DAVID PREMACK operational as to have testable consequences. This problem is addressed to some extent in Grace A. DeLaguna's Speech: Ite Function and Development (Bloomington, Ind.: Indiana University Press, 1963), C. W. Morris's Signs, Symbols and Language (New York: George Braziller, Inc., 1955), and B. F. Skinner's Verbal Behavior (New York: Appleton-Century, Crofts), 1957.

Accounts of the language man has taught chimpanzees can be found in B. T. Gardner and R. A. Gardner, "Teaching Sign Language to a Chimpanzee," Science 165:664-72 (1969). David Premack, "Language in Chimpanzee?" Science 172:808-22 (1971); Ann Premack and David Premack, "Teach, ing Language to an Ape," Scientific American 227:14:92-99 (1972); and Volume 3 of Allan M. Schrier and Fred Stollnitz (eds.), Behavior of Nonhuman Primates (New York: Academic Press, 1971). Data in the present article were taken from my book Intelligence in Ape and Man, which struggles with the relation between symbols inside and outside of language.

9.

LANGUAGE AS A PART OF CULTURE*

Michael Silverstein

there is nothing more dangerous than to imagine that language is a process running parallel and exactly corresponding to mental process, and that the function of language is to reflect or to duplicate the mental reality of man in a secondary flow of verbal equivalents.

The fact is that the main function of language is not to express thought, not to duplicate mental processes, but rather to play an active pragmatic part in human behaviour. Thus in its primary function it is one of the chief cultural forces and an adjunct to bodily activities. Indeed, it is an indispensable ingredient of all concerted human action.1

... it is well to observe that whether or not thought necessitates symbolism, that is speech, the flow of language itself is not always indicative of thought. We have seen that the typical linguistic element labels a concept. It does not follow from this that the use to which language is put is always or even mainly conceptual. We are not in ordinary life so much concerned with concepts as such as with concrete particularities and specific relations . . . It is somewhat as though a dynamo capable of generating enough power to run an elevator were operated almost exclusively to feed an electric doorbell.2

^{*}Adapted from the English version of "Linguistik und Anthropologie," in Th. Vennemann and R. Bartsch (eds.), Linguistik und Nachbarwissenschaften (Skriptor Verlag, 1973), sections of which are here amended and reproduced with permission of the publisher.

^{1.} Bronislaw Malinowski, Coral Gardens and Their Magic (London: G. Allen and Unwin, 1935), p. 7.

^{2.} Edward Sapir, Language: An Introduction to the Study of Speech (Reprint. New York: Harcourt, Brace & Co., Inc., 1921), p. 14.

It is important to see that Malinowski, the social anthropologist, and Sapir, the linguist, agree to a large extent on the actual function of speech in human behavior. Our own folk wisdom about language and the traditional linguistics that has evolved from it are based on the recognition of a single use or function for language, making referential propositions, that is, describing things or telling about them. However, facts about other functions of language have been accumulating, especially from the study of "exotic," non-European speech in anthropological investigation, and even from our own language. Such distinct uses of speech ultimately show that the structure of language as it emerges from the assumption of propositionality is only one way of looking at the phenomenon of speech though, in our own society, it is the way dictated by our intellectual tradition. When linguistic function itself becomes the problem for investigation, then the true realm of the anthropology of language is entered.

Functions of speech overlap in any given behavioral event of speaking. In this chapter, we will gradually build up a notion of how there is a systematic overlap of functions, which even the most strictly linguistic approaches must deal with through an attempt at a full specification of the meaning of forms. Along with acts of reference or describing, speech consists of concomitant acts of "indexing" or marking and creating the very boundaries of the communication itself, without describing them necessarily in the referential way: the roles of speaker, hearer, audience, and so on; the socially recognized attributes of persons; the time, place, and occasion of communication; the goal of the speech event itself; and many other factors.

All of these aspects of the meaningfulness of speech behavior are missed by the traditional kind of analysis—the kind of analysis that, for example, goes into our usual language textbooks. It is only in recent years that the uniqueness of language in its referential functions and the fundamentally "cultural" nature of uses of language have become clear enough to attempt a systematic anthropological formulation. Let us then begin with some characterizations of professed goals before moving on to the substantive analysis.

To explain social behavior, anthropologists speak in terms of

a conceptual system called "culture"; to explain linguistic behavior in particular, linguists speak in terms of a conceptual system called "grammar." It follows that a grammar is a part of a culture. We should add immediately that there must be a psychological basis for both of these conceptual systems, though we cannot yet specify the nature of the mental processes in detail. We should also add that both grammar and culture are manifested only in society, that is, only where we find organized groups of people.

