LANGUAGE, THOUGHT, AND LOGIC

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Language, Thought, and Logic

Rethinking Theory

. . . it is often easier to discover a truth than to assign to it its proper place.

—FERDINAND DE SAUSSURE

Preface

Anyone who writes a book about the theory of language is likely to be asked immediately whether it is philosophy or linguistics. In answer to this I can only say that this book is, among other things, about the impasse and confusion in theory of language of which the question is symptomatic. Another initial question will likely be: does the book attempt to offer a new view of linguistic theory? To which the answer is: certainly, though some explanation of just what this means will also be necessary. Theory of language is a field that seems to tempt everyone to begin again conceptually at the beginning, and this is one of its great weaknesses; a widespread sense that no known theory of language works very well, and that somewhere there lurks a key factor that will explain this mystery, leads one scholar after another to bypass all prior thought in order to go back to the basic elements of the linguistic situation—speakers, listeners, sounds, things, and so on—to rebuild conceptually from the ground up. The reasons for this odd behavior are considered in chapter 1, but for the moment it is enough to say that this habit results in a kind of unfinished and incomplete jigsaw puzzle. The pieces are strewn all over the table precisely because despair of getting the picture right seems to impel everyone to begin his or her own anew rather than to see what coherence might emerge from the neglected pile of fragments, each of which seems inadequate when taken only by itself. In terms of this analogy, my own contribution will be to pick up the pieces, show how some of them fit together in ways that have not been seen before, and add a few of my own in order to present at the end a picture that I believe is both coherent and new, while containing some significant parts that were already on the table.

Some initial assumptions made almost universally by people who talk and theorize about language are, if I am correct, logical mistakes that are virtually impossible to recover from once made; my second chapter is devoted to an exorcism of these missteps. Chapter 3 builds on the crucial reorientations of the previous chapter to argue that categorization (not syntax) is the most fundamental aspect and process of language, and that neither anything else in language nor indeed its purpose can be properly understood until the nature of categorization has been grasped. The fourth chapter analyzes the notion of grammar in the same spirit, and the fifth the place of language in human thought. The next two

chapters look at some traditional problems of philosophy and attempt to show both how those problems result from an inadequate theory of language, and how the view of language developed here leads to a solution of the problems and thus to a redirection of inquiry in the field. The eighth chapter looks at the state of the discipline of linguistics, here too suggesting that effort has been fundamentally misdirected because of the logical errors I have discussed in the course of this book. In the conclusion I summarize the main outline of the linguistic theory that has emerged during the course of the preceding chapters.

I am aware that this book covers a great deal of ground, and that many much longer books have been devoted to material and ideas that here take up just a part of a single chapter; there will certainly be more to be said about all of these topics. But since my aim here has been to establish a new general picture of linguistic theory and to suggest the major implications of that picture, it seemed to me important to concentrate on setting out its larger contours in a single argument.

Several people read the entire manuscript of this book and gave me many helpful suggestions for its improvement: Barbara Ellis, Saul Morson, Thomas Pavel, Siegfried Puknat, Austin Quigley, and Avrum Stroll. It is impossible to list the names of all those colleagues and students with whom I have discussed these issues over many decades; they all helped immeasurably.

