series *der die das*, etc., in German; however, in spite of the appearance, the analogy is less immediate since the two functions actually proceed from the role of this pronoun as a demonstrative.

The syntax of the relative clause in Proto-Indo-European emerges thus as endowed with the same structure as that in the languages of other families which we analyzed at the beginning. What can be compared in linguistic systems that differ completely from one another are the functions, as well as the relations among these functions, indicated by formal marks. One could show, even in a fashion still schematic, that the relative clause, no matter how it is connected to the antecedent (by a pronoun, a particle, etc.), behaves like a determined "syntactic adjective" just as the relative pronoun plays the role of a determinative "syntactic article." To sum up, the complex units of the clause can, by virtue of their function, be distributed among the same classes of forms in which the simple units, or words, are ranged by virtue of their morphological characteristics.

From *B.S.L.* 53 (1957–1958) : 39–53

Man and Language

EIGHTEEN

Relationships of Person in the Verb

ALONG WITH THE PRONOUN, the verb is the only class of words embodying the category of person. But the pronoun has so many other characteristics belonging exclusively to it and conveying relationships so different that it would require an independent study. It is verbal person alone that we shall consider, although we shall make occasional use of pronouns.

In all languages that possess a verb, the forms of the conjugation are classed according to their reference to person, the enumeration of the persons properly constituting the conjugation; and three persons are distinguished in the singular, in the plural, and sometimes in the dual. It is well known that this classification is inherited from Greek grammar in which the inflected verbal forms make up the *πρόσωπα*, the personae, the "figurations" under which the verbal notion is realized. The series of *πρόσωπα* or *personae* in a way furnishes a parallel to that of the *πτώσεις* or *casus* of the nomina inflection. In the grammatical nomenclature of India, the notion is also expressed by the three *puruṣa* or "persons," called respectively *prathama-puruṣa* 'first person' (= our 3rd pers.), *madhyamapuruṣa*, 'intermediate person' (= our 2nd pers.), and *uttamapuruṣa* 'last person' (= our 1st pers.); this is the same sequence as the Greek but in reverse order; the difference is fixed by tradition, the Greek grammarians citing verbs in the first person, those of India in the third.

This classification, as it was worked out by the Greeks for the description of their language, is today still considered not only to be verified by all the languages endowed with a verb but also to be natural and set down in the order of things. In the three relationships it institutes, it sums up the ensemble of the positions that determine a verbal form provided with a mark of person, and it is valid for the verb of any language whatsoever. There are always, then, three persons and there are only three. However, the summary and non-linguistic nature of a category thus established must be proclaimed. By aligning on a single level and in an unchanging order "persons" defined by their succession and related to those *beings* which are "I," "you," and "he," we

only transpose into a pseudolinguistic theory differences which are *lexical* in nature. These denominations do not indicate to us the necessity of the category or the content that it implies or the relationships which link the different persons. Inquiry must be made as to how each person is opposed to all the others and as to what principle their opposition is based on, since we can only apprehend them by what differentiates them.

Meanwhile a preliminary question arises: can a verb exist without distinction of persons? This amounts to asking whether the category of person is really necessary and inherent in the verb or whether it simply constitutes a possible modality in it, frequently realized but not indispensable, as are, after all, many of the verbal categories. Actually, although examples are very rare, it is possible to pick out languages in which the expression of person can be absent from the verb. Thus, in the Korean verb, according to Ramstedt, "the grammatical persons . . . have no grammatical distinction in a language where all forms of the verb are indifferent to person and number" (G. J. Ramstedt, *A Korean Grammar*, p. 61). It is certain that the principal verbal distinctions in Korean are of a "social" order; the forms are extremely diversified according to the rank of the subject and the interlocutor and vary according to whether one is speaking to a superior, an equal, or an inferior. The speaker effaces himself and makes abundant use of impersonal expressions; in order not to stress indiscreetly the relationship of the positions, he is often content with forms that are undifferentiated as to person, which may be understood correctly only through a refined sense of the proprieties. It is not necessary, however, to take this custom as an absolute rule as Ramstedt does; first, because Korean possesses a complete series of personal pronouns which can be put into play, and that is essential; and secondly, because, even in the sentences he cites, the ambiguity is not such as one might imagine it to be.[1] Thus *pogətta* 'I shall see; you will see; he will see; one can see; one is to see' (Ramstedt, p. 71), generally means 'I shall see'; while 'you will see' [sing.] is expressed by *porida*. The sentence, *i bəanyn yo so hagəni-wa tasinən hazi ani hagetta* (not *hagesso*) 'this time I forgive you, but I shall not forgive you again' (ibid., p. 97), signifies instead, with the replacement of *hagetta* by *handa* '(I observe that) he forgives you this time but he will not forgive you again,' because the nominal and abstract stem *hagi* is hardly suitable to the first person. One must indeed understand *i san-son yl məkkəni-wa irhəm yn mollasso* to mean 'although I eat this fish, I don't know its name' (ibid., p. 96), but by substituting *molatti* for *mollasso*, the sentence would be in the 2nd sing.: 'although *you* eat this fish, *you* don't know its name.' The same with the sentence, *ilbon e sardaga pyoŋ yl edesso* 'I lived in Japan and I got this sickness' (ibid., p. 98) will signify '*you* got this sickness . . .' when *edesso* is replaced by *odokəsso*. All these restrictions in usage and the necessity

for the employment of pronouns contribute to the introduction of variations of person in a verb which is in principle undifferentiated. Among the Paleo-Siberian languages, according to R. Jakobson (*American Anthropologist* 44 [1942]:617), the verbal forms in Gilyak do not in general distinguish person or number, but "neuter" modes oppose the first to the non-first person in the singular; other languages in the same group also distinguish only two persons; sometimes, as in Yukaghir, the first and second merge, sometimes, as in Ket, the first and the third. But all these languages possess personal pronouns. In sum, it does not seem that there is any language that we know of that is endowed with a verb in which the distinctions of person are not indicated in one way or another in the verbal forms. One can thus conclude that the category of person really does belong among the fundamental and necessary notions of the verb. That is an observation which suffices for us, but it goes without saying that the originality of each verbal system in this respect should be studied in its own right.

A linguistic theory of verbal person can be constituted only on the basis of the oppositions that differentiate the persons; and it will be summed up in its entirety in the structure of these oppositions. In order to uncover this structure, we could start with the definitions used by the Arab grammarians. For them, the first person is *al-mutakallimu* 'the one who speaks'; the second, *al-muḫāṭabu* 'the one who is addressed'; but the third is *al-γā'ibu* 'the one who is absent.' A precise notion of the relationships among persons is implied by these denominations; precise especially in that it reveals the disparity between the first and second persons and the third. Contrary to what our terminology would make us believe, they are not homogeneous. This is what must be made clear first.

In the first two persons, there are both a person involved and a discourse concerning that person. "I" designates the one who speaks and at the same time implies an utterance about "I"; in saying "I," I cannot *not* be speaking of myself. In the second person, "you" is necessarily designated by "I" and cannot be thought of outside a situation set up by starting with "I"; and at the same time, "I" states something as the predicate of "you." But in the third person a predicate is really stated, only it is outside "I-you"; this form is thus an exception to the relationship by which "I" and "you" are specified. Consequently, the legitimacy of this form as a "person" is to be questioned.

We are here at the center of the problem. The form that is called the third person really does contain an indication of a statement about someone or something but not related to a specific "person." The variable and properly "personal" element of these denominations is here lacking. It is indeed the "absent" of the Arab grammarians. It only presents the invariable inherent

in every form of a conjugation. The consequence must be formulated clearly: the "third person" is not a "person"; it is really the verbal form whose function is to express the *non-person*. This definition accounts for the absence of any pronoun of the third person—a fundamental fact that it suffices to notice—and the very peculiar situation of the third person of the verb in most languages, of which we shall give a few examples.

In Semitic, the 3rd sing. of the perfect does not have an ending. In Turkish, the 3rd sing. generally has a zero marker, in contrast to the 1st sing. *-m* and the 2nd sing. *-n*; hence in the durative present of "to love": 1. *sev-iyor-um*, 2. *sev-iyor-sun*, 3. *sev-iyor*; or in the determined preterite: 1. *sev-di-m*, 2. *sev-di-n*, 3. *sev-di*. In Finno-Ugric, the 3rd sing. has the form of the simple stem: Ostiak 1. *eutlem*, 2. *eutlen*, 3. *eutl*; the subjective conjugation of "to write" in Hungarian: 1. *ír-ok*, 2. *ír-sz*, 3. *ír*. In Georgian, in the subjective conjugation (the only one in which consideration of the person as subject occurs exclusively), the two first persons, in addition to their endings, are characterized by prefixes: 1. *v-*, 2. *h-*; but the 3rd sing. has only the ending. In Caucasian of the northwest (Abxaz and Cherkess in particular), the personal signs for the two first persons have a constant and regular form, but for the third person there are many signs and quite a number of difficulties. Dravidian uses a nominal form of the noun of agency for the 3rd sing., in contrast to the two first persons. In Eskimo, W. Thalbitzer clearly indicates the nonpersonal nature of the 3rd sing.: "Of a neutral character, lacking any mark of personality, is the ending of the third person singular *-oq* . . . which quite agrees with the common absolute ending of the noun. . . . These endings for the third person indicative must be regarded as impersonal forms: *kapiwoq* 'there is a stab, one is stabbed'" (*H.A.I.L.* 1: 1032, 1057). In all of those Amerindian languages in which the verb functions by endings or by personal prefixes, this mark is generally lacking in the 3rd person. In Burushaski, the 3rd sing. of all verbs is subject to the signs of the nominal classes, while the two first persons are not (Lorimer, *The Burushaski Language* 1 : 240, sec. 269). Many other similar phenomena could easily be found in other families of languages. Those which have just been cited suffice to make it obvious that the first two persons are not on the same plane as the third, that the third person is always treated differently and not like a real verbal "person," and that the uniform classification into three parallel persons does not fit the verb of these languages.

In Indo-European, the anomalous 3rd sing. of Lithuanian gives evidence along the same lines. In the archaic inflection of the perfect, if one analyzes the endings into their elements, 1. *-a*, 2. *-tha*, 3. *-e*, one obtains: 1. $ə_2e$, 2. $-tə_2e$, opposed to 3. *-e*, which functions as a zero ending. If the Sanskrit periphrastic future is envisaged on the synchronic plane without any reference to the

nominal sentence, one will observe the same lack of agreement between the 3rd sing. and the two other persons: 1. *kartâsmi*, 2. *kartâsi*, 3. *kartâ*. It is not fortuitous either that in the inflection of "to be" in modern Greek to the two first persons, *εἶμαι* and *εἶσαι*, is opposed a third person, *εἶναι*, common to the singular and plural and of a distinct structure. Conversely, the difference can be manifested by a specially marked form of the 3rd sing.; thus, English (*he*) *loves* in contrast to (*I*, *you*, *we*, *they*) *love*. All these concordant phenomena must be considered in order to perceive the strangeness of the "normal" inflection in Indo-European, for example, that of the athematic present *es-mi*, *es-si*, *es-ti* with three symmetrical persons which, far from representing a fixed and necessary type, is an anomaly at the very center of the languages. The third person has been made to conform to the first two for reasons of symmetry and because every Indo-European verbal form tends to make the sign of the subject stand out since it is the only one it can show. We have here a regularity of an extreme and exceptional nature.

It follows that, very generally, person is inherent only in the positions "I" and "you." The third person, by virtue of its very structure, is the nonpersonal form of verbal inflection.

Indeed, it is always used when the person is not designated and especially in the expression called impersonal. Here again we come up against the question of the impersonals, an old problem and a sterile debate as long as we persist in confusing "person" and "subject." In *ὕει*, *tonat* 'it rains,' the process is indeed stated as nonpersonal, a pure *phenomenon* whose occurrence is not connected with an agent; and locutions like *Ζεὺς ὕει* are doubtless recent and, as it were, reverse rationalizations. The authenticity of *ὕει* arises from the fact that it positively expresses the process as taking place outside the "I-you," which are the only indicators of persons.

In effect, one characteristic of the persons "I" and "you" is their specific "oneness": the "I" who states, the "you" to whom "I" addresses himself are unique each time. But "he" can be an infinite number of subjects—or none. That is why Rimbaud's "je est un autre [I is another]" represents the typical expression of what is properly mental "alienation," in which the "I" is dispossessed of its constitutive identity.

A second characteristic is that "I" and "you" are reversible: the one whom "I" defines by "you" thinks of himself as "I" and can be inverted into "I," and "I" becomes a "you." There is no like relationship possible between one of these two persons and "he" because "he" in itself does not specifically designate anything or anyone.

Finally, one should be fully aware of the peculiar fact that the "third person" is the only one by which a *thing* is predicated verbally.

The "third person" must not, therefore, be imagined as a person suited

to depersonalization. There is no apheresis of the person; it is exactly the non-person, which possesses as its sign the absence of that which specifically qualifies the "I" and the "you." Because it does not imply any person, it can take any subject whatsoever or no subject, and this subject, expressed or not, is never posited as a "person." This subject only adds *in apposition* a precision judged necessary for the understanding of the content, not for the determination of the form. Hence *volat avis* does not mean 'the bird flies,' but 'it flies (scil.) the bird.' The form *volat* would be enough in itself and, although it is nonpersonal, includes the grammatical notion of subject. Nahua and Chinook behave in the same way, always incorporating the subject pronoun (and also, if need be, the object pronoun) in the verbal form, the subject and object substantives being treated as appositions: Chinook *tgigénxaute ikanáte tEmewálEma* 'the spirits watch over the soul,' lit. 'they it watch over (*tgi*, 'they it'), the soul (*ikanáte*), the spirits (*t-mewálEma*)' (cf. Boas, *H.A.I.L.* 1:647). Everything outside the person strictly considered, that is, outside "I-you," receives as predicate a verbal form of the "third person" and cannot receive any other.

This quite special position of the third person explains some of its special uses in the area of *parole*. It can be assigned to two expressions with opposite values. *He* (or *she*) can serve as a form of address with someone who is present when one wishes to remove him from the personal sphere of "you." On the one hand, it can show a kind of respect: it is the polite form (employed in Italian and German or in the forms of "His Majesty") which raises the interlocutor above the status of person and the relationship of man to man. On the other hand, it is used to show scorn, to slight someone who does not even deserve that one address oneself "personally" to him. From its function as a nonpersonal form, the "third person" takes this ability to become a form of respect, which makes another being more than a person, as well as a form of insult, which can annihilate him as a person.

It can now be seen what the opposition between the first two persons of the verb and third consists of. They contrast as members of a correlation, the *correlation of personality:* "I-you" possesses the sign of person; "he" lacks it. The "third person" has, with respect to the form itself, the constant characteristic and function of representing a nonpersonal invariant, and nothing but that.

But if "I" and "you" are both characterized by the sign of person, one really feels that in their turn they are opposed to one another within the category they constitute by a feature whose linguistic nature should be defined.

The definition of the second person as the person to whom the first addresses himself undoubtedly fits the most common use. But common does

not mean single and invariable. The second person can be used outside address and can be made to enter into a variety of the "impersonal." For instance, *vous* in French functions as an anaphoric of *on* (e.g., "*on* ne peut se promener sans que quelqu'un *vous* aborde" [one cannot go out for a walk without someone accosting you]'). In many languages, "you" can serve, as it does in English, to denote an indefinite agent (like Fr. *on*): Lat. memoria minuitur nisi eam *exerceas*; crederes 'you [= one] would believe (on croirait)'; Gr. *εἴποις ἄν* 'you [= one] would say (on dirait)'; mod. Gr. *λές* 'you say [= one says] (on dit),' *πᾶς* 'you go [= one goes] (on va)'; in Russian, in formulaic or proverbial locutions: *govoriš s nim—on ne slušaet* 'you speak [= one speaks] to him, he does not listen (on lui parle, il n'écoute pas),' *podumaeš, čto on bolen* 'you [= one] would think he was ill (on croirait qu'il est malade)' (Mazon, *Grammaire russe*, sec. 157). It is necessary and sufficient, that one envisage a *person* other than "I" for the sign of "you" to be assigned to that person. Thus every *person* that one imagines is of the "you" form, especially, but not necessarily, the person being addressed "you" can thus be defined as "the non-*I* person."

There are grounds, then, for observing an opposition between the "*I*-person" and the "non-*I* person." On what basis is it established? A special correlation which we call, for want of a better term, the *correlation of subjectivity* belongs to the *I-you* pair in its own right. What differentiates "I" from "you" is first of all the fact of being, in the case of "I," *internal* to the statement and external to "you"; but external in a manner that does not suppress the human reality of dialogue. The second person with the uses cited in Russian, etc., is a form which assumes or calls up a fictive "person" and thereby institutes an actual relationship between "I" and this quasi-person; moreover, "I" is always *transcendent* with respect to "you." When I get out of "myself" in order to establish a living relationship with a being, of necessity I encounter or I posit a "you," who is the only imaginable "person" outside of me. These qualities of internality and transcendence properly belong to "I" and are reversed in "you." One could thus define "you" as the *non-subjective person*, in contrast to the *subjective person* that "I" represents; and these two "persons" are together opposed to the "non-person" form (= he).

It would seem that all the relations established among the three forms of the singular should remain the same when they are transposed to the plural (the dual forms pose a problem only as being dual, not as persons). Yet we know very well that the passage from the singular to the plural in the personal pronouns does not involve a simple pluralization. Furthermore, in a number of languages a twofold distinction (inclusive and exclusive) of particular complexity has been created in the verbal form of the first person plural.

As in the singular, the central problem here is that of the first person. The

simple fact that different words are very generally used for "I" and "we" (and also for "thou" and "you") suffices to except the pronouns from the ordinary processes of pluralization. There are indeed some exceptions, but they are very rare and partial: for example, in Eskimo, the stem is the same in the singular *uwaŋa* 'I' and the plural *uwaŋut* 'we,' and it enters into a formation of the nominal plural. But *illi* ('thou') and *ili*^{w}*sse* 'you' contrast in quite another way. In any case, identicality of pronominal forms in the singular and plural remains the exception. In the great majority of languages, the pronominal plural does not coincide with the nominal plural, at least as it is ordinarily represented. It is clear, in effect, that the oneness and the subjectivity inherent in 'I' contradict the possibility of a pluralization. If there cannot be several "I"s conceived of by an actual "I" who is speaking, it is because "we" is not a multiplication of identical objects but a *junction* between "I" and the "non-I," no matter what the content of this "non-I" may be. This junction forms a new totality which is of a very special type whose components are not equivalent: in "we" it is always "I" which predominates since there cannot be "we" except by starting with "I," and this "I" dominates the "non-I" element by means of its transcendent quality. The presence of "I" is constitutive of "we."

It is common knowledge that in very different languages, the "non-I," which is implicit and necessary in "we," is capable of receiving two precise and distinct contents. "We" is expressed in one way for "I + you" and in another for "I + they." These are the inclusive and exclusive forms, which differentiate the pronominal and verbal plural of the first person in a large number of Amerindian and Australian languages, as well as in Papu, Malay-Polynesian, Dravidian, Tibetan, Manchurian and Tunguz, Nama, etc.

This use of "inclusive" and "exclusive" cannot be considered satisfactory; it rests in fact on the inclusion or exclusion of "you," but with respect to "they" the designations could be exactly the reverse. It is nevertheless difficult to find more appropriate terms. It seems more important to us to analyze this "inclusive-exclusive" category from the point of view of the relationships of person.

Here the essential fact to recognize is that the distinction of the inclusive and exclusive forms is modeled in reality on the relationship we have established between the first and second singular and between the first and third singular, respectively. These two pluralizations of the first person singular serve in each case to join the opposed terms of the two correlations which have been isolated. The exclusive plural ("I + they") consists of a junction of two forms which oppose one another as personal and nonpersonal by virtue of the "correlation of person." For example, in Siuslaw (Oregon), the exclusive form in the dual (*-a*^{u}*xûn*, *-axûà*) and in the plural (*-nxan*) consists of that of the 3rd

dual (*-a^{u}x*) and plural (*-nx*) augmented by the final of the 1st sing. (*-n*) (cf. Frachtenberg, *H.A.I.L.* 2:468). In contrast, the inclusive form ("I + you") effects the junction of persons between whom exists the "correlation of subjectivity." It is interesting to observe that in Algonquian (Fox), the independent inclusive pronoun 'we' *ke-gunāna* has as its sign the *ke-* of the 2nd pers. *ke-gwa* 'thou,' and *ke-guwāwa* 'you,' while the exclusive 'we' *ne-gunāna* has *ne-*, that of the 1st pers. *ne-gwa* 'I' (*H.A.I.L.* 1:817); it is a 'person' that predominates in each of the two forms, "I" in the exclusive (entailing junction with the non-person) and "you" in the inclusive (entailing junction of the nonsubjective person with "I" implicit). This is only one of the very diverse realizations of this plurality. Others are possible. But we can see here the differentiation operating on the very principle of person: in the inclusive "we" opposed to "he, they," it is "thou" which stands out, while in the exclusive "we" opposed to "thou, you," it is "I" which is stressed. The two correlations that organize the system of persons in the singular are thus seen in the double expression of "we."

But the undifferentiated "we" of other languages, Indo-European for example, must be viewed in a different perspective. What does the pluralization of the person of the verb consist of here? This "we" is something other than a junction of definable elements, and the predominance of "I" is very strong in it, to the point that, under certain conditions, this plural can take the place of the singular. The reason for this is that "we" is not a quantified or multiplied "I"; it is an "I" expanded beyond the strict limits of the person, enlarged and at the same time amorphous. As a result there are two opposed but not contradictory uses outside the ordinary plural. On the one hand, the "I" is amplified by "we" into a person that is more massive, more solemn, and less defined; it is the royal "we." On the other hand, the use of "we" blurs the too sharp assertion of "I" into a broader and more diffuse expression: it is the "we" of the author or orator. This can also be considered an explanation for the frequent contaminations or entanglements of the singular and plural, or of the plural and impersonal, in popular or peasant language: *nous, on va* (pop. Tuscan, *noi si canta*), or the *je sommes* of northern French, with its counterpart *nous suis* in Franco-Provençal, expressions in which the need to give "we" an indefinite meaning is mixed with the voluntarily vague assertion of a prudently generalized "I."

In a general way, the verbal person in the plural expresses a diffused and amplified person. "We" annexes an indistinct mass of other persons to "I." In the passage from "thou" to "you," be it the collective "you" or the polite "you," we recognize a generalization of "thou," either metaphoric or real, with regard to which, especially in languages of Western culture, "thou" often takes the value of a strictly personal and hence familiar address. As

for the non-person (the third person), verbal pluralization, when it is not the grammatically regular predicate of a plural subject, accomplishes the same function as in the "personal" forms: it expresses the indecisive generality of "one" (of the type *dicunt* 'they say'). It is this non-person which, extended and unlimited by its expression, expresses an indefinite set of non-personal beings. In the verb, as in the personal pronoun, the plural is a factor of limitlessness, not multiplication.

The expressions of verbal person are thus basically organized by two fixed correlations:

1. The *correlation of personality* opposing the *I-you* persons to the non-person *he*;

2. The *correlation of subjectivity* operating within the preceding and opposing *I* to *you*.

The ordinary distinction of the singular and plural should be, if not replaced, at least interpreted in the order of persons by a distinction between *strict person* (= "singular") and *amplified person* (= "plural"). Only the "third person," being a non-person, admits of a true plural.

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NINETEEN

The Correlations of Tense in the French Verb

THE PERSONAL FORMS of the French verb are traditionally distributed among a certain number of tense paradigms designated as "present," "imperfect," "past definite," etc., and these in their turn are distributed among the three large categories of time, present, past, and future. These divisions, whose principle is incontestable, remain, nevertheless, far from the realities of use and do not suffice to organize them. In the idea of time alone, we do not find the criterion that will decide the position or even the possibility of a given form within the verbal system. How do we know, for example, whether *il allait sortir* belongs or does not belong to the paradigm of *sortir*? By virtue of what tense classification should it be accepted or rejected?

If we attempt to reduce the oppositions that appear in the material structure of the verbal forms to temporal divisions, we will meet with a serious difficulty. Let us consider, for example, the opposition of the simple and compound forms in the verb. If we contrast *il courait* to *il avait couru*, it is not in any case on the same axis of time as that on which *il courait* is opposed to *il court*. And yet *il a couru* is certainly in some way a tense form since it can be an equivalent of *il courut*. But at the same time, *il a couru* serves as a partner to *il court*. The connections of the compound forms with time thus remain ambiguous. Of course, we could transfer the distinction of simple and compound forms to "aspect," but we would not have any clear advantage since aspect certainly does not furnish a univocal principle of correlation of one type of forms to another, and the fact remains that, in spite of everything, some of the compound forms are indeed to be considered temporal—some of them only.

The question is, then, to look in a synchronic view of the verbal system in modern French for the correlations that organize the various tense forms. It is thanks to what seems to be a defect in the system that we can better see the real nature of the articulations. There is one point at which the system is unduly redundant: and that is in the tense expression of the "past," which makes use of two forms, *il fit* and *il a fait*. According to the traditional

interpretation, these are two variants of the same form, between which a choice is in order, depending on whether one is writing or speaking, and their co-existence points to a transitional phase in which the early form (*il fit*) is retained in the written language, which is more conservative, while the spoken language anticipates the substitution of the competing form (*il a fait*), which is destined to become the only one. But before reducing the phenomenon to the terms of a successive development, it would be well to ask why the spoken and written languages would differ from each other on this point of temporality and not on any other; how it happens that the same difference does not extend to other parallel forms (for example, *il fera* and *il aura fait* remain absolutely distinct, etc.); and above all, whether exact observation confirms the schematic distribution by which they are customarily contrasted. From one problem to the other, it is the entire structure of the verb which comes to be submitted to a fresh examination. It seems to us that the description of the tense correlations constitutes the most necessary task.

The paradigms in grammars lead one to believe that all the verbal forms taken from the same stem belong to the same conjugation simply by virtue of morphology. But we propose to show here that the organization of tense depends on principles that are less evident and more complex. The tenses of a French verb are not employed as members of a single system; they are distributed in *two systems* which are distinct and complementary. Each of them includes only one group of the tenses of the verb; both are used concurrently and remain at the disposal of each speaker. These two systems show two different planes of utterance, which we shall here distinguish as that of *history* and that of *discourse*.

The *historical* utterance, today reserved to the written language, characterizes the narration of past events. These three terms, "narration," "event," and "past," are of equal importance. Events that took place at a certain moment of time are presented without any intervention of the speaker in the narration. In order for them to be recorded as having occurred, these events must belong to the past. No doubt it would be better to say that they are characterized as past from the time they have been recorded and uttered in a historical temporal expression. The historical intention does indeed constitute one of the important functions of language; it impresses upon it its specific temporality, whose formal marks we must now point out.

The historical design of the utterance is recognized by the fact that it imposes a special delimitation upon the two verbal categories of tense and person taken together. We shall define historical narration as the mode of utterance that excludes every "autobiographical" linguistic form. The historian will never say *je* or *tu* or *maintenant*, because he will never make use of the formal apparatus of discourse, which resides primarily in the relation-

ship of the persons *je* : *tu*. Hence we shall find only the forms of the "third person"[1] in a historical narrative strictly followed.

The field of temporal expression will be similarly defined. The historical utterance admits of three tenses: the aorist (= the simple past, or past definite),[2] the imperfect (which also includes the form in *-rait* called the conditional), and the pluperfect. Secondarily, and in a limited way, there is a periphrastic substitute for the future, which we shall call the *prospective*. The present is excluded, with the very rare exception of an atemporal present like the "present of definition."[3]

In order to better reveal the "historical" skeleton of the verb, we shall reproduce below three specimens of narration taken at random; the first two are from the same historian but of different genres, while the other is taken from imaginative literature.[4] We have underlined the personal verbal forms, all of which correspond to the tenses enumerated above.

Pour devenir les maîtres du marché méditerranéen, les Grecs *déployèrent* une audace et une persévérance incomparables. Depuis la disparition des marines minoenne et mycénienne, l'Égée *était* infestée par des bandes de pirates: il n'y *eut* longtemps que des Sidoniens pour oser s'y aventurer. Les Grecs *finirent* pourtant par se débarrasser de cette plaie: ils *donnèrent* la chasse aux écumeurs de rivages, qui *durent* transférer le principal théâtre de leurs exploits dans l'Adriatique. Quant aux Phéniciens qui *avaient fait* profiter les Grecs de leur expérience et leur *avaient appris* l'utilité commerciale de l'écriture, ils *furent* évincés des côtes de l'Ionie et chassés des pêcheries de pourpre égéennes; ils *trouvèrent* des concurrents à Cypre et jusque dans leurs propres villes. Ils *portèrent* alors leurs regards vers l'Ouest; mais là encore les Grecs, bientôt installés en Sicile, *séparèrent* de la métropole orientale les colonies phéniciennes d'Espagne et d'Afrique. Entre l'Aryen et le Sémite, la lutte commerciale ne *devait* cesser[5] dans les mers du Couchant qu'à la chute de Carthage.

(G. GLOTZ, *Histoire grecque*, 1925, p. 225.)

Quand Solon *eut accompli* sa mission, il *fit* jurer aux neufs archontes et à tous les citoyens de se conformer à ses lois, serment qui *fut* désormais prêté tous les ans par les Athéniens promus à la majorité civique. Pour prévenir les luttes intestines et les révolutions, il *avait prescrit* à tous les membres de la cité, comme une obligation correspondant à leurs droits, de se ranger en cas de troubles dans l'un des partis opposés, sous peine d'atimie entraînant l'exclusion de la communauté: il *comptait* qu'en sortant de la neutralité les hommes exempts de passion *formeraient* une majorité suffisante pour arrêter les perturbateurs de la paix publique. Les craintes *étaient* justes; les précautions *furent* vaines. Solon *n'avait satisfait* ni les riches ni la masse pauvre et *disait* tristement: «Quand on fait de grandes choses, il est difficile de plaire à tous.»[6] Il *était* encore archonte qu'il *était* assailli par les invectives des mécontents; quand il *fut sorti* de charge, ce *fut* un déchaînement de reproches et d'accusations. Solon *se défendit*, comme toujours, par des vers:

c'est alors qu'il *invoqua* le témoignage de la Terre Mère. On l'*accablait* d'insultes et de moqueries parce que «le cœur lui *avait manqué*» pour se faire tyran, parce qu'il *n'avait pas voulu*, «pour être le maître d'Athènes, ne fût-ce qu'un jour, que de sa peau écorchée on fît une outre et que sa race fût abolie.»[7] Entouré d'ennemis, mais résolu à ne rien changer de ce qu'*il avait fait*, croyant peut-être aussi que son absence *calmerait* les esprits, il *décida* de quitter Athènes. Il *voyagea*, il *parut* à Cypre, il *alla* en Égypte se retremper aux sources de la sagesse. Quand il *revint*, la lutte des partis *était* plus vive que jamais. Il se *retira* de la vie publique et s'*enferma* dans un repos inquiet: il «*vieillissait* en apprenant toujours et beaucoup», sans cesser de tendre l'oreille aux bruits du dehors et de prodiguer les avertissements d'un patriotisme alarmé. Mais Solon n'*était* qu'un homme; il ne lui *appartenait* pas d'arrêter le cours des événements. Il *vécut* assez pour assister à la ruine de la constitution qu'il *croyait* avoir affermie et voir s'étendre sur sa chère cité l'ombre pesante de la tyrannie.

(Ibid., pp. 441–442)

Après un tour de galerie, le jeune homme *regarda* tour à tour le ciel et sa montre, *fit* un geste d'impatience, *entra* dans un bureau de tabac, y *alluma* un cigare, se *posa* devant une glace, et *jeta* un regard sur son costume, un peu plus riche que ne le permettent[8] en France les lois du goût. Il *rajusta* son col et son gilet de velours noir sur lequel *se croisait* plusieurs fois une de ces grosses chaînes d'or fabriquées à Gênes; puis, après avoir jeté par un seul mouvement sur son épaule gauche son manteau doublé de velours en le drapant avec élégance, il *reprit* sa promenade sans se laisser distraire par les œillades bourgeoises qu'il *recevait*. Quand les boutiques *commencèrent* à s'illuminer et que la nuit lui *parut* assez noire, il *se dirigea* vers la place du Palais-Royal en homme qui *craignait* d'être reconnu, car il *côtoya* la place jusqu'à la fontaine, pour gagner à l'abri des fiacres l'entrée de la rue Froidmanteau...

(BALZAC, Études philosophiques: *Gambara*.)

We can see that, in this mode of utterance, the number and the nature of the tenses remain the same. There is no reason for them to change as long as the historical narration is being pursued, and, furthermore, there is no reason for the narration to come to a standstill since we can imagine the whole past of the world as being a continuous narration, entirely constructed according to this triple correlation of tenses: aorist, imperfect, and pluperfect. It is sufficient and necessary that the author remain faithful to his historical purpose and that he proscribe everything that is alien to the narration of events (discourse, reflections, comparisons). As a matter of fact, there is then no longer even a narrator. The events are set forth chronologically, as they occurred. No one speaks here; the events seem to narrate themselves. The fundamental tense is the aorist, which is the tense of the event outside the person of a narrator.

We have already set up, by way of contrast, a plane of *discourse*. Discourse

must be understood in its widest sense: every utterance assuming a speaker and a hearer, and in the speaker, the intention of influencing the other in some way. It is primarily every variety of oral discourse of every nature and every level, from trivial conversation to the most elaborate oration. But it is also the mass of writing that reproduces oral discourse or that borrows its manner of expression and its purposes: correspondence, memoirs, plays, didactic works, in short, all the genres in which someone addresses himself to someone, proclaims himself as the speaker, and organizes what he says in the category of person. The distinction we are making between historical narration and discourse does not at all coincide with that between the written language and the spoken. Historical utterance is today reserved to the written language. But discourse is written as well as spoken. In practice one passes from one to the other instantaneously. Each time that discourse appears in the midst of a historical narration, for example when the historian reproduces someone's words or when he himself intervenes in order to comment upon the events reported,[9] we pass to another tense system, that of discourse. The nature of language is to permit these instantaneous transfers.

Parenthetically, let us suggest that historical utterance can on occasion merge with discourse to make a third type of utterance in which discourse is reported in terms of an event and is transposed onto the historical plane; this is what is ordinarily called "indirect speech." The rules of this transposition involve problems which will not be examined here.

By its choice of verb tenses, discourse clearly distinguishes itself from historical narration.[10] Discourse freely employs all the personal forms of the verb, *je/tu* as well as *il*. Explicit or not, the relationship of person is everywhere present. Because of this, the "third person" does not have the same value as it does in historical narration. In the latter, since the narrator does not intervene, the third person is not opposed to any other and it is truly an absence of person. But in discourse, a speaker opposes a non-person *il* to a *je/tu* person. Similarly, the number of verb tenses is greater in discourse: in fact, all the tenses are possible except one, the aorist, which is today banished from this plane of utterance although it is the typical form for history. It must be stressed above all that the three fundamental tenses of discourse are the present, future, and perfect, all three of which are excluded from historical narration (except the pluperfect). The imperfect is common to the two planes.