On the one hand, then, the pursuit of anthropological studies without the use and investigation of the native language of the people being studied is unthinkable in theory, although all too frequently the case in practice. On the other hand, the pursuit of grammatical studies without understanding the function or uses of the speech forms being studied is actually impossible in theory, although again linguists have simply assumed that this is the correct and necessary approach.

To demonstrate why the above contentions are true, let me explain the importance of the two observations I quoted above. Malinowski and Sapir are in effect contrasting two approaches to the first goal of anthropological research—to understand "meaning." In terms of language, meaning is what is communicated each time one member of society speaks to another (a "speech event"). In terms of social behavior, meaning is what is communicated each time one member of society behaves in certain ways toward someone (a "cultural event"). For example, think of all the ways, linguistic and nonlinguistic, in which the meaning of "deference" is communicated by one person to another.

One approach, which has dominated linguistics and gives certain kinds of results, explains only the fact that speech behavior communicates describing or referential meanings. This approach hypothesizes that a grammar is a closed, abstract conceptual device. Such a grammar associates propositional meaning (akin to logical propositions) with an abstract grammatical form (a sentence) in such a way that there is a direct relationship presumed between abstract sentence and speech behavior. This is what is meant by Malinowski in talking of duplicating mental reality (propositions about, or

descriptions of, the world) by verbal equivalents (the sentences underlying speech). So also Sapir talks to the "typical linguistic element" (part of an abstract sentence) representing a concept (an element in a mental proposition). Obviously, Sapir, in the tradition of linguistics, feels that this is the highest form of linguistic behavior, since he compares this marvelous and powerful device for reasoning to a great dynamo. We have called this the approach to "propositionality" in language.

The other approach, which is more strictly justified by what we now know about speech behavior, sees that it is impossible to attribute exactly propositionality to the vast majority of utterances in everyday social interaction. (Let us say that utterances are propositional when their directly related sentences produced by the grammar are propositional.) Speech behavior which may even be formally indistinguishable from fully propositional utterances intergrades with all other forms of behavior and communicates native facts about society that are presupposed and brought into relief by the very event of speaking. This is what Malinowski means by the pragmatic part of speech behavior and why he calls it one of the chief cultural forces. Social behavior in general communicates native facts about society realized in the actual circumstances of the events at hand. This is what Sapir means to include in the concrete particularities of the speech event; that they require the mental amperage of a doorbell, in his metaphor, is true only because they are usually unrecognized by native speakers at a conscious level.

The rules by which a speech act presupposes or creates certain elements of the native system of cultural concepts characterize the "function" of speech. Malinowski's assertion, then, is that the function of speech is not primarily propositional: the very behavior of speaking (as opposed to the closed, abstract grammatical system) contributes its own "meaning" to the sentences underlying utterances. This seeming paradox can be resolved only by broadening our view of what a "grammar" is, for to study speech only for its sentential and, hence, propositional value—which we overtly recognize as unique in our European tradition—is to appreciate only a fraction of the meaning of speech behavior.

This is what I mean by saying that anthropological linguistics studies the function of speech behavior in society. Sapir says that "ideation reigns supreme in language" and that for this ideation "the sentence . . . is the linguistic expression of a proposition." Yet he spent the rest of his career gradually uncovering all the ways in which this was not true.

Malinowski on his part admits that "the sentence is at times a self-contained linguistic unit," though "the real linguistic fact is the full utterance within its context of situation." Yet he never could come to grips with a rigorous linguistic analysis made on the basis of assumed propositionality, heuristically always our starting point. Clearly we must keep function fixed as referential in order to study propositionality by itself; but equally clearly the linguistic analysis is never complete until we can describe the relationship of linguistic form to total meaning, including the pragmatic function of which Malinowski spoke.

Contemporary linguistic theory now recognizes the equivalent of what I have called, along with Malinowski, "function" in language; however, its methodology is firmly linked to the assumption of propositionality independent of context. It cannot really deal with "function" because this depends on speech behaviors being culturally meaningful in an anthropologically observable and describable speech situation. Obviously, either the covert assumption must be made explicit, and linguistics must become a branch of philosophical logic, or function must be included in linguistic investigation, with the necessary consequence that linguistics become explicitly a branch of anthropological investigation. There is no principled middle ground.