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ONE

The Scope of the Issues in Theory of Language

There is much that is unique about theory of language as a field of inquiry. Perhaps no other area of thought has its basic ideas so ever present in our ordinary, everyday speech: we mention words, meanings, reference, grammar, ideas, and concepts all the time and in all kinds of contexts. Not surprising in view of this, linguistic theory is centrally involved in many branches of knowledge. Linguistics, philosophy, computer science, psychology, language teaching, anthropology, and biology (to name only these) all have a vital interest in language and hence in the conceptual basis of our understanding of it, that is, in the theory of language. That work in one field is relevant to another is not unusual, but two special factors need to be noted here. First, to say that one field influences another does not do justice to this situation, for even the central territory of linguistic theory is claimed not by one but by two fields—philosophy and linguistics. Second, new ideas in the theory of language do not simply have an impact on other fields; they can revolutionize them. To take just one example: in 1936 A. J. Ayer published his *Language, Truth and Logic*, which is now remembered as a classic statement of the philosophical position known as logical positivism.[1] In it Ayer expounded a solution to most of the traditional issues in philosophy: epistemology, metaphysics, ethics, aesthetics, and others. For some time this position was a highly influential one in the philosophical world, but the basic assumption from which everything in logical positivism derives is a view of meaning—a particular viewpoint within the theory of language. Ayer's work is a ruthlessly consistent working out of the philosophical consequences of that view, but ultimately it stands or falls on the adequacy of its initial assumption, an assumption about language. If Ayer's view of meaning is flawed, the philosophical position he develops from it fails at the outset. And indeed the precipitous decline of logical positivism's standing as a philosophical position happened not through a direct attack on its philosophical conclusions but because of the

undermining of its linguistic-theoretical premises by some remarkable new ideas about language developed by Wittgenstein.[2] I shall have more to say on the philosophical and linguistic issues inherent in these events in the course of this book, but for the moment my point is simply that in this case a particular view of how language worked had the most profound consequences for an entire field of inquiry; philosophy in the English-speaking world changed radically.

Many other fields have undergone similarly far-reaching changes when a new view of some aspect of language has affected them, the most notable recent example being the impact of structuralism on some areas of the social sciences and humanities. Nor is this in any way surprising. Concepts in the theory of language are among the basic tools of thought in all intellectual inquiry. Part of the uniqueness of linguistic theory, then, is that no other field is likely to have so great an impact on so many other fields when new thought arises in it. The stakes involved in theorizing about language are therefore always likely to be relatively high. But the converse is also true: because so many fields use and are dependent on linguistic theory, new thought can come from many quarters—in fact from any of those fields where progress might significantly depend on change in or refinement of the prevailing linguistic theory. Philosophy is again the outstanding example, but anthropological concerns gave us the so-called Whorf hypothesis concerning the relation between the structure of a language and the thought and behavior of its speakers,[3] and computer scientists are currently trying to solve the recalcitrant theoretical problems of semantics, not simply because they want to help out linguists, but because they need to for their own reasons. Charles Sanders Peirce, working his way into theory of language from the direction of logic and scientific method, is perhaps the most remarkable case of all, for Peirce had already in the nineteenth century seen much that would later be set out in a different form by such thinkers as Saussure, Wittgenstein, or Whorf.[4] Like Saussure, Peirce thought the sign triadic in structure, like Whorf he thought there was no thinking without signs, and like Wittgenstein he rejected the positivist notion that there were "simples"—conceptions that were ultimate, irreducible, and unitary.[5] Needless to say, all of these later thinkers got no help from Peirce, because it did not occur to them to scour the literature on the philosophy of science before making their own way into theory of language.[6]

Oddly enough, it seems that the field that should in principle be central to the development of linguistic theory—linguistics and philology—has often been the most somnolent area of general thought about language. During the thirties and forties, for example, this field seemed largely content with the commonsense theory embodied in our everyday language itself, while much progress was being made in other quarters where that theory was being questioned. Its concerns at this time were certainly not unimportant—for example,

producing grammars and dictionaries of disappearing languages, extending the philological approach that had served so well in reconstructing the history of Indo-European languages to "exotic" languages, working out the controversy over the relative importance of synchronic and diachronic approaches, refining the theory of the phoneme—but the pursuit of these matters did not seem to require linguists to rethink their basic theory in the way that philosophers were then having to do.