The distinction made here between two planes of utterance within the language puts the phenomenon that for fifty years has been called the "disappearance of the simple forms of the preterite"[11] in French into a different perspective. The term "disappearance" surely is not proper. A form disappears only if its function is no longer necessary or if another form serves

it better. We thus must state precisely the situation of the aorist with respect to the *double* system of forms and functions that constitute the verb. There are two distinct relationships to be observed. On the one hand, it is a fact that the aorist is not used in the spoken language and is not one of the verb tenses proper to discourse. On the other hand, as the tense of historical narrative, the aorist holds its own very well, and moreover it is not threatened at all and no other tense could take its place. Let those who consider it to be on the way to extinction only try to replace the aorists by perfects in the passages cited above. The result would be such that no author could be persuaded to present history in such a way. It can be stated as a fact that anyone who knows how to write and who undertakes the narration of past events spontaneously employs the aorist as the fundamental tense, whether he evokes these events as a historian or creates them as a novelist. Out of a concern for variety, he may change the tone, multiply the points of view, and adopt other tenses, but then he leaves the plane of historical narrative. We need precise statistics, based on large samplings of all sorts of texts, books, and newspapers that would compare the use of the aorist fifty years ago with that of today in order to establish in everyone's eyes that this tense remains as necessary as it has ever been, within the strict conditions of its linguistic function. Among the texts that would serve as evidence, one would also have to include translations, which give us information about the spontaneous equivalences an author finds in order to transfer a narration written in another language into the tense system that is suitable in French.[12]

Conversely, statistics would bring out the rarity of historical narrations composed entirely in the perfect, and would show how little suited the perfect is to conveying an objective account of events. Anyone can verify this in some contemporary work in which the narrative is set deliberately in the perfect;[13] it would be interesting to analyze the stylistic effects that arise from this contrast between the tone of the narration, which is intended to be objective, and the expression used, the perfect in the first person, which is the autobiographical form par excellence. The perfect creates a living connection between the past event and the present in which its evocation takes place. It is the tense for the one who relates the facts as a witness, as a participant; it is thus also the tense that will be chosen by whoever wishes to make the reported event ring vividly in our ears and to link it to the present. Like the present, the perfect belongs to the linguistic system of discourse, for the temporal location of the perfect is the moment of the discourse while the location of the aorist is the moment of the event.

Moreover, the whole aorist paradigm must not be treated as a single unit. Here again the boundary passes through the paradigm and separates the two planes of utterance in the choice of personal forms. Discourse excludes the

aorist, but historical narration, which employs it constantly, retains it only in the forms of the third person.[14] The consequence is that *nous arrivâmes* and especially *vous arrivâtes* are never found, either in historical narration, because they are personal forms, or in discourse, because they are forms of the aorist. On the other hand, *il arriva* and *ils arrivèrent* occur constantly in history, and there are no possible substitutes.

The two planes of utterance are thus delimited into positive and negative features. In the historical utterance, the aorist, the imperfect, the pluperfect, and the prospective are admitted (in forms of the third person); the present, the perfect, and the future (simple and compound) are excluded. In the utterance of discourse, all tenses, with all their forms, are admitted, with the sole exception of the aorist (simple and compound).

The exclusions are just as important as the tenses admitted. For the historian, the present,[15] the perfect, and the future are excluded because the dimension of the present is incompatible with the historical intention: the present would necessarily be the present of the historian but the historian cannot historicize himself without contradicting his intention. An event, in order to be set as such in a temporal expression must have ceased to be present and must no longer be capable of being stated as present. The future is excluded for the same reason; it is only a present projected towards the future; it implies prescription, obligation, and certitude, which are subjective modalities, not historical categories. When, in the narration of events and by the operation of historical concatenation, an impending event looms up or a calamity must be stressed, the historian uses the tense that we call the prospective ("il *allait* partir," "il *devait* tomber").

In discourse, by contrast, the exclusion is limited to the aorist, which is unrivalled as the historical tense. If it were introduced into discourse, the aorist would seem pedantic and bookish. For stating past facts, discourse uses the perfect, which is both the functional equivalent of the aorist and hence a tense, and also something other than a tense.

Discussing the perfect, we have now arrived at another great problem, one of formal structure as well as of use: what is the relation between the simple tenses and the compound tenses? Here again the paradigms of the conjugation do not tell us about the principle of distribution since, as we have seen, the distinction we have made between the two planes of utterance traverses the distinction between the simple and compound tenses. We have observed the peculiar fact that the pluperfect is common to discourse and to history, while the perfect belongs to discourse alone. Beneath these apparent disagreements we can nevertheless recognize a coherent structure.

There is nothing original in saying that the simple and compound tenses

are distributed into two symmetrical groups. Ignoring the nominal forms, which along with the modal forms are also in conformity with this, we have:

il écrit	*il a écrit*
il écrivait	*il avait écrit*
il écrivit	*il eut écrit*[16]
il écrira	*il aura écrit*[17]

With an expansion of the system, in which the compound forms in their turn produce compound forms, the so-called "temps surcomposés" or secondary compounds, we have:

il a écrit	*il a eu écrit*
il avait écrit	*il avait eu écrit*, etc.

The formal parallelism of these two series in all tenses suffices to show that the relation between the simple and compound forms is not itself temporal. And yet, at the same time that we expel temporality from this opposition, we must still partially reintroduce it, since *il a écrit* functions as a temporal form of the past. How can we get out of this difficulty? By recognizing it and stating it precisely. *Il a écrit* is opposed both to *il écrit* and to *il écrivit*, but not in the same manner. The reason for this is that *the compound tenses have a double status:* they maintain two distinct types of relations with the simple tenses:

1. The compound tenses show a one-to-one contrast with the simple tenses insofar as each compound tense furnishes each simple tense with a correlative in the *perfect*. We call "perfect" the entire class of compound forms (with *avoir* and *être*) whose function—cursorily defined, but this will suffice here —consists in presenting the notion as "accomplished" with respect to the moment considered and the "current" situation resulting from this temporalized accomplishment.

The forms of the perfect have a formal criterion: they can always be constructed as verbs in an independent clause. They can be arranged in the following series:

present perfect: *il a écrit*
imperfect perfect: *il avait écrit*
aorist perfect: *il eut écrit*
future perfect: *il aura écrit.*

2. The compound tenses have another function distinct from the preceding: they indicate *anteriority*. This term is obviously open to question, but we cannot find a better one. In our view, *anteriority* is determined always and only with respect to the correlative simple tense. It creates a logical and intralinguistic connection and does not reflect a chronological one that would be set up in objective reality, for intralinguistic anteriority maintains the process *in the same time* that is expressed by the correlative simple form. Here is

a notion peculiar to the language, original in the highest degree, and without equivalent in the time of the physical universe. We have to reject such approximations of "anteriority" as the "past of the past," the "past of the future," etc., as in the rather widespread terminology which is really meaningless; there is only one past and it does not admit of any qualification: the "past of the past" is as little comprehensible as the "infinite of the infinite" would be.

The formal mark of the forms of anteriority is twofold: (1) they cannot be constructed as free forms; (2) they must be employed jointly with simple verbal forms on the same tense level. The forms of anteriority will be found in dependent clauses introduced by a conjunction like *quand.* Hence they can be arranged thus:

present anterior: *quand il a écrit une lettre* (il l'envoie)
imperfect anterior: *quand il avait écrit . . .* (il l'envoyait)
aorist anterior: *quand il eut écrit . . .* (il l'envoya)
future anterior: *quand il aura écrit . . .* (il l'enverra).

The proof that the form of anteriority does not carry any reference to time by itself is that it must depend syntactically on a free tense form whose formal structure it adopts in order to establish itself on the same temporal level and thus fulfill its proper function. That is why *quand il a écrit . . . il envoya* is unacceptable.

The compound tenses, whether they indicate perfectivity or anteriority, have the same distribution as the simple tenses with regard to the two planes of utterance. They also belong to discourse and to narration respectively. In order not to prejudge matters, we have formulated examples in the third person, the form common to both planes. The principle of the distinction is the same: 'quand *il a fini* son travail, *il rentre* chez lui' is discourse because of the present and the present anterior; 'quand *il eut fini . . ., il rentra*' is a historical utterance because of the aorist and the aorist anterior.

The reality of the distinction we are setting up between the forms of perfectivity and the forms of anteriority seems to us to be evidenced by still another trait. Depending on which one is concerned, the structure of the relations between the temporal forms is different. In the category of perfectivity, the relation established between the compound forms is symmetrical with that which prevails between the correlative simple forms: *il a écrit* and *il avait écrit* are in the same relationship as *il écrit* and *il écrivait.* They thus oppose one another on the axis of time by means of a paradigmatic temporal relationship. But the forms of anteriority do not have a temporal relationship among themselves. Being syntactically dependent forms, they can only enter into opposition with those simple forms of which they are the syntactic correlatives. In an example like 'Quand *il a fait* son travail, *il part,*' the present

anterior '(quand) *il a fait*' is opposed to the present 'il part' and owes its value to this contrast. It is a syntagmatic temporal relationship.

Such is the double status of the perfect. From this arises the ambiguous situation of a form like *il avait fait*, which is a member of both systems. As a (free) form of the perfective, *il avait fait* is opposed as an imperfect to the present *il a fait* to the aorist, *il eut fait*, etc. But as the (nonfree) form of anteriority, (*quand*) *il avait fait* contrasts with the free form *il faisait* and does not maintain any relationship with (*quand*) *il fait*, *quand il a fait*, etc. The syntax of the utterance determines whether the perfect form belongs to one or the other of the two categories.

At this point we must look at a process of great importance that bears on the development of the language. It is the functional equivalence between *je fis* and *j'ai fait*, which, precisely, distinguishes between the plane of historical narration and that of discourse. In fact, the first person *je fis* is admitted neither in narration, being first person, nor in discourse, being aorist. But the equivalence is also valid for the other personal forms. It can be understood why *je fis* was supplanted by *j'ai fait*. It is with the first person that the development must have begun; the axis of subjectivity was there. As the aorist became specialized as the tense of the historical event, it was removed from the subjective past, which, by a reverse tendency, was associated with the sign of the person in discourse. For a speaker speaking of himself, the fundamental tense is the "present"; everything accomplished for which he assumes responsibility by stating it in the first person of the perfect is cast without fail back into the past. From that point on, the expression is fixed: in order to specify the subjective past, it will suffice to employ the form of the perfective in discourse. Thus from the perfect form, *j'ai lu ce livre*, in which *j'a, lu* is a present perfective, we move easily to the temporal form of the past, *j'ai lu ce livre l'année dernière; j'ai lu ce livre dès qu'il a paru.* Discourse is thus provided with a past tense symmetrical with the aorist of narration and contrasting with it in value; *il fit* objectifies the event by detaching it from the present; *il a fait*, on the contrary, links the past event with our present.

However, the system of discourse is perceptibly affected by this; it gains a temporal distinction but at the price of the loss of a functional distinction. The form *j'ai fait* becomes ambiguous and creates a deficiency. In itself, *j'ai fait* is a perfect that furnishes either the form of the perfective or the form of anteriority to the present *je fais*. But when *j'ai fait*, the compound form, becomes the "aorist of discourse," it takes on the function of the simple form, with the result that *j'ai fait* is sometimes perfect, a compound tense, and sometimes aorist, a simple tense. The system has remedied this difficulty by recreating the missing form. Alongside the simple tense *je fais* is the compound tense *j'ai fait* for the notion of the perfective. Now, since

j'ai fait slips into the rank of a simple tense, there is a need for a new compound tense that in its turn will express the perfective; this will be the secondary compound *j'ai eu fait*. Functionally, *j'ai eu fait* is the new perfect of a *j'ai fait* which has become the aorist. Such is the point of departure for the secondary compound tenses. The system is thus put right and the two pairs of oppositions become symmetrical again. To the present *je mange* is opposed a perfect, *j'ai mangé*, which furnishes discourse with (1) a present perfective (e.g., '*j'ai mangé;* je n'ai plus faim'); (2) a present anterior (e.g., 'quand *j'ai mangé*, je sors me promener'). When *j'ai mangé* becomes the aorist, it recreates for itself a new perfect, *j'ai eu mangé*, which similarly gives (1) an aorist perfective (e.g., '*j'ai eu mangé* mon repas en dix minutes'); (2) an aorist anterior (e.g., '*quand j'ai eu mangé*, je suis sorti'). Moreover, the temporal parallelism is reestablished between the two planes of utterance: the pair *il mangea* (aorist) : *il eut mangé* (perfect) of historical narration now corresponds to *il a mangé* (the new aorist) : *il a eu mangé* (the new perfect) in discourse.

We have given only a brief outline here of a vast subject that would demand long analyses and detailed statistics. The essential thing was to bring to light the large divisions, sometimes barely visible, that run through the tense system of the verb in modern French. Some, like the distinction between historical narration and discourse, create two subsystems of tense and person in the verb; another, that of the present and perfect, is not of a temporal order. But at each temporal level the perfect conveys two functions that are distinguished by the syntax: the function of the perfective and the function of anteriority, symmetrically distributed, partly through the creation of new forms, between narration and discourse. The conjugational table of a French verb, in which the paradigms are lined up, complete and uniform, does not let one even suspect that the formal system of the verb has a double structure (the conjugation of the present and the conjugation of the perfect) as has the tense organization, which is based on relationships and oppositions that are the reality of the language.

From *B.S.L.* 54 (1969) : 46–68

TWENTY

The Nature of Pronouns

IN THE STILL OPEN DEBATE on the nature of pronouns, it is usual to consider these linguistic forms as constituting a class both formal and functional, in the manner of nominal or verbal forms, for example. Now all languages possess pronouns, and in all of them they are defined as referring to the same categories of expression (personal pronouns, demonstratives, etc.). The universality of these forms and these notions leads to the thought that the problem of pronouns is both a problem of language in general and a problem of individual languages; or better, that it is a problem of individual languages only because it is primarily a problem of language in general. It is as a phenomenon of language that we pose the problem here, in order to show that pronouns do not constitute a unitary class but are of different types depending on the mode of language of which they are the signs. Some belong to the syntax of a language, others are characteristics of what we shall call "instances of discourse," that is, the discrete and always unique acts by which the language is actualized in speech by a speaker.

The situation of the personal pronouns should be considered first. It is not enough to distinguish them from the other pronouns by a denomination that separates them. It must be seen that the ordinary definition of the personal pronouns as containing the three terms, *I*, *you*, and *he*, simply destroys the notion of "person." "Person" belongs only to *I*/*you* and is lacking in *he*. This basic difference will be evident from an analysis of *I*.

Between *I* and a noun referring to a lexical notion, there are not only the greatly varying formal differences that the morphological and syntactic structure of particular languages imposes; there are also others that result from the very process of linguistic utterance and which are of a more general and more basic nature. The utterance containing *I* belongs to that level or type of language which Charles Morris calls pragmatic, which includes, with the signs, those who make use of them. A linguistic text of great length—a scientific treatise, for example—can be imagined in which *I* and *you* would not appear a single time; conversely, it would be difficult to conceive of a short spoken

text in which they were not employed. But the other signs of a language are distributed indifferently between these two types of texts. Besides this condition of use, which is itself distinctive, we shall call attention to a fundamental and moreover obvious property of *I* and *you* in the referential organization of linguistic signs. Each instance of use of a noun is referred to a fixed and "objective" notion, capable of remaining potential or of being actualized in a particular object and always identical with the mental image it awakens. But the instances of the use of *I* do not constitute a class of reference since there is no "object" definable as *I* to which these instances can refer in identical fashion. Each *I* has its own reference and corresponds each time to a unique being who is set up as such.

What then is the reality to which *I* or *you* refers? It is solely a "reality of discourse," and this is a very strange thing. *I* cannot be defined except in terms of "locution," not in terms of objects as a nominal sign is. *I* signifies "the person who is uttering the present instance of the discourse containing *I*." This instance is unique by definition and has validity only in its uniqueness. If I perceive two successive instances of discourse containing *I*, uttered in the same voice, nothing guarantees to me that one of them is not a reported discourse, a quotation in which *I* could be imputed to another. It is thus necessary to stress this point: *I* can only be identified by the instance of discourse that contains it and by that alone. It has no value except in the instance in which it is produced. But in the same way it is also as an instance of form that *I* must be taken; the form of *I* has no linguistic existence except in the act of speaking in which it is uttered. There is thus a combined double instance in this process: the instance of *I* as referent and the instance of discourse containing *I* as the referee. The definition can now be stated precisely as: *I* is "the individual who utters the present instance of discourse containing the linguistic instance *I*." Consequently, by introducing the situation of "address," we obtain a symmetrical definition for *you* as the "individual spoken to in the present instance of discourse containing the linguistic instance *you*." These definitions refer to *I* and *you* as a category of language and are related to their position in language. We are not considering the specific forms of this category within given languages, and it matters little whether these forms must figure explicitly in the discourse or may remain implicit in it.

This constant and necessary reference to the instance of discourse constitutes the feature that unites to *I/you* a series of "indicators" which, from their form and their systematic capacity, belong to different classes, some being pronouns, others adverbs, and still others, adverbial locutions.

The demonstratives, *this*, etc., are such indicators inasmuch as their organization correlates with that of the indicators of person, as in Lat.

hic/iste. Here there is a new and distinctive feature in this series: it is the identification of the object by an indicator of ostension concomitant with the instance of discourse containing the indicator of person. By simultaneous ostension, *this* will be the object designated in the present instance of discourse and the reference implicit in the form (for example, *hic* as opposed to *iste*), which associates it with *I* and *you*. Outside this class, but on the same plane and associated in the same frame of reference, we find the adverbs *here* and *now*. Their relationship with *I* will be shown by defining them: *here* and *now* delimit the spatial and temporal instance coextensive and contemporary with the present instance of discourse containing *I*. This series is not limited to *here* and *now*; it is increased by a great number of simple or complex terms that proceed from the same relationship: *today*, *yesterday*, *tomorrow*, *in three days*, etc. It is pointless to define these terms and the demonstratives in general by deixis, as is generally done, unless one adds that the deixis is contemporary with the instance of discourse that carries the indicator of person; it is from this reference that the demonstrative takes its property of being unique and particular each time, which is the uniqueness of the instance of discourse to which it refers.

The essential thing, then, is the relation between the indicator (of person, time, place, object shown, etc.) and the *present* instance of discourse. For from the moment that one no longer refers, by the expression itself, to this relation of the indicator to the unique instance that manifests it, the language has recourse to a series of distinct terms that have a one-to-one correspondence with the first and which refer, not to the instance of discourse, but to "real" objects, to "historical" times and places. Hence correlations such as *I*: *he—here*: *there—now*: *then—today*: *the very day—yesterday*: *the day before—tomorrow*: *the day after—next week*: *the following week—three days ago*: *three days before*, etc. The language itself reveals the profound difference between these two planes.

The reference to the "speaker" implicit in this whole group of expressions has been treated too lightly and as being self-evident. We rob this reference of its inherent meaning if we do not see the feature by which it is distinguished from other linguistic signs. Yet it is a fact both original and fundamental that these "pronominal" forms do not refer to "reality" or to "objective" positions in space or time but to the utterance, unique each time, that contains them, and thus they reflect their proper use. The importance of their function will be measured by the nature of the problem they serve to solve, which is none other than that of intersubjective communication. Language has solved this problem by creating an ensemble of "empty" signs that are nonreferentia. with respect to "reality." These signs are always available and become "full" as soon as a speaker introduces them into each instance of his discourse,

Since they lack material reference, they cannot be misused; since they do not assert anything, they are not subject to the condition of truth and escape all denial. Their role is to provide the instrument of a conversion that one could call the conversion of language into discourse. It is by identifying himself as a unique person pronouncing *I* that each speaker sets himself up in turn as the "subject." The use thus has as a condition the situation of discourse and no other. If each speaker, in order to express the feeling he has of his irreducible subjectivity, made use of a distinct identifying signal (in the sense in which each radio transmitting station has its own call letters), there would be as many languages as individuals and communication would become absolutely impossible. Language wards off this danger by instituting a unique but mobile sign, *I*, which can be assumed by each speaker on the condition that he refers each time only to the instance of his own discourse. This sign is thus linked to the *exercise* of language and announces the speaker as speaker. It is this property that establishes the basis for individual discourse, in which each speaker takes over all the resources of language for his own behalf. Habit easily makes us unaware of this profound difference between language as a system of signs and language assumed into use by the individual. When the individual appropriates it, language is turned into instances of discourse, characterized by this system of internal references of which *I* is the key, and defining the individual by the particular linguistic construction he makes use of when he announces himself as the speaker. Thus the indicators *I* and *you* cannot exist as potentialities; they exist only insofar as they are actualized in the instance of discourse, in which, by each of their own instances, they mark the process of appropriation by the speaker.

The systematic nature of language causes the appropriation these indicators signal to appear in the instance of discourse in all the elements capable of "agreeing" formally, especially in the verb, by means of processes that vary according to the type of idiom. We must emphasize this point: the "verb form" is an inextricable part of the individual instance of discourse: it is always and necessarily actualized by the act of discourse and in dependence on that act. It cannot admit of any potential and "objective" form. If the verb is usually represented by its infinitive as the lexical entry in a number of languages, this is purely by convention; the infinitive in language is something completely different from the infinitive in the lexicographic metalanguage. All the variations in the verbal paradigm—aspect, tense, gender, person, etc.—result from that actualization and from that dependence with respect to the instance of discourse, especially the "tense" of the verb, which is always relative to the instance in which the verb form figures. A finite personal utterance is thus constituted on a double plane: it puts the denominative function of language into operation for references to the object, which

language establishes as distinctive lexical signs, and arranges these references to the object with the aid of self-referential indicators corresponding to each of the formal classes that the idiom recognizes.

But is this always true? If language, as it is exercised, is by necessity produced in discrete instances, does not this necessity oblige it to consist only of "personal" instances? We know empirically that this is not the case. There are utterances in discourse that escape the condition of person in spite of their individual nature; that is, they refer not to themselves but to an "objective" situation. This is the domain that we call the "third person."

The "third person" in fact represents the unmarked member of the correlation of person. That is why it is not a truism to affirm that the non-person is the only mode of utterance possible for the instances of discourse not meant to refer to themselves but to predicate the process of someone or something outside the instance itself, and this someone or something can always be provided with an objective reference.

Thus, in the formal class of pronouns, those said to be of the "third person" are, by their function and by their nature, completely different from *I* and *you*. As has long been seen, forms like *he*, *him*, *that*, etc. only serve as abbreviated substitutes (Pierre is sick; *he* has a "fever"); they replace or relay one or another of the material elements of the utterance. But this function is not attached only to pronouns; it can be served by elements of other classes—in French, on occasion by certain verbs ("cet enfant écrit maintenant mieux qu'il ne *faisait* l'année dernière" [similarly in English: that child writes better now than he *did* last year]). This is a function of syntactic "representation" which extends to terms taken from different "parts of speech" and which answers to a need for economy by replacing one segment of the utterance, or even an entire utterance, with a more manageable substitute. Hence the function of these substitutes has nothing in common with that of the indicators of person.

Certain languages show that the "third person" is indeed literally a "non-person."[1] To take just one example among many, here is how the possessive pronominal prefixes are presented in two series (something like inalienable and alienable) in Yuma (California): first person, *?-*, *?an^{y}-*; second person, *m-*, *man^{y}-*; third person, zero, *n^{y}*.[2] The personal reference is a zero reference outside the *I/you* relationship. In other languages (Indo-European chiefly) the regularity of the formal structure and a symmetry of secondary origin produce the impression of three coordinated persons. This is especially the case with modern languages with an obligatory pronoun in which *he* seems to be a member of a paradigm with three terms, on a par with *I* and *you*, or in the inflection of the present in Indo-European with *-mi*, *-si*, *-ti*. In fact, the symmetry is only formal. What must be considered distinctive of the "third

person" is its property of (1) combining with any object reference, (2) never being reflective of the instance of discourse, (3) admitting of a sometimes rather large number of pronominal or demonstrative variants, and (4) not being compatible with the paradigm of referential terms like *here*, *now*, etc.

Even a brief analysis of the forms that are imprecisely classed as pronominal leads thus to the recognition among them of classes of entirely different natures and, consequently, to the distinction between, on the one hand, language as a repertory of signs and a system for combining them and, on the other, language as an activity manifested in instances of discourse which are characterized as such by particular signs.

From *For Roman Jakobson*, Morris Halle, Horace G. Lunt, Hugh McLean, and Cornelis H. van Schooneveld, eds. (The Hague, 1956), pp. 34–37

TWENTY-ONE

Subjectivity in Language

IF LANGUAGE IS, as they say, the instrument of communication, to what does it owe this property? The question may cause surprise, as does everything that seems to challenge an obvious fact, but it is sometimes useful to require proof of the obvious. Two answers come to mind. The one would be that language is *in fact* employed as the instrument of communication, probably because men have not found a better or more effective way in which to communicate. This amounts to stating what one wishes to understand. One might also think of replying that language has such qualities as make it suited to serve as an instrument; it lends itself to transmitting what I entrust to it—an order, a question, an announcement—and it elicits from the interlocutor a behavior which is adequate each time. Developing a more technical aspect of this idea, one might add that the behavior of language admits of a behaviorist description, in terms of stimulus and response, from which one might draw conclusions as to the intermediary and instrumental nature of language. But is it really language of which we are speaking here? Are we not confusing it with discourse? If we posit that discourse is language put into action, and necessarily between partners, we show amidst the confusion, that we are begging the question, since the nature of this "instrument" is explained by its situation as an "instrument." As for the role of transmission that language plays, one should not fail to observe, on the one hand, that this role can devolve upon nonlinguistic means—gestures and mimicry—and, on the other hand, that, in speaking here of an "instrument," we are letting ourselves be deceived by certain processes of transmission which in human societies without exception come after language and imitate its functioning. All systems of signals, rudimentary or complex, are in this situation.

In fact, the comparison of language to an instrument—and it should necessarily be a material instrument for the comparison to even be comprehensible—must fill us with mistrust, as should every simplistic notion about language. To speak of an instrument is to put man and nature in opposition. The pick, the arrow, and the wheel are not in nature. They are fabrications. Language

is in the nature of man, and he did not fabricate it. We are always inclined to that naïve concept of a primordial period in which a complete man discovered another one, equally complete, and between the two of them language was worked out little by little. This is pure fiction. We can never get back to man separated from language and we shall never see him inventing it. We shall never get back to man reduced to himself and exercising his wits to conceive of the existence of another. It is a speaking man whom we find in the world, a man speaking to another man, and language provides the very definition of man.

All the characteristics of language, its immaterial nature, its symbolic functioning, its articulated arrangement, the fact that it has *content*, are in themselves enough to render suspect this comparison of language to an instrument, which tends to dissociate the property of language from man. Certainly in everyday practice the give and take of speaking suggests an exchange, hence a "thing" which we exchange, and speaking seems thus to assume an instrumental or vehicular function which we are quick to hypostasize as an "object." But, once again, this role belongs to the individual act of speech.

Once this function is seen as belonging to the act of speech, it may be asked what predisposition accounts for the fact that the act of speech should have it. In order for speech to be the vehicle of "communication," it must be so enabled by language, of which it is only the actualization. Indeed, it is in language that we must search for the condition of this aptitude. It seems to us that it resides in a property of language barely visible under the evidence that conceals it, which only sketchily can we yet characterize.

It is in and through language that man constitutes himself as a *subject*, because language alone establishes the concept of "ego" in reality, in *its* reality which is that of the being.

The "subjectivity" we are discussing here is the capacity of the speaker to posit himself as "subject." It is defined not by the feeling which everyone experiences of being himself (this feeling, to the degree that it can be taken note of, is only a reflection) but as the psychic unity that transcends the totality of the actual experiences it assembles and that makes the permanence of the consciousness. Now we hold that that "subjectivity," whether it is placed in phenomenology or in psychology, as one may wish, is only the emergence in the being of a fundamental property of language. "Ego" is he who *says* "ego." That is where we see the foundation of "subjectivity," which is determined by the linguistic status of "person."

Consciousness of self is only possible if it is experienced by contrast. I use *I* only when I am speaking to someone who will be a *you* in my address. It is this condition of dialogue that is constitutive of *person*, for it implies that reciprocally *I* becomes *you* in the address of the one who in his turn desig-

nates himself as *I*. Here we see a principle whose consequences are to spread out in all directions. Language is possible only because each speaker sets himself up as a *subject* by referring to himself as *I* in his discourse. Because of this, *I* posits another person, the one who, being, as he is, completely exterior to "me," becomes my echo to whom I say *you* and who says *you* to me. This polarity of persons is the fundamental condition in language, of which the process of communication, in which we share, is only a mere pragmatic consequence. It is a polarity, moreover, very peculiar in itself, as it offers a type of opposition whose equivalent is encountered nowhere else outside of language. This polarity does not mean either equality or symmetry: "ego" always has a position of transcendence with regard to *you*. Nevertheless, neither of the terms can be conceived of without the other; they are complementary, although according to an "interior/exterior" opposition, and, at the same time, they are reversible. If we seek a parallel to this, we will not find it. The condition of man in language is unique.

And so the old antinomies of "I" and "the other," of the individual and society, fall. It is a duality which it is illegitimate and erroneous to reduce to a single primordial term, whether this unique term be the "I," which must be established in the individual's own consciousness in order to become accessible to that of the fellow human being, or whether it be, on the contrary, society, which as a totality would preexist the individual and from which the individual could only be disengaged gradually, in proportion to his acquisition of self-consciousness. It is in a dialectic reality that will incorporate the two terms and define them by mutual relationship that the linguistic basis of subjectivity is discovered.

But must this basis be linguistic? By what right does language establish the basis of subjectivity?

As a matter of fact, language is responsible for it in all its parts. Language is marked so deeply by the expression of subjectivity that one might ask if it could still function and be called language if it were constructed otherwise. We are of course talking of language in general, not simply of particular languages. But the concordant facts of particular languages give evidence for language. We shall give only a few of the most obvious examples.

The very terms we are using here, *I* and *you*, are not to be taken as figures but as linguistic forms indicating "person." It is a remarkable fact—but who would notice it, since it is so familiar?—that the "personal pronouns" are never missing from among the signs of a language, no matter what its type, epoch, or region may be. A language without the expression of person cannot be imagined. It can only happen that in certain languages, under certain circumstances, these "pronouns" are deliberately omitted; this is the case in most of the Far Eastern societies, in which a convention of politeness imposes

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the use of periphrases or of special forms between certain groups of individuals in order to replace the direct personal references. But these usages only serve to underline the value of the avoided forms; it is the implicit existence of these pronouns that gives social and cultural value to the substitutes imposed by class relationships.

Now these pronouns are distinguished from all other designations a language articulates in that *they do not refer to a concept or to an individual.*

There is no concept "I" that incorporates all the *I*'s that are uttered at every moment in the mouths of all speakers, in the sense that there is a concept "tree" to which all the individual uses of *tree* refer. The "I," then, does not denominate any lexical entity. Could it then be said that *I* refers to a particular individual? If that were the case, a permanent contradiction would be admitted into language, and anarchy into its use. How could the same term refer indifferently to any individual whatsoever and still at the same time identify him in his individuality? We are in the presence of a class of words, the "personal pronouns," that escape the status of all the other signs of language. Then, what does *I* refer to? To something very peculiar which is exclusively linguistic: *I* refers to the act of individual discourse in which it is pronounced, and by this it designates the speaker. It is a term that cannot be identified except in what we have called elsewhere an instance of discourse and that has only a momentary reference. The reality to which it refers is the reality of the discourse. It is in the instance of discourse in which *I* designates the speaker that the speaker proclaims himself as the "subject." And so it is literally true that the basis of subjectivity is in the exercise of language. If one really thinks about it, one will see that there is no other objective testimony to the identity of the subject except that which he himself thus gives about himself.

Language is so organized that it permits each speaker to *appropriate to himself* an entire language by designating himself as *I*.

The personal pronouns provide the first step in this bringing out of subjectivity in language. Other classes of pronouns that share the same status depend in their turn upon these pronouns. These other classes are the indicators of *deixis*, the demonstratives, adverbs, and adjectives, which organize the spatial and temporal relationships around the "subject" taken as referent: "this, here, now," and their numerous correlatives, "that, yesterday, last year, tomorrow," etc. They have in common the feature of being defined only with respect to the instances of discourse in which they occur, that is, in dependence upon the *I* which is proclaimed in the discourse.

It is easy to see that the domain of subjectivity is further expanded and must take over the expression of temporality. No matter what the type of language, there is everywhere to be observed a certain linguistic organization

of the notion of time. It matters little whether this notion is marked in the inflection of the verb or by words of other classes (particles, adverbs, lexical variations, etc.); that is a matter of formal structure. In one way or another, a language always makes a distinction of "tenses"; whether it be a past and a future, separated by a "present," as in French [or English], or, as in various Amerindian languages, of a preterite-present opposed to a future, or a present-future distinguished from a past, these distinctions being in their turn capable of depending on variations of aspect, etc. But the line of separation is always a reference to the "present." Now this "present" in its turn has only a linguistic fact as temporal reference: the coincidence of the event described with the instance of discourse that describes it. The temporal referent of the present can only be internal to the discourse. The *Dictionnaire générale* defines the "present" as "le temps du verbe qui exprime le temps où l'on est." But let us beware of this; there is no other criterion and no other expression by which to indicate "the time at which one *is*" except to take it as "the time at which one *is speaking*." This is the eternally "present" moment, although it never relates to the same events of an "objective" chronology because it is determined for each speaker by each of the instances of discourse related to it. Linguistic time is *self-referential*. Ultimately, human temporality with all its linguistic apparatus reveals the subjectivity inherent in the very using of language.

Language is accordingly the possibility of subjectivity because it always contains the linguistic forms appropriate to the expression of subjectivity, and discourse provokes the emergence of subjectivity because it consists of discrete instances. In some way language puts forth "empty" forms which each speaker, in the exercise of discourse, appropriates to himself and which he relates to his "person," at the same time defining himself as *I* and a partner as *you*. The instance of discourse is thus constitutive of all the coordinates that define the subject and of which we have briefly pointed out only the most obvious.

The establishment of "subjectivity" in language creates the category of person—both in language and also, we believe, outside of it as well. Moreover, it has quite varied effects in the very structure of languages, whether it be in the arrangement of the forms or in semantic relationships. Here we must necessarily have particular languages in view in order to illustrate some effects of the change of perspective which "subjectivity" can introduce. We cannot say what the range of the particular phenomena we are pointing out may be in the universe of real languages; for the moment it is less important to delimit them than to reveal them. English provides several convenient examples.

In a general way, when I use the present of a verb with three persons (to use the traditional nomenclature), it seems that the difference in person does not lead to any change of meaning in the conjugated verb form. *I eat*, *you eat*, and *he eats* have in common and as a constant that the verb form presents a description of an action, attributed respectively and in an identical fashion to "I," "you," and "he." Similarly, *I suffer*, *you suffer*, *he suffers* have the description of the same state in common. This gives the impression of being an obvious fact and even the formal alignment in the paradigm of the conjugation implies this.

Now a number of verbs do not have this permanence of meaning in the changing of persons, such as those verbs with which we denote dispositions or mental operations. In saying *I suffer*, I describe my present condition. In saying *I feel* (*that the weather is going to change*), I describe an impression which I feel. But what happens if, instead of *I feel* (*that the weather is going to change*), I say *I believe* (*that the weather is going to change*)? The formal symmetry between *I feel* and *I believe* is complete. Is it so for the meaning? Can I consider *I believe* to be a description of myself of the same sort as *I feel*? Am I describing myself believing when I say *I believe* (*that . . .*)? Surely not. The operation of thought is not at all the object of the utterance; *I believe* (*that . . .*) is equivalent to a mitigated assertion. By saying *I believe* (*that . . .*), I convert into a subjective utterance the fact asserted impersonally, namely, *the weather is going to change*, which is the true proposition.