What kinds of facts motivate this conclusion? What kinds of observed regularities become explainable once the function of speech behavior is recognized? What, then, is the relationship developing between grammar and culture, between linguistics and anthropology more generally? I can mention some of the number of things and the solutions one can now see emerging. However, the reader should remember that contemporary theoretical linguistics has completely ignored the long tradition of which both Malinowski and Sapir were part and that so-called anthropological linguistics has, paradoxically, built

up this tradition with an implicit theory which assumed that for practical purposes the functions of all languages were the same as those recognized by us. To the extent that this traditional anthropological linguistics has succeeded, we have data to be explained about functional universals of language, not data that can be assumed to be irrelevant to linguistics.

Consider now a speech situation in which person A is speaking with person B. In the speech situation, the speaker utters a message to the hearer which corresponds in some direct fashion, let us hypothesize, to a sentence which is to be characterized by a grammar. Consider the two sentences in English represented by the written forms He went away happy and I went away happy. If A utters the message corresponding to the first of these sentences to B, then a part of the meaning of this utterance, different from the meaning had A uttered the second message to B, is that it is not A or B who went away happy. If B utters the message corresponding to the first sentence to A, then it is clear that the meaning of the message is the same to this degree, that again it is not A or B who went away happy. The meaning of the first sentence, then, must incorporate no information about who is speaking to whom.

Contrast with this a speech situation which is the same except that A utters the message corresponding to the second sentence to B. The meaning of this message incorporates some indication that it is the person who is speaking, A, who went away happy. Again, if B utters this to A, then the meaning must incorporate some indication that it is the person who is speaking, B, who went away happy. Both of these messages correspond to the second sentence, and in order to give an account of the meaning of the second sentence, we must incorporate some indication that the meaning changes systematically so that whoever utters the second message is referring to himself as the one who went away happy.

The meaning of the first sentence is formulable without any indication of who utters its message form except in a negative way. The meaning of the second sentence is not so formulable. Here is an example of our inability in certain cases to formulate a description of the meaning of a sentence without knowledge about the speech situation (Malinowski's "context of situa-

tion") in which its corresponding messages are uttered. We might say that any simple sentence which includes the linguistic unit I posits a proposition about the individual who is uttering the message corresponding to it. Every language has such words, called "personal pronouns."

Pronominal meaning must be stated in the form of rules that point to the individuals in the social roles of speaker and hearer in the context of situation. These words shift their reference depending on who is speaking to whom. We might say that the class of objects to which they refer can be defined only with some specific knowledge about the context of the situation. True pronouns refer or describe someone—in one mode of speech function—only by presupposing the socially defined boundaries of the very speech event-another mode of function. The class of linguistic items to which they belong has been called "shifters," "indexical signs or indices," "referential particulars," and so forth. They are "duplex signs" because they function in two modes, one referential, one not. No linguistic theory currently in vogue has satisfactorily dealt

But why should I bring up this phenomenon of English, which seems to be remote from the problems of linguistic "function" in a broad anthropological sense?

The relevance of these little words (which occur in all languages) to anthropological approaches to the phenomenon of language is that in principle all "functions" of language can be reduced to a similar kind of statement: to describe the meaning of a sentence we must have some kind of data about the relations of the messages that correspond to it and the context of situation. To the extent that the message form and sentence meaning are linked to the context of situation, we can say that the purely abstract propositional function, the "ideation" of Sapir, gives way to other, context-defining functions of language. Note then that the only truly unpredictable sentences are those which have no part determined by the context of situation of their messages. It is basically to this latter set of sentences that Chomsky's linguistic theory and the theories of all those that follow a similar methodology, are directed.

To take our own analysis further, consider now the English

sentence written as You went away happy. English uses the messages corresponding to this sentence in situations where the going away of the hearer at least, and perhaps of someone else as well, is to be predicated. We say that the English pronoun you means that the speaker using it is referring with it to the person or persons to whom he or she is uttering the message containing the pronoun. It does not distinguish between one hearer and the hearer along with other persons.

Contrast the same kind of sentence in another language, for example, French. How do we say the equivalent proposition? Vous vous en êtes allé content and tu t'en es allé content are both ways of saying this, given only the information contained in the analysis of the English sentence. The second of these French sentences can be used only for a unique hearer, never for more than one, and there are other ways in which it contrasts with the first of these sentences.