It was probably a sense that linguistics had not been an intellectually ambitious field during this period that led to the enthusiastic response on the part of the younger generation of linguists to Noam Chomsky's *Syntactic Structures*, published in 1957; Chomsky's generative grammar gave the appearance of being theory at a high level of sophistication, and thus it offered an aura of intellectual ambition that had seemed lacking.[7] As if to yield pride of place to this new thrust in linguistics, the radical rethinking in theory of language that had been taking place in philosophy began to bog down. It did not take long for generative grammar to run into trouble in its turn, as more and more of its adherents began to suggest revisions of its basic theory so radical that they called into question virtually its entire conceptual framework. But as this new thrust in linguistics became blunted by internal doctrinal squabbling, yet another area of the academy took up the slack and made a bid for center stage in theory of language: by the late sixties the most visible new aspect of the scene was the rediscovery of Saussure by the French anthropologist Claude Lévi-Strauss and by the structuralist school that followed his lead and pursued it into a number of areas of humanistic scholarship.[8] Whether and to what extent any of these developments made real and permanent contributions to theory of language are questions that will arise many times during the course of this book; what is clear from just these examples is that many fields can influence or be influenced by linguistic theory in decisive fashion.

It would be natural to assume that this widespread interest and activity must be conducive to progress, even rapid progress, in linguistic theory, but experience shows that that assumption would be mistaken. There are two competing proverbs for situations such as this: "many hands make light work" and "too many cooks spoil the broth." The factual record shows that it is the latter, not the former, that is relevant. We seem to be dealing not with a unique advantage but with a unique handicap. Why is this so? There will be many factors to consider when attempting to answer this question, but we can only begin to do so by making a distinction: to find linguistic theory useful for the solution of one's own problems is very far from having an interest in it for its own sake. Academic disciplines have their own internal priorities and political struggles, and whenever theory of language has been invoked (or even advanced) in a given discipline the particular local purposes that have led to interest in the first place have also set

strict limits on the extent of that interest. The sad fact is that intellectual curiosity usually stops when the need that gave rise to it has been satisfied. As a result, the full significance of new ideas in linguistic theory is often ignored by those who use them and even on occasion by those who discover them; in practice this means that they can remain in an incomplete state once enough has been worked out to satisfy the limited purposes of a particular discipline, and even that they can then be used there in ways that do violence to them and fundamentally misconceive them.

The reception of Ferdinand de Saussure's important work is a good example here.[9] Saussure's influence on philology and linguistics in the first half of this century was certainly a strong one, but there is a sense in which this influence related more to the politics of a profession than to what was truly original in his thought. During this time the field was obsessed with the struggle between historically oriented scholars and the newer wave of more structurally oriented linguists. Saussure's distinction between synchronic and diachronic approaches was a constant source of discussion during these years because that issue was of great relevance to the parochial dispute then dominating the field, but this elementary distinction was of far less significance than Saussure's extraordinary and far more important theory of the differential character of language both in form and in content. Only after the political heat of the battle between the philologists and the linguists began to cool down was interest renewed in the real core of Saussure's theoretical work. One example will suffice to show how badly the politics of a discipline obscured the nature of Saussure's contribution. Leonard Bloomfield was one of the leading figures of the Saussurian structuralist camp in the political struggles of the profession at this time, and yet his approach to virtually every other question in linguistic theory was that of a naive realist.[10] Saussure would surely have wanted to dissociate himself completely from Bloomfield.

This narrowing of Saussure's importance in the feud between linguists and philologists probably gave outsiders the impression that his major contribution to linguistic theory was his distinction between synchrony and diachrony, and it may therefore not be surprising that philosophers, for example, showed no interest in his work at this time; but this meant that they overlooked the enormous importance of his contribution to semantic theory. Had Ayer known Saussure's work and grasped its significance, for example, the history of philosophy in this century might have been very different; his confident building of an entire philosophical system of thought on the "verification" theory of meaning would have been impossible, for this theory was essentially a subspecies of the theory that Saussure had seriously undermined, that is, the theory that words labeled things and thus denoted or referred to them. But the problem was in any case compounded by the politics of Ayer's own discipline, for here too a predominant

interest in a local dispute determined how far the interest in linguistic theory would go.

Ayer's mind was focused primarily on the battle between those members of his profession who leaned to the Continental metaphysical tradition and those who, like himself, belonged to the newer, analytical movement. For the purposes of that struggle, the assumptions he normally made in a commonsense way about meaning and language seemed sufficient to deal the other side what he thought was a deadly blow; he saw no need to make his theory of language more developed or sophisticated. Nevertheless, the ensuing