Let us consider further the following utterances: "You are Mr. X., *I suppose*." "*I presume* that John received my letter." "He has left the hospital, from which *I conclude* that he is cured." These sentences contain verbs that are verbs of operation: *suppose*, *presume*, and *conclude* are all logical operations. But *suppose*, *presume*, and *conclude*, put in the first person, do not behave the way, for example, *reason* and *reflect* do, which seem, however, to be very close. The forms *I reason* and *I reflect* describe me as reasoning and reflecting. Quite different are *I suppose*, *I presume*, and *I conclude*. In saying *I conclude* (*that . . .*), I do not describe myself as occupied in concluding; what could the activity of "concluding" be? I do not represent myself as being in the process of supposing and presuming when I say *I suppose*, *I presume*. *I conclude* indicates that, in the situation set forth, I extract a relationship of conclusion touching on a given fact. It is this logical relationship which is materialized in a personal verb. Similarly, *I suppose* and *I presume*, are very far from *I pose* and *I resume*. In *I suppose* and *I presume*, there is an indication of attitude, not a description of an operation. By including *I suppose* and *I presume* in my discourse, I imply that I am taking a certain attitude with regard to the utterance that follows. It will have been noted that all the verbs cited are followed by *that* and a proposition; this proposition

is the real utterance, not the personal verb form that governs it. But on the other hand, that personal form is, one might say, the indicator of subjectivity. It gives the assertion that follows the subjective context—doubt, presumption, inference—suited to characterize the attitude of the speaker with respect to the statement he is making. This manifestation of subjectivity does not stand out except in the first person. One can hardly imagine similar verbs in the second person except for taking up an argument again *verbatim*; thus, *you suppose that he has left* is only a way of repeating what "you" has just said: "*I suppose* that he has left." But if one removes the expression of person, leaving only "*he supposes that . . .*," we no longer have, from the point of view of *I* who utters it, anything but a simple statement.

We will perceive the nature of this "subjectivity" even more clearly if we consider the effect on the meaning produced by changing the person of certain verbs of speaking. These are verbs that by their meaning denote an individual act of social import: *swear, promise, guarantee, certify*, with locutional variants like *pledge to . . ., commit (oneself) to. . . .* In the social conditions in which a language is exercised, the acts denoted by these verbs are regarded as binding. Now here the difference between the "subjective" utterance and the "nonsubjective" is fully apparent as soon as we notice the nature of the opposition between the "persons" of the verb. We must bear in mind that the "third person" is the form of the verbal (or pronominal) paradigm that does *not* refer to a person because it refers to an object located outside direct address. But it exists and is characterized only by its opposition to the person *I* of the speaker who, in uttering it, situates it as "non-person." Here is its status. The form *he . . .* takes its value from the fact that it is necessarily part of a discourse uttered by "I."

Now *I swear* is a form of peculiar value in that it places the reality of the oath upon the one who says *I*. This utterance is a *performance*; "to swear" consists exactly of the utterance *I swear*, by which Ego is bound. The utterance *I swear* is the very act which pledges me, not the description of the act that I am performing. In saying *I promise, I guarantee*, I am actually making a promise or a guarantee. The consequences (social, judicial, etc.) of my swearing, of my promise, flow from the instance of discourse containing *I swear, I promise*. The utterance is identified with the act itself. But this condition is not given in the meaning of the verb, it is the "subjectivity" of discourse which makes it possible. The difference will be seen when *I swear* is replaced by *he swears*. While *I swear* is a pledge, *he swears* is simply a description, on the same plane as *he runs, he smokes*. Here it can be seen that, within the conditions belonging to these expressions, the same verb, according as it is assumed by a "subject" or is placed outside "person," takes on a different value. This is a consequence of the fact that the instance of

discourse that contains the verb establishes the act at the same time that it sets up the subject. Hence the act is performed by the instance of the utterance of its "name" (which is "swear") at the same time that the subject is established by the instance of the utterance of its indicator (which is "I").

Many notions in linguistics, perhaps even in psychology, will appear in a different light if one reestablishes them within the framework of discourse. This is language in so far as it is taken over by the man who is speaking and within the condition of intersubjectivity, which alone makes linguistic communication possible.

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TWENTY-TWO

Analytical Philosophy and Language

PHILOSOPHICAL INTERPRETATIONS of language generally arouse a certain apprehension in the linguist. Since he is little informed about the movement of ideas, the linguist is prone to think that the problems belonging to language, which are primarily formal problems, cannot attract the philosopher and, conversely, that the philosopher is especially interested within language in notions that he, the linguist, cannot make use of. A certain timidity in the face of general ideas probably enters into this attitude. But the aversion of the linguist for everything that he summarily qualifies as "metaphysical" proceeds above all from a more and more vivid awareness of the formal specificity of linguistic facts, to which philosophers are not sensitive enough.

It is thus with all the more interest that the linguist will study the concepts of the philosophy called analytic. The Oxford philosophers have devoted themselves to the analysis of ordinary language, as it is spoken, in order to renew the very basis of philosophy by freeing it from abstractions and conventional frames of reference. A colloquium was held at Royaumont whose object was precisely the exposition and discussion of this philosophy.[1] According to one of its representatives, J. O. Urmson, the Oxford school grants to natural languages the value of an exceptional object that merits the most elaborate investigations. The reasons were clearly stated. It is worthwhile to quote them:

> . . . The Oxford philosophers, almost without exception, approach philosophy after a very extended study of the classical humanities. They are thus spontaneously interested in words, in syntax, in idioms. They would not wish to utilize linguistic analysis for the sole purpose of solving problems of philosophy, since the examination of a language interests them for itself. Hence these philosophers are perhaps the more ready for and more inclined to linguistic distinctions than other philosophers.
>
> For them, natural languages, which philosophers usually stigmatize as awkward and unsuited to thought, contain in reality an abundance of concepts and the most subtle distinctions, and fill a variety of functions to which philosophers ordinarily remain blind. In addition, since these languages

were developed in order to answer to the needs of those who make use of them, the Oxford philosophers consider it probable that they retain none but useful concepts and sufficient distinctions; that they are precise where one needs to be precise and vague where one does not need precision. Everyone who knows how to speak a language undoubtedly has an implicit grasp of these concepts and these nuances. But, still according to the Oxford school, philosophers who strive to describe these concepts and these distinctions either fail to appreciate them or oversimplify them. In any case, they have only examined them superficially. The true riches that languages conceal remain buried.

That is why the Oxford school has devoted itself to very elaborate, very detailed studies of ordinary language—studies by which they hope to discover hidden riches and make explicit distinctions of which we have only a confused knowledge—by describing the disparate functions of all sorts of linguistic expression. It is difficult for me to describe this method in general terms. Often they will study two or three expressions that at first glance seem to be synonymous and will demonstrate that they have to be used differently. They will scrutinize the contexts in which these expressions are used to try to bring to light the implicit principle that governs the choice.[2]

It is for philosophers of other persuasions to say whether or not this constitutes the work of philosophy. But for linguists, at least for those who do not turn away from the problems of meaning and who consider that the content of the kinds of expression is also their domain, such a programme is full of interest. It is the first time, taking into account the previous but differently oriented attempts of Wittgenstein, that philosophers devote themselves to a thorough study of the conceptual resources of a natural language and that they have brought to it the required spirit of objectivity, curiosity, and patience, for, as Urmson tells us,

> . . . all the great philosophers, or almost all, have demanded that one scrutinize the words which one uses, and they have recognized that one can be blinded by a wrongly interpreted word. But according to the Oxford philosophers of today, the importance and the complexity of the work that such preliminary research demands has never been sufficiently recognized. They devote articles or entire books to studies that were formerly disposed of in a few lines.[3]

One then turns quite naturally to the paper given at this colloquium by the philosopher considered as the "undisputed master of this discipline," J. L. Austin, under the title "Performatif : constatif."[4] Here we have a specimen of this type of analysis applied to utterances that are called performative, in contrast to those which are declarative or constative. The performative utterance

> . . . has its own special job, it is used to perform an action. To issue such an utterance *is* to perform the action—an action, perhaps, which one scarcely could perform, at least with so much precision, in any other way. Here are some examples:
>
> I name this ship 'Liberté.'
> I apologise.
> I welcome you.
> I advise you to do it.
>
> . . . to say 'I promise to . . .'—to issue, as we say, this performative utterance—just *is* the act of making a promise . . .[5]

But can we recognize such an utterance with certainty? Austin doubts and finally denies that we possess a sure criterion for it: he considers the hope of finding "some criterion, whether of grammar or of vocabulary, which would make it possible for us to answer in every case the question whether a particular utterance is performative or not" to be "exaggerated and, in large measure, vain." There are, of course, "normal" forms which, as in the examples above, require a verb in the first person of the singular, in the present indicative, in the active voice; or again, utterances in the passive voice and in the second or third person of the present indicative such as, " 'Passengers are requested to cross the line by the footbridge only.' " But, he continues, the "normal" forms are not necessary.

> . . . it is not in the least necessary that an utterance, if it is to be performative, should be expressed in one of these so-called normal forms. To say "Shut the door," plainly enough, is every bit as performative, every bit as much the performance of an act, as to say "I order you to shut the door." Even the word "dog" by itself can sometimes . . . stand in place of an explicit and formal performative; one performs, by this little word, the very same act as by the utterance "I warn you that the dog is about to attack us," or by "Strangers are warned that here there is a vicious dog." To make our utterance performative, and quite unambiguously so, we can make use, in place of the explicit formula, of a whole lot of more primitive devices such as intonation, for instance, or gesture; further, and above all, the very context in which the words are uttered can make it entirely certain how they are to be taken—as a description, for example, or again as a warning.[6]

The most important part of this article deals with the "unhappinesses"[7] of the performative utterance, with the circumstances which can render it null and void: when the one who is performing is not qualified or lacks sincerity or breaks his word. Considering next the declarative utterance or assertion of fact, the author observes that this notion is no more certain and no better

defined than the contrasting idea, and that, in addition, it is subject to the identical "unhappinesses." To sum up, he concludes, "What we need, perhaps, is a more general theory of these speech-acts, and in this theory our Constative-Performative antithesis will scarcely survive."[8]

We have taken from this article only the most salient points of the line of reasoning and those arguments in the demonstration which touched upon facts which are properly linguistic. Thus we shall neither examine the considerations of the logical "unhappinesses" which can overtake and render inoperative either type of utterance, nor the conclusions Austin was led to by them. Whether or not he was right to set up a distinction and then immediately go about watering it down and weakening it to the point of making one doubt its existence, it nonetheless remains true that linguistic matter serves as a basis for the analysis in this case, and we are all the more interested in it because we have ourselves independently pointed out the special linguistic situation of this type of utterance. Several years ago, while describing the subjective forms of the linguistic utterance,[9] we gave a brief indication of the difference between *I swear*, which is an action, and *he swears* which is nothing but a description of a fact. The terms "performative" and "constative" had not yet appeared,[10] but, nevertheless, that was the substance of their definition. Now the occasion presents itself to extend our own views and make them more precise by confronting them with Austin's.

It is necessary first of all to delimit the field of the examination by specifying the examples that we consider adequate. The choice of examples is of prime importance here, for we must first propose those which are obvious, and it is from the reality of usage that we shall extract the nature of the functions and finally the criteria of the definition. We are not at all certain that the locutions cited above (*I welcome you; I apologize; I advise you to do it*) can be given as conclusive for the notion of the performative.

At least, they are not proof today because social life has made them so trite. Since they have fallen to the rank of simple formulae, they must be brought back to their original sense in order for them to regain their performative function. For example, to say *I offer my apologies* is a public acknowledgement of wrong, an act that calms a quarrel. One might discover, in expressions that are even triter, residues of performative utterances; *good morning* in its complete form, *I wish you a good morning*, is a well-wishing performative that has lost its primitive solemnity and power. But it would be a separate task to search out for the performatives that have fallen into disuse in order to reanimate them within contexts of usage which are today abolished. Rather than undertake such exhumations, we are interested in choosing performatives in full use which will lend themselves directly to analysis.

We might propose a preliminary definition by saying that performative

utterances are those in which a declarative-jussive verb in the first person of the present is constructed with a dictum, as in *I order* (or *I command, I decree*, etc.) *that the population be mobilized*, in which the dictum is represented by *the population is mobilized.* It is really a dictum since the explicit utterance is indispensable to the text's having the quality of a performative.

Another variety of such utterances is given by the construction of the verb with a direct object and a predicative term: *I declare him elected*; *We find you guilty*; *I name X the director*; *I designate you as my successor*; *I charge you with this mission* (whence the title "chargé de mission"); *I delegate you as my representative* (whence the title of "delegate"); *We make you a knight* (in which the verb *make* is indeed a performative of speaking). Or again, without any difference: *I relieve X of his functions*; *I let him off*; *I except him*; *I exonerate him*; etc.

This preliminary delimitation immediately permits the exclusion of such utterances as: *I know that Pierre has arrived*; *I see that the house is closed.* It so happens that (1) *know* and *see* are not verbs of the performative category, as will be indicated further on; (2) a proposition such as *Pierre has arrived*, or *the house is closed*, is not a dictum but a factum; (3) the whole utterance in its effective use does not fulfil the performative function.

On the other hand, we must recognize as authentic and admit as performatives utterances that are not obviously so because they are only implicitly attributed to the authority entitled to produce them. These are utterances that are in use today in official formulations: *Mr. X is named minister plenipotentiary*; *The chair in Botany is declared vacant.* They do not require a declarative verb (I decree that . . .) and have been reduced to the dictum, but this dictum is published in an official document, signed by the authority, and sometimes accompanied by the inserted word "hereby." Or again, the pronouncement of the dictum is reported impersonally and in the third person: *It is decided that . . .*; *The president of the republic decrees that. . . .* The change consists of a simple transposition. The utterance in the third person can always be reconverted into a first person and again assume its typical form.

That is one area in which performative utterances are produced; the area of acts of authority. We shall now open up another in which the utterance does not emanate from a recognized power but posits a personal commitment for the one who utters it. Alongside acts of authority publishing decisions that have the force of law, there are utterances of pledges that relate to the person of the speaker: *I swear . . ., I promise . . ., I make a vow . . ., I pledge myself to . . .*, as well as, *I abjure . . ., I repudiate . . ., I renounce . . ., I abandon . . .*, with a variant of reciprocity: *we agree . . .*; *it has been agreed between X and Y that . . .*; *the contracting parties agree . . .*

In any case, a performative utterance has no reality except as it is authenticated as an *act*. Outside the circumstances that make it performative, such an utterance is nothing at all. Anybody can shout in the public square, "I decree a general mobilization," and as it cannot be an *act* because the requisite authority is lacking, such an utterance is no more than *words*; it reduces itself to futile clamor, childishness, or lunacy. A performative utterance that is not an act does not exist. It has existence only as an act of authority. Now, acts of authority are first and always utterances made by those to whom the right to utter them belongs. This condition of validity, related to the person making the utterance and to the circumstances of the utterance, must always be considered met when one deals with the performative. The criterion is here and not in the choice of verbs. Any verb of speaking, even the most common of all, the verb *say*, is capable of forming a performative utterance if the formula, *I say that . . .*, uttered under the appropriate conditions, creates a new situation. That is the rule of the game. A meeting of an official nature cannot begin until the chairman has said, *la séance est ouverte*. The audience knows that he is chairman; this relieves him of having to say, "Je déclare que la séance est ouverte," which would be according to rule. Hence, in the mouth of the same person, *la séance est ouverte* is an act, while *la fenêtre est ouverte* is a statement of fact. This is the difference between a performative and a constative utterance.

Another condition results from this one. The performative utterance, being an act, has the property of being *unique*. It cannot be produced except in special circumstances, at one and only one time, at a definite date and place. It does not have the value of description or prescription but, once again, of performance. This is why it is often accompanied by indications of date, of place, of names of people, witnesses, etc.; in short, it is an event because it creates the event. Being an individual and historical act, a performative utterance cannot be repeated. Each reproduction is a new act performed by someone who is qualified. Otherwise, the reproduction of the performative utterance by someone else necessarily transforms it into a constative utterance.[11]

This leads us to recognize in the performative a peculiar quality, that of being *self-referential*, of referring to a reality that it itself constitutes by the fact that it is actually uttered in conditions that make it an act. As a result of this it is both a linguistic manifestation, since it must be spoken, and a real fact, insofar as it is the performing of an act. The act is thus identical with the utterance of the act. The signified is identical to the referent. This is evidenced by the word "hereby." The utterance that takes itself as a referent is indeed self-referential.

Should the formal framework that up to this point we have been assigning to

the performative utterance be expanded? Austin classes utterances in the imperative as performatives: "To say, 'Shut the door,' plainly enough, is every bit as performative as to say: 'I order you to shut the door.' "[12] This would seem to go without saying since the imperative is the form of "order" par excellence. Actually this is an illusion which is almost enough to create a very serious misunderstanding concerning the very nature of the performative utterance. The modalities of its linguistic use must be considered most attentively.

An utterance is performative in that it *denominates* the act performed because Ego pronounces a formula containing a verb in the first person of the present: "I *declare* the meeting adjourned"; "*I swear* to tell the truth." Hence a performative utterance must name the spoken performance as well as its performer.

There is nothing like this in the imperative. We must not be deceived by the fact that the imperative produces a result, that *come here!* actually makes the person to whom one spoke come. It is not this empirical result that counts. A performative utterance is not performative in that it can modify the situation of an individual, but in that it is *by itself* an act. The utterance *is* the act; the one who pronounces it performs the act in denominating it. In this utterance the linguistic form must conform to a specific model, that of the verb in the present and in the first person. It is completely otherwise with the imperative. Here we have to do with a specific modality of discourse. The imperative is not denotative and does not have the communication of content as its aim; rather it is characterized as pragmatic and aims to act upon the hearer to indicate a behavior to him. The imperative is not a verbal tense; it does not admit of a temporal sign or a personal reference. It is a simple semanteme employed as a jussive form with a specific intonation. It can thus be seen that an imperative is not the equivalent of a performative utterance by reason of the fact that it is neither an utterance nor performative. It is not an utterance because it does not serve to construct a clause with a personal verb; and it is not performative because it does not denominate the spoken act that is to be performed. Thus, while *Come here!* is indeed an order, linguistically it is something other than saying, "I order you to come here." There is no performative utterance unless it contains the mention of the act, namely, *I order*. The imperative, on the other hand, could be replaced by any procedure that would produce the same result, a gesture, for example, and would no longer have a linguistic reality. The criterion, then, is not the behavior expected of the interlocutor, but the form of the respective utterances. The difference results from the fact that the imperative produces a certain behavior, while the performative utterance is the very act it denominates as well as it denominates its performer. Hence we shall reject any equating of the one with the other.

A second equivalent of the performative utterance, according to Austin, is the notice given on a sign: "Even the word 'Dog' by itself can sometimes . . . stand in place of an explicit and formal performative: one performs by this little word the very same act as by the utterance, 'I warn you that the dog is about to attack us' or by 'Strangers are warned that here there is a vicious dog.' "[13] Actually it is to be feared that here again are the effects of a confusion. On a sign, "Dog" is a linguistic signal, not a communication and still less a performative. Following Austin's line of thought, the term "warning" acquires an ambiguous role since it can be taken in two distinct senses. Any "iconic" or linguistic signal (a shop sign, a street sign, etc.) "gives notice [or warning]." The horn on a car is called the "avertisseur" [from Fr. *avertir*, "to warn, give notice"]. Similarly, the sign "Dog" or "Beware of the dog" could indeed be interpreted as a "warning," but that is something very different from the explicit statement, "I warn you that . . ." The sign is a simple signal: it is up to you to draw what conclusion you wish as to your behavior. Only the formula, "I warn you that . . .," assuming that it has been produced by someone in authority, is a performative notice. An extralinguistic implication must not be taken as the equivalent of a linguistic performance; these types arise from two entirely different categories. In the signal, it is we who supply the function of warning.

And so we see no reason for abandoning the distinction between the performative and the constative. We believe it justified and necessary, provided that one maintain it within the strict conditions of use that sanction it, without letting the consideration of the "result obtained" intervene since this is the source of confusion. If one does not hold to precise criteria of a formal and linguistic order, and particularly if one is not careful to distinguish between sense and reference, one endangers the very object of analytic philosophy; the specificity of language in the circumstances in which the linguistic forms one chooses to study are valid. The exact delimitation of the linguistic phenomenon is as important to philosophical analysis as to linguistic description, for the problems of content, in which the philosopher is most particularly interested but which the linguist does not neglect either, gain in clarity by being treated within formal frameworks.

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TWENTY-THREE

Delocutive Verbs

THE TERM GIVEN AS THE title of this article is not yet current in linguistics. We are using it here in order to define a class of verbs which need to be recognized as both particular and general. Some of the examples of these verbs are taken from the classical languages, others from the modern languages of the western world, but this does not mean that they delimit a geographic area or a genetic family. They illustrate, rather, a similarity of morphological creations that are realized within an almost identical cultural framework. We shall see that it is not a matter of scattered phenomena but, on the contrary, of frequent formations whose commonplace use has somewhat concealed their peculiar nature.

A verb is called "denominative" if it is derived from a noun; "deverbative," if from a verb. We shall call "delocutives" those verbs which we propose to establish as *derived from locutions.*

Let us take the Latin verb *salutare,* to greet. Its formation is quite clear: *salutare* is derived from *salus, -utis*; it is thus, strictly speaking, a denominative by virtue of a relationship which seems obvious. In reality, the connection of *salutare* with *salus* requires another definition; for the *salus* which serves as a base for *salutare* is not the word *salus,* but the wish *salus!* Hence *salutare* does not signify "salutem alicui efficere," but " 'salutem' alicui dicere;"[1] not "to effect the well-being of someone" but "to say 'Greetings!' " Accordingly *salutare* must not be traced back to *salus* as a nominal sign but to *salus* as a locution of discourse; in other words, *salutare* refers not to the notion of *salus* but to the formula "salus!," however we may reconstruct that formula in the historical usage of Latin.[2] This double status of *salus* explains why one can say both *salutem dare* 'to give salvation' (= 'to save')[3] and *salutem dare* 'to give "greetings" ' (= 'to greet').[4] Actually two forms of *salus* are distinguished by this, and only the second expression of *salutem dare* is equivalent to *salutare.* And so we see that, appearances notwithstanding, *salutare* is not derived from a noun endowed with the virtual value of a linguistic sign, but from a syntagm in which the nominal form is realized

as "a term to utter." Hence such a verb is defined by its relation to the formulaic locution from which it is derived and will be called delocutive.

As soon as one has become aware of this, one is led to revise a good number of verbal derivations which have been considered—on the surface—to be denominatives. In the same etymological family as *salutare*, we find the case of *salvere*. Taking account only of morphological relations, it would seem that the adjective *salvus* had produced two verbal denominatives: *salvare* and *salvere*. This would be a seriously mistaken opinion. Whatever importance is attached to establishing exact relationships, two distinct planes of derivation must be recognized. The true and only denominative of *salvus* 'safe' is *salvare* 'to make safe, to save' (which is attested only in Christian Latinity; it is *servare* which held its place in the classical era). But *salvere* is something entirely different from a verb of state taken from *salvus*.

The essential fact to see is that *salvere* is derived not from *salvus* but from the formula of greeting *salve*! (*salvete*!), for this verb *salvere* has in reality only a single form, the infinitive *salvere*, which is employed in locutions such as *jubeo te salvere* 'I bid you good day.' The personal forms are extremely rare; an example like *salvebis a meo Cicerone* 'you have the greetings from my (son) Cicero'[5] proclaims, by the very construction of *salvere ab . . .*, that it is an improvised expression. It follows that *salvere* is, in fact, the conversion of *salve!* into the grammatical form required by the syntax of the indirect sentence. There is, therefore, no verb *salvere*, but only one or two nonparadigmatized verbal forms that transpose the locution "*salve!*" in a reference in related discourse. From the functional point of view, *salvere* is a delocutive that has, for that matter, remained in an embryonic state.

A nonderived verb can become delocutive in one segment of its forms if its meaning and construction are conducive to this. Extremely characteristic from this point of view is the verb *valere*, of which one is quite naturally reminded here by the formula *salve, vale*. The verb *valere* 'to have vigor, to be effective' does indeed exist, and it is a verb widely used throughout all Latinity. But a specific use of it must be set apart: the epistolary formula *te jubeo valere*. The infinitive *valere* is not to be taken in its normal value here; *te jubeo valere* cannot be classified with the other uses of *jubeo* + infinitive, such as *te jubeo venire*. Here *valere* is an infinitive converted from *vale!* in such a way that *te jubeo valere* is equivalent to *te jubeo : vale!* Hence the syntactic derivation *vale!* > *valere* gives a delocutive function to *valere* in this expression.

We naturally think of the analogous situation of the Greek infinitive *khaírein*. On the one hand we have the infinitive in its normal function: *khaírein táll' egó s' ephíemai* 'I give you leave to take your pleasure regarding all the rest';[6] but *khaírein* in its formulaic use in *khaírein tini légein* 'to send

one's greetings to someone' represents the delocutive form that transposes the imperative *khaîre* 'greetings!'

The creation of delocutive verbs is effected under the pressure of lexical necessities and it is connected with the frequency and importance of pregnant formulae in certain types of culture. Latin offers several examples that are very instructive in their diversity. If *negare* is substantially derived from *nec*, it is insofar as it signifies 'to say *nec*' (with the emphasis on *to say*). Here again the basic term is one that forms an entire locution, in this case *nec*, conveying a negative judgment and constituting a sentence all by itself. Another delocutive is *autumare*, which is properly 'to say *autem*,' hence 'to argue, to assert.' It cannot be imagined that particles like *nec* or *autem* would have given rise to derived verbs if they had been taken in their logical function. It is only as formal elements of discourse that *nec* or *autem* lend themselves to the formation of verbs. Those verbs which have the exclusive connotation of "to say . . ." are delocutives in the strictest sense.

We know that Lat. *quiritare* 'to call for help' is to be explained literally as 'to shout *Quirites!*' For that we have the testimony of Varro: "quiritare dicitur is qui Quiritium fidem clamans implorat,"[7] and in addition, several examples of *quiritatio*, in the form of the appeal *Quirites!* or *porro, Quirites!*, have been preserved in literature.[8] Such a verb can only be delocutive since the base term is not the designation *Quirites*, but the call *Quirites!* Otherwise *quiritare*, if it were a denominative, would have to mean "to make someone a Quirite." The difference is obvious.

We shall find in this mode of derivation the means for better understanding the meaning of an important term in ancient Roman ritual, the verb *parentare* 'to make a funeral oblation in memory of someone.' The relation with *parens* is obvious, but how should it be interpreted? A denominative *parentare* from *parens* would have to mean '*to treat someone as *parens*,' which omits the essential point. How then does it happen that the verb is restricted to funerary use? No one seems even to have seen the difficulty. It can be solved by an induction which we shall base on the following text. At the death of Romulus, or rather, after his sudden disappearance, Livy tells us that the people were at first seized with fright: *deinde a paucis initio facto deum deo natum, regem parentemque urbis Romanae salvere universi Romulum jubent* 'Then when a few men had taken the initiative, they all with one accord hailed Romulus as a god and a god's son, the King and Father of the Roman City.' A careful reading of this passage, in the midst of a narration that is so rich in authentic traditions, can uncover in Livy's formulation an expression which was certainly taken from an archaic ritual. With the expression *parentem salvere jubent*, it seems to us that we can restore a solemn formula that consisted of the appeal, *'parens, salve!'* Livy preserves for us the

very formula of the *conclamatio* in the indirect syntax. This hypothesis becomes a certainty when the very same expression is found in a famous episode: during the celebration of the anniversary of the death of Anchises arranged by Aeneas, after the funeral games, when all the rites have been performed, he casts flowers upon the tomb of his father and utters the words, *salve, sancte parens, iterum.*[10] The agreement would appear decisive. This rite is exactly that of a *parentatio.* Here we find the explanation of *parentare,* which must signify literally, 'to utter the formula *salve, parens!*' The locution is reduced to its essential term, *parens,* on which *parentare* was formed, a typical delocutive.[11]

All that has been said of the relationship between Lat. *salus* and *salutare* is also valid for Fr. *salut* and *saluer,* as well as for the corresponding pairs in other Romance languages. It is the same relationship of locution to delocutive, and this relationship has to be posited synchronically without regard to the historical descendence from Lat. *salutem* to Fr. *salut.* It is not difficult at present to put into the same class Fr. *merci* and *(re)mercier* (O.F. *mercier*). We know from childhood that *remercier* means 'dire merci'; nevertheless it is important to stress the relationship through '*dire* (and not *faire*) merci.' *Merci* in its lexical sense of 'grace' (cf. *demander merci*) would produce a denominative *(re)mercier* in the sense of 'to do a favor, to reprieve,' which is never the case. Only *merci!* as a conventional locution permits the justification of *(re)mercier,* which thereby is characterized as a delocutive, not as a denominative. Yet it must not be thought that the use of *merci!* as a locution was necessarily to lead to the creation of a verbal derivative like *remercier.* One could have recourse to distinct expressions. Such for example is the situation in Russian, in which the formula *spasibo!* 'thank you' has not produced a derived verb and remains independent of the verb *blagodarit'* 'to thank.' On the other hand, Eng. *to thank* and Germ. *danken* are clearly delocutives in relation to the substantives *thank(s), Dank.* Even in Gothic the locution *þank fairhaitan* (= **Dank verheissen*), to translate Gr. *khárin ékhein* (Luke 17:9), shows that *þank* had become a fixed term, henceforth detached from *þagkjan* 'denken.'

Since the basic term is taken so to speak as the name of the notion and not as the expression of the notion, modern languages retain the possibility, illustrated above by Lat. *negare* and *autumare,* of constructing a delocutive from a particle, on condition that this particle can be employed as a locution. Thus we have in English *to hail* 'to shout "hail!" '; *to encore* 'to shout "encore!" '; in American English, *to okay* and even *to yes*;[12] in French, *bisser* 'to shout, "bis!" ' One might cite in Old High German a verb *aberen* 'to repeat,' taken from *aber,* like Lat. *autumare* from *autem.* We shall also consider Fr. *tutoyer* and *vouvoyer* as delocutives since they signify nothing other

than '*to say* tu (vous).' It is obvious that a denominative of *tu* would be impossible; *tu* is not a quality that one can confer—it is a term of address of which *tutoyer* is the delocutive.

Most of the verbs cited up to now are related by conventions to social life. Since the general conditions of culture are highly similar in the various modern western societies, it may seem natural that we encounter the same expressions in several languages. But the similarities that have been observed might be the result either of independent creations or, on the other hand, of influences of one language upon another. It would not be without interest to be able to state precisely the exact nature of the process in each case. Meanwhile the definition given here for delocutive verbs enables us to make the necessary distinctions.

Thus in Gothic the adjective *hails* 'healthy, in good health' has a formulaic use in the term *hails* 'khaîre! greetings!' But the derived verb *hailjan* only means 'to cure'; it is a denominative. There is no *hailjan* '*to greet.' It is in a more recent phase of Germanic that there appears a new verb, O.H.G. *heilazzen*, O.Ice. *heilsa*, O.E. *halettan* 'to hail,' which is a delocutive. It was probably created on the model of Lat. *salutare*.

We notice also that Slavic agrees with Latin in the relation of O.Slav. *celŭ* (Russian *celyi*) 'salvus' to *celovati* 'salutare' (Russian *celovat'* 'to embrace'). Is this an independent creation in Slavic? The answer emerges from the very definition of the delocutive. The existence of an adjective *celŭ* is a necessary but not the only condition for the creation of a delocutive *celovati*; in addition it is necessary that the base form be susceptible of a formulaic use. Now we do indeed have in Slavic the equivalent of the Lat. *salvus*, but not that of Lat. *salve!* It is thus highly likely that the correlation *celŭ* : *celovati* was a Slavic calque from Latin, directly or through Germanic.

The same question might be posed and solved in connection with a similar concordance between Armenian and Iranian. In Armenian there is *druat* 'eulogy, praise,' and *druatem* 'to greet, praise, acclaim,' like Lat. *salus* : *salutare*. Now this term comes from Iranian (Avest. *druvatāt-* 'salus').[13] From this one might jump to the conclusion that Armenian took the present derivative from Iranian as well as the noun. But it is to be observed that if Iranian has indeed converted the noun *drūd* 'health' into a formula of salutation—Middle Persian *drūd abar tō* 'greetings to you!'—it has only *drūdēn-* as a delocutive verb. It follows that *druatem* was created in Armenian itself through autonomous derivation.

Ultimately, it is the resources and the structure of each linguistic system which decide this possibility of verbal as well as all other derivations. It is instructive to observe from this standpoint the differences of behavior among languages starting with a common lexical situation. Let us take for

example an expression with the same sense in three languages: Germ. *willkommen*, Eng. *welcome*, Fr. *bienvenu*. It is its use as a formula of welcoming which has determined its development in each language. The Germanic expression was so closely associated with a rite of welcome that it became, borrowed by O.F. *wilecome*, It. *bellicone*, the name for the large cup of hospitality. Now a delocutive is realized in English in the verb *to welcome* 'to say "welcome!" ' German has not gone that far; there is no verb **willkommen* but only a locution, *willkommen* (adj.) *heissen* 'to bid someone welcome.' In French the language has encountered a difficulty which it has only partially surmounted. There was a reluctance to derive from the adjective *bienvenu*, obvious in meaning and formerly separable (*très bien venus soiés*, 13th c.), a delocutive, **bienvenir* (*quelqu'un*), which would have been the exact equivalent of *to welcome* (*someone*). But a step has been made in that direction by the creation of an infinitive, *bienvenir*, which is limited to the expression *se faire bienvenir de quelqu'un*. The point of departure is the expression *être bienvenu* (*de quelqu'un*), treated as a passive, on which a causative *se faire bienvenir* has been established in the same way that *être bien vu* leads to *se faire bien voir* (*de quelqu'un*). But these are only approximations of a delocutive that was not achieved.

Nothing is apparently more simple than the sense of the Latin *benedicere* 'to bless,' starting with the two morphemes that compose it, *bene* and *dicere*. This example has a particular interest for the present analysis because the form actually contains *dicere* and makes us suspect the condition of a delocutive. But examination reveals a history that is much more complex and less lineal, and whose description remains to be made. We shall limit ourselves for our purpose to indicating the most salient points.

1. There was a use of *bene dicere* that has not been pointed out. It occurs in a passage in Plautus: *quid si sors aliter quam voles evenerit?—Bene dice!* 'what will happen if your lot turns out other than you wish?—No evil forebodings!'[14] Here Plautus with that locution *bene dicere* is certainly imitating Gr. *euphḗmei!* Moreover, nothing proves that this *bene dice!* ever led to a verb *bene dicere* in the sense of Gr. *euphēmeîn*, because even in Greek there was no verb *euphēmeîn* but only an infinitive *euphēmeîn*, a transposition of the imperative *euphḗmei* (*euphēmeîte*) in an expression like *euphēmeîn keleúein* 'to invite to utter words of good omen,' which is the ritual formulation of "to invite silence."[15]

2. The sense of the formula *bene tibi dico* 'I wish you well'[16] is different. We must not think, as seems usually the case, that *bene dicere* literally signifies 'to wish well'; *dicere* here is not to be taken absolutely and, besides, has never signified 'to wish.' *Bene* must be understood as the objective term of *dicere*: "*bene!*" *dicere alicui* 'to say *bene!* to someone.' This *bene!* is an interjection

of a wish such as is met in many expressions: *bene mihi, bene vobis* 'to my good health, to yours!" in Plautus;[17] *bene nos; patriae, bene te, pater, optime Caesar* 'to our good health, to yours! father of the country!' in Ovid,[18] etc. From the very fact that the two components retain their autonomy, *bene dicere* did not succeed in taking the place of an authentic delocutive as would have been a verb derived directly from *bene!* We might imagine a German delocutive **pros(i)tieren* which would give an idea of it.[19]

3. A third acceptation appears when *bene dicere* is used in the classical language for 'to praise, to eulogize someone.' This is again a development that is due to a literary influence: *bene dicere* serves to translate Gr. *eulogeîn*, which is quite different from *euphēmeîn*.