In fact, there are various kinds of cultural facts, such as whether or not the speaker and the hearer are of the same kin group, are of the same age, have the same status, have intertwined personal histories, and so forth, that determine which of the two forms of this proposition is the sentence underlying the correct utterance under the circumstances. In other words, we must know several things about the relationships between natively analyzed values of age, kin status, and so on, for speaker A and hearer B in French society, before we can determine if the sentences underlying the messages represent true or false propositions. The meaning of the sentences depends not only on the identity of the hearer in the speech situation as the person referred to in the proposition but also on the various relationships that hold—to a member of French society-between speaker and hearer. Exactly the same may be said of the German usage of sentences with Du vs. Ihr and Sie and of the Russian ty vs. vy.

There are thus sentences the meanings of which can be formulated only by reference to correct use of corresponding messages, determined by the values of social variables represented in the speech situation. These social variables are recognized (explicitly or implicitly) in the society of people who speak with these forms. Such sentences contain social

indexes, which code the facts of the social world into features of form (words, grammatical categories, turns of phrase, pronunciation, stress, and intonation) that mesh with the features we can characterize with abstract propositional meaning.

We can formulate the dependency as rules of (message) use of indexical signs, relating such factors of the speech situation as roles of speaker and hearer, relative status or sex, and so forth, to the indexical elements of message form, as a contribution to speech distinct from rules relating underlying propositional characteristics to nonindexical referential elements. Thus, with a notion of rules of use that determine the meaning of such indexical elements of sentences, there is no way we can still maintain the fiction of the closed, bounded nature of the "grammar" or abstract linguistic device, without appeal to cultural factors. Speech as a flow of messages is a complex of nonindexical referential signs, indexical referential signs, and nonreferential indexical signs, at the very least.

The examples of rules of use most obvious to a native speaker of a language involve categories such as personal pronouns and syntactic markers of style (for example, the use of who vs. whom in English speech levels), or alternate sets of vocabulary items (for example, obscene vs. nonobscene reference to body parts and functions). These all have in common the properties of being "segmental"—isolable stretches of speech-and "referential," that is, they make up part of propositions at the same time as they index social variables of the speech situation. Native speakers can frequently give accurate evidence about the use of these kinds of indexes. But there are other kinds of indexical devices-among them a particular "accent" that identifies a certain regional upbringing or social class of the speaker, or certain intonation patterns individuals use that identify their social class or the particular role in terms of which they are interacting with us by means of speech (for example, delivering a sermon). These subtle phonological indexes are just as amenable to description within this general framework as the categories just mentioned. That they are part of the sound system of a language usually puts them out of the realm of features on which we can secure accurate testimony from native participants. People can perhaps duplicate a

MICHAEL SILVERSTEIN phonological "style," but they find it difficult to characterize accurately both the phonetic effects (the form) and the precise conditions of use (the function). These indexes, which are "nonsegmental" and "nonreferential," are particularly hard for a native speaker to give accurate information about. But the anthropological linguist investigates all such indexes that associate ways of speaking with cultural factors, trying to give a total meaning to sentences and their messages.

To see how profoundly this kind of linguistic device, the pure cultural index, differs from the usual sort of conditions for denotation of the philosopher or the usual sort of meaning that enters into the propositional analysis of sentences of most contemporary linguistic theories, we should observe so-called male and female forms of speech. Recall from the discussion of personal pronouns that the essence of meaning of these forms is that their proper reference depended on (or "presupposed") culturally imparted knowledge such as role structure, relative status of the participants in those roles, and so on. Since these conditions are expressed by a linguistic element that refers to one of the participants of the speech act (the hearer, for example, in T-V forms), these indexes accomplish two functions, the one referential to the specific role, the other deferential to the asymmetry of statuses. If one did not have a functional perspective, and were limited to studying reference only, one might easily confuse these cultural conditions on the use of pronouns with further referential conditions on the set of objects denoted. That is, one might miss the duality of function formulable with respect to the speech situation. These cultural conditions are conditions on the use of messages, however, not general conditions on the class of objects to which abstract elements of a sentence can refer. To see this more clearly, we turn to the male vs. female forms that have no referential function.

In simple male vs. female speech forms, certain messages are systematically used by sociological (not biological) males, and certain referentially equivalent messages that systematically differ in form are used by females. That is to say, the message form depends on the sex of the speaker, socially recognized. In a complicated case, in Yana, a California Indian language, it is essential to know the relative social sex of both speaker and hearer (male speaking to male, and so on) as the conditioning factor of the difference of message form.