4. Finally, when Gr. *eulogeîn* was itself chosen to render Hebr. *brk*, it was *benedicere* (now becomes a single sign) which remained the Latin equivalent for it, but this time in the new Judaeo-Christian value of 'to bless,' producing in its turn *benedictus* and *benedictio*. This is the modern notion.

In order to complete the characterization of this type of verbal derivation, it seems convenient to ward off two possible confusions. In the first place, we must distinguish carefully between delocutives and verbs derived from interjections: Fr. *claquer, huer, chuchoter*, Engl. *to hush, to boo*, etc. A delocutive always has as its root a *signifier* that can be interjected into discourse without ceasing to be a signifier, while verbs like *claquer* are constructed on simple onomatopoeias. Here the distinction is easy. A little more insidious is the temptation to confuse the delocutives with what are called "verbs of wishing" in the traditional grammars. Of course expressions like *welcome!* and *salut!* serve to transmit a wish. But this psychological background is alien to the problem. The delocutive is defined not by the intentional content but by the formal relationship between a locution and a verb denoting the utterance of that locution. The meaning of the constituent locution matters little. The difference appears clearly if we compare the "verb of wishing" par excellence, *to wish*, with a delocutive like *to greet*. The word *wish* is not a formula of wishing; it is a substantive like any other, and the derived verb, *to wish*, is a simple denominative, while *greetings* is certainly a substantive, but also in the form *greetings!* a formula of greeting; that is why *to greet*, signifying 'to say "greetings!" ' will be called a delocutive. One should also classify as delocutives Fr. *sacrer* 'to say, *"sacré! . . ."* ,' *pester* 'to say, *"peste!"* '

The essential and signal feature of a delocutive is that it is in the relationship of "to say . . ." with its nominal base, and not in the relationship of "to do . . .," which belongs to the denominative. It is not the least instructive characteristic of this class to show us a sign of language deriving from a locution of discourse and not from another sign of language; by this very fact, delocutives are, above all, from the moment at which they are created,

verbs denoting activities of discourse. Their structure as well as the reas that summon them into existence assign them a very particular position am the other classes of verbal derivatives.

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Lexicon and Culture

TWENTY-FOUR

Semantic Problems in Reconstruction

THE IDEAS OF SEMANTICS are still presented in such vague form that in order to treat any aspect of the field, we should begin by establishing a body of rigorous definitions. But these definitions would in their turn require a discussion of the very principles of meaning. This would be a long and arduous task and the works devoted to semantics up until now give only a faint notion of it. And so in this article, which is limited to the theme suggested by the editors of this journal, we shall have to proceed empirically, on the whole, neglecting for the moment theoretical considerations in order to treat concretely several types of problems which the linguist encounters when he concerns himself with reconstruction.

In general, the criteria of a formal reconstruction can be strict because they stem from precise rules that cannot be set aside unless one is in a position to substitute more exact rules for them. The whole apparatus of phonetics and morphology enters in to sustain or refute these endeavors. But when it is a matter of meaning, one has as a guide only a certain probability based on "common sense," on the personal evaluation of the linguist, and on the parallels that he can cite. The problem is always, at all levels of the analysis, within just one language or at different stages of a comparative reconstruction, to determine if and how two morphemes which are formally identical or similar can be shown to coincide in meaning.

The only principle we shall use in the considerations that follow, by taking it for granted, is that the "meaning" of a linguistic form is defined by the totality of its uses, by their distribution, and by the types of associations therefrom. In the presence of identical morphemes with different meanings, one must ask oneself whether there is some use in which the two meanings converge. The answer is never given in advance. It can only be found after a careful study of all the contexts in which the form may appear. One does not have the right to assume what the answer is, either positively or negatively' on the basis of likelihood.

1. Take, for example, the case of the English homophones *story* 'narrative'

and *story* 'a set of rooms.' What keeps us from saying that they are the same is not our feeling that a "narration" and a "floor" are irreconcilable, but the impossibility of finding any usage of such a nature that the one meaning might be interchanged with the other. Even expressions purposely chosen for their ambiguity like *to build a story* or *the third story* (of an anthology, of an apartment building), immediately lose their ambiguity, once they are placed in an authentic context. We must then consider them distinct. It is only by way of confirmation that the etymological proof will be utilized: *story* 'narrative' < O.F. *estoire* (*historia*), but *story* 'floor' < O.F. *estorée* (**staurata*). We may not have the etymology, but even if we did, it would not by itself suffice to guarantee the present independence of two morphemes, which could, by virtue of their identical forms, have become associated through their meaning in some way and have created a new semantic unit.

2. Here is the opposite case. In French we have *voler* 'fly' and *voler* 'steal.' The two verbs are distinct in every respect. *Voler* 'fly' belongs to the semantic class of "walk, run, swim, creep," etc.; *voler* 'steal' is synonymous with "rob, purloin," etc. *Voler* 'fly' is intransitive; *voler* 'steal' is transitive. Derived forms include only one term which is common to both verbs: *vol.* Otherwise they differ: *voler* 'fly' produces *voleter, s'envoler, survoler, volée, volatile, volaille, volière;* but *voler* 'steal,' only *voleur.* This very limitation of *voler* 'steal' makes us suspect that it goes back to a specialized use of *voler* 'fly'. The condition for it would be a context in which *voler* 'fly' would lend itself to a transitive construction. This context is found in the language of falconry; it is the expression, "le faucon *vole* la perdrix" (= reaches and seizes in flight). Such is the actual condition, not presumable in advance, in which the exceptional transitive use creates a new sense for *voler*; in this situation the *vol* of the bird means both "flying" and "stealing." The coexistence of the two *voler*s should not lead us to reconcile them in an improbable unity; the peculiar situation of one of these two homonyms and especially the scarcity of its derived forms urge us to seek the typical usage that divided a unitary semantic field into two distinct parts.

3. In the evaluation of the differences in meaning that intervene among the members of a formally bound ensemble, the linguist is always inclined to let himself be guided unconsciously by the categories of his own language. Hence the semantic problems that, all things considered, come down to problems of translation. We encounter this even in those reconstructions that have never been challenged and that might pass for obvious facts. The correspondence between Gr. *títhēmi, éthēka* 'to put down' and Lat. *facere* 'to make' is an elementary datum of comparative linguistics. From that we might conclude that **dhe-* admits both the sense of "set" and that of "make." But the connection between "set" and "make" is not so clear to us that

without proof we may accept it as true for Indo-European. In our classification of ideas, "set" goes with "place, put, lodge," etc.; and "make" with "accomplish, construct, manufacture, operate," etc. The two lines do not meet. The very multiplicity of the acceptations for "make" does not seem to help us clarify the connection that is nevertheless involved in these ancient associations. In order to justify this sense-relation, linguists have had recourse to technical uses.[1] Actually the reasons must be sought in a more precise definition of the uses. First, it should be observed that even in a case in which the translation "set" is admissible, the conditions of use show that "set" properly signifies "set down something which will last from now on, which is destined to endure": in Greek, with *themeília* 'to set the foundations, with *bômon* 'to raise an altar.' That is why it is suited to signify "to establish in existence, to create"; cf. in Old Persian *būmīm adā . . . asmānam adā* 'he has set (= created) the earth, he has set (= created) the sky,' in Greek *khármat' étheken* 'he has set (= created) joys for men' (Pindar *Ol.* 2. 101), etc. In the second place, it will be noticed that one of the most frequent constructions of **dhe-* is predicative, which furnishes the usual sense of "make," both in those languages which also have "set" and in those, like Latin, which have only "make": *basiléa tina theînai* is literally *aliquem regem facere*, and an expression like *theînaí tina athánaton* is the exact equivalent of *immortalem facere*. It is enough to indicate the principle; the examples are abundant. The important thing is to see that: (1) the distinction between "set" and "make" does not correspond to the Indo-European reality in the settled form it has for us; (2) the syntactic construction of **dhe-* is an essential component of the use and the meaning; (3) the notion of "make," insofar as it is expressed by **dhe-*, is determined by particular connections which alone allow for defining it, for the definition is possible only in the terms of the language itself.

4. This situation often occurs in less recognizable forms. This presents difficulties that may arise from the fact that one or the other of the meanings considered is inexactly or too cursorily defined. We shall take as an example of this a Greek verb whose meanings do not seem to have created any problem until now. There is in Greek the verb *tréphō* 'nourish,' with numerous derivatives and compounds attesting to the same meaning: *trophós* 'foster-father,' *tropheús* 'stock-raiser,' *trophē* 'nourishment,' *dio-tréphēs* 'foster-child of Zeus,' etc. It is said to be identical with *tréphō* 'to thicken, to congeal (a liquid),' perf. *tétrophè* 'to coagulate, to be compact,' which in its turn has been attached to *thrómbos* 'blood-clot' (in spite of the phonology), then to a series of unrelated comparisons which one will find detailed in Boisacq 353 and which will not delay us here. The only important thing for us is the relationship in Greek itself of *tréphō* 'nourish' to *tréphō* 'curdle (milk).' It is

actually quite possible that the two meanings are only one, but how to check it? The dictionaries do not indicate any trouble. That of Liddell-Scott-Jones defines *tréphō* thus: "1. *thicken* or *congeal* a liquid; 2. usu. *cause to grow* or *increase, bring up, rear*, esp. of children bred and brought up in a house." The same in Bailly: "1. rendre compact; 2. rendre gras, engraisser, nourrir." Even for someone who trusts only in the "feeling" of a language, such a relationship must seem so strange as to demand a verification of the uses. That it could have been thought obvious that "to curdle (milk)" leads to the sense of "to nourish, to raise (a child)" is enough to discredit that "intuitive" empiricism which serves as the method for most reconstructions. Here the disparity of meanings seems such that a reconciliation of them could be nothing more than contrived. In reality, the translation of *tréphō* by 'nourish' in the use that is actually the most common does not suit all the examples and is itself only an acceptation of both a broader and a more precise sense. In order to account for the ensemble of semantic connections of *tréphō*, we have to define it as: 'to encourage (by appropriate measures) the development of that which is subject to growth.' With *paîdas, híppous*, we would translate it as 'to nourish, to raise (children, horses).' But there is also *tréphein aloiphḗn* 'to encourage the increase of fat' (*Od.* 13. 410); *tréphein khaítēn* 'to let his hair grow' (*Il.* 23. 142). It is here that a peculiar and "technical" development is inserted, and it is precisely the sense of "curdle." The Greek expression is *tréphein gála* (*Od.* 9. 246), which must now be literally interpreted as 'to encourage the natural growth of milk, to let it attain the state towards which it is tending,' or, prosaically, 'to let it curdle.' This is nothing other than an idiomatic connection of *tréphein* to the sense of 'to let grow, to encourage growth' that it has everywhere. From the standpoint of Greek, there is no difference between *tréphein khaítēn* 'let the hair develop itself' and *tréphein gála* 'let the milk develop.' Nor is there any difference between *tróphies paîdes* 'children who have grown (and attained the adult age)' and *kúmata tróphoenta, kúma tróphi* 'waves that have attained their full development.' There is thus no longer any problem as to the classification of the two meanings of *tréphō* since there is only one meaning, which is the same everywhere. One can conclude that *tréphō* 'to clot,' does not exist; what does exist is a use of *tréphō gála* that creates an association that is unusual to us but explicable in the Greek contexts. It can also be seen that the whole difficulty comes, basically, from differences between the lexical resources of the languages being considered. While *tréphein paîda* translates directly into English or French ('rear a child, nourrir un enfant'), *tréphein gála* requires a specific translation ('curdle milk, cailler du lait'). The linguist who asks himself, "How to reconcile 'curdle' and 'rear' or 'cailler' and 'nourrir'?" or who invents an affiliation between these two meanings, is the victim of a false prob-

lem. The question does not arise in either a modern language, in which the forms are different, or in Greek, in which the meanings are identical. This is only one among the many gratuitous difficulties created in semantic reconstruction either by an insufficient definition of the terms under discussion or by an unjustified transposition of the values from one semantic system to another.

5. The same problem could be posed, no longer within a historical language, but in the synchrony of a formal reconstruction. In Indo-European there is a root **dwei-* 'to fear' well attested by Greek *déos* 'fear' (**dweyos*) and the perfect *dé-dwoi-a* 'I have fear' furnishing the present *deidō*, by Av. *dvaēθā-* 'menace, cause of fear', by modern Arm. *erknč'im* 'I fear.' This **dwei-* 'fear' is substantially the same as the stem of the numeral **dwei-* 'two.' The resemblance persists in derivatives of historical times: Hom. *dé-dwoi-a* 'I have fear' appears to have been built upon the same stem as the adjective *dwoi-ós* 'double,' and Arm. *erknč'im* 'I fear' recalls *erku* 'two' (**dwō*); the gradation in the Homeric perfect 1st sing. *dé-dwoi-a* : 1st pl. *dé-dwi-men* is in conformity with that of the numeral **dwei-* (**dwoi-*) : **dwi-*. In short, everything seems to suggest that the forms of these two roots are identical. Is this chance? But in order to exclude chance, it must be demonstrated that the establishment of identical forms is verified in the meaning. And, what connection could one imagine between the meanings of "fear" and "two" which would not look like mere cleverness? It is nevertheless necessary to consider this more carefully, and not reject without an examination the possibility of a relation. For—this is essential—if we can regard the notion of "two" as "simple," we have no right to assume that a notion like "to fear" is equally "simple." Nothing gives us a priori assurance that it had the same semantic structure in the ancient stages of Indo-European as in the language of the present discussion. And the analysis of this semantic structure itself has as a condition the study of the uses of **dwei-* 'to fear' in situations in which we can best observe them. Homeric Greek lends itself rewardingly to such a study. For it is in a text of the *Iliad*, notwithstanding that it has been read and reread a thousand times, that a solution that had not been offered till now presents itself. Here is the passage: *lîēn méga pêma . . . eisoróōntes déidimen; en doiêi dè saosémen ē apolésthai nêas* (*Il.* 9. 229–230), literally: 'foreseeing a great disaster, we are afraid (*deidemen*); what is in doubt (*en doiêi*) is: shall we save or shall we lose the ships?' The text itself, bringing *deidemen* and *en doiêi* together in the same sentence, illuminates their relation as if by a classroom demonstration. The expression *en d(w)oyêi*[2] (*esti*) properly signifies 'the thing is in double, in doubt, *in dubio*,' that is, 'it is redoubtable.' Hence it follows that **dwei-* 'to fear' signifies 'to be of two minds [*double*], to doubt'; cf. O.F. *douter*, Mod. Fr. *redouter* 'to fear.' The situation

described in the text (the feeling when faced with a perilous alternative) restores the connection being sought for between **dwei-* the numeral and **dwei-* the verbal. Henceforth they can be considered as identical in meaning. As further proof we shall use parallels like Lat. *duo, dubius* (*in dubio esse*), *dubitare*; Germ. *zwei, zweifeln*, etc. Thus, thanks to a decisive context, a notion like "to fear" in Indo-European takes shape with its specific connections, which only its use can reveal and which are different from those that determine it today[3].

6. The necessity of making use of contexts would seem to be a methodological principle too obvious to deserve insisting upon. But when we reduce meaning to varieties of use, it becomes imperative to ascertain that the uses not only allow apparently different meanings to be brought together, but also allow us to state the reason for their difference. Factors that provoke the emergence of a new "species" of meaning should also enter into the reconstruction of a semantic process. Lacking that, the perspective is falsified by imaginary evaluations. We shall take an example from the most commonplace comparison of them all, that of Lat. *testa* and Fr. *tête*. Handbooks go on repeating that the passage of the meaning of *testa* 'crock, piece of pottery' to that of *tête* was due to jest. The explanation is found even in the most recent dictionaries.[4] It is time to look at the facts, which, moreover, are obvious; only they have not been considered. The problem begins with the term for "head" in classical Latin. It has been observed that *caput* signifies not only 'head' but also 'person' and 'capital (financial)' and 'capital (of a province)'; it enters into liaisons such as *caput amnis* 'source (or mouth) of a river,' *caput coniurationis* 'head of the conspiracy,' *caput cenae* 'principal dish of a meal,' *caput libri* 'chapter in a book,' *caput est ut* . . . 'it is essential that . . .,' etc. The number and extent of these variants weakened the specific meaning of *caput* 'head,' which led to two possible solutions. Either it could have been redetermined as **caput corporis*, which should itself have been ambiguous and which, in any case, the language rejected, or it could have been replaced by a different term. This is what happened in Latin: the language resorted to *testa*, a term that used to designate any hard shell and which was first applied to what we call today the "brain-*pan*" (cf. Fr. *boîte* crânienne, Germ. Hirn*schale*). The sense of "skull" appears clearly in late Latin[5] (Antoninus Placentius: *vidi testam de homine* 'I saw a man's skull') and it was used that early as a name for the "head"; '*testa*: caput or vas fictile' (*C.G.L.* 5:526–539), whence Old French *teste* 'skull.' It is probable that, as an anatomical term, *testa* was in use among Roman doctors long before the texts mention it. And so there is in this development neither a joke nor, as a matter of fact, a peculiarity worth noting. One might even find that the case of *testa*: *tête* has usurped its place in the traditional teaching; it simply offers another special aspect of the refurbishing that reached most of

the names for the parts of the body. From this we can trace the successive oppositions: Lat. *caput* : *testa* > O.F. *chef* : *teste* > Mod. Fr. *tête* : *crâne*. But in this corrected perspective, the considerations of *testa* as a humorous designation no longer seem to have any foundation. The real question would rather be to study how *caput* and *testa* coexisted and were delimited in late Latin, and *chef* and *teste* in Old French, in order to arrive at their current distribution. If this research remains still to be done, it is at least partly because an inexact evaluation of the nature of the process has obscured its importance.

7. Within the framework of a grand-scale comparison of several languages, one often observes that forms that are obviously related are each distinguished by a particular variety of meaning. Although the semantic unity of the family is undeniable, it does not seem capable of being defined exactly. One has the impression that the "primary meaning," preserved exactly by one language, deviates for particular reasons in each of the other languages, thus producing a composite image of the semantic situation. In general the comparatists do not take the time to examine this image when the formal correspondences are satisfying. Or if they do consider the development of one of the forms, they do so without regard to the question of the ensemble. Such, for instance, is the case of the term for 'road' : Sans. *pánthāḥ*, Av. *pantå*, Arm. *hun*, O.Slav. *pǫtĭ*, O.Pr. *pintis*, Gr. *póntos*, Lat. *pons*. The Indo-European antiquity of the terms is guaranteed by the archaisms in the inflection. We cannot say that the meaning raises an obstacle to the reconstruction of a common form. Nevertheless the divergences appear serious enough to justify an examination. The Indo-Iranian, Slavic, and Baltic words mean 'road.' But Gr. *póntos* signifies 'sea'; Lat. *pons* designates 'bridge,' and Arm. *hun*, 'ford.' Since these meanings are not equivalent and since, in the dialectal distribution, it is especially in Greek and in Latin that the divergence shows itself, one would tend to think that this disagreement results from reasons of style or of culture. In Greek one might think that poetic imagination assimilated the "sea" to a "road." In Latin, the transfer of "road" to "bridge" might be thought a result of a terra-marine civilization. These hypotheses stem from another hypothesis, not recognized as such, unformulated and unconscious: the hypothesis that the primary sense is that of "road" because it is documented in an ancient dialect like Indo-Iranian or because of the agreement between Indo-Iranian, Slavic, and Baltic, or by virtue of its "simplicity"; and the meanings of "sea" or "bridge" or "ford" would be deviations. But the uses we find in the most abundant ancient texts, in Vedic,[6] allow us to grant a more exact notion to *pánthāḥ* and to show its various shades of meaning. First of all, there are in Vedic several other terms for road, and they are all in some way distinguished from this one: *yāna-* denominates the 'road' of souls towards their rest (*devayāna*, *pitṛyāna*); *mārga-*, the path of wild animals (*mṛga*);

adhvan, the beaten track; *rāthya*, the wagon track. What characterizes the *pánthāḥ* is that it is not simply the road as a space to cover from one point to another. It implies difficulty, uncertainty, and danger, it has unforeseen detours, it can vary depending on who is traversing it, and moreover, it is not just terrestrial—birds have their road, and rivers too. The *pánthāḥ* is thus neither plotted in advance nor regularly trod. It is indeed rather a "crossing" attempted over an unknown and often hostile region, a path opened by the gods to the onrush of waters, a passage past natural obstacles, or the route that birds invent in space; in short, a way into a region forbidden to normal passage, a means of going through a perilous or uneven expanse. The closest equivalent would be "crossing" rather than "road," and it is indeed this sense which explains the diversity of the documented variants. Starting with Sans. *pathya* and into the history of Indo-Aryan, we have 'road,' but this sense is no more "primordial" than the others; it is only one of the realizations of the general signification defined here. Elsewhere these realizations are represented differently. In Greek, the "crossing" is that of an arm of the sea (cf. *Hellés-pontos*), then more broadly, of an expanse of water serving as a "passage" between two continents; in Armenian, it is a "ford"; and in Latin, *pons* will designate the 'crossing' of a stream of water or a dip in the ground, hence a 'bridge.' We are not in a position to give the exact reasons, which arise from geography or culture, for these particular determinations, all of them prehistoric. But at least we can realize that "road," "arm of the sea," "ford," and "bridge" are variants of a meaning whose reconstruction is made possible by these terms, and that the problem does not refer to the semantic aspect of the term in one language or the other but concerns each one of them and the entire family of which they are members.

8. When in the comparison of the terms of a unitary group we find ourselves in the presence of developments that are distributed in clearly marked groups, we are often obliged to indicate in which direction the meaning has varied and which of the observed meanings has produced the other. It is then necessary to refer to a criterion that is general and fixed enough not to need to be proved each time. One of the most usual criteria is the "concrete" or "abstract" character of the meaning, the evolution being supposed to have proceeded from the "concrete" to the "abstract." We shall not emphasize the ambiguity of these terms, which have been inherited from an obsolete philosophy. The question is simply to know whether, even when accepted without argument, they can furnish a principle that would be valuable in semantic reconstruction. The best way to test them would be to examine the application that has been made of them—unconsciously—in a rather important lexical problem. This is the curious case of an etymological family, well defined in its formal relations, whose meaning is distributed among

notions that are very material, on the one hand, and moral and institutional on the other.

It is the term that, in general, has to do with "trust" and which in the Germanic Middle Ages had great social and cultural importance (cf. *trust*, *true*, *truce*, etc.) The unity of meaning in the Germanic forms stands out even as they are enumerated. In Gothic we find *trauan* 'pepoithénai, to be confident,' *ga-trauan* 'pisteúesthai, to trust,' *trauains* 'pepoíthēsis, confidence,' *traustei* (from the gen. *trausteis*) 'diathēkē, pact, alliance'; in addition, O.Ice. *trūa*, O.E. *trūōn*, O.H.G. *trū(w)ēn* 'to have confidence,' derived from **trūwō*, in O.Ice. *trū* 'respect,' O.E. *truwa* 'religious respect, belief,' O.Ice. *trūr* 'faithful'; to the full development, O.E. *trēowian*, O.H.G. *triuwen* 'to trust'; a derivative, **drou-sto-*, gives O.Ice. *traustr* 'trusty, strong,' and the abstract **draustyā*, in Goth. *trausti*, O.Ice. *traust* 'confidence,' O.H.G. *trost* 'act of giving confidence, encouragement'; an adjective **dreuwo-* in Goth. *triggws*, O.Ice. *tryggr*, O.H.G. *gi-triuwi* 'faithful,' and in the O.E. noun, *treōw* f., O.H.G. *triuwa* 'fidelity.' But outside of Germanic, the related terms convey an entirely different meaning, which is, however, partially represented in Germanic as well. They designate "tree," sometimes, in particular, the "oak tree," or "wood" in general: Gr. *drûs* 'oak,' Sans. *dāru*, *dru-*, Av. *dru-* 'tree, wood,' *drvaēni-* 'wooden,' Goth., *triu* 'wood, tree' (and the corresponding forms, Eng. *tree*, etc.), Gall. *derw* pl. 'oaks,' O.Slav. *dřevo*, Russ. *dérevo* 'tree,' Lith *dervà* 'pine wood.'

How should this distribution of meaning, "tree" on the one hand, "fidelity" on the other, be organized within a set of forms which are clearly related in other ways? This whole etymological family was studied by H. Osthoff in an important chapter of his *Etymologica Parerga* (1901) significantly entitled "Eiche und Treue." He establishes the Indo-European word represented by Gr. *drûs* 'oak' as the point of departure of the whole morphological and semantic development, and claims that the moral values implied in *Treue* and *truste* proceed from it. The Gothic adjective *triggws*, O.H.G. *gitriuwi* 'getreu, faithful,' would, then, properly signify 'firm like an oak.' In the Germanic mentality, the "oak" would have been the symbol of firmness and confidence, and the image of "oak" would have inspired the whole set of the representations of "fidelity." For more than half a century Osthoff's theory has been considered established; etymological dictionaries refer to it as to a proven demonstration.[7] One would accordingly imagine this to be an illustration of a concrete designation evolving into a moral notion: an institution having a vegetable symbol as its origin.

But as soon as this construction is examined, its deficiencies are revealed. Osthoff, by putting the name of the "oak" at the point of departure for the whole derivation, admits implicitly—the argument is essential for this theory

—that the name for "oak" is Indo-European. But everything contradicts this. It is only in Greek that *drū-* signifies 'oak.' Everywhere else the sense is "tree, wood" in general: Hitt. *taru*, Ind.-Ir. *dāru-*, *drū-*, Goth. *triu*, etc., O.Slav. *drŭva* pl. In Greek itself, *dóru* applies to a tree (*Od.* 6. 167), to the wood of a ship (*Il.* 15. 410), to the wood of a lance, and to the lance. Even more to the point, the sense of "oak," which Gr. *drûs* has in the classical language is secondary and relatively recent: a scholiast (ad *Il.* 11. 86) still knew that "the ancients called any kind of tree *drûs* (*drûn ekáloun hoi palaioì . . . pân déndron*). The generic term for "tree" denoted the most important tree, the "oak," probably under the influence of the beliefs attached to the prophetic oaks of Dodona. Moreover the common name for the tree, Gr. *déndrewon*, can be explained as a broken redoubling with dissimilation, from **der-drew-on* (cf. Lat. *cancer* from **kar-kro*), and rests on **drew-* in the sense of 'tree.' Thus everything confirms that **dreu-* designates tree in general and that the sense of 'oak' was acquired only in Greek. There is a reason for this limitation: the oak grows only in one part of the Indo-European area, in the middle part of Europe which goes from Gaul to northern Greece and not beyond there toward the east; in fact there is no Indo-Iranian term for "oak." Thus Osthoff's demonstration is weakened in its very principle: the signification that he believed to be the original one appears to be late and limited. Consequently the relation between the notions he set up loses its principal support.

This must be carried further and the methodological flaw of the whole line of reasoning exposed. The morphological correlations and the distribution of the forms do not indicate a relation between the terms that denote "tree" and those for "fidelity" such that the second would derive from the first. They are equally distributed in each language and both depend upon the same signification, which allows itself to be reconstructed with the aid of the ensemble of attested forms. The formal base must be set up as I **der-w-* II **dr-eu-*, with the sense of 'to be firm, solid, sound.' Cf. Sans. *dhruva-* (for **druva-* contaminated by *dhar-*), Av. *drva*, O.Pers. *duruva-* 'firm, sound,' Gr. *dro(w)ón· iskhurón* (Hes.), O.Slav. **su-dorwa* > *sŭdravŭ*, Russ. *zdóróv* 'sound,' Irish *derb* (**derwo-*) 'sure,' O.Pr. *druwis* 'faith' (< 'security'), Lith. *drútas* 'firm, powerful,' etc. Here is the natural place for the Germanic members of this group like Goth. *trauan*, *trausti*, etc., which are directly derived from this base and which fixed the terminology of "confidence" in Germanic. Hence it is this common signification that the designation of "tree" shares in the same degree. Contrary to Osthoff's reasoning, we consider that **derwo-*, **drwo-*, **dreu-* in the sense of 'tree' is only a particular use of the general sense of "firm, solid." It is not the "primitive" name of the oak which created the notion of solidity; on the contrary, it is by the expression of solidity that trees in general and the oak in particular were designated: Gr. *drûs* (Gall.

derwen) signifies literally 'the solid, the firm.' There is a parallel in Iranian in which 'tree' is called *draxt* (M. Pers.), *diraxt* (Mod. Pers.), which goes back to Av. *draxta-*, the adjective of *drang-* 'to hold firm.' The romantic conception of the oak as the inspiration of fidelity gives way to a less peculiar and probably more exact representation: the name **dru-* for tree has nothing "primitive" about it; it is a qualification which once attached to its object became its designation and was separated from its semantic family; hence the coexistence of two morphemes, which have become distinct, like *tree* and *true* in English. Here it can be seen how fallacious the criterion of the "concrete" and the "abstract" is when applied to a reconstruction, and how important is the necessary distinction between signification and designation.

9. The difference of meaning and the difficulty of reconstruction reach an even higher degree when the forms are distributed among distinct and grammatically irreconcilable classes. In the cases considered up to this point, we had to do with forms whose status, at least, was not at odds with a direct comparison, the meaning alone giving rise to discussion. But how to operate when the formal similarities are contradicted by functional differences? We can easily establish a relation between nominal and verbal forms that are distributed according to the principles of derivation. Can we bring together into the same semantic family forms of which some are particles and the others are verbals or nominals without any common syntactic use? Such a problem is posed, however, by the coexistence of forms of different series that group themselves around the Indo-European term **pot(i)-*, which designates the 'chief.' In trying to solve it, we shall answer the question of method brought up by this case.

An I.E. **pot(i)-* is represented in a free state in Sans. *pati-* 'chief' and also 'husband,' Gr. *pósis* 'husband,' compounded in Sans. *jás-pati-* 'master of a line of descendants' (a very productive Indo-Iranian type), Gr. *des-pótēs*, Lat. *hospes*, *compos*, Lith. *viešpats* 'lord,' Goth. *bruþ-faþs* 'bridegroom,' etc. Lat. *potis* and an ensemble of derivatives, *potior*, *possum*, *possideo*, can easily be connected to this. The meaning, uniformly distributed, is defined as 'master, chief,' with a development in Latin and Italic toward the notion of "power." But there is a homophony between this **pet-/*pot(i)-* 'chief' and a particle of identity, **pet-/pot(i)-*, which means 'same, self': Hitt. *-pet*, Av. *-paiti*, Lat. *-pte*, Lith. *-pat*. The two forms do not always occur together; Hittite does not have a form of **pot(i)-* 'chief,' and the particle seems to be lacking in Sanskrit and Greek. But in the majority of languages both appear without there always being a discernible connection between them. The reconstruction of a semantic relationship must necessarily start with a decision of principle: which of these two classes should be taken as the point of departure? The question has been settled in opposite ways. Meillet decided

that one should proceed from **poti-* 'chief' and that the value of Lith. *pats* '(him)self' resulted from an appositional use, which Meillet did not go on to explain;[8] this hypothesis is hardly compatible with the obvious antiquity of the particle. More likely, but not exempt from difficulties, is the opinion of H. Pedersen, who takes the meaning of "master" from "self," citing not exact proofs but parallels: he compares certain uses of "himself" to designate the "master of the house," such as Gr. *autós*, Lat. *ipse*, Dan. dial. *han selv* 'the mistress of the house,' Russ. *sam*, *sama* 'barin i barynja.'[9] But all that these examples can prove is that in a very special situation, as is that of familiars or domestics, a pronoun suffices to refer to the personage of authority. Slaves in Greek or Latin comedy express themselves thus, but not free men in the solemn language of religion or poetry. The use of *ipse* for the master of the house is a simple fact of "parole," and it has never reached the level of "langue." Besides, it is too sporadic and recent to account for the obviously archaic and "noble" forms such as the Sanskrit pair *pati/patni*, and the Greek, *pósis/pótnia*. It has not been observed that this "ancillary" use of *autós*, *ipse*, etc., has ever produced a lexical denomination for "master" as such, or a derivation starting with this sense. In short, these parallels are both too limited in their sphere and too "familiar" in style for them to be seen as other than "situational variants." The pronouns *ipse* and *autós* can occasionally designate the master; they have never signified "master" outside their context. They do not assist us in recovering the connection between the two forms of **pot(i)-*.

The manner in which the forms of each series are distributed respectively is worthy of observation. It will be noted that Hittite, an archaic dialect in many respects, possesses only the particle *-pet* 'self' (*apas-pet* 'himself, he exactly'), and there is no trace of a nominal form like **pot(i)-*. This makes one assume that **pot(i)-* has a chance of being secondary. On the other hand, the nominal forms of the "master" group are not linked to any verbal root; when there is a verbal form, such as Sans. *patyate*, Lat. *potior*, it is clearly denominative. This is, therefore, a lexical family which is entirely and exclusively nominal. The terms under consideration are thus on the one hand a particle, on the other, a nominal form.

It is necessary first to state precisely the function of the particle *-pet*. There are two distinct expressions of equivalence in the Indo-European languages, which can be illustrated by the example of Gothic, which possesses both *sama* and *silba*; by *sama* 'same' the equivalence is announced as a permanent fact of the object recognized in different aspects or in different instances; by *silba* 'self' the equivalence is opposed to otherness: "himself" to the exclusion of all others. It can be mentioned in passing that the value of emphasis and of contrast inherent in the expression of the "self" category

leads to its being signalled either by reference to the corporal being (hence, Ind.-Ir. *tanū-*, Hitt. *tuekka-*, O.H.G. *leip*, Fr. *en personne, en chair et en os*, etc.), or by an emphatic denomination like the superlative (hence Germ. *selbst*, Gr. *autótatos*, Lat. *ipsissimus* [cf. *met-ipsimus* > O.F. *medisme*, Fr. *même*], Slav. *sam* as the superlative, etc.) as "exemplary" personifications of the notion. The function of the enclitic *-pat* in Hittite, *-pat* in Lithuanian, whose use is inherited, obviously answers to the notion of "self": Hitt. *apaš-pat* 'that one exactly, himself,' Lith. *ten-pat* 'the self-same place,' *aš pats* 'myself,' with a superlative value developed in Lithuanian: *pàts pirmàsis* 'the foremost.'

In this function, the particle is attached to the pronoun, and then there occurs a selective association, which appears clearly in Iranian, in which *-pati* is incorporated into the reflexive—Av. *xᵛaē-paiti-* 'oneself,' and especially the derived *xᵛaepaiθya-*, O.Pers. *(h)uvāipašiya* 'one's very own,' in the O.Pers. predicative construction *(h)uvāipašiyam kar-* 'proprium facere, to appropriate' —for any person whatsoever, but always for one person. From this use can be deduced the explanation of the nominal **pet/pot*, suffixed and nominalized by *-i* in **poti*, which means the person in his own right, the "ipse" with some sort of determination. Actually the derivative of *pati-*, Sans. *patya-*, constructed with the dative, preserves the sense of "to be proper to": *asutís cárur mádāya patyate*, lit. 'an agreeable beverage is proper to drunkenness' (*R.V.* 8. 1. 26), and Av. *paiθya-* signifies 'to have in one's own right' (and not 'to be master of'). This definition of **poti* as 'the ipse, the being in person' is conditioned by the determination that actually always accompanies the term in the most ancient expressions: the **dems poti* (Av. *dəng pati-*, Ved. *dam-pati*, Gr. *des-pótēs*) is literally 'the *ipse* of the house, the being itself of the family,' the one who *personifies* the social cell. That is what we transpose into the terms of our own culture by the usual translation '*master* of the house.' From this proceed all the other compounds, which gradually come to include more territory: Sans. *viś-pati*, Av. *vis-paiti-*, Lith. *vieš-pats* 'the one who is the ipse of the **wik-* = master of the clan,' etc.

We find two indications that corroborate this interpretation. The sense of Lat. *hospes* (**ghos-pet-*), which designates the one who receives as well as the one who offers hospitality, is better explained as the "ipse" rather than the "master" of the reciprocal benefit designated by **ghos(ti)-*, in which the two members are equal partners. In addition, it now becomes possible to connect the series of compounds in **-poti* to a formation of the same meaning, but of different structure, which belongs to western Indo-European. Saussure once called attention to the curious formation of the following terms: Lat. *dominus tribunus*, Goth. *þiudans* 'king,' *kindins* 'hēgemōn,' O.Ice. *drottenn* 'prince', they are all secondary derivatives in **-no-* of base terms for designating chiefs:

that one should proceed from **poti-* 'chief' and that the value of Lith. *pats* '(him)self' resulted from an appositional use, which Meillet did not go on to explain;[8] this hypothesis is hardly compatible with the obvious antiquity of the particle. More likely, but not exempt from difficulties, is the opinion of H. Pedersen, who takes the meaning of "master" from "self," citing not exact proofs but parallels: he compares certain uses of "himself" to designate the "master of the house," such as Gr. *autós*, Lat. *ipse*, Dan. dial. *han selv* 'the mistress of the house,' Russ. *sam, sama* 'barin i barynja.'[9] But all that these examples can prove is that in a very special situation, as is that of familiars or domestics, a pronoun suffices to refer to the personage of authority. Slaves in Greek or Latin comedy express themselves thus, but not free men in the solemn language of religion or poetry. The use of *ipse* for the master of the house is a simple fact of "parole," and it has never reached the level of "langue." Besides, it is too sporadic and recent to account for the obviously archaic and "noble" forms such as the Sanskrit pair *pati/patni*, and the Greek, *pósis/pótnia*. It has not been observed that this "ancillary" use of *autós*, *ipse*, etc., has ever produced a lexical denomination for "master" as such, or a derivation starting with this sense. In short, these parallels are both too limited in their sphere and too "familiar" in style for them to be seen as other than "situational variants." The pronouns *ipse* and *autós* can occasionally designate the master; they have never signified "master" outside their context. They do not assist us in recovering the connection between the two forms of **pot(i)-*.

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the *dominus* (**domo-no-*) is the chief of the *domus* as the *þiudans* (**teuta-no*) is of the *þiuda*.[10] If we compare the series of derivatives in *-no-* with that of the compounds in *-poti*, we shall see that they are parallel and share in common elements: **domo-no* and **dem(s)poti-*; **genti-no-* (Goth. *kindins*) and **gentu-poti* (Av. *zantu-pati*); a Latin **vicinus* would be the counterpart of Sans. *viś-pati*. This correlation between the terms in *-no-* of the western domain and the compounds in *-poti*, which abound especially in Indo-Iranian, suggests that they express the same notion. Now a derivative in *-no-* can hardly convey by itself the specific sense of "chief, master"; **domo-no-*, **genti-no-*, must simply signify 'the one of the *domus*, the one of the *gens*,' that is, in fact, the one who personifies it and in some way assumes it, who acts in its name and has authority over it. That is precisely the value which **poti* indicates by itself: the representative personage, an ipse invested with authority in the social unit, whom we call the "master."

If this is so, the base of the semantic history of **poti* 'master' is to be found in the syntagms or in the compounds of which **poti* is the second member. This is what the facts confirm: Sans. *pati-* 'master' in the free state is extracted from compounds in which it acquired its meaning. But then, what about the special acceptation of the term, that of 'husband,' attested to by Sans. *pati-* and Gr. *pósis*? Is it only the husband as "master" of the wife? This would satisfy a simplistic conception of Indo-European conjugality, but it would be belied by the feminine *patnī*, *pótnia*. The denomination is undoubtedly related to ancient usages concerning which one of the compounds, Goth. *bruþ-faþs*, informs us indirectly. The relation of *bruþ-faþs* 'numphíos, bridegroom' to *bruþs* 'numphē' is illuminated by the modern forms *Bräutigam*, *bridegroom* (for **-goom*), O.E. *bryd-guma*, in which *-faþs* was replaced by the term for 'man' (*-guma*) in order to indicate "the man of the bride," that is, "the masculine partner of the *brūti*." We must refer here to the very ancient formulae in which the future spouses were placed opposite one another as partners in an alliance; in Rome, *ubi tu Gaius, ego Gaia*; in India, *amo 'ham asmi sá tvam* 'I am he here; you are she there.'[11] The same thing is true in this case; the *pati* and the *patnī*, the *pósis* and the *pótnia* (*-póina*) are properly the 'ipse' and the 'ipsa' of the engagement that unites them. That is why the masculine partner of the *brūti* is denominated as **bhrūti-poti-*, in which **-poti* has the same function as *-pet-* in Lat. *hospes*.

In this reconstruction the nominalization of the particle *pet/pot-* in *-poti* and the use of the particle with a pronoun in order to emphasize ipse-ness can be seen as the decisive factors in the semantic history of the two morphemes to be identified. The development of the syntagms (**dems poti*) and the compounds is linked to the institutional value of the designations thus created in the very structure of Indo-European society. The man qualified

by a title in **-poti* is originally not the chief or the master but the representative of the social division.

The Latin data deserve to be considered in their totality because they represent, in their variety of meanings and syntactic functions, a summing up of the entire process. The importance assumed in Latin by the group of *posse*, *potens*, *potentia*, *potestas* and the predominance of the notion of "power" in the modern derivatives have blinded philologists and linguists to the correlations that articulate this whole semantic group and, in particular, the conditions under which this notion of "power" was formed. As a point of departure, we find the inheritance of the enclitic particle (*mea*)*pte*, which serves to stress what is peculiar to one, ipse-ness: suopte *pro suo ipsius*, *ut* meopte *meo ipsius*, tuopte *tuo ipsius* (P. Festus 409. 1). It will be noted that *utpote* signifies not 'as is possible,' but 'as is proper (to the circumstance), as is natural,' and that the sense of the comparative adverb *potius* 'rather, preferably,' superl. *potissimum* 'especially,' leads to a *pote* 'exactly, precisely, properly,' like the Hitt. *-pat* above.[12] The value of "that which is proper" is thereby introduced into the nominal forms, stressing possession as "property" [Fr. propriété, adj. propre, e.g., what is *properly* and peculiarly one's own]. In effect, *compos* signifies literally 'who is put in possession of,' not only in *compos sui* (or *mentis*, *animi*) 'who is in possession of his wits' or, as in French, "maître de soi," but also in *compos culpae* (Pl. *Truc.* 835) 'who is in possession of his fault, who identifies with it, who assumes the responsibility for it,' *compos voti* 'who has the possession of his wish, who has made it his own' (= who sees it realized), in manifest connection with the value of the Avestan compound *xᵛaēpaiθya-* 'proprius.' Such is obviously the sense of *poti-* in *possideo*, lit. 'to occupy as one's own.' From the 'ipse' to the derivative 'proprius' a relation can be traced that fixes the sense of "possession." The archaic present *potio* signifies 'proprium facere, to make something the proper possession of someone': *eum nunc potivit pater servitutis*, lit. 'his father made him the possession of slavery' [i.e., made him a slave] (Pl. *Amph.* 177). One must also take into account the decisive fact that *potis* tends to be constructed predicatively; thus we see how *potis sum facere*, lit. 'I am the *self-same* one to do—je suis *à même* de faire—*ipse* sum qui faciam,' becomes 'I *can* do.' Such is the makeup of the notion of "power," a "power" that depends on the distinctive quality of the person, on his self-identity, and not on human nature or the course of circumstances. It is the last stage of the process which leads from a particle of identity to the creation of a distinct nominal group, important and productive, and which Indo-European as well as Latin uses permit us to reconstruct with a fair degree of probability.

In these analyses, which aim above all to illustrate some simple rules of methodology, we have chosen various examples. The problems considered

are of varying complexity and of different levels, situated in the synchrony of the same language or in a perspective going back by degrees to a distant prehistory. They were chosen for their value as types and because it seemed to us that each of them could be brought to its solution. A methodology at grips with the difficulties of a real problem at least lets itself be judged by the solutions it proposes, whereas by reasoning from established conclusions one is sure of winning without risk and of teaching only what is known.

In all the cases discussed a problem of relations was involved, and it is by relations that a semantic structure is defined. The alert reader will undoubtedly discern in the procedure followed here the same preoccupations that come to light in other parts of present-day linguistics, and even certain analogies in the object of the research. The preceding considerations turn upon a single question, which is the identification of distinctive features as opposed to variants: how to define the distribution and combinatory capacities of a "meaning"; how a sense taken as different from another can simply represent one of its variants; how the variant of a meaning is "semanticized" in its turn and becomes a distinct unit—these are all problems which could be immediately transposed into terms of phonemics. But semantic notions, which are more complex, more difficult to objectify and especially to formalize, since they are entangled in the extralinguistic "substance," call first for a description of those uses which alone will allow a meaning to be defined. And this description itself requires that we free ourselves of false evidence, of references to "universal" semantic categories, and of confusions between the data to be studied and those of the language of the describer. It is perhaps in the work of reconstruction that these conditions are the most severe.

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TWENTY-FIVE

Euphemisms Ancient and Modern

THERE IS SOMETHING PECULIAR and paradoxical in the universally accepted explanation of the Greek term that expresses "euphemism."[1] The dictionaries give to *εὐφημεῖν* two opposing meanings, and the one that is given first contradicts what it means: "to speak words which augur well" and, consequently, "to avoid words which augur ill," hence, "to maintain silence." Thus, according to the literal definition of Liddell-Scott-Jones: "*avoid all unlucky words* during sacred rites: hence, as the surest mode of avoiding them, *keep a religious silence.*" But the second meaning is the opposite: "to shout in triumph." This amounts to establishing a euphemism for a euphemism. But neither the actual meaning nor the historical uses of the word agree with this pseudological schema. In order to see the impossibility, it is enough to observe that the two meanings are found in the same authors; so that if we have to admit "to be silent" as the first meaning, that of "to cry out" becomes incomprehensible; and furthermore, *εὐφημία*, *εὐφημισμός*, which were already in common use among the Greeks in the sense of "euphemism," cannot be related to either the one or the other.

A confusion between the values of *langue* and those of *parole* (in the Saussurian sense) has been introduced into the interpretation of these words. The religious acceptations, with all their overtones, associations, and overlappings are related to "parole." But these acceptations can only be determined by beginning with a purely linguistic value. In the study of the vocabulary of religion, as with all special vocabularies, it is necessary to separate the two aspects of the problem if we wish to understand the nature of the actions that are involved in it. We have then to begin by restoring the proper significance of *εὐφημεῖν*, *εὐφημία*, and there is no question but that this is positive. Because this obvious point has not been recognized, it is necessary to assert that *εὐφημεῖν* always means 'to utter words which are auspicious,' and only this. To mention only a few examples as proof, the compound *ἐπευφημεῖν* is found as early as in Homer, where it clearly means 'to assent by an auspicious outcry' (*πάντες ἐπευφήμησαν Ἀχαιοί* [*Il.* 1. 22.

376]) and often in poetry *εὐφημεῖν* occurs in the sense of 'to utter auspicious outcries' (Aesch. *Ag.* 596; *Eum.* 1035); *κέλαδος ηὐφήμησεν* (Aesch., *Pers.*, 389); *ὀλολυγμὸς εὐφημῶν* (*Ag.* 28); or in actual discourse, *εὔφημον ἔπος* (*Suppl.* 512); *εὔφημος μοῦσα* (*Suppl.* 694); *ἀνοίγειν εὔφημον στόμα* (Ar. *Birds* 1719); *λόγων εὐφημία* (Eur. *IA.* 1469), etc.

How then did the negative sense originate? A passage in Herodotus (3. 38) is helpful in understanding this. Darius asked some Indians what price they would accept for burning their deceased fathers: *οἱ δὲ ἀμβώσαντες μέγα εὐφημέειν μιν ἐκέλευον* 'ceux-ci se récrièrent fort et prièrent Darius de ne pas prononcer des paroles de mauvais augure [they protested vehemently and begged Darius not to speak such ill-omened words]' (Legrand). The locution *εὐφημέειν μιν ἐκέλευον* shows that the verb preserved its basic meaning but that the circumstance in which it was spoken as an appeal in the form of a prohibition confers on it for us the negative meaning, 'do not speak of misfortune!' The concern here is to reverse the effect of evoking something unlucky. This acceptation results entirely from a context in which the verb is introduced in the form of an *appeal* to the *εὐφημία* in order to combat the effect of words that were considered improper and which might bring down misfortune. Indeed, this use of *εὐφημεῖν* is always found in the *imperative* or in substitutes for the imperative, and also as an invitation to protect by words (cf. Lat. *favete linguis*) the course of a ceremony that even innocuous words would disturb: *εὐφημῆσαι κέλεσθε* (*Il.* 9. 171, the only Homeric example); *εὐφήμει, εὐφημεῖτε* (Ar. *Clouds* 297; *Ach.* 241); *εὔφημον κοίμησον στόμα* (Aesch. *Ag.* 1247); *γλῶσσαν εὔφημον φέρειν* (*Choeph.* 581); *εὔφημος ἴσθι* (Soph. *Fr.* 478), etc. That, in practice, this injunction became the equivalent of "be silent!" changes nothing in the meaning of the verb. There is no instance of *εὐφημεῖν*, meaning 'to keep silent,' being freely used in the sense of *σιωπᾶν* in a narrative context, but only occasions in the religious service when the invitation to "speak auspiciously," issued by the herald, obliged the worshippers to cease all other talk. The effect of the religious use upon the meaning of the word is obvious.

It is necessary in order to appreciate a euphemism to recreate as far as possible the conditions of its use in spoken discourse. An expression like *εἴ τι πάθοιμι, ἤν τι πάθω* 'if something happens to me (i.e., if I die)' obviously does not authorize positing *παθεῖν τι* in the sense of "die." The situation alone determines the euphemism. And that situation, depending on whether it is permanent or occasional, modifies the type of the euphemistic expression according to norms peculiar to each language.

Everything hinges on the nature of the idea that one wishes to bring to mind while avoiding naming it specifically. If the idea is among those which the social and moral norms condemn, the euphemism will not last; it will be

contaminated in its turn and will have to be regenerated. It takes some thought to discern terms which were originally "respectable" in the Lat. *meretrix* (cf. *mereor* 'to earn'), Gr. *πόρνη* 'whore' (cf. *πέρνημι* 'to buy'), Goth. *hors* '*πόρνος*, *μοιχός*' (cf. Lat. *carus* 'dear'). But other ideas are only occasionally unfavorable, and the expression, according to the individual case, will be direct or will receive a substitute. For instance, in Avestan, the opposition of "white" and "black" is normally expressed by the adjectives *auruša-* and *sāma-* (*syāma-*, *syāva-*). It is used in the symbolic figures in the mythology of the creation of opposing forces; the star Tištriya takes the form of a white horse (*auruša-*), his enemy, the demon Apaoša, a black horse (*sāma-*), cf. Yt. 8. 20–21. But the same text (8. 58) prescribes offering to Tištriya 'a white sheep, or a black one, or one of any color as long as it is uniform' *pasūm aurušəm vā vohu-gaonəm va*. This time the offering is consecrated to Tištriya, and nothing which is offered him should evoke the world of the daevas, so "black" is called *vohu-gaona-* 'of a good color' in order to exorcise *sāma-*.[2]

Sometimes an expression, which has become so commonplace that it no longer rouses the attention is illuminated by the beliefs associated with the idea it expresses. Those who say, as in French, "de bonne heure" [in good time, i.e. early] for "tôt" [early] (cf. *zu guter Zeit*), are no longer aware of the peculiarity, which is nevertheless real, of Lat. *māne* 'early' being the adverb from *mānus* 'good, favorable.' There is not yet a satisfactory explanation for this link between the idea of "early" and that of "good." For to bring up *matūtīnus*, *mātūrus*, as does J. B. Hofmann (in A. Walde, *Lateinisches Etymologisches Wörterbuch*, rev. ed. [Heidelberg, 1965], 2:25) in order to justify an original sense of "rechtzeitig," is to discount the religious value of *mānus* while leaving the essential point obscure: just why was the *morning* so characterized? We must take into account ancient concepts that are still reflected in the Roman calendar. The days were not simply apportioned as *fasti* and *nefasti*. There were in addition divisions within certain days. It is known through Varro that there were certain *dies fissi* that were unpropitious in the morning and propitious the rest of the time, and there were *dies intercisi*, unpropitious in the morning and evening and propitious during the interval. Morning thus had a special quality that predisposed it to prohibition. On this same subject, there is also extremely interesting evidence that comes from another people. E. Destaing collected from among the Berbers, at the dictation of an educated native speaker, what amounts to a treatise of linguistic taboos.[3] Among the very specific indications as to what brings about the use of euphemisms, there is one that recurs in connection with almost all the names of animals, tools, etc.; it is in the mornings that they are under the strictest prohibitions. "Experience has shown that the unpropitious influence of creatures and things, as well as that of the words which designate them, is

exerted primarily in the morning. Consequently there is a whole category of taboo words which are forbidden only in the morning, before the meal taken in the middle of the day. This is the case with the names for broom, needle, cooking-pot, etc."[4] Among other euphemisms that in Berber are kept for the language of the morning, the one which concerns hares is worth noting. Instead of calling the hare *autūl*, they say *bu tmezgīn* 'the animal with long ears.' This immediately recalls the Indo-European expressions, Gr. λαγωός 'animal with hanging ears,' Pers. *xargōš* 'animal with donkey's ears,' which must also be substitutes.[5] The Berbers are so aware of the portents of morning that if a man leaving his house at the beginning of the day sees a needle on the ground, "he picks it up, throws it far away, and angrily returns home in order *to change his morning*. How can he change his morning? He enters the house, goes to bed, shuts his eyes, and pretends to sleep for a minute. Then he goes about his business. Or he will take the utensils with which dinner was served the night before, and if there is any food remaining, he will eat several mouthfuls. If there is nothing cooked, he will take some flour, put it in his mouth, and go off saying, 'This is the real morning and not the other!' "[6]

Morning is, in effect, the dangerous time when, at the departure of night, the fortunes of the day are decided, whether good or evil. The Latin expression *māne* must be derived from this belief, from which one can now recognize the same euphemism in the adjective *mānis* applied to the spirits of the dead, to the *mānēs*. Just as fearsome spirits are propitiated by their being called "good," so the beginning of the morning can be made favorable by characterizing it as the "*good* hour," or *māne*. This is a novel example of the process known through Gr. *Εὐμενίδες*.

In all these examples it is a matter of a fixed notion whose religious value is a constant. It receives a stable designation which also always belongs to the sacred vocabulary. The process consists in endowing an unpropitious notion with a propitious name. But for other ideas there is also a different process by which the expression considered bad is *desacralized* by substituting for it an equivalent which is remote or much weakened. This latter process can account for the various and not always fully understood ways for saying "kill" in Greek.

One of these merits particular mention. Herodotus uses καταχρᾶσθαι for 'kill,' along with ἀποκτεῖναι, but although each of the two verbs seems to be freely used for the other in the course of the same account, the usage is conditioned by reasons resulting from the circumstances. Astyages, in order to get rid of his daughter's son, who, according to a prophecy, was to dispossess him of his throne, orders Harpages to take him away and kill him: φέρων δὲ ἐς σεωυτοῦ ἀπόκτεινον (I. 108). The order is transmitted by Harpages to

Mithridates in the same brutal form: *καὶ μιν' Αστυάγης ἐντέλλεται ἀποκτεῖναι* (1. 111). But in order to induce Mithridates to commit the murder, Harpages threatens him personally with the worst of deaths in the event that he should disobey: *ὀλέθρῳ τῷ κακιστῷ σε διαχρήσεσθαι* (1. 110). When Astyages discovers later that his order has not been carried out, he makes Harpages come to him and asks: 'By what means did you bring about the death of the child born to my daughter whom I had turned over to you?' *τέῳ δὴ μόρῳ τὸν παῖδα κατεχρήσαο τὸν τοι παρέδωκα ἐκ θυγατρὸς γεγονότα τῆς ἐμῆς*; (1. 117). It can be seen that *διαχρᾶσθαι* is used as a mitigation of *ἀποκτεῖναι* and that it appears in *speech* as a less explicit expression. In another passage (3. 36), Cambyses orders his guards to seize Croesus and kill him: *λαβόντας μιν ἀποκτεῖναι*. But they prudently hide Croesus so that if Cambyses should change his mind, they would be rewarded; and if not, there would always be time enough to put him to death, *τότε καταχρήσασθαι*. The historian is interpreting the thoughts of those to whom this killing was repugnant. Here is another example of this same contrast between the brutality of an idea formulated in a decision and a less explicit expression at the moment of carrying it out: the Lacedemonians had decided to kill Minyans, *τοῖσι ὧν Λακεδαιμονίοισι ἔδοξε αὐτοὺς ἀποκτεῖναι*; but at the moment of executing them . . . , *ἐπεὶ ὧν ἔμελλόν σφεας καταχρήσεσθαι* (3. 146). This verb occurs again in a request for punishment and in reproducing the terms of the request: *ἔπεμπον ἐπειρησομένους εἰ καταχρήσωνται τὴν ὑποζάκορον τῶν θεῶν* 'they sent to ask the oracle if they should execute the subpriestess of the goddesses [who had delivered secrets to Miltiades]' (6. 135); *οἱ Ἐλαιούσιοι τῷ Πρωτεσίλεῳ τιμορέοντες ἐδέοντό μιν καταχρησθῆναι* 'the Eleontines, in order to avenge Prothesilaus, had asked that he be put to death' (9. 120). Finally, Herodotus uses *καταχρῆσθαι* with the reflexive for 'to kill oneself': *λέγουσι . . . αὐτοῦ μιν ἐν τῇσι θυρέῃσι καταχρήσασθαι ἑωυτόν* (1. 82); in the same sense one also finds *αὐτὸν διαχρᾶσθαι* (1. 24) and *ἑωυτὸν κατεργάζεσθαι* (ibid.). It appears then that *καταχρᾶσθαι, διαχρᾶσθαι, κατεργάζεσθαι,* are euphemistic expressions meaning 'to finish someone off, to liquidate him' in cases where feeling prohibits a cruder expression. The range of the usages explains and justifies the semantic deviation.

The French *exécuter* [to carry out] in the sense of 'to put to death' is in conformity with this same feeling. This acceptation proceeds from the official euphemism *exécuter (à mort)* [to carry out a sentence (to death)] and from the one which designates the hangman as *exécuteur de la haute justice, des hautes oeuvres* [the executor of (the one who carries out) supreme justice, supreme deeds] (cf. Germ. *Scharfrichter*). The discredit attached to the function of the hangman caused him to be designated by various euphemisms in Greek: *ὁ δήμιος* (scil. *δοῦλος*), *ὁ κοινὸς δήμιος* (Plato *Laws* 872b), *ὁ δημόκοινος*

(Soph. fr. 780; Antipho 1. 20; Iso. 17. 15). In Latin, on the other hand, a name which was an insult was preferred: *carnufex*. But what exactly does *carnufex* mean? The literal sense is just that which Donatus (*Hec.* 441) defines: *carnifices dicti quod carnes ex homine faciant*. This compound nevertheless has something peculiar about it when it is compared to *opi-fex*, *auri-fex*, *arti-fex*, etc. It gives the impression of being a translation. And it is indeed as a translation that it can be explained: *carnu-fex* is an exact calque of Gr. κρεουργός 'butcher,' already found in Aesch., κρεουργὸν ἧμαρ (*Ag.* 1592); cf. κατακρεουργεῖν 'to put into pieces' (Hdt. 7. 181); κρεουργηδὸν διασπασάντες τοὺς ἄνδρας 'dismembering them limb from limb like butchers' (Hdt. 3. 13). Latin thus changed the Greek word for "butcher" into a term designating the "hangman" (and this, in spite of everything, is a kind of euphemism), while at the same time the word *macellarius*, derived from *macellum*, which is also from the Greek, is kept for the word "butcher."

In a completely different area, Havers has rightly emphasized the euphemistic character of expressions for "to extinguish the fire" in relation to popular beliefs concerning fire as a living being.[7] To all the evidence that he has brought together might be added a few Iranian examples. A very powerful superstition in Iran and Afghanistan forbids extinguishing a flame by blowing on it.[8] This does not indicate that one cannot properly say "to extinguish the fire"; in fact, there is an even stronger expression, *ātaš kuštan* 'to kill the fire' (cf. Sans. *pari-han-* in the same sense). But in common usage a euphemism prevails: *sākit kardan* 'to appease' and, especially, *xāmūš kardan* 'to make silent, to quiet (the fire),' or *ruxsat dādan* 'to give leave to it'; of the fire itself, *ruxsat šude* 'it has taken leave, it is extinguished' is said. In Afghanistan, the ordinary locution is (*ātaš*) *gul kardan* (cf. Hindi: *gul karnā*) 'to extinguish,' passive, *gul šudan*, which is also a euphemism but one in which the sense of *gul* is not completely clear.[9] This is probably the word that the older dictionaries interpret as "the snuff of a lamp or a candle," and the expression would mean something like "to snuff the flame." The aim of all these processes is not simply to mitigate the idea of "extinguish." Just as in the Vedic ritual of sacrifice, the victim is 'appeased' (*śāmayati*) or 'made to consent' (*saṃjñāpayati*), when in actual fact it is "strangled," so the fire that is extinguished is "appeased." All this recalls Lat. *ignem tutare*, which is indeed to be understood as 'to calm, to appease (the fire),'[10] and this confirms the euphemistic origin of Fr. *tuer* [to kill].

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TWENTY-SIX

Gift and Exchange in the Indo-European Vocabulary

IT WAS THE VERY GREAT contribution of Marcel Mauss, in his now classic "Essai sur le don,"[1] to have revealed the functional relationship between gift and exchange and to have defined thereby a whole group of religious, economic, and judicial phenomena belonging to archaic societies. He showed that the gift is only one element in a system of reciprocal prestations which are at once free and constraining, the freedom of the gift obliging the recipient to a countergift, which engenders a continuous flow of gifts offered and gifts given in return. Here is the principle of an *exchange* which, generalized not only between individuals but also between groups and classes, stimulates the circulation of wealth throughout the entire society. The game is determined by rules that become fixed in institutions of all sorts. A vast network of rites, celebrations, contracts, and rivalries organizes the mechanics of these transactions.

The demonstration made by Mauss was based primarily upon archaic societies, which furnished him with a mass of conclusive evidence. If one seeks to verify this mechanism in ancient societies, particularly in the Indo-European world, convincing examples become much more rare. It is true that Mauss himself described "an archaic form of contract among the Thracians," and he also discovered in ancient India and Germany traces of analogous institutions. In addition, one must allow for chance discoveries, always possible in this vast domain in which the investigation has not been systematically pursued. The fact remains that these societies are much more difficult to explore and that, as far as usable documents are concerned, one cannot count on a large amount of sure and specific evidence, if one wishes it to be explicit.

We do have nevertheless some less apparent facts, which are all the more valuable for not having run the risk of being distorted by conscious interpretations. These are the facts presented by the vocabulary of the Indo-European languages. One cannot use them without an elaboration based on the comparison of attested forms. But that comparison will result in conclusions

which will supply to a rather large degree the absence of evidence for the most ancient periods of our societies. Several examples will be brought forth and analyzed in order to obtain whatever information they can offer about the prehistoric notions of gift and exchange.

In most Indo-European languages, "to give" is expressed by a verb from the root **dō-* which also has a large number of nominal derivatives. There seemed to be no possible doubt about the constancy of this signification until it was established that the Hittite verb *dā-* meant not 'give' but 'take.' This caused considerable confusion, which still lasts. Should Hittite *dā-* be considered a different verb? We cannot assume this without misgivings. Must we, on the other hand, admit that the original sense of **dō-* was 'take,' faithfully preserved in Hittite *dā-* as well as in Indo-Iranian *ā-dā-* 'receive'? This would reverse the problem without making it any easier; it would remain to be explained how "give" could have come from "take." In reality the problem seems insoluble if we seek to derive "take" from "give" or "give" from "take." But the problem is wrongly put. We shall consider that **dō-* properly means neither 'take' nor 'give' but either the one or the other, depending on the construction. It must have been employed like English "take," which permits two opposed meanings: "to take something from someone" but also "to take something to someone, to deliver something to someone." Cf. also, "to betake oneself, to go"; besides, in Middle English, *taken* meant 'to deliver' as well as 'to take.' Similarly, **dō-* indicated only the fact of taking hold of something; only the syntax of the utterance differentiated it as 'to take hold of in order to keep' (= take) and 'to take hold of in order to offer' (= give). Each language made one of these acceptations prevail at the expense of the other in order to construct the antithetical and distinct expressions for "taking" and "giving." Accordingly, in Hittite *dā-* means 'take' and is opposed to *pai-* 'give,' while in most of the other languages it is **dō-* which means 'give,' and a different verb which assumes the meaning of "take." Some traces of the double possibility survive; even though the distribution was fixed in Indo-Iranian, the verb *dā-* 'to give,' with the preverb *ā-* indicating movement toward the subject, means 'to receive.'

It seems, then, that the most characteristic verb for "to give" was marked by a curious semantic ambivalence, the same sort of ambivalence affecting more technical expressions like 'buy' and 'sell' in Germanic (Germ. *kaufen: verkaufen*) or 'borrow' and 'lend' in Greek (*δανείζω* : *δανείζομαι*). "To give" and "to take" thus proclaim themselves here, in a very ancient phase of Indo-European, as notions that were organically linked by their polarity and which were susceptible of the same expression.

Now **dō-* is not the only example of this. For a long time there has been

a question about the etymology of the verb for "take" in Germanic: Goth. *niman*, Germ. *nehmen*, which assumes a root **nem-*. One would naturally think of relating it to Gr. *νέμω*. Comparatists have always refused to do this, claiming that there was a difference in meaning.[2] But the meaning must be defined with some precision before it can be decided if it is really an obstacle to the relationship. The Greek verb *νέμω* has the two values of 'to give legally as an allotment' (*Ζεὺς νέμει ὄλβον ἀνθρώποισι* [*Od.* 14. 188] and 'to have legally as an allotment' (*πόλιν νέμειν*) [Hdt. 1. 59]).[3] In Gothic, *niman* does indeed mean 'to take' in various acceptations. But a compound of this verb is of special interest: it is *arbi-numja* 'heir,' lit. 'the one who takes (= receives) the inheritance.' Now the Greek term that *arbi-numja* translates is *κληρονόμος* 'heir.' Is it chance that (*κληρο*)*νόμος* and (*arbi*)*numja* are formed from *νέμω* in Greek and from *niman* in Gothic? Here we have hold of the missing link which allows us to join the meanings which history has separated. Goth. *niman* means 'to take,' not in the sense of 'to take hold of' (which is *greipan*, Germ. *greifen*) but in the sense of 'to receive' and more exactly, of 'to receive as an allotment, into possession,' which is precisely the same as one of the two acceptations of Gr. *νέμω*. The connection between *νέμω* and *niman* is now restored, and is confirmed by the ambivalence of **nem-*, which indicates legal attribution as given or as received.[4]

Let us now turn to the very notion of "gift" in the form which is the most constant throughout most of the Indo-European languages. We observe that, in general, nominal forms derived from **dō-* were used. Now, it happens—and this fact has been barely noticed—that within a single language, several of these derivatives will be employed simultaneously, being differentiated by their suffixes. The coexistence of these "synonyms" should arouse attention and call for a strict verification, first because they are not synonyms and, more especially, because the simplicity of a notion such as "gift" would not seem to require multiple expressions.

Ancient Greek had no fewer than five distinct and parallel words for "gift," **dō-*, and our dictionaries and translations render them identically as 'gift, present': *δώς, δόσις, δῶρον, δωρεά, δωτίνη*.[5] We must try to define each one of them specifically by virtue of its formation. The first, *δώς*, has only one example, in Hesiod: *δὼς ἀγαθή, ἅρπαξ δὲ κακή* 'to give is good, to ravish is evil' (*Works* 354); a root word which, like *ἅρπαξ*, must have been an invention of the poet for an expression as simple and as little differentiated as possible for "gift." In *δόσιϱ* the notion is presented as an effective accomplishment; it is the act of giving susceptible of being realized in a gift:[6] *καί οἱ δόσις ἔσσεται ἐσθλή* '(the one who will devote himself), we shall give him a precious gift' (*Il.* 10. 213). This time, the gift is promised in advance, designated in detail, and is to recompense a bold deed. The next two, *δῶρον* and *δωρεά*

must be taken together: the first, *δῶρον*, is indeed the gift of generosity, of gratitude, or of homage, which is incorporated into the object offered; and *δωρεά* properly designates, as an abstraction, 'the providing of presents' (cf. Hdt. 3. 97) or the 'totality of presents' (ibid. 3. 84), whence the adverbial use *δωρεάν* 'in the manner of a present, gratuitously.' Aristotle defines *δωρεά* precisely as a *δόσις ἀναπόδοτος* (*Top.* 125a. 18), a *δόσις* that does not impose the obligation of a gift in return. Finally there remains the most significant term, *δωτίνη*, which is also a gift but of a completely different sort. The *δωτίνη*, in Homer, is the obligatory gift offered to a chief whom one wishes to honor (*Il.* 9. 155. 297) or the gift that is due one as a guest; Ulysses, received by Polyphemus, feels he has a right to count on the *δωτίνη*, which is a part of the duties of hospitality: *εἴ τι πόροις ξεινήιον ἠὲ καὶ ἄλλως | δοίης δωτίνων ἥ τε | ξείνων θέμις ἐστίν* (*Od.* 11. 267). Alcinous, welcoming Ulysses at his home, does not wish to let him leave without having brought together the whole *δωτίνη* that is meant for him: *εἰς ὅ κε πᾶσαν | δωτίνην τελέσω* (*Od.* 11. 351). The uses of the word in Herodotus confirm this technical sense. A man, wishing to befriend the husband of a woman whom he desires, offers him as a *δωτίνη* any of his possessions that the husband might desire, but on condition of reciprocity (Hdt. 6. 62). One cannot emphasize more clearly the functional value of the *δωτίνη*, of this gift that obliges a gift in return. This is the invariable sense of the word in Herodotus; whether the *δωτίνη* is intended to call forth a gift in return or whether it serves to compensate for a previous gift, it always includes the idea of reciprocity: it is the gift that a city is compelled to give the person who has done it a service (1. 61); the gift sent to a people in order to engage their friendship (1. 69).[7] Whence *δωτινάξω* (2. 180) 'to collect the *δωτῖναι*' in the form of voluntary contributions from the cities towards a common work. In an inscription from Calauria, *δωτίνη* relates to the "rent" due in kind from one who has obtained a concession of land (*I.G.* 4. 841. 11; third century B.C.). We have in *δωτίνη* the notion of a gift in return or a gift which calls for a return. The mechanism of the reciprocity of the gift is revealed by its very meaning and is related to a system of offerings of homage or hospitality.