From the formal point of view, we can examine how the functional indexing is achieved. In several Muskogean languages of the American southeast, for example, the distinction between male and female speaker is manifested in the forms of the verb in a sentence: if the female form ends in an unaccented vowel, then the male form is the same; if the female form ends in anything else, then a suffix -s is added to the verb for a male speaker and a series of phonological changes, for which regular, though complex, rules can be stated, takes place. It does not matter whether or not the speaker or hearer is referred to in the sentence by any of the words. The phonological changes that take place depend only on the sex of the actual speaker of the message or of the original speaker in a quoted message. At the level of propositional content of the sentence, the function of referential speech, there is exact equivalence of everything said in one form or in the other. At the level of cultural behavior, manifested in message form, there is a profound difference.

These specific rules of the grammar implemented in constructing proper sex-role forms must depend on the facts of the speech situation. We might say that the rules of the grammar specifying the formal features of sentences consist partly of rules of use of the language, specifying the function(s) of messages corresponding to sentences. Certain rules of grammar in this wider sense are appropriate under certain conditions of discourse, other rules of grammar under other conditions. A total "functional" grammar of a language, then, the goal of the anthropological linguist, consists of many overlapping partial grammars, which are functional subgrammars of rules that are context-dependent.

The claim being made here can, in fact, be reformulated as follows. The context-independent propositionality of the sentence underlying a message with indexical features cannot be properly analyzed until we have properly described the function of the sentence and its messages in terms of rules of use. This means that the study of "grammar" cannot in principle be carried on in an adequate way until we tackle the ethnographic description of the canons of use of the messages corresponding to sentences. Reformulating this result, we may say that grammar is open-ended, not closed, and a part of the statement of the total meaning of a sentence is a statement of the rules of use that determine the indexical—or "pragmatic"—effect of the message features. This means, again, that if we call the "function" of a sentence the way in which the corresponding message depends on the context of situation, then the determination of the function of the sentence, independent of its propositional value, is a necessary step in any linguistic analysis.

Thus, a theory of rules of use, in terms of social variables of the speech situation and dependent message form, is an integral part of the grammatical description of the abstract sentences underlying them. Rules of use depend on ethnographic description, that is, on analysis of cultural behavior of people in a society. Thus, at one level, we can analyze sentences as the embodiment of propositions, or of "semantic" meanings more narrowly; at another level, which is always implied in any valid grammatical description, we must analyze messages as linguistic behavior, embodying cultural meaning more broadly.

So the relationship between grammar (language) and culture is not a kind of mirror effect, whereby there is only structural analogy (isomorphism) between these two objects of scientific description (the position, apparently, of such theorists as the influential social anthropologist Lévi-Strauss). The relationship is rather one of part-to-whole: a valid description of a language by (functional) grammar demands description of the rules of use in speech situations that structure, and are structured by, the variables of culture. Thus could Malinowski assert, and Sapir agree, that speech behavior is part and parcel of cultural behavior more generally.

BIBLIOGRAPHICAL NOTE

The viewpoint of this paper is developed in greater technical detail in M. Silverstein, "Shifters, Linguistic Categories, and

Cultural Description," in K. Basso and H. Selby (eds.), Meaning in Anthropology (Albuquerque: University of New Mexico Press, 1976). The basic bibliography of linguistic anthropology to about 1960 is contained in D. Hymes (ed.), Language in Culture and Society (New York: Harper & Row Publishers, Inc., 1964), along with some of the most important contributions to shaping the field. Also see Hymes' development of a viewpoint close to my own in his Foundations in Sociolinguistics: An Ethnographic Approach (Philadelphia: University of Pennsylvania Press, 1974). The papers in J. Gumperz and D. Hymes (eds.), Directions in Sociolinguistics: The Ethnography Communication (New York: Holt, Rinehart & Winston, Inc., 1972), and Joshua A. Fishman (ed.), Advances in the Sociology of Language, Vols. 1 and 2 (Atlantic Highlands, N.J.: Humanities Press, Inc., 1971-72), present specific analyses which can he seen in light of the overall theory sketched here, along with up-to-date bibliography. For lively topical discussions and reviews of important works, one should look to the issues of the new journal Language in Society (Cambridge University Press).

To get a sense of recent discussion of the "meaning" of language, on which all else rests, see the many treatments—philosophical, linguistic, psychological—in D. Steinberg and L. Jakobovits (eds.), *Semantics* (New York: Cambridge University Press, 1974), most of which are distinctly traditional in outlook.