Up to this point we have considered words whose sense brought them to our attention immediately. But a valid inquiry must and can go well beyond the terms that have an explicit reference to the gift. There are some which are less apparent, not immediately obvious, and which sometimes can be recognized only by certain particular qualities in the meaning. Others preserve their proper value in only one part of the Indo-European domain. We must make use of both in order to reconstruct this complex prehistory.

An obvious connection joins the notion of the gift to that of hospitality. But one must distinguish among the terms relating to hospitality. The ety-

mology of some of them, like Greek ξένος is not certain. The study of the word is thus involved with that of the institution and should be left to the historian of Hellenic society. More interesting are the terms whose evolution we can follow, even, and perhaps especially, if this evolution has produced divergences in the meaning. One of these is the Latin word *hostis*. The term *hostis* will here be considered in its relation with other Latin words of the same family, which includes more than Latin (Goth. *gasts*, O.Slav. *gosti* 'guest/host'), but we shall put aside *hospes*, which cannot be analyzed with any certitude although it is certainly related.

Well-known Latin evidence assists in the reconstruction of the history of *hostis* in Rome. The word still means 'foreigner' in the Law of the XII Tables, and this sense was familiar to Roman scholars. Varro (*L.L.* 5. 3) states: "hostis . . . tum eo verbo dicebant peregrinum qui suis legibus uteretur, nunc dicunt eum quem dicebant perduellionem." And Festus (414. 37) gives us this important definition in addition: " . . . ab antiquis hostes appelabantur quod erant pari iure cum populo Romano atque *hostire* ponebatur pro *aequare*."

There are actually a series of proofs that *hostire* did indeed signify *aequare*, Several derivatives confirm it, some of which are related to material operations. others to judicial or religious institutions. In Festus himself, we find *redhostire* 'referre gratiam,' and in Plautus: promitto . . . *hostire* contra ut merueris 'I promise to pay you back as you deserve' (*Asin.* 377). In addition, *hostimentum* is defined as 'beneficii pensatio' and 'aequamentum' (Nonius 3. 26) and, according to a gloss, more precisely, '*hostimentum* dicitur lapis quo pondus exaequatur' (*C.G.L.* 5. 209. 3). This meaning appears in Plautus, where it indicates the "compensation" for work and wages: 'par pari datum hostimentumst, opera pro pecunia' (*Asin.* 172). The same notion is present in *hostus*, which Varro specifies as a rural term: '*hostum* vocant quod ex uno facto olei reficitur: factum dicunt quod uno tempore conficiunt' (*R.R.* 1. 24. 3); the sense is properly 'compensation, that oil which is obtained as a compensation for one pressing.' *Hostorium* was the name for the stick used to *level* the bushel (lignum quo modius aequatur, Prisc. 2. 215. 17; *C.G.L.* 5. 503. 36). Augustine (*Civ. Dei.* 4. 8) mentions a *dea Hostilina* who was in charge of equalizing the ears of grain (or perhaps of equalizing the harvest with the work realized). These clear and concordant indications are not diminished by certain glosses in the abridgement of Festus and Nonius, according to which *hostire* would mean 'ferire, comprimere, caedere'; this sense was deduced from archaic citations that were not exactly understood and which moreover refute it: in *hostio ferociam* (Pacuvius) and *hostit voluntatem tuam* (Naevius), the verb does not mean 'destroy' but 'compensate, counterbalance.'

An important term for this family is gained by annexing to it the word

hostia. Hostia does not designate any offered victim at all but only the one which was intended to 'compensate for' the anger of the gods. Just as important in another domain is the term *hostis*, whose relation to all the others which surround it can be seen. The primary meaning of *hostis* is indeed the one Festus gives it: not just any "foreigner" but the foreigner who is *pari iure cum populo Romano. Hostis* thereby takes on the meaning of both 'foreigner' and 'guest.' The equal rights that he enjoyed with respect to the Roman citizen were connected with his status as a guest. *Hostis* is properly one who compensates and enjoys compensation, one who obtains from Rome the counterpart of the advantages which he has in his own country and the equivalent of which he owes in his turn to the person whom he pays reciprocally. This old relationship was weakened, then abolished, as the status of *civis* came to be more rigorously defined and the *civitas* became the sole and ever stricter norm of judicial participation in the Roman community. The relationships regulated by personal or family agreements were wiped out in the face of rules and duties imposed by the state; *hostis* then became the 'foreigner' and then the 'public enemy' by a change in meaning that is connected with the political and judicial history of the Roman state.

Through *hostis* and the related terms in early Latin we can discern a certain type of *compensatory offering* that is the basis of the notion of "hospitality" in the Latin, Germanic, and Slavic societies; equality of status transposes into law the parity between persons confirmed by reciprocal gifts.

In order to approach a different aspect of the same notions, we shall resort to another Latin word whose meaning has been more stable but also more complex. An entire Indo-European phenomenology of "exchange," of which fragments survive in the numerous forms derived from the root **mei-*, might be traced through and around *munus*. We should study in particular the Indo-Iranian notion of *mitra*, the contract and the god of the contract, a term whose authentic meaning largely overlaps that of the "contract." It is the equivalent in the human world of what the *ṛta* is in the cosmic world, that is, the principle of total reciprocity that bases human society on rights and obligations to the point that the same expression (Sans. *druh-*, Av. *drug-*) indicates the one who violates the *mitra* and the one who transgresses the *ṛta*. This profound and rich expression takes on a particular acceptation in Lat. *munus*. In literary use, *munus* means 'function, office,' or 'obligation' or 'task' or 'favor' or, finally, 'public spectacle, gladiatorial contest,' all acceptations relating to the social sphere. The formation of *munus* is characteristic in this regard; it contains the suffix **nes-* which, as Meillet correctly observed, is attached to designations of a social or judicial nature (cf. *pignus, fenus, funus, facinus*). The unity of meanings in *munus* is found in the notion of respects paid or service accomplished, and this itself goes back to what Festus de-

fined as a *donum quod officii causa datur*. In accepting a *munus*, one contracts an obligation to repay it publicly by a distribution of favors or privileges, or by holding games, etc. The word contains the double value of a charge conferred as a distinction and of donations imposed in return. Here is the basis of "community," since *communis* signifies literally 'one who shares in the *munia* or *munera*'; each member of the group is compelled to give in the same proportion as he receives. Charges and privileges are the two faces of the same thing, and this alternation constitutes the community.

An "exchange" which is constituted of "gifts" accepted and returned is something quite different from utilitarian commerce. It must be generous in order to be judged profitable. When one gives, he must give the most precious thing he has. This is what can be learned from certain terms that are etymologically of the same family as *munus*: O.Irish *māin*, *mōin*, which means 'present' and 'precious thing,' and especially Goth. *maiþms* 'δῶρον,' O.Ice. *meidmar* pl. 'jewels,' O.E. *madum* 'treasure, jewel.' It is worth noticing that Goth. *maiþms* is not a gift in the sense that English "gift" would express. This word appears in the translation of Mark 7: 11, to render δῶρον, but as the equivalent of the Hebrew word κορβᾶν 'offering to the Treasure of the Temple.' The choice of *maiþms* shows that in Gothic as in the other Germanic languages, the present of exchange must be of signal value.

A comparison of vocabulary will reveal to us an institution analogous to the ones we have just discussed, but not so obvious. It is a type of donation almost abolished in historical societies and which we can only rediscover by interpreting the rather dissimilar significations of a group of words derived from **dap-*: Lat. *daps* 'sacred banquet,' O.Ice. *tafn* 'sacrificial animal,' Arm. *tawn* 'feast,' Gr. δαπάνη 'expense' (cf. δάπτω 'break to pieces, consume, destroy'), and also Lat. *damnum* 'damage' (**dap-nom*). The religious sense of some of these terms is clear. But in each of them the meaning has been narrowed down to only one particular aspect of a representation which goes beyond the sphere of the sacred and is realized in the domains of law and economy as well.

As the nucleus of the meaning we shall set up the notion of "expense" as a manifestation both religious and social: a festive and sumptuous expense, an offering that consists of a large consumption of food, made for prestige and as a "pure loss." This definition seems to account for all the special acceptations arising from the fragmentation of an archaic conception. The Roman *daps* was a banquet offered to the gods, a real banquet with roast meat and wine which the participants ceremoniously consumed after having desacralized it. The antiquity of this rite can be seen in the formulae that consecrated it; according to Cato, these prayers were addressed to Jupiter: *Jupiter dapalis*,

quod tibi fieri oportet, in domo familia mea culignam vini dapi, eius rei ergo macte hac illace dape pollucenda esto . . . Jupiter dapalis, macte illace dape pollucenda esto (Cato *Agr.* 132). The use of *pollucere* with *daps* emphasizes the magnificence of it: the verb always accompanies splendid consecrations in the ancient religious vocabulary. This can actually be seen in Ovid (*Fasti* 5. 515ff) when the poor peasant Hyrieus offers Jupiter, who is visiting him, a whole ox, his only possession, as a *daps*. Moreover, ancient derivatives of *daps* confirm the fact that this word implied largesse and associate it with festive banquets of hospitality: '*dapatice* se acceptos dicebant antiqui, significantes magnifice, et *dapaticum negotium* amplum ac magnificum' (Festus). The verb *dapinare*, whether it is connected with *daps* or whether it is an adaptation of Gr. *δαπανᾶν*, signifies, in the only example of it that survives, 'to treat royally at the table': *aeternum tibi dapinabo victum, si vera autumas* (Pl. *Capt.* 897).

In Greek, *δαπάνη*, of which, in general, only the commonplace acceptation of "expense" is retained, also implies largesse, an expense for display and prestige, although the term is no longer restricted to religious use. In Herodotus (2. 169), *δαπάνη* signifies 'sumptuous ornamentation' in the decoration of a building. Pindar (*Isthm.* 4. 29) provides a significant use of it: *Πανελλάνεσσι δ'ἐριζόμενοι δαπάνᾳ χαῖρον ἵπποιν* '(the competitors in the games) in rivalry with the peoples of all Hellas took pleasure in expenditures on horses.' It really is, in effect, an expense of rivalry and prestige. If a new proof is necessary, it will be found in the sense of the adjective *δαψιλής* 'abundant, splendid,' which passed into Latin, in which *dapsilis* 'magnificent, sumptuous,' is associated secondarily with *daps* and renews an ancient etymological connection. The verb *δαπανᾶν* means 'to spend,' but it must be understood in a stronger sense: 'to spend' here means 'to consume, to destroy'; cf. *δαπανηρός* 'prodigal, extravagant.' Hence, with the strict notion of a 'sacrifice with food' (Lat. *daps*, O.Ice. *tafn*) and of 'feast' (Arm. *tawn*) must be associated the idea of an ostentatious prodigality which is at the same time the consumption of food and the destruction of wealth. This clarifies the word *damnum*, so curiously separated from this semantic group. In *damnum*, there remains only the sense of 'damage suffered,' of material and especially pecuniary loss: it is the "expense" imposed upon someone and no longer consented to freely, the "loss" which is prejudicial and no longer a voluntary sacrifice; in short, a detriment or a penalty instead of a magnificent squandering. Jurists, who were also peasants, thus narrowed and reduced to a penalty what had been the sign of largesse and generosity. Whence *damnare* 'damno afficere, to impose a fine,' and in general, 'to condemn.'

All these features help us perceive, in an Indo-European prehistory which is not so ancient, a socioreligious phenomenon of which we still retain many

traces in our vocabulary today. In English we say "*to give* a reception" and in French "*offrir* un banquet"; there are "expenses" of food and "sacrifices" of possessions made as social obligations and as fulfillments of the duty of hospitality. This analysis leads us finally to recognize, in the Indo-European word, the institution known as potlatch. It does not seem that the ancient classical societies knew that aggravated form of potlatch that several writers, Mauss in particular, have described among the Kwakiutl or the Haïda, or those extravagant challenges in which chiefs who were jealous of their prestige provoked one another to enormous destructions of wealth. But the fact still remains that the terms analyzed here refer to a custom of the same type as the potlatch. Although the theme of rivalry no longer appears, the essential features are really the same: the feast with an abundance of food, the expense which is purely ostentatious and intended to maintain rank, the festive banquet—all this would have no sense if those who had the profit of this largesse were not committed to requite it by the same means. Moreover, is it chance that the term *potlatch* is related in essence to offerings of food and means literally, 'to nourish, to consume'?[8] Among all the varieties of potlatch, this must have been the most usual in societies in which the authority and the prestige of the chiefs were maintained by the largesse they distributed and from which they benefited in turn.

It would be easy to extend these considerations further, either by pursuing the etymological relations of the terms examined, or, on the other hand, by studying the different Indo-European expressions for notions that are apparently identical. One example will show in what unpredictable form the notion of "exchange" may be revealed.

As one might guess, "exchange" gives rise to a large vocabulary for specifying economic relations. But terms of this type have almost always been renewed, so that we must consider each language for itself. There is, however, one term which is at least fairly widespread in Indo-European and which is unvarying in meaning: it is the one that properly designates "value." It is represented by Gr. *ἀλφάνω*, Sans. *arh-* 'to have worth, to be worthy' (cf. *arhat* 'deserving') also Av. *arz-*, Lth. *algà* 'price, wages.' In Indo-Iranian and in Lithuanian, the sense appears to be rather general and abstract, not lending itself to a more precise determination. But in Greek, *ἀλφάνω* allows for a more exact interpretation than the dictionaries indicate in rendering it by 'to earn, to yield.'

In Homer, *ἀλφανω* means indeed 'to get a profit,' but this sense is connected to a well-defined situation: the profit in question is the one that a captive brings to the man who sells him. It suffices to enumerate the Homeric examples. In order to move Achilles to pity, when he is ready to kill him, Lycaon implores him: 'You once took me and led me to be sold at the market

at Lemnos, where I brought you the price of a hundred oxen' *ἑκατόμβοιον δέ τοι ἦλφον* (*Il.* 21. 79). About a little slave who is offered for sale: 'he will bring you a thousand times his price' *ὁ δ'ὑμῖν μυρίον ὤνον ἄλφοι* (*Od.* 4. 453). Melantheus threatens to sell Eumaeus far from Ithaca 'so that he will bring me a good living' *ἵνα μοι βίοτον πολύν ἄλφοι* (*Od.* 17. 250), and the suitors invite Telemachus to sell his guests at the market in Sicily 'where they will bring you a good price' *ὅθεν κέ τοι ἄξιον ἄλφοι* (*Od.* 20. 383). There is no variation in the meaning of the verb and the full force of it is found in the epithet that describes maidens: *παρθένοι ἀλφεσίβοιαι* they 'bring in oxen' for their father who gives them in marriage.

"Value" is characterized, in its ancient expression, as a "value of exchange" in the most material sense. It is the value of exchange that a human body possesses which is delivered up for a certain price. This "value" assumes its meaning for whoever disposes of a human body, whether it is a daughter to marry or a prisoner to sell. There we catch a glimpse, in at least one part of the Indo-European domain, of the very concrete origin of a notion connected to certain institutions in a society based on slavery.

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The Notion of "Rhythm" in its Linguistic Expression

IT MIGHT BE THE TASK of a psychology of movements and gestures to make a parallel study of the terms that denote them and the psychological phenomena that they express, the meaning inherent in the terms, and the often very different mental associations that they awaken. The notion of "rhythm" is one of the ideas that affect a large portion of human activities. Perhaps it even serves to distinguish types of human behaviour, individual and collective, inasmuch as we are aware of durations and the repetitions that govern them, and also when, beyond the human sphere, we project a rhythm into things and events. This vast unification of man and nature under time, with its intervals and repetitions, has had as a condition the use of the word itself, the generalization, in the vocabulary of modern Western thought, of the term *rhythm*, which comes to us through Latin from Greek.

In Greek itself, in which ῥυθμός does indeed designate rhythm, where does the notion come from and what does it properly mean? An identical answer is given by all the dictionaries: ῥυθμός is an abstract noun from ῥεῖν 'to flow,' the sense of the word, according to Boisacq, having been borrowed from the regular movements of the waves of the sea. This is what was taught more than a century ago, at the beginnings of comparative grammar, and it is what is still being repeated. And what, really, could be more simple and satisfying? Man has learned the principles of things from nature, and the movement of the waves has given rise in his mind to the idea of rhythm, and that primordial discovery is inscribed in the term itself.

There is no morphological difficulty in connecting ῥυθμός to ῥέω by means of a derivation which we shall have to consider in detail. But the semantic connection that has been established between "rhythm" and "to flow" by the intermediary of the "regular movement of the waves" turns out to be impossible as soon as it is examined. It suffices to observe that ῥέω and all its nominal derivatives (ῥεῦμα, ῥοή, ῥόος, ῥυάς, ῥυτός) are exclusively indicative of the notion of 'to flow,' but that the sea does not "flow." Ῥεῖν is never said of the sea, and moreover, ῥυθμός is never used for the movement of the waves.

The terms which depict this movement are entirely different: *ἄμπωτις, ῥαχία, πλημυρίς, σαλεύειν*. Conversely, what flows, *ῥεῖ*, is the river or the stream, and a current of water does not have "rhythm." If *ῥυθμός* means 'flux, flowing,' it is hard to see how it could have taken on the value proper to the word "rhythm." There is a contradiction of meaning between *ῥεῖν* and *ῥυθμός*, and we cannot extricate ourselves from the difficulty by imagining —and this is a pure invention—that *ῥυθμός* could have described the movement of the waves. What is more, *ῥυθμός* in its most ancient uses never refers to flowing water, and it does not even mean "rhythm." This whole interpretation rests on the wrong premises.

It is clearly necessary, in order to reconstruct a history which was less simple but which is also more instructive, to begin by establishing the authentic meaning of the word *ῥυθμός* and by describing its use at its origins, which go very far back. It is absent from the Homeric poems. It is especially to be found in the Ionian authors and in lyric and tragic poetry, then in Attic prose, especially in the philosophers.[1]

It is in the vocabulary of the ancient Ionian philosophy that we may apprehend the specific value of *ῥυθμός*, and most particularly among the creators of atomism, Leucippus and Democritus. These philosophers made *ῥυθμός* (*ῥυσμός*)[2] into a technical term, one of the key words of their teaching, and Aristotle, thanks to whom several citations from Democritus have come down to us, transmitted its exact meaning to us. According to him, the fundamental relationships among bodies are established by their mutual differences, and these differences come down to three: *ῥυσμός, διαθιγή, γροπή*, which Aristotle interprets thus: *διαφέρειν γάρ φασι τὸ ὄν ῥυσμῷ καὶ διαθιγῇ καὶ τροπῇ· τούτων δ' ὁ μὲν ῥυσμὸς σχῆμά εστιν, ἡ δὲ διαθιγὴ τάξις, ἡ δὲ τροπὴ θέσις*. 'Things are differentiated by *ῥυσμός*, by *διαθιγή*, and by *τροπή*; the *ῥυσμός* is the *σχῆμα* ('form'), the *διαθιγή* ('contact') is the *τάξις* ('order'), and the *τροπή* ('turn') is the *θέσις* ('position') (*Metaph.* 985b 4). It is clear from this important passage that *ῥυσμός* means *σχῆμα* ('form'), which is confirmed by Aristotle by what follows in the passage, in an example borrowed from Leucippus. He illustrates these three notions by applying them respectively to the "form," "order," and "position" of the letters of the alphabet:[3] A differs from N by the *σχῆμα* (or *ῥυσμός*), AN differs from NA by the *τάξις*, and I differs from H by the *θέσις*.

Let us hold on to the idea suggested by this passage that *ῥυσμός* is the equivalent of *σχῆμα*. Between A and N, the actual difference is one of "form" or "configuration": two of the strokes are identical—*Λ*—and only the third is different, being interior in A and exterior in N. And it is indeed in the sense of "form" that Democritus always uses *ῥυθμός*.[4] He wrote a treatise *Περὶ τῶν διαφερόντων ῥυσμῶν*, which means 'on the variety of *form* (of

atoms).' His doctrine taught that water and air, *ῥυθμῷ διαφέρειν*, differ from each other in the *form* that their constituent atoms take. Another citation from Democritus shows that he also applied *ῥυθμός* to the *form* of institutions: *οὐδεμία μηχανὴ τῷ νῦν καθεστῶτι ῥυθμῷ μὴ οὐκ ἀδικεῖν τοὺς ἄρχοντας* 'there is no way, in the present *form* (of the constitution) to prevent rulers from committing injustice.' The verbs *ῥυσμῶ*, *μεταρρυσμῶ*, *μεταρρυσμίζω* 'to form' or 'to transform' proceed from this same meaning, in the physical or moral sense: *ἀνοήμονες ῥυσμοῦνται τοῖς τῆς τύχης κέρδεσιν, οἱ δὲ τῶν τοιῶνδε δαήμονες τοῖς τῆς σοφίης* 'fools are *formed* by the acquisitions of chance; but men who know [what] these acquisitions [are worth], by those of wisdom'; *ἡ διδαχὴ μεταρυσμοῖ τὸν ἄνθρωπον* 'instruction *transforms* man'; *ἀνάγκη . . . τὰ σχήματα μεταρρυθμίζεσθαι* 'it is indeed necessary that the *σχήματα change in form* (in order to pass from angular to round).' Democritus also uses the adjective *ἐπιρρύσμιος*, whose meaning can now be corrected; it is not "courant, qui se répand" (Bailly) or "adventitious" (Liddell-Scott), but 'possessing a form': *ἐτεῇ οὐδὲν ἴσμεν περὶ οὐδενός, ἀλλ' ἐπιρρυσμίη ἑκάστοισιν ἡ δόξις* 'we have no genuine knowledge of anything, but everyone *gives a form* to his belief' (= lacking knowledge of anything, everyone makes up his own opinion about everything).

Accordingly, there is no variation, no ambiguity in the meaning that Democritus assigns to *ῥυθμός*, and this is always 'form,' understood as the distinctive form, the characteristic arrangement of the parts in a whole. This point being established, there is no difficulty in confirming it by the total number of ancient examples. Let us first consider the word in Ionian prose. It is found once in Herodotus (5. 58), along with the verb *μεταρρυθμίζω*, in a passage which is particularly interesting because it deals with the "form" of the letters of the alphabet: ("The Greeks borrowed the letters of their writing from the Phoenicians";) *μετὰ δὲ χρόνου προβαίνοντος ἅμα τῇ φωνῇ μετέβαλον καὶ τὸν ῥοθμὸν τῶν γραμμάτων* 'as time passed, at the same time that they changed their language, the Cadmeans also changed the *form* (*ῥυθμός*) of the characters'; *οἳ παραλαβόντες* ("*Ιωνες*) *διδαχῇ παρὰ τῶν Φοινίκων τὰ γράμματα, μεταρρυθμίσαντές σφεων ὀλίγα ἐχρέωντο* 'the Ionians borrowed letters from the Phoenicians through instruction, and used them after having *transformed* (*μεταρρυθμίσαντες*) them a little.' It is not chance that Herodotus used *ῥυθμός* for the 'form' of letters at almost the same period that Leucippus, as we have just seen, was defining this word by using the very same example. This is proof of an even more ancient tradition that applied *ῥυθμός* to the configuration of the signs of writing. The word remained in use among the authors of the *Corpus Hippocraticum*, and with the same sense. One of them prescribes, for the treatment of clubfoot, the use of a small leaden boot, 'in the *form* of the ancient sandals of Chios' (*οἷον αἱ*

χῖαι κρηπῖδες ῥυθμὸν εἶχον).[5] From ῥυθμός, come the compounds ὁμόρρυσμος, ὁμοιόρρυσμος 'of the same form,' ὁμορρυσμίη 'resemblance' (Hip. 915h, 916b), εὐρρυσμός 'of a beautiful *form*, elegant,' etc.

If we now turn to the lyric poets, it is even earlier, as early as the seventh century, that we see the appearance of ῥυσμός. It is taken, like σχῆμα or τρόπος, as defining the individual and distinctive 'form' of the human character. Archilochus counsels, "do not boast of your victories in public and do not collapse at home in order to weep over your defeats; rejoice at reasons for joy and do not exacerbate yourself unduly over evils; γίγνωσκε δ'οἷος ῥυσμὸς ἀνθρώπους ἔχει 'learn to know the *dispositions* which men have' " (2. 400. Bergk). In Anacreon, the ῥυσμοί are also particular 'forms' of mood or character: ἐγὼ δὲ μισέω πάντας ὅσοι σκολιοὺς ἔχουσι ῥυσμοὺς καὶ χαλεπούς (fr. 74. 2), and Theognis counts ῥυθμός among man's distinctive traits: μήποτ' ἐπαινήσῃς πρὶν ἂν εἰδῇς ἄνδρα σαφηνῶς ὀργὴν καὶ ῥυθμὸν καὶ τρόπον ὄντιν' ἔχει 'never praise a man before knowing clearly his feelings, his *disposition* (ῥυσμός), his character' (964). Let us add here Theocritus: Αὐτονόας ῥοθμὸς ὠὗτος 'the *attitude* of Autonoë was the same' (26. 23).

Among the tragedians, ῥυθμός and the verbs derived from it invariably maintain the same sense as in all the texts cited: ἐν τριγώνοις ῥυθμοῖς 'in a triangular *form*,' in a fragment of Aeschylus (fr. 78 N[2]); νηλεῶς ὧδ' ἐρρύθισμαι 'a pitiless fate has made my present *form* (= condition)' (*Prom.* 243); πόρον μετερρύθμιζε '(Xerxes, in his madness,) wanted to *transform* a strait' (*Pers.* 747); μονορρύθμοι δόμοι 'a dwelling *arranged* for one person' (*Suppl.* 961).[6] The use of ῥυθμίζω in Sophocles is very instructive (*Antig.* 318): to the guard whom Creon has commanded to be quiet because his voice makes him suffer and who asks him, "Is it in your ears or in your soul that my voice makes you suffer?" Creon replies, τί δὲ ῥυθμίξεις τὴν ἐμὴν λύπην ὅπου 'why do you *picture* the location of my grief?' Here is the exact sense of ῥυθμίζω 'to give a form,' and the scholiast correctly renders ῥυθμίζειν by σχηματίζειν, διατοποῦν 'to picture, to localize.' Euripides speaks of the ῥυθμός of a garment, of its distinctive 'form' (ῥυθμὸς πέπλων, *Heracl.* 130); of the 'modality' of a murder (τρόπος καὶ ῥυθμὸς φόνου, *El.* 772); of the 'distinctive mark' of mourning (ῥυθμὸς κακῶν, *Suppl.* 94); he uses εὐρύθμως 'in a suitable fashion,' for the arrangement of a bed (*Cycl.* 563) and ἄρρυθμος for a 'disproportionate' passion (*Hipp.* 529).

This meaning of ῥυθμός persists in the Attic prose of the fifth century. Xenophon (*Mem.* 3. 10. 10) makes ῥυθμός ('proportion') the quality of a fine cuirass, which he qualifies by εὔρυθμος 'of a beautiful *form*.' In Plato one finds, among others, the ῥυθμός the 'balanced state' between opulence and poverty (*Laws* 728e), and expressions like ῥυθμίζειν τὰ παιδικά 'to *form* a young favorite' (*Phaedr.* 253b), μεταρρυθμίζεσθαι 'reproduce the *form*,'

in speaking of the images which mirrors reflect (*Tim.* 46a); this same verb μεταρρυθμίζειν has the moral sense of 'to *reform* (the character)' in Xenophon (*Econ.* 11. 2. 3). And Aristotle himself invented ἀρρύθμιστος 'not reduced to a *form*, amorphous' (*Metaph.* 1014b, 27).

We must limit ourselves here to this almost exhaustive list of examples. The citations suffice amply to establish: (1) that ῥυθμός never meant 'rhythm' from the earliest use down to the Attic period; (2) that it was never applied to the regular movement of the waves; (3) that its constant meaning is 'distinctive form, proportioned figure, arrangement, disposition' in conditions of use which are otherwise extremely varied. Similarly the derivatives or compounds, nominal or verbal, of ῥυθμός never refer to anything but the notion of "form." Such was the exclusive meaning of ῥυθμός in all types of writings down to the period at which we halted our citations.

Having established this meaning, we can and must determine it precisely. There are other expressions in Greek for 'form': σχῆμα, μορφή, εἶδος, etc., among which ῥυθμός should be distinguished in some way, better than our translation can indicate. The very structure of the word ῥυθμός should be investigated. We can now profitably return to etymology. The primary sense, the one which we have just deduced, seems unquestionably to take us far away from "to flow," by which others have explained it. And nevertheless, we shall not lightly abandon a comparison which is morphologically satisfying; the relation of ῥυθμός to ῥέω does not in itself give rise to any objection. It is not this derivation itself that we have criticized, but the wrong sense of ῥυθμός that was deduced from it. Now we can take up the analysis again, basing it on the corrected meaning. The formation in -(θ)μός[7] deserves attention for the special sense it confers upon "abstract" words. It indicates, not the accomplishment of the notion, but the particular modality of its accomplishment as it is presented to the eyes. For example ὄρχησις is the act of dancing, ὀρχηθμός, the particular dance seen as it takes place; χρῆσις is the act of consulting an oracle, χρησμός the particular response obtained from the god; θέσις is the act of placing, θεσμός the particular disposition; στάσις is the state of being in some position (Fr. *se tenir*), σταθμός the position assumed, whence the balancing of a scale, a stance, etc. This function of the suffix emphasizes the originality of ῥυθμός. But it is especially the meaning of the radical which must be considered. When Greek authors render ῥυθμός by σχῆμα, and when we ourselves translate it by 'form,' in both cases it is only an approximation. There is a difference between σχῆμα and ῥυθμός; σχῆμα in contrast to ἔχω 'je (me) tiens' (cf. the relation of Lat. *habitus* to *habeo*) is defined as a fixed 'form,' realized and viewed in some way as an object. On the other hand, ῥυθμός, according to the contexts in which it is given, designates the form in the instant that it is assumed by what is moving,

mobile and fluid, the form of that which does not have organic consistency; it fits the pattern of a fluid element, of a letter arbitrarily shaped, of a robe which one arranges at one's will, of a particular state of character or mood. It is the form as improvised, momentary, changeable. Now, *ῥεῖν* is the essential predication of nature and things in the Ionian philosophy since Heraclitus, and Democritus thought that, since everything was produced from atoms, only a different arrangement of them produced the difference of forms and objects. We can now understand how *ῥυθμός*, meaning literally 'the particular manner of flowing,' could have been the most proper term for describing "dispositions" or "configurations" without fixity or natural necessity and arising from an arrangement which is always subject to change. The choice of a derivative of *ῥεῖν* for explaining this specific modality of the "form" of things is characteristic of the philosophy which inspired it; it is a representation of the universe in which the particular configurations of moving are defined as "fluctuations." There is a deep-lying connection between the proper meaning of the term *ῥυθμός* and the doctrine of which it discloses one of its most original notions.

How then, into this coherent and unvarying semantics of "form" did the notion of "rhythm" thrust itself? Where is its connection with the original concept of *ῥυθμός*? The problem is to understand the conditions that made *ῥυθμός* the word suited to express what we understand by "rhythm." These conditions are partially implied in advance by the definition posited above. The modern sense of "rhythm," which indeed existed in Greek itself, came about a priori from a secondary specialization, that of "form" being the only one attested until the middle of the fifth century. This development is really a creation to which we can assign, if not a date, at least a circumstance. It is Plato who determined precisely the notion of "rhythm," by delimiting the traditional value of *ῥυθμός* in a new acceptation. The principal texts in which the notion became fixed must be cited. In the *Phileb.* (17d), Socrates insists on the importance of intervals (*διαστήματα*), whose characteristics, distinctions, and combinations must be known if one wishes to study music seriously. He says, "Our predecessors taught us to call these combinations 'harmonies'—(*ἁρμονίας*); *ἔν τε ταῖς κινήσεσιν αὐ τοῦ σώματος ἕτερα τοιαῦτα ἐνόντα πάθη γιγνόμενα, ἃ δὴ δι' ἀριθμῶν μετρηθέντα δεῖν αὖ φασὶ ῥυθμοὺς καὶ μέτρα ἐπονομάζειν.* 'They also taught us that there occur other analogous qualities, inherent this time in the movements of the body, which are numerically regulated and which must be called *rhythms* and *measures* (*ῥυθμοὺς καὶ μέτρα*).' " In the *Symposium* (187b): *Ἡ γὰρ ἁρμονία συμφωνία ἐστίν, συμφωνία δὲ ὁμολογία τις . . . ὥσπερ γε καὶ ὁ ῥυθμὸς ἐκ τοῦ ταχέος καὶ βραδέος, ἐκ διενηνεγμένων πρότερον, ὕστερον δὲ ὁμολογη-*

σάντων, γέγονε 'Harmony is a consonance, and consonance an accord. . . . It is in the same way that *rhythm* results from the rapid and the slow, at first contrasted, then in accord.' Finally, in the *Laws* (665a), he teaches that young people are impetuous and turbulent, but that a certain order (τάξις), a privilege exclusively human, appears in their movements: τῇ δὴ τῆς κινήσεως τάξει ῥυθμὸς ὄνομα εἴη, τῇ δ' αὖ τῆς φωνῆς, τοῦ τ' ὀξέος ἅμα καὶ βαρέος συγκεραννυμένων, ἁρμονία ὄνομα προσαγορεύοιτο, χορεία δὲ τὸ ξυναμφότερον κληθείη 'This order in the movement has been given the name *rhythm*, while the order in the voice in which high and low combine is called *harmony*, and the union of the two is called the *choral art*.'

It can be seen how this definition developed from the traditional meaning and also how that meaning was modified by it. Plato still uses ῥυθμός in the sense of 'distinctive form, disposition, proportion.' His innovation was in applying it to the *form of movement* which the human body makes in dancing, and the arrangement of figures into which this movement is resolved. The decisive circumstance is there, in the notion of a corporal ῥυθμός associated with μέτρον and bound by the law of numbers: that "form" is from then on determined by a "measure" and numerically regulated. Here is the new sense of ῥυθμός: in Plato, 'arrangement' (the original sense of the word) is constituted by an ordered sequence of slow and rapid movements, just as "harmony" results from the alternation of high and low. And it is the order in movement, the entire process of the harmonious arrangement of bodily attitudes combined with meter, which has since been called ῥυθμός. We may then speak of the "rhythm" of a dance, of a step, of a song, of a speech, of work, of everything which presupposes a continuous activity broken by meter into alternating intervals. The notion of rhythm is established. Starting from ῥυθμός, a spatial configuration defined by the distinctive arrangement and proportion of the elements, we arrive at "rhythm," a configuration of movements organized in time: πᾶς ῥυθμὸς ὡρισμένῃ μετρεῖται κινήσει 'all rhythm is tempered by a definite movement' (Arist. *Probl.* 882b. 2).

The history sketched here will assist in the appreciation of the complexity of the linguistic conditions from which the notion of "rhythm" was disengaged. We are far indeed from the simplistic picture that a superficial etymology used to suggest, and it was not in contemplating the play of waves on the shore that the primitive Hellene discovered "rhythm"; it is, on the contrary, we who are making metaphors today when we speak of the rhythm of the waves. It required a long consideration of the structure of things, then a theory of measure applied to the figures of dance and to the modulations of song, in order for the principle of cadenced movement to be recognized and given a name. Nothing is less "natural" than this slow working out, by

the efforts of philosophers, of a notion which seems to us so necessarily inherent in the articulated forms of movement that we have difficulty in believing that people were not aware of it from the very beginning.

From *Journal de Psychologie* 44 (1951) : 401–410

TWENTY-EIGHT

Civilization: A Contribution to the History of the Word

THE WHOLE HISTORY of modern thought and the principal intellectual achievements in the western world are connected with the creation and handling of a few dozen essential words which are all the common possession of the western European languages. We are just beginning to perceive how desirable it would be to describe with precision the genesis of this vocabulary of modern culture. Such a description could only be the sum of many detailed investigations of each of these words in each language. These works are still rare, and those who undertake them feel keenly the scarcity of the most necessary lexical documentation, especially in French.

In a well-known study,[1] Lucien Febvre gave a brilliant sketch of the history of one of the most important terms of our modern lexicon, the word *civilisation*, and the development of the very productive notions attached to it between the end of the eighteenth and the middle of the nineteenth century. He also deplored the difficulties encountered in dating exactly the appearance of the word in French. Precisely because *civilisation* is one of those words which show a new vision of the world, it is important to describe as specifically as possible the conditions under which it was created. The present article, which has as its particular purpose the broadening of the problem and the enrichment of the documentation, will be limited to that early phase of the first uses of the word.

Febvre did not encounter any reliable example of *civilisation* before 1766. A little after the publication of his study, new specific details and earlier examples were contributed on the one hand by Ferdinand Brunot, in a succinct note in his *Histoire de la langue française*,[2] and on the other by Joachim Moras, who devoted a detailed treatise to the notion of civilization in France.[3] To this we can now add still other data encountered in our own reading.

It now appears quite likely that the earliest examples of the word are to be found in the writings of the Marquis de Mirabeau. Today it is hard to imagine the fame and influence of the author of *L'Ami des hommes*, not only in the circle of the physiocrats, but in the entire intellectual world and for many

decades, at least until the first quarter of the nineteenth century. For an appreciation of his influence, we have the fervent statements of those of his contemporaries who passionately embraced his doctrine. Such a one was Linguet who, in his *Théorie des lois civiles* (1767), cites side by side "*l'Ami des hommes, l'Esprit des lois,* et quelques autres ouvrages publiés par des génies supèrieurs." So also the Abbé Baudeau, whose *Première Introduction à la philosophie économique* (1771) is signed: "Un disciple de l'*Ami des hommes.*" Similarly, very much later, in 1814, the extremely clear-thinking Benjamin Constant, in a work directly related to the topic of this study, *De l'esprit de conquête et de l'usurpation, dans leurs rapports avec la civilisation européenne,* refers to "deux autorités imposantes, M. de Montesquieu et le marquis de Mirabeau."[4] Yet, whoever reads Mirabeau today will be astonished that the excesses and eccentricities of the writer did not in any way damage the reputation of the economist and reformer. It is these glaring defects that the historian of the language will be struck by today; outrageous statements, vulgar gusto, mixed metaphors, bombast, and unevenness of tone seem to be the natural expression of a bold and tempestuous mind.

Now it is in that work which immediately caused Mirabeau's name to be revered that the word *civilisation* is found for the first time. *L'Ami des hommes ou Traité de la population,* dated 1756, but actually published in 1757,[5] without the name of the author, was a success at once. In it we read, towards the middle of the first part, "A bon droit les Ministres de la Religion ont-ils le premier rang dans un société bien ordonnée. La Religion est sans contredit le premier et le plus utile frein de l'humanité; c'est le premier ressort de la civilisation; elle nous prêche et nous rappelle sans cesse la confraternité, adoucit notre coeur, etc.'[6] The word reappears from there on in the rest of the work. It is also encountered in Mirabeau's later writings. Accordingly, we find in his *Théorie de l'impôt* (1760): "L'exemple de tous les Empires qui ont précédé le nôtre et qui ont parcouru le cercle de la civilisation serait dans le détail une preuve de ce que je viens d'avancer" (p. 99).[7] Still another and little-known piece of evidence of Mirabeau's predilection for this term was revealed by the inventory of his papers and deserves to be recalled here, although at the date ascribed to it, it is less valuable for our topic. Mirabeau left a rough draft of the beginning of a work which was to have been called *L'Ami des femmes ou Traité de la civilisation,* as a counterpart to *L'Ami des hommes ou Traité de la population.* Weulersse places this outline "vers 1768, sans doute." It is a pity that this unique text, preserved in the National Archives, cannot be dated more precisely. Whoever has the curiosity to consult it will find a manuscript[8] consisting of five and a half pages of preface and ten pages, the only ones written, of the treatise proper. The tone will be indicated by the fact that the text begins, after a preamble in the form of an

invocation, with the following title: "Traité de la civilisation. Première partie, premier âge. Chapître I^er^. Le bégayement." Extravagant as it is, shot through with reflections and digressions in the most bizarre style, this fragment nevertheless contains several instructive uses of the word which was the subject proper of the discourse. We shall enumerate all of them: "Elle (= la simplicité) saura me guider dans les routes de la civilisation" (p. 1); "il s'agit de savoir lequel des deux sexes influe le plus sur la civilisation" (p. 2); "l'extirpation de ces préjugés est ce que produisent les connaissances qu'apporte la civilisation" (p. 4); "les honnêtes gens gardent leur honnêteté et leur coeur pour leur conduite, et leur civilisation et leur esprit pour la société" (ibid.); "la civilisation et l'usage les oblige (*sic*) à se déprecier dans la société" (ibid.); and especially this passage, which is a definition: "J'admire à cet égard combien nos vues de recherches fausses dans tous les points le sont sur ce que nous tenons pour être la *civilisation*. Si je demandais à la plupart en quoi faites-vous consister la civilisation, on me répondrait, *la civilisation est l'adoucissement de ses moeurs, l'urbanité, la politesse, et les connaissances répandues de manière que les bienséances y soient observées et y tiennent lieu de lois de détail;* tout cela ne me présente que le masque de la vertu et non son visage, et la civilisation ne fait rien pour la société si elle ne luy donne le fonds et la forme de la vertu" (p. 3).[9] It is clear from these uses that for Mirabeau "civilisation" is the process of what had been up until his time called "police" in French, that is, an act tending to make man and society more "policé," the effort to induce the individual to observe spontaneously the rules of decency and to transform the customs of society in the direction of a greater urbanity.

It is in this sense that the word was also understood by the authors who, from 1765 on, made use in their turn of the term *civilisation*, generally under the inspiration of Mirabeau. The studies mentioned above have taken into account the texts of Boulanger, Baudreau, and Dupont de Nemours, and it would be of no use to reproduce them here. We shall, however, add several examples taken from Linguet, *Théorie des lois civiles ou Principes fondamentaux de la société* (London, 1767): "Nous ferons voir par la suite que ce malheur est inévitable. Il tient à la civilisation des peuples" (1:202);[10] "Ce sont là les deux premiers titres du Code originel des hommes, à l'époque de leur civilisation" (2:175); "Je me plais à démêler aux environs la trace des premiers pas qu'ont fait (*sic*) les hommes vers la civilisation" (2:219); "Pour . . . faire des instruments de la fertilité ceux du luxe, il ne fallait qu'un peu plus de civilisation, qui ne dut pas tarder" (2:259). Here *civilisation* means the original, collective process that made humanity emerge from barbarity, and this use was even then leading to the definition of *civilisation* as the state of civilized society, examples of which were to multiply from that time forward.

We may wonder why *civilisation* was so late in appearing, when *civiliser* and *civilisé* had been in current use for a long time. It is unlikely that this development was hindered by the existence of *civilisation* as a legal term (the act of making a criminal action into a civil case), which could never have been very widespread. Two other main reasons will come to mind. One is the scarcity at that time of words in *-isation* and the slow rate of their increase. Despite what J. Moras says about this, in the middle of the eighteenth century there was only a very small number of words of this type before the Revolution: in the lists of F. Gohin[11] and A. François[12] we find only *fertilisation*, *thésaurisation*, *temporisation*, *organisation* (which had been created earlier but only became current then), and finally, *civilisation*. This is indeed few in contrast to the some seventy terms in *-ité* which were created during the same period.[13] Even within this small group, most of the words kept the exclusive meaning of "act" (like *fertilisation*). The notion of a "state," to which *civilisation* comes quite quickly, is shown only in *organisation* in "l'organisation des végétaux," then "des organisations charitables." Habit makes us insensitive to the exceptional character that the use of *civilisation* took on very early in contrast to the other derivatives in *-isation*. In addition to this rather slight productivity in a class of abstract words of technical aspect, we should consider, in order to explain the late appearance of *civilisation*, the very novelty of the notion and the changes in the traditional concept of man and society that it implies. From original barbarity to the present state of man in society, a universal and gradual development was discovered, a slow process of education and refinement, in a word, a constant progress in the order of that which *civilité*, a static term, was no longer sufficient to express and which had to be called *civilisation* in order to define together both its direction and its continuity. It was not only a historical view of society; it was also an optimistic and resolutely nontheological interpretation of its evolution which was stressed, sometimes without those who proclaimed it being aware of this, although some of them, Mirabeau first of all, still counted religion as the chief factor in *civilisation*.

But, as Febvre saw,[14] the word has a parallel and almost contemporaneous history in England, in which the conditions, were curiously similar: *civilize* and *civilized* are early; *civilization* as a legal term is attested from the beginning of the eighteenth century, but *civilization* in the social sense is of a much later date. For a notion destined to spread widely and at a period of close contact between the two countries, this poses the question of the priority of one or the other in the first uses as well as the question of possible mutual influences. It is first of all a matter of fixing the date of the appearance of *civilization* in English. The *Oxford English Dictionary* attributes the date of 1772 to the first example, which is from Boswell's *Life of Johnson*. In this

case, the question of the priority of French or English, left undecided by Febvre, would be immediately settled to the advantage of French, in which *civilisation* appeared fifteen years earlier, in 1757. Such is actually what J. Moras concluded since, despite extensive reading, he was unable to find *civilization* in English before 1772.[15] Nevertheless the solution cannot be reached so simply, and new and specific information may be of interest here.

It is necessary to see how the word is presented in the text given by the *O.E.D.* as the earliest, and to read in its entirety the passage from Boswell, which is only partially quoted in the article in the dictionary: "On Monday, March 23 [1772], I found him [Dr. Johnson] busy, preparing a fourth edition of his folio Dictionary. . . . He would not admit *civilization*, but only *civility*. With great deference to him I thought *civilization*, from *to civilize*, better in the sense opposed to barbarity than civility, as it is better to have a distinct word for each sense, than one word with two senses, which *civility* is, in his way of using it." The passage is interesting for more than one reason. Boswell is conscious of a difference which had already been established between *civility* in the sense of "courtesy, politeness," and *civilization*, the opposite of barbarity. There can be no doubt that he was pleading for a word which was already in use and not for a neologism of his own invention, since it was a matter of having it recorded in a dictionary. And so he must have read it, and probably Johnson had too, although the latter was loathe to accept it. If there is anything to be concluded from this use in Boswell, it is that other writers had already accepted it.

This inference is indirectly confirmed by the very rapidity of the triumph of *civilization*. As early as 1775, Ash's dictionary (cited by the *O.E.D.*) records *civilization* as "the state of being civilized; the act of civilizing." One year later, we find such examples as follow (none of which is cited in the *O.E.D.*). In a pamphlet by Richard Price on the occasion of the war with America: ". . . in that middle state of civilization, between its first rude and its last refined and corrupt state."[16] And above all in Adam Smith's *An Inquiry Into the Nature and Causes of Wealth of Nations* (1776), in which, without systematic search, we turned up these examples within a few pages: "It is only by means of a standing army, therefore, that the civilization of any country can be perpetuated or even preserved for any considerable time" (2:310); "as the society advances in civilization" (2:312); "the invention of fire-arms, an invention which at first sight appears to be so pernicious, is certainly favorable to the permanency and to the extension of civilization" (2:313). We know that Adam Smith spent almost a year in Paris, in the company of the Duke of Buccleuch, between the end of 1765 and October, 1766, and frequented the physiocrats, Quesnay, Turgot, Necker, etc. Perhaps

he became familiar with the word *civilisation* then, although it was still quite new, but there is nothing to confirm this. The free use of the word *civilization* by Adam Smith in 1776, in a work which would have required several years to produce, proves in any case that we cannot trace the creation of the word back only as far as 1772.

In actual fact, other writers had employed it before the mention that Boswell makes of it. Here the information of the *O.E.D.* is deficient. It was relatively simple for us to discover some examples of *civilization* several years before 1772.

The word is first found a year earlier, in 1771, in a work by John Millar, a professor at the University of Glasgow, entitled *Observations Concerning the Distinction of Ranks in Society*, the second edition of which was translated into French with the title *Observations sur les commencements de la société* (Amsterdam, 1773).[17] John Millar announced in his preface that it was his purpose to study "the alterations produced . . . by the influence of civilization and regular government" (p. vii). Here are the examples collected from within the work: ". . . among nations considerably advanced in civilization and refinement" (p. 4); "the gradual advancement of society in civilization, opulence and refinement" (p. 37); "being neither acquainted with arts and civilization nor reduced under subjection to any regular government" (p. 50); 'the advancement of a people in civilization" (p. 63); "the same effects of civilization are at length beginning to appear" (p. 76); "the progress of a people in civilization and refinement" (p. 101); "the advancement of a people in civilization and refinement" (p. 153, in the title of chapter IV); "the advancement of a people in civilization and in the arts of life" (p. 178); "the progress of civilization" (p. 190); "the influence of civilization upon the temper and dispositions of the people" (p. 203).

But, even in 1771, J. Millar seems to be handling *civilization* with such freedom that one hesitates to think that he was the first to use it. And, in fact, we have found a precursor who, four years earlier, used the word and discussed the notion. It was another Scotsman, Adam Ferguson, professor of moral philosophy at the University of Edinburgh, in the work entitled *An Essay on the History of Civil Society* (Edinburgh, 1767).[18] On page 2 he establishes the principle that governs the evolution of human societies: "Not only the individual advances from infancy to manhood, but the species itself from rudeness to civilization." The word is taken up many times in the exposition that follows: "We are ourselves the supposed standards of politeness and civilization" (p. 114); "it was not removed by the highest measures of civilization" (p. 137); "our rule in measuring degrees of politeness and civilization" (p. 311); "in the progress of civilization" (p. 373); "luxury necessary to civilization" (p. 375); "in the extremes of civilization and rudeness" (p. 382).

Here again, we must ask if Adam Ferguson had not, in his turn, taken up the word from someone else. But our reading has failed to lead us any farther. It does not seem that any of the philosophers whom Ferguson could have followed, among them Hutcheson, Hume, and Locke, ever used the word *civilization*. An exhaustive reading of many authors and a careful examination of Scotch and English historical and philosophical publications between 1750 and around 1760[19] would be necessary in order to be sure of even a negative confirmation. So far, up to the point to which we could press our inquiry, the earliest published mention of *civilization* is in 1767, ten years after the first example of *civilisation* in Mirabeau. On the basis of these dates, we would positively have to assign historical priority to the French writer. It would remain to be seen if this difference in date necessarily implied that the English word was a calque of the French, and who would have been the agent of this transfer. Now it does not seem that Ferguson could have taken inspiration from Mirabeau; there is no proof that he had even read him. On the other hand, there are reasons to believe that the term *civilization* could have appeared in his writings or in his teaching before 1767.

We find an indication of this in a letter from David Hume to Adam Smith, dated April 12, 1759, recommending "our friend Ferguson" to him for a position at the University of Glasgow. Hume wrote in his friend's behalf: "Ferguson has very much polished and improved his treatise on Refinement and with some amendments it will make an admirable book, and discovers an elegant and a singular genius."[20] Now an article by Dugald-Stewart tells us that this treatise, *On Refinement*, was published in 1767 under the title of *An Essay on the History of Civil Society*. In 1759, then, it was the first version of the book mentioned above. If the manuscript of this first work has been preserved, it would be worth while to verify if Ferguson was already using the word *civilization* in it. If he was, it would become at least probable that Ferguson had invented it on his own account (if he had not found it in a previous author) and that in any case, the history of *civilization* in English, at least from its beginnings, in 1759, did not depend on a French influence. An investigation is needed.

Another bit of information along these same lines could be inferred from a much later publication by Ferguson himself. In 1792, in the leisure of his retirement, he published a summary of the lectures he had given at the University of Edinburgh on the principles of moral and political thought: *Principles of Moral and Political Science, being chiefly a Retrospect of Lectures delivered in the College of Edinburgh* (Edinburgh, 1792). He had occasion several times to use *civilization* in it (1:207, 241, 304; 2:313), but at this date the word no longer has anything unusual about it. One of the examples, however, must claim our attention: "The success of commercial arts, divided

into parts, requires a certain order to be preserved by those who practise them, and implies a certain security of the person and property, to which we give the name of civilization, although this distinction, both in the nature of the thing, and derivation of the word, belongs rather to the effects of law and political establishment on the forms of society, than to any state merely of lucrative possession or wealth" (1:241). The expression ". . . to which *we* give the name of civilization" is ambiguous; is it the "we" of common usage? Or that of an author who has created a new expression? It would be necessary to try to ascertain the date of the first version of this essay, if Ferguson's manuscripts still survive, in order to decide whether or not he refers to a word of his own invention.

We shall end with this suggestion for new research to be pursued in England, which alone will permit clearing up the point we now leave undecided: whether *civilization* was invented twice, in France and in England, independently but at about the same date, or whether it is the French which alone introduced it into the vocabulary of modern Europe.

From *Hommage à Lucien Febvre* (Paris, 1954), 1: 47–54

Notes

Abbreviations

B.S.L.	Bulletin de la Société de Linguistique de Paris
B.S.O.A.S.	Bulletin of the School of Oriental and African Studies (University of London)
B.S.O.S.	Bulletin of the School of Oriental Studies (London)
C.F.S.	Cahiers Ferdinand de Saussure
C.P.	Collected Papers
G.W.	Gesammelte Werke
H.A.I.L.	Handbook of the American Indian Languages
H.R.	F. W. K. Müller, Handschriften-Reste in Estrangelo-Schrifte aus Turfan, Chinesich-Turkestan (Abhandlungen der Preussichen Akademie der Wissenschaften, 1906)
I.J.A.L.	International Journal of American Linguistics
K.Z.	Zeitschrift für Vergleichende Sprachforschung auf dem Gebiete der Indogermanischen Sprachen, begrundet von A. Kuhn (Göttingen)
M.S.L.	Mémoires de la Société de Linguistique de Paris
N.T.S.	Norsk Tidsskrift for Sprogvidenskap
S.E.	Standard Edition
W.Z.K.M.	Wiener Zeitschrift für die Kunde des Morgenlandes
Z.D.M.G.	Zeitschrift der Deutschen Morgenländischen Gesellschaft
Z.I.I.	Zeitschrift für Indologie und Iranistik

Chapter Two

1. "Symbolic thought is simply thought. Judgment creates symbols. All thought is symbolic. All thought constructs signs at the same time as things. Thought, in creating itself, leads inevitably to symbol since its formulation is immediately symbolic; since the images under which it establishes groups of things are symbols of them and since it always operates on symbols, even when it seems to be operating directly on things, because the things on which it operates are basically only symbols. And it arranges these symbols in a world of symbols, in a system of signs, according to relationships and laws." H. Delacroix, *La Langage et la Pensée* (Paris, 1930), p. 602.

CHAPTER THREE

1. These pages reproduce the essentials of a lecture given at Geneva on February 22, 1963, at the invitation of the University in order to commemorate the fiftieth anniversary of the death of Ferdinand de Saussure. Some preliminary sentences of a personal character have been omitted. It should not be forgotten that this lecture was intended for an audience consisting of others besides linguists and that the circumstances excluded all discussion and even any excessively technical statements.
2. R. Godel, *Les sources manuscrites du "Cours de linguistique générale" de Ferdinand de Saussure* (Geneva, 1957).
3. This text was cited by Godel, *Les Sources*, p. 31, but from a defective copy, which should be corrected in several places. The passage is quoted here from the original letter. Also [1965] see Benveniste, "Lettres de Ferdinand de Saussure à Antoine Meillet," *Cahiers Ferdinand de Saussure* 21 (1964): 92–135.
4. *C.F.S.* 12 (1954): 57, 58. 5. Ibid., p. 58.
6. Ibid., p. 63. 7. Ibid., pp. 55, 56. 8. Ibid., p. 57.
9. *Modern Language Journal* 8 (1924): 319.
10. *Cours de linguistique générale*, 1st ed., pp. 34, 35. (Ferdinand de Saussure, *Course in General Linguistics*, Wade Baskin trans. [New York, 1959], pp. 16, 17.)
11. A. Meillet, *Linguistique historique et linguistique générale* (Paris, 1936) 2:174.
12. Ibid., p. 183.

CHAPTER FOUR

1. Cited here from the first edition, Lausanne-Paris, 1916. (Ferdinand de Saussure, *Course in General Linguistics*, Wade Baskin trans. [New York, 1959]. The page numbers in square brackets refer to this translation.)

CHAPTER FIVE

1. Cf., among others, Maurice Mathis, *Le peuple des abeilles*, p. 70: "Dr. K. von Frisch had discovered . . . the behaviour of the baited bee on its return to the hive. According to the nature of the food to be exploited, honey or pollen, this bee performed a regular exhibition dance on the wax combs, turning in a circle for a sweet substance or in figures of eight for the pollen."
2. Karl von Frisch, *Bees, Their Vision, Chemical Senses, and Language* (Ithaca, New York: Cornell University Press, 1950).
3. Ibid., p. vii (Foreword by Donald R. Griffin).
4. Since these pages were written, a review of Frisch's book by F. Lotz, published in *Word* 7 (1951) : 66, has already called the attention of the linguists to this problem and offered some of the remarks presented here.
5. For a survey of recent research on animal communication and on the language of bees in particular, see an article by T. Sebeok in *Science*, 1965, pp. 1006ff.

Chapter Six

1. The original text is not quoted since all the Greek terms are cited below. We translated the passage literally in order to give it its general tenor before analyzing it in detail. [The translator has accordingly not used a standard English translation here.]
2. We do not take account here of the difference of accentuation between the relative series and the interrogative. That is a secondary fact.
3. Quoted with other similar opinions and sanctioned by H. P. Cook in the preface to his edition of the *Categories* (Loeb Classical Library). [The translator used Cook's translation of Gomperz.]
4. With regard to this question, see an article in the *Journal de Psychologie*, 1950, pp. 121ff (reproduced in chapter 14).
5. A detailed account of the facts will be found in D. Westermann, *Grammatik der Ewe-Sprache* (Berlin, 1907), sections 110–111; *Wörterbuch der Ewe-Sprache*, (Berlin, 1954), 1:321, 384.

Chapter Seven

1. The references to the texts of Freud use the following abbreviations: *G.W.* with the number of the volume for the *Gesammelte Werke*, the chronological edition of the German texts published in London by Imago Publishers; *S.E.* for the English text of the *Standard Edition*, which is in the process of being published by the Hogarth Press in London; *C.P.* for the English text of the *Collected Papers*, Hogarth Press, London.
2. J. Lacan, "Fonction et champ de la parole et du langage en psychanalyse," *La Psychanalyse* 1 (1956):81–166.
3. *C.P.*, 4:184–191; *G.W.*, 8:214–222.
4. *The Interpretation of Dreams* indicates that oriental dream-books base the greater number of their interpretations upon similarity of sounds and resemblance between words. *S.E.*, 4; *G.W.*, 2–3.
5. *S.E.*, 19:235–239; *G.W.*, 14:11–15.
6. *S.E.*, 5:351, *G.W.*, 2–3:356.

Chapter Eight

1. None of these terms, however, is yet included in the *Lexique de la terminologie linguistique* by J. Marouzeau, 3rd ed., Paris, 1951 [nor in the updated reprinting of this edition dated 1961]. For a rather general historical summary, see J. R. Firth, "Structural Linguistics," *Transactions of the Philological Society*, 1955, pp. 83–103.
2. But neither "to structure" nor "structuration" are current in linguistics.
3. We are considering here only works *in French*; it is particularly necessary to stress this because this terminology is now international but it does not convey the same ideas in one language as in another. See p. 82 at the end of this chapter. We are not taking into account the nontechnical use of the term "structure" by certain linguists, for example J. Vendryes, "La structure grammaticale," *Le Langage*, Paris, 1923, pp. 361, 408.

4. We should remember that this book, which appeared in 1916, is a posthumous publication. We are here quoting from the fourth edition, Paris, 1949. (Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin [New York, 1959].) On the materials used for the redaction, see R. Godel, *Les Sources manuscrites du "Cours de Linguistique générale"* (Geneva, 1959).
5. "Precursor of the phonology of Prague and of modern structuralism" (B. Malmerg, "Saussure et la phonétique moderne," *Cahiers F. de Saussure* 12 [1954]: 17). See also A. J. Greimas, "L'actualité du saussurisme," *Le français modern*, 1956, pp. 191ff.
6. Saussure (1857–1913) taught at Paris at the École des Hautes Études from 1881 to 1891.
7. A. Meillet, *Linguistique historique et linguistique générale* 2 (1936): 222.
8. Ibid., p. 158.
9. *Linguistique historique et linguistique générale* 1 (1921): 11.
10. Ibid., p. 16.
11. M. Grammont, *Traité de phonétique* (Paris, 1933), p. 153.
12. Ibid., p. 167.
13. Another study that adheres to the Saussurian doctrine is that by G. Guillaume, "La langue est-elle ou n'est-elle pas un système?" *Cahiers de linguistique structurale de l'Université de Québec* 1 (1952).
14. *Actes du I^er^ Congrès international de Linguistes*, 1928, pp. 36–39, 86.
15. *Travaux du Cercle linguistique de Prague* (Prague, 1929).
16. Ibid., p. 8. 17. Ibid., p. 10. 18. Ibid., pp. 10–11.
19. Ibid., p. 12. 20. Ibid., p. 26.
21. The linguists mentioned played a large part in the work of the Linguistic Circle of Prague under the leadership of V. Matthesius in particular; this is why the movement is often referred to as "the school of Prague." For tracing its history, the collection of the *Travaux du Cercle linguistique de Prague* is an essential source. And especially, see also R. Jakobson, "La scuola linguistica di Praga," *La Cultura* 12 (1933): 633–641; "Die Arbeit der sogenannten 'Prager Schule,'" *Bulletin du Cercle linguistique de Copenhague* 3 (1938): 6–8; preface to *Principes de Phonologie* de N. S. Trubetskoy, French translation (Paris, 1949), pp. xxv–xxvii.
22. N. Trubetskoy, "La phonologie actuelle," *Psychologie du langage*, Paris, 1933, pp. 227–246.
23. Ibid., p. 233. 24. Ibid., p. 243. 25. Ibid., p. 245. 26. Ibid., pp. 245–246.
27. The two terms "structure" and "system" are related differently in the article by A. Mirambel, "Structure et dualisme de système en grec moderne," *Journal de Psychologie*, 1952, pp. 30ff, and still differently in W. S. Allen, "Structure and System in the Abaza Verbal Complex," *Transactions of the Philological Society*, 1956, pp. 127–176.
28. This attitude with respect to language has been studied from a philosophical perspective by Ernst Cassirer, "Structuralism in Modern Linguistics," *Word* 1 (1945): 99ff. On the situation of structural linguistics with respect to the other social sciences, see A. G. Haudricourt, "Méthode scientifique et linguistique structurale," *L'Année Sociologique*, 1959, pp. 31–48.
29. A. Lalande, *Vocabulaire technique et critique de la philosophie* (Paris, 1960), vol. 3, s.v. Structure.
30. Ibid., s.v. Forme.
31. V. Brøndal, *Acta Linguistica* 1 (1939): 2–10. The article was reprinted in his *Essais de linguistique générale* (Copenhagen, 1943), pp. 90ff.
32. *Acta Linguistica* 4 (1944): v. The same ideas are developed in English by L. Hjelmslev in an article entitled "Structural Analysis of Language," *Studia Linguistica*, 1947, pp. 69ff. Cf. also the *Proceedings of the VIIIth International Congress of Linguists*, Oslo, 1958, pp. 636ff.

33. See a summary of the whole subject in E. Benveniste, "Tendances récentes en linguistique générale," *Journal de Psychologie*, 1954, pp. 130ff.
34. A. Martinet, *Économie des changements phonétiques* (Berne), p. 11.
35. An instructive comparison of the points of view is given by A. Martinet, "Structural Linguistics," in *Anthropology Today*, ed. A. L. Kroeber, Chicago, 1953, pp. 574ff. Several definitions are also to be found in Eric P. Hamp, *A Glossary of American Technical Linguistic Usage* (Utrecht-Anvers, 1957), s.v. Structure.

Chapter Nine

1. L. Bloomfield, *Language* 1 (1925):130 and 4 (1928):99; and in his book, *Language* (New York, 1933), pp. 359–360.
2. For the same opinion, see the observations of M. Swadesh, *I.J.A.L.* 19 (1953):31 ff.
3. I am utilizing here some of the brief notations from the excellent survey by Clement M. Doke, *Bantu* (International African Institute), London, 1945. For more details see Malcolm Guthrie, *The Classification of the Bantu Languages* (London, 1948), whose conclusions are not essentially different.
4. For a recent account, see the study of Austroasian by R. Shafer, *B.S.L.* 48 (1952):111ff.
5. B. Collinder, "Le parenté linguistique et le calcul des probabilités," *Uppsala Universitets Arsskrift* 13 (1948):24.
6. A. L. Kroeber and C. D. Chrétien, *Language* 15 (1939):69; cf. D. W. Reed and J. L. Spicer, ibid. 28 (1952): 348ff.
7. N. S. Trubetskoy, "Gedanken über das Indogermanenproblem," *Acta Linguistica* 1 (1939):81ff.
8. E. Sapir, "The Takelma Language of South-Western Oregon," in F. Boas, ed., *Handbook of America Indian Languages*, Bureau of American Ethnology, Bulletin 40, 2 (Washington, D.C., 1911–1938):1–296.
9. Examples taken from the Takelma text in Sapir, pp. 294–295. It is well to note that Takelma permits several nominal affixes but no nominal inflection, and that, in addition, it practices a great deal of incorporation of subjective and objective pronouns. But we simply want to show that Trubetskoy's syntactic criterion applies here too.
10. In his article on phonological affinities reproduced as the appendix to Trubetskoy's *Principes de Phonologie* (French translation by J. Cantineau, Paris, 1949), p. 353.
11. F. N. Finck, *Die Haupttypen des Sprachbaus*, 3rd ed. (Stuttgart, 1936).
12. Finck's categories were used, but considerably enriched and made more flexible, in the writings of two original linguists, J. Lohmann and E. Lewy. Cf. in particular, Lewy, "Der Bau der europäischen Sprachen," *Proceedings of the Royal Irish Academy* 48 (1942):15–117.
13. E. Sapir, *Language* (New York, 1921), chaps. 5, 6.
14. Ibid., p. 149.

Chapter Ten

1. B. Russell, *Introduction to Mathematical Philosophy* (New York, 1960), pp. 155–156: "A 'propositional function' . . . is an expression containing one or more undetermined constituents, such that, when values are assigned to these constituents, the expression becomes a proposition . . . 'x is human' is a propositional function, so long as x remains undetermined, it is neither true nor false but when a value is assigned to x it becomes a true or false proposition."

2. F. de Saussure seems also to have conceived of the "meaning" as an internal component of linguistic form although he expressed it only in a comparison intended to refute another comparison: "The two-sided linguistic unit has often been compared with the human person, made up of the body and the soul. The comparison is hardly satisfactory. A better choice would be a chemical compound like water, a combination of hydrogen and oxygen; taken separately, neither element has any of the properties of water" (*Cours de linguistique générale*, 2nd ed., Paris, 1940, p. 145 [Ferdinand de Saussure, *Course in General Linguistics*, tr. Wade Baskin, New York, 1959, p. 103]).
3. Gr. *katégorema* = Lat. *praedicatum.*
4. Since *lexeme* was made from Gr. *lexis*, there is no reason not to make *phraseme* from Gr. *phrasis* 'sentence.'

CHAPTER ELEVEN

1. We are not making a distinction between prepositions and preverbs here.
2. See in particular Bruno Kranz, "De particularum 'pro' et 'prae' in prisca latinitate vi atque usu," dissertation, Breslau, 1907, and J. B. Hofmann, *Lateinische Syntax und Stylistik*, rev. by Anton Szantyr in *Handbuch der Altertum Wissenschaft* (Munich, 1965), 2:268, 271.
3. J. Wackernagel, *Jahrbuch des Schweizer Gymnasiallehrervereins* (1919), 47:166ff, followed by Hofmann, *Lateinische Syntax.*
4. K. Brugmann, *Grundriss der vergleichenden Grammatik der Indogermanischen Sprachen*, 2nd ed. (Strassburg, 1906–1911), II, 2, p. 881, section 692B.
5. O. Riemann, *Syntaxe latine*, 7th ed. (Paris, 1942), p. 195, n. 1.

CHAPTER TWELVE

1. A. W. de Groot, "Classification of the Uses of a Case Illustrated on the Genitive in Latin," *Lingua* 6 (1956):8–65.
2. Ibid., p. 8: "A structural description is a description of grammar in terms of grammar."
3. Ibid., p. 22: "A regular category may be said to be 'freely productive.' "
4. Ibid., p. 32. 5. Ibid., p. 56.
6. O. Riemann, *Syntaxe latine*, 7th ed. (Paris, 1942), p. 135.
7. De Groot, "Classification," p. 46.
8. J. W. Poultney, *The Bronze Tables of Iguvium* (New York, 1959), sec. 153 i, p. 154.
9. G. Devoto, *Tabulae Iguvinae*, 2nd ed. (Rome, 1940), p. 519.
10. The commentary on this example by de Groot, "Classification," pp. 46–47, makes the *id* the object of *assentandi*: "Indefinite case of the substantival neuter pronoun with the genitive of a gerundive, *id assentandi* . . . [p. 47]. Consequently, *id assentandi* may, in a sense, be said to be the equivalent of *eius rei assentandi*; there are, however, no examples of the latter construction, and no examples of *assentari* with a noun object, *assentari aliquam rem.*" In fact, *id* is not and could not be the object of *assentandi*; the sentence would be unintelligible; *id* must obviously be construed with *facere.*
11. Cicero *De Legibus* 2. 9.
12. See especially A. Ernout, *Philologica* (Paris, 1946), pp. 217ff, for a good collection of examples. Cf. also A. Ernout and F. Thomas, *Syntaxe latine* (Paris, 1951), pp. 225–226.

13. Belonging, the case of which is the genitive, should be carefully distinguished from possession, which is predicated in the dative; cf. *Archiv Orientální* 17 (1949):44–45.
14. De Groot, "Classification," p. 42: "If I am right in taking this as a separate grammatical category . . ."
15. Ibid., p. 52.

Chapter Thirteen

1. Most recently in several articles in the *Journal de psychologie* 43 (1950):1–192 (fascicle entitled "Grammaire et psychologie").
2. Cf. P. E. Goddard, in F. Boas, ed., *Handbook of American Indian Languages*, Bureau of American Ethnology, Bulletin 40 (Washington, D.C., 1911–1938), 1:109, sec. 23.
3. R. L. Bunzel, *H.A.I.L.* 3 (New York, 1933–1938): 496.
4. L. J. Frachtenberg, *H.A.I.L.* 2:604.
5. Cf. B. L. Whorf in *Linguistic Structures of Native America*, ed. H. Hoijer et al. (New York, 1946), p. 165.
6. C. F. Voegelin, *Tübatulabal Grammar* (Berkeley, California, 1935), p. 164.
7. Cf. L. Bloomfield, *Language* 18 (1942):196.
8. Cf. Voegelin, *Tübatulabal Grammar*, pp. 149, 162.
9. On the conditions of the nominal sentence in Finno-Ugric, in addition to the article by R. Gauthiot, *M.S.L.* 15 (1909):201–227, see that of T. A. Sebeok, *Language* 19 (1943):320–327. Cf. also A. Sauvageot, *Lingua* 1 (1948):225ff.
10. Cf. Frachtenberg, *H.A.I.L.* 2:414.
11. L. Bloomfield, *Tagalog Texts* (Urbana, Illinois, 1917) 2:153, sec. 89.
12. The fact that the nominal sentence often expresses "general truths" has already been observed; cf. Meillet, *M.S.L.* 14 (1906–1908):16, and A. Meillet and J. Vendryes, *Traité de grammaire comparative*, 2nd ed. (Paris, 1927), p. 595, sec. 871. We are trying to give this empirical observation a basis, and that is the very structure of the utterance.
13. The reader who compares our remarks with the important article by L. Hjelmslev ("Le verbe et la phrase nominale," *Mélanges J. Marouzeau*, Paris, 1948, pp. 253–281) will be able to observe some points of agreement between the two discussions and one serious divergence, which we can only indicate briefly here. We agree with taking the term "nominal sentence" in its narrow meaning. Hjelmslev's final definition, "a verb is a propositional conjunction" (p. 281), is hardly different from one of the two properties by which we characterize the verb. The other, however, the assertive function, seems equally necessary to us. But the critical point in Hjelmslev's discussion seems to us to be the "commutation" by which he separates three implicit elements in the content of *omnia praeclara rara*: infectum, present, and indicative. He says, "The proof is furnished by the fact that as soon as one replaces the infectum by the other aspect, the present by another tense, or the indicative by another mood, the expression necessarily changes at the same time" (p. 259). This is precisely the operation which, it seems to us, the meaning of the nominal sentence prohibits. Hjelmslev maintains that there is a difference only of emphasis or stress between the nominal sentence *omnia praeclara rara* and a verbal sentence such as *omnia praeclara sunt rara* (p. 265). We, on the contrary, have attempted to establish that these are two types with distinct functions. As a consequence, there is no possible commutation from one to the other, and it is not legitimate to seek an implicit expression of tense, mood, and aspect in a nominal utterance which is by nature nontemporal, nonmodal, and nonaspectual.
14. M. L. Sjoestedt, *Description d'un parler irlandais du Kerry* (Paris, 1938), p. 116, sec. 154.

CHAPTER FOURTEEN

1. In this article we have purposely used examples that are cited in all works of comparative grammar.
2. To my knowledge, B. Delbrück, *Vergleichende Syntax der Indogermanischen Sprachen*, 2:412ff, in K. Brugmann and B. Delbrück, *Grundriss der Vergleichenden Grammatik der Indogermanischen Sprachen* (Strassburg, 1893–1900), vols. 3–5, is the only one to have made them a basic part of his description. But he has parceled out the facts into small semantic categories instead of aiming at a general definition. By proceeding in this way, we do not imply that these verbs with a single diathesis necessarily preserve an earlier stage than the verbs with the double diathesis.
3. This distinction is justified in an article in *B.S.L.* 43 (1946):1ff (see chapter 18 of this work).

CHAPTER FIFTEEN

1. H. Schuchardt, *Ueber den passiven Charakter des Transitivs in den Kaukasichen Sprachen* (Vienna: Sitzungsberichte der Philosophisch-Historischen Classe der Kaiserlichen Akademie der Wissenschaften, 1896), vol. 133.
2. A summary of this will be found in the article by Hans Schnorr von Carolsfeld, "Transitivum und Intransitivum," *I.F.* 52 (1933):1–31.
3. See, for example, the recent study by H. Hendriksen, "The Active and the Passive," *Uppsala Universitet Arsskrift* 13 (1948):61ff.
4. W. Geiger, "Die Passivconstruktion des Präteritums transitiver Verba im Iranischen," *Festgruss an Rudolf von Roth*, Stuttgart, 1893, pp. 1ff.
5. Including Meillet-Benveniste, *Grammaire du vieux-perse* (1931), p. 124.
6. For example, G. Morgenstierne, *N.T.S.* 12 (1940):107, n. 4, for an explanation of the transitive preterite in Pashto.
7. *Grammaire du vieux-perse*, pp. 122ff.
8. The form and the meaning of Old Persian *avā* 'as much' have been explained in a note in the *B.S.L.* 47 (1951):31.
9. The restoration of the participle is debatable and other forms can be envisaged. But it must be a participle, and it is only the construction that matters here.
10. It is curious that these examples, the only ones that shed light on the construction of the passive, are not even mentioned in R. G. Kent, *Old Persian* (American Oriental Society), New Haven, 1953, sec. 275, in the very skimpy paragraph in which he deals with the passive.
11. For the translation of *tau[h]mā*, cf. *B.S.L.* 47:37.
12. Kent's translation, "other sons of Darius there were" (*Old Persian*, 150), is literal only in appearance. Kent has failed to recognize the true sense of the sentence in not having seen that the genitive-dative here has a predicative function. The name Darius is the pivot of the development: "Darius had other sons besides me, but it is to me that he granted the preeminence." This holds also for the translation of B. 1. 29–30: "Of that Cambyses there was a brother."
13. A. Meillet, "Le développement du verbe 'avoir,' " *Antidoron . . . J. Wackernagel*, 1924, pp. 9–13.
14. The expression is drawn from the last Persian example cited for convenience of discussion. Besides, it is maintained in Middle Persian: *ēn zan kē-š yak pust ast* 'that woman who has a son' (*H.R.* 2:91).
15. A. Meillet, *M.S.L.* 11 (1900):385, and *Esquisse d'une grammaire comparée de l'arménien classique* (Vienna, 1903), p. 68.
16. To our knowledge, the only comprehensive account remains that of A. Dirr, *Einführing in das Studium der Kaukasichen Sprachen* (Leipzig, 1928), pp. 63ff.

17. G. Deeters, *Armenisch und Südkaukasich* (Leipzig, 1927), pp. 77ff.
18. Ibid., p. 113.
19. Meillet, *Esquisse*, 1st ed., p. 68; *Esquisse*, 2nd ed. (Vienna, 1936), p. 128.
20. K. Brugmann and B. Delbrück, *Grundriss der Vergleichenden Syntax der Indogermanischen Sprachen* (Strassburg, 1893–1900), 2:502; H. Pedersen, *K.Z.* 40:151ff, and *Tocharisch vom Besichtspunkt der Indoeuropäischen Sprachvergleichung* (Copenhagen, 1941), p. 46; H. Schuchardt, *W.Z.K.M.* 19 (1905):208ff; Deeters, *Arm. und Südkaukas*, p. 79; L. Mariès, *Revue des Études Arméniennes* 10 (1930):176; S. Lyonnet, *Le parfait en arménien classique* (Paris, 1933), p. 68.
21. Other examples will be found in A. Meillet, *M.S.L.* 12 (1903):411, and in the study by G. Cuendet on the translation of Gr. *ἔχειν* in classical Armenian, *Revue des Études Indo-européennes* 1 (1938):390ff.
22. These pages had been printed when I saw that M. J. Lohmann, *K.Z.* 43 (1936):51ff, had arrived at the same interpretation of the Armenian perfect by a different route, starting from Georgian.
23. A summary of this development was traced by J. Vendryes in *Mélanges de linguistique et de philologie offerts à Jacq. van Gynneken à l'occasion du soixantième anniversaire de sa naissance (21 avril 1937)*, Paris, 1937, pp. 85–92 (an article reprinted in his *Choix d'études linguistiques et celtiques*, Paris, 1952, pp. 102–109).
24. The formation of the perfect in Khorasmian, parallel to that in Sogdian, was suggested by W. Henning, *Z.D.M.G.* 90 (1936):*33*. See also A. A. Freiman, *Xorezmiiskii Jazyk* (Moscow, 1951), pp. 41, 112. In Khotanese, it is the auxiliary *yan-* 'to do,' which constitutes the transitive perfect. Cf. S. Konow, *Primer of Khotanese Saka* (Oslo, 1949), p. 50.
25. The essential data for Middle Persian will be found in W. Henning, *Z.I.I.* 9 (1933):242ff; for Middle Parthian, in A. Ghilain, *Essai sur la langue parthe* (Louvain, 1939), pp. 119ff.

Chapter Sixteen

1. *B.S.L.* 46 (1950):19ff, and 55 (1960):259ff.
2. Cf. A. Socin, *Arabische Grammatik*, 11th ed., C. Brockelmann, ed., sec. 100–102.
3. For more examples, see J. Deny, *Grammaire de la langue turque* (Paris, 1920), sec. 549ff, 1175; and in the collaborative work, *Philologiae Turcicae Fundamenta* (1959), 1:104, 111, 125, 207, et al.
4. We have previously remarked upon this use of the pronoun in Sogdian and Yagnābī (E. Benveniste, *Essai de grammaire sogdienne* [Paris, 1914–1929] 2:67–68), but without being able to explain it.
5. Examples from M. S. Andreev and E. M. Peshchereva, *Jagnobskie Teksty* (Moscow, 1957), pp. 227b, 354a; W. Geiger and E. W. A. Kuhn, *Grundriss der Iranischen Philologie*, 2:342 (sec. 94, 3). Under the influence of Persian, Yagn. *-x* is sometimes reinforced by *ast*.
6. Cf. Benveniste, *Études sur la langue ossète* (Paris, 1959), pp. 74–75, where the present demonstration is announced.
7. For details, cf. A. Ernout, *B.S.L.* 50 (1954):25ff.
8. M. L. Sjoestedt, *Description d'un parler du Kerry* (Paris, 1938), pp. 112ff.
9. W. Krause, *Westtocharische Grammatik* (Heidelberg, 1952), 1:61, sec. 64.
10. *B.S.L.* 52 (1956):289–306.
11. Perhaps there may be ground for a revision, from the viewpoint indicated here, of the complex data relating to "to be" in Indo-Aryan that have been studied by R. L. Turner, *B.S.O.S.* 8 (1936):795ff, and H. Hendriksen, *B.S.O.A.S.* 20 (1957):331ff.

12. A. Meillet, "Le développement du verbe 'avoir,' " *Antidóron J. Wackernagel*, 1924, pp. 9–13.
13. Deny, *Grammaire*, sec. 1198.
14. N. N. Poppe, *Grammar of Written Mongolian* (Wiesbaden, 1954), p. 147, sec. 509.
15. The different expressions have been studied by G. Deeters, *Festschrift A. Debrunner*, 1954, pp. 109ff.
16. D. Westermann, *Wörterbuch der Ewe-Sprache*, rev. ed. (Berlin, 1954), 1:321.
17. A. Klingenheben, *Nachrichten von der Gesellschaft der wissenschaften zu Göttingen*, 1933, p. 390.
18. J. Lukas, *A Study of the Kanuri Language* (London, 1937), pp. 28–29, sec. 72.
19. This distinction did not appear in the article by Meillet cited above. It was suggested for Hittite in *Archiv Orientální* 17 (1949):44ff.
20. Cf. *Archivum Linguisticum* 1 (1949):19ff; *Die Sprache* 6 (1960):169.
21. The lemma *aēs-* of C. Bartholomae, *Altiranisches Wörterbuch*, Strassburg, 1904, s.v., is illusory. A stem in *aēs-* could in all strictness be postulated for the substantive *aēšâ-*. But as verbal forms, there exist only the perfect *ise* (to be read *īse*) and the participle *isāna-* (to be read *īsāna-*), identical to Ved. *īśe, īśaná-*. One can give no credit to the forms *iste, ista*, which are inadequately documented or are editorial corrections.
22. M. Leumann, *Morphologische Neuerungen im altindischen Verbalsystem* (Meddelingen der Koninklijke Nederlandse Akademie N.R. XV, 3), 1952, p. 13 (85), rightly emphasizes the parallelism of Gothic and Indo-Iranian that originate in one form of the perfect.
23. M. Haas, *Tunica, Handbook of American Indian Languages* (New York, 1941), 4:59ff, sec. 4. 71.
24. *B.S.L.* 54 (1959) : 57ff (chapter 15).
25. W. Westendorf, *Mitteilungen des Instituts für Orientforschung* 1 (1953): 227ff.
26. Cf. S. Lyonnet, *Le Parfait en arménien classique* (Paris, 1933), p. 100.
27. Ibid., p. 95, Lyonnet rightly observes: ". . . in certain cases it is difficult to decide if the perfect marks the state of the object or of the subject."
28. Cf. E. Schwyzer, *Griechische Grammatik*, rev. A. Debrunner (Munich, 1950), 2:150, for other examples. Schwyzer, "Zum persönlichen Agens beim Passiv," *Abhandlungen der Preussischen Akademie der Wissenschaften*, 1942, no. 10, pp. 15–16, is rather vague; he does not distinguish the dative with the verbal adjective from the dative with the passive forms of the verb.
29. Cf. Lyonnet, *Le Parfait*, pp. 55–56.
30. A. Meillet, *Caractères généraux des langues germaniques*, 5th ed. (Paris, 1937), p. 130.
31. Cf. most recently, K. Sørensen, in *Travaux du Cercle Linguistique de Copenhague* 11 (1957):145.
32. The reverse order, with "to be" preceding the adjective, indicates a predicative syntagm, not a perfect: *batei was gadraban*, as in Greek, *ὅ ἦ λελατομημένον* (Mark 15:46).
33. A. Heusler, *Altisländisches Elementarbuch*, 4th ed. (Heidelberg, 1950), sec. 434.
34. J. Barat, *M.S.L.* 18 (1914):140ff.
35. F. Mossé, *Manuel de l'anglais du Moyen Age* (Paris, 1943), 1:150, 236.
36. Cf. Zbigniew Golab, in *Folia Orientalia* (Cracow, 1959), 1:34ff.

CHAPTER SEVENTEEN

1. The data on Ewe are taken from D. Westermann, *Grammatik der Ewe-sprache* (Berlin, 1907), secs. 91–92, 176.
2. Ibid., sec. 149.

3. Ibid., sec. 93. "Das Relativpronomen *si* ist dasselbe wie Demonstrativ *si*, und man könnte *si* deshalb ebenso gut ein Demonstrativpronomen des vorangehenden Substantiv nennen."
4. Our analysis is based on the description by Mary R. Haas, *Tunica, Handbook of American Indian Languages* (New York, 1941), vol. 4. We have combined sections 4.843 and 7.45.
5. Mary R. Haas, *Tunica Texts*, University of California Publications in Linguistics, 6, no. 1 (1950):62d.
6. We have used Bérard Haile, *Learning Navaho* (St. Michaels, Arizona, 1941–1948), vols. 1–4. The examples are taken from 1:50, 92, 128, 164; 3:37; 4:167.
7. Citations following F. K. Li, *Linguistic Structures of Native America*, ed. H. Hoijer (New York 1946), sec. 12d, p. 401 and sec. 45a, pp. 419–420.
8. Numerous examples in R. Jestin, *Le verbe sumérien: Déterminants verbaux et infixes* (Paris, 1943), pp. 162ff.
9. A similar interpretation is now given by V. Christian, *Beiträge zur Sumerischen Grammatik* (Öesterreichische Akademie der Wissenchaften, Philosophisch-historische klasse, Sitzungberichte, 1957), 231, 2, p. 116.
10. A. Socin, *Arabische Grammatik*, rev. C. Brockelmann, 11th ed. (Leipzig, 1941), sec. 125, pp. 150–151.
11. There is hardly need to say that we are describing here not the Indo-European varieties of the relative clause but only the structure of the Indo-European type. We have limited ourselves to the essentials on purpose. The accumulation of examples found in all the textbooks would have easily and uselessly extended this study.
12. See B. Delbrück, *Vergleichende Syntax*, 3:304ff, in F. K. Brugmann and B. Delbrücke, *Grundriss der Vergleichenden Grammatik der Indogermanischen Sprachen* (Strassburg, 1899–1911), vols. 3–5; J. Wackernagel, *Altindische Grammatik*, rev. A. Debrunner (Göttingen, 1957), 3:554–557 (with bibliography); a survey of the uses in L. Renou, *Grammaire de la langue védique* (Lyon, 1952), sec. 446ff, which rightly stresses (sec. 448) the archaic nature of the use of *ya-* as an article.
13. W. Porzig, *I.F.* 41:216ff, cites fifty-one examples of it for *mandalas*, vols. 2–7 of the *R.V.*
14. The examples are in C. Bartholomae, *Altiranisches Wörterbuch* (Strassburg, 1904), col. 1221ff; cf. H. Reichelt, *Awestisches Elementarbuch* (Heidelberg, 1909), sec. 749ff. The description of the facts of Avestan was the topic of a paper presented by Hansjakob Seiler under the title, "Das Relativpronomen im jüngeren Awesta," to the XXIVth International Congress of Orientalists, Munich, August 29, 1957.
15. The construction of the determined adjective is presented as a correspondence between Iranian, Slavic, and Baltic in A. Meillet and A. Vaillant, *Le Slave commun* (Paris, 1934), p. 446. This is actually a common Indo-European feature, as our demonstration tends to establish.
16. See E. A. Hahn, *Language* 21 (1946):68ff; 25 (1949):346ff; J. Friedrich, *Hethitisches Elementarbuch* (Heidelberg, 1940–1946), sec. 336.
17. Several of those which follow are taken from the texts published by E. von Schuler, *Hethitische Dienstanweisungen* (Graz, 1957), pp. 14, 17, 41 (secs. 8–9).
18. Quotation from the myth of Telipinu, E. Laroche, *Révue Hittite et Asianique* 13 (1955):29.
19. This is unfortunately the case in the edition by R. G. Kent (Loeb Classical Library), 1:54, which follows Laetus in correcting "divi potes." Similar "corrections" eliminate from our texts authentic features that cannot be explained as errors in the tradition.
20. Lit. "of the same tastes as A. V."
21. See several other citations in W. Havers, *I.F.* 43 (1926): 239ff, where they are defined inaccurately as "emphatische Relativsätze."

22. Cf. J. Vendryes, *Grammaire du vieil-irlandais* (Paris, 1908), pp. 331ff, and R. Thurneysen, *A Grammar of Old Irish*, trans. D. A. Binchy and O. Bergin (Dublin, 1946), secs. 492ff.
23. The evidence of Celtic would be very valuable if one could confirm the hypothesis of Thurneysen, *Grammar*, sec. 50ff, on the Gallic 3rd pl. rel. *dugiiuntiio*, which would contain at the end the postposed pronoun **yo*. This postposition has been likened to that of the pronoun *kuiš* in Hittite by M. Dillon, *Transactions of the Philological Society*, 1947, p. 24. But J. Pokorny, *Die Sprache* 1 (1949):242, judges it differently.

CHAPTER EIGHTEEN

1. I have made certain of this by questioning Mr. Li-Long-Tseu, a cultured Korean and himself a linguist, to whom I am indebted for the following corrections. In transcribing Korean, I have reproduced his pronunciation.

CHAPTER NINETEEN

1. We are here referring to distinctions that were stated in an article in the *B.S.L.* 18 (1946):1ff, and 54 (1959):399ff.
2. We hope that using the term "aorist" for the tense that is the "passé simple" or "passé défini" in French grammars will not be found inconvenient. "Aorist" does not have connotations so different or so precise as to create confusion here, and it is preferable to "preterite," which might be confused with the "imperfect."
3. We have put aside completely the modal forms of the verb as well as the nominals (the infinitive, participles). Everything that is said here on the topic of the correlations of tenses applies equally to these forms.
4. Of course the historical statement of events is independent of their "objective" truth. All that counts is the "historical" intention of the writer.
5. Example of the "prospective" (p. 206).
6. Intrusion of discourse into the narrative with the correlative change of tense.
7. On indirect discourse, see below, p. 209.
8. Reflection of the author which is a departure from the plane of narration.
9. As in the case in the comment pointed out by the above note.
10. We always refer to the tenses of the "historical narration" in order to avoid the term "narrative tenses," which has created so much confusion. In the perspective we are laying out here, the aorist is a "narrative tense" but the perfect could also be one, and this obscures the essential distinction between the two planes of utterance.
11. This is the title of an article by A. Meillet, published in 1909, that was included in his *Linguistique historique and linguistique générale* (Paris, 1926), 1:149ff.
12. To give just two examples of recent translations: the translator of Ernest Hemingway's "Big Two-Hearted River," called in French *La Grande Rivière au coeur double* (in the collection *The Fifth Column and the Forty-nine First Stories*, French title, *Paradis perdu*, Paris, 1949), used the aorist continuously for forty pages (along with the imperfect and the pluperfect). Except for two or three sentences of interior monologue, the entire narrative is, in French, established in this temporal relationship, since no other is possible. The same with the French version of Thor Heyerdahl's *L'Expedition du Kon-Tiki*, which presents the greater part of the narration exclusively in the aorist, throughout entire chapters.

13. This is the case with *L'Étranger* by Albert Camus. The exclusive use of the perfect in this narration as the tense of the events was commented on with penetration, but from another point of view, by Jean-Paul Sartre, *Situations*, 1:117–118.
14. We must make some subtle distinctions here. The novelist still uses the aorist without effort in the first persons of the singular and plural. It will be found on every page of a narration like Alain-Fournier's *Le Grand Meaulnes*. But it is otherwise for the historian.
15. We are not of course speaking here of the "historical present" of the grammars, which is simply a stylistic device.
16. Example: "En un instant il eut écrit cette lettre."
17. Example: "Il aura écrit cette lettre dans une heure."

Chapter Twenty

1. For an earlier statement of this see *B.S.L.* 53 (1946) : 1ff (chapter 18 above).
2. According to A. M. Halpern in his article "Yuma," *Linguistic Structures of Native America*, ed. Harry Hoijer et al. (Viking Fund Publications in Anthropology, 6), New York, 1946, p. 264.

Chapter Twenty-two

1. *La Philosophie analytique*, Paris, Éditions de Minuit, 1962 (Cahiers de Royaumont, Philosophie, no. IV). It is regrettable that the date at which this conference took place does not appear anywhere in the publication.
2. J. O. Urmson, "L'histoire de l'analyse," *La philosophie analytique*, pp. 19ff.
3. Ibid., p. 21.
4. J. L. Austin, "Performatif : Constatif," ibid., pp. 271–281. [This article was translated by G. J. Warnock and appears with the title "Performative-Constative" in Charles E. Caton, ed., *Philosophy and Ordinary Language*, University of Illinois Press, Urbana, 1963, pp. 22–33. The citations here are from this translation.]
5. *Philosophie analytique*, p. 271 [*Philosophy and Ordinary Language*, pp. 22–23].
6. Ibid., p. 274 [p. 25].
7. [For *malheur(s)*, and so glossed by Austin in *Philosophie analytique*, p. 272 and note 3, which is cited by Warnock, in Caton, ed., *Philosophy and Ordinary Language*, p. 53, note 3.]
8. *Philosophie analytique*, p. 279 [*Philosophy and Ordinary Language*, p. 31].
9. "De la subjectivité dans le langage," *Journal de Psychologie* 55 (1958):267ff (chapter 21 above).
10. A note on terminology: Since *performance* is already in use, there should be no difficulty in introducing *performatif* in the special sense it has here. All that has been done is to bring back in French a lexical family which English took from Old French: *perform* comes from Old French *parformer*. As for the term *constatif*, it is a regular formation made from *constat*: a *constatif* statement is indeed a statement of a *constat* (established fact). Although *constat* is etymologically the Latin present *constat* 'it is established,' French treats it like a substantive of the same series as *résultat* and thus attaches it to the family of the ancient verb *conster*, "to be established." The ratio *conster*:*constat* is thus parallel to *résulter*:*résultat*. And just as *résultatif* and *prédicatif* have been formed from *résultat* and *prédicat*, so it is permissible to derive the adjective *constatif* from *constat*.
11. We are not speaking here, of course, of the material multiplication of a performative utterance by means of printing.
12. Complete citation above, p. 223.
13. Ibid.

CHAPTER TWENTY-THREE

1. Plautus *Persa* 501: *Salutem dicit Toxilo Timarchides.*
2. For example, *salus sit tibi* or *vos Salus servassit* (Plautus *Cistellaria* 742), etc.
3. Cicero *Actio in Verrem* 2. 154.
4. *Salute data redditaque* (Livy 3. 26. 9).
5. Cicero *Epistulae ad Atticum* 6. 2.
6. Sophocles *Ajax* 112.
7. Varro *De Lingua Latina* 5. 7.
8. See W. Schulze, *Kleinere Schriften* (Göttingen, 1934), pp. 178ff, for numerous citations.
9. Livy 1. 16. 3 (*Livy*, B. O. Foster, trans. [London: Loeb Classical Library, 1919], 1 : 58–59); cf. several lines further on, *Romulus, parens huius urbis* (1.16.6).
10. Virgil *Aeneid* 5. 80.
11. The same connection between *parentare* and *parens* was suggested by H. Wagenvoort, *Studies in Roman Literature, Culture and Religion* (Leyden, 1956), p. 290, according to the résumé of M. Leumann, *Glotta* 36 (1957): 148–149.
12. H. L. Mencken, *The American Language*, 4th ed. (New York, 1936), p. 195.
13. Cf. H. Hübschmann, *Armenische Grammatik*, in B. Delbrück et al., *Bibliothek Indogermanischer Grammatik* (Leipzig, 1897) 6: 146.
14. Plautus *Casina* 345.
15. We have had the occasion to show this in greater detail in an article that appeared several years ago (*Die Sprache* 1 [1949]: 116ff) on the Greek expression *euphēmeîn*. See chapter 25.
16. Plautus *Rudens* 640; *Trinummus* 924, etc.
17. *Persa* 773; cf. 709, etc.
18. *Fasti* 2. 635.
19. I have not seen an article by A. Debrunner on Lat. *salutare* published in the *Festschrift Max Vasmer*, Berlin, 1956, pp. 116ff, and cited in *K.Z.* 74 (1956): 143, n. 2.

CHAPTER TWENTY-FOUR

1. A. Ernout and A. Meillet, *Dictionnaire étymologique de la langue latine* (Paris, 1932), pp. 372ff.
2. The dative form of Gr. *doiêi* goes back to **dwoyyai* and corresponds to the Sans. dat. sing. fem. *dvayyái* (J. Wackernagel, *Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen*, 1914, p. 119).
3. This demonstration had not been published when this was written. I had, however, indicated the conclusion in a letter to J. Pokorny, and he mentioned it in his *Indogermanisches Etymologisches Wörterbuch* (Berne, 1948), p. 228.
4. Cf. O. Bloch and W. von Wartburg, *Dictionnaire étymologique de la langue française* (Paris, 1950), p. 602.
5. The principal examples were collected by E. Löfstedt, *Syntactica* 1 (1933): 352, with the correct conclusion they impose. But no one seems to have taken them into account.
6. The principal Vedic examples were conveniently assembled by P. Thieme, *Der Fremdling im Rigveda* (Leipzig, 1938), pp. 110–117.
7. Cf. A. Walde, *Vergleichendes Wörterbuch der Indogermanischen Sprachen*, ed. J. Pokorny (Berlin and Leipzig, 1927–1932), 1 : 804; Pokorny, *Indogermanisches*, p. 214.

8. A. Meillet, *Wörter und Sachen* 12 (1929):18.
9. H. Pedersen, *Archiv Orientální* 7 (1935):80ff, and *Hittitisch und die anderen Indoeuropäischen Sprachen* (Copenhagen, 1938), pp. 77–78. Cf. O. Schrader, *Reallexikon der Indogermanischen Altertumskunde*, rev. A. Nehring (Berlin and Leipzig, 1917–1929), 1:216.
10. F. de Saussure, *Cours de linguistique générale*, 4th ed. (Paris, 1949), p. 309. [*Course in General Linguistics*, Wade Baskin, trans., New York, 1949, p. 227.]
11. Cf. *Language* 29 (1953):259.
12. It would naturally be tempting to find this particle in the form of Lat. *ipse* itself. But the bringing together of *-pse* with *-pote*, *-pte* creates a phonetic difficulty that appears insurmountable.

Chapter Twenty-five

1. The observations that follow depend on various topics treated so instructively by W. Havers, *Neuere Literatur zum Sprachtabu* (Vienna: Akademie der Wissenschaften, 1946), report 223, 5.
2. C. Bartholomae, *Altiranisches Wörterbuch* (Strassburg, 1904), 1432, gives another explanation for *vohugaina-*, which he takes as 'blutfarben' and connects to *vohuni* 'blood.' It seems simpler to take *vohu* in its usual meaning and to consider *vohugaona-* as much a euphemism in the usage cited as in the plant name. Besides, even the noun for 'blood,' Av. *vohuni*, if it is related to *vohu-*, attests to the regeneration of a forbidden word; in any case, the variety of forms for 'blood' in modern Iranian and the difficulty of tracing them back to a common prototype (cf. W. Henning, *Z.I.I.* 9 [1933]:227) are proof of changes that were partly voluntary.
3. E. Destaing, "Interdictions de vocabulaire berbère," in *Mélanges René Basset* (Publications de l'Institut des Hautes Études Marocaines, XI), 2 (1925):177–277.
4. Ibid., p. 178.
5. Havers, *Neuere Literatur*, p. 51.
6. Destaing, *Interdictions*, p. 220.
7. Havers, *Neuere Literatur*, pp. 64ff.
8. Cf. H. Massé, *Croyances et coutumes persanes* (Paris, 1938), p. 283: "Do not blow out the lamp, because in that way one cuts short his own life."
9. L. Bogdanow, *Journal of the Asiatic Society of Bengal* 26 (1930):78.
10. J. Jud, *Revue de linguistique romane* 1 (1925):181ff; Havers, *Neuere Literatur*, pp. 75ff.

Chapter Twenty-six

1. *L'Année sociologique*, new series, 1 (1923–1924):30–186.
2. As a recent instance, cf. S. Feist, *Etymologisches Wörterbuch der Gotischen Sprache*, 3rd ed. (Leyden, 1939), p. 376.
3. Just as Fr. *partager* means 'to give as a share' and 'to have as a share.'
4. There are other proofs of this: O. Irish *gaibim* 'take, have,' corresponds to Germ. *geben* 'give'; while O.Slav. *bero* means 'I take,' the same form in Irish, *do-biur*, means 'I give,' etc. These terms are affected by an apparent instability which in reality reflects the double value inherent in verbs with this sense. Etymologists often refuse to admit these opposed meanings or try to retain only one, thus rejecting obvious parallels and spoiling the interpretation.
5. There is even a sixth, δόμα, but it is late and need not detain us.
6. Cf. Benveniste, *Noms d'agent et noms d'action en indo-européen* (Paris, 1948), p. 76.

7. This meaning of δωτίνη, once fixed, helps to settle a philological problem. We read in Herodotus 6. 89 that the Corinthians, by way of friendship, ceded to the Athenians some ships with the "symbolic" price of five drachmas, 'because their law forbade a completely free gift' δωτίνην (var. δωρέην) γὰρ ἐν τῷ ὁμω νοὺκ ἐξῆν δοῦναι. The sense of a 'free gift,' which is that of δωρεή, not of δωτίνη, should cause the adoption of the reading δωρεὴν of ABCP, in opposition to the editors (Kallenberg, Hude, Legrand) who admit δωτίνην, following DRSV.
8. Cf. Mauss, *L'Année sociologique*, new series, 1 (1923–1924):38, n. 1.

CHAPTER TWENTY-SEVEN

1. Most of the references used here are to be found in Lidell-Scott-Jones, *s.v.*, ῥνθμός. But the different acceptations of ῥυθμος in it are arranged almost at random, starting with the meaning of 'rhythm,' and without one's being able to discern the principle of the classification.
2. Between ῥυθμός and ῥυσμός the difference is only dialectal; ῥυσμός is the prevailing form in Ionian. There are many other examples of the coexistence of -θμος and -σμος: cf. Doric τεθμός, Homeric θεσμός; βαθμός and βαδμός etc.
3. These observations are valid for the form of the letters in the archaic alphabets, which we cannot reproduce here. An I is, in effect, a vertical H.
4. The citations from Democritus that follow may easily be found in H. Diels, *Die Fragmente der Vorsokratiker*, rev. W. Kranz (Berlin, 1951–1952), vol. 2.
5. E. Littré, ed., "Des Articulations," *Oeuvres complètes de Hippocrate* (Paris, 1844), 4:266.
6. Another example of ῥυθμός in Aeschylus, *Choeph.* 797, in a very emended text, was unusable.
7. For an analysis of the formations in -θμός, cf. J. Holt, *Glotta* 27 (1939):182ff; but he does not mention ῥυθμός.

CHAPTER TWENTY-EIGHT

1. L. Febvre, "Civilisation. Le mot et l'idée," Publications du Centre International de Synthèse (Paris, 1930), pp. 1–55. Paper read at the Centre de Synthèse in May, 1929.
2. F. Brunot, *Histoire de la langue française* (1930) 6, 1st part: 106. He gives as the first example of the word a passage from Turgot which L. Febvre ("Civilisation," pp. 4–5) eliminated as probably belonging to Dupont de Nemours.
3. J. Moras, *Ursprung und Entwickelung des Begriffs der Zivilisation in Frankreich (1756–1830)*, *Hamburger Studien zu Volkstum und Kultur der Romanen* 6 (Hamburg, 1930).
4. 1814 edition, p. 53, n. 1.
5. This was demonstrated by G. Weulersse, *Les Manuscrits économiques de François Quesnay et du marquis de Mirabeau aux Archives nationales* (Paris, 1910), pp. 19–20, which shows "that the work was composed entirely, and undoubtedly even printed, in 1756, but it did not appear until 1757."
6. It was not difficult to go back to Mirabeau. This passage is cited in the second edition of the *Dictionnaire de Trévoux*. The reference now appears in the new edition of O. Bloch and W. von Warburg, *Dictionnaire étymologique de la langue française* (Paris, 1950), but with a wrong date (1755, instead of 1757) and an error in the title of the work (*L'Ami de l'homme* instead of *L'Ami des hommes*).

7. We do not think it would be of any use to take up again the examples given by J. Moras for Mirabeau or those of the Abbé Baudeau in the *Éphémerides du citoyen*, already cited by L. Febvre and J. Moras.
8. Dossier M. 780, no. 3. The manuscript was pointed out by G. Weulersse (*Les Manuscrits économiques*, p. 3). J. Moras did not make complete use of it.
9. The passages in italics are underlined in the original ms.
10. It is the only passage cited by Brunot (*Histoire*) with a different reference (p. 190) which either refers to another edition or is wrong.
11. F. Gohin, *Les Transformations de la langue française pendant la deuxième moitié du XVIII^e siècle* (Paris, 1902), pp. 266ff.
12. Brunot, *Histoire*, 6, 2nd part: 1320.
13. Gohin, *Les Transformations*, p. 271.
14. Febvre, "Civilisation" pp. 7ff.
15. Moras, *Ursprung*, pp. 34ff.
16. R. Price, *Observations on the Nature of Civil Liberty, the Principles of Government and the Justice and Policy of the War with America* (Dublin, 1776), p. 100.
17. This translation was only mentioned by Febvre, "Civilisation," pp. 9, 22. In the French translation, it is always *civilisation* which translates the English word and which is sometimes even employed (p. 154) where the English text has "refinement."
18. A French translation, *Histoire de la société civile*, tr. Bergier, was published in 1783 (the publisher's note states that it was printed almost five years before that date). The translator uses *civilisation* everywhere. It is even less useful for listing the examples than the French version of Millar's work.
19. In any case it is now clear that Boswell, being himself a Scotsman and one who had studied at Edinburgh, had every reason for being familiar in 1772 with a term which Ferguson's courses must have made known.
20. Letter cited by Dugald-Stewart in his biography of Adam Smith, published at the beginning of the posthumous collection, *Essays on Philosophical Subjects* (1795) p. xlvi.

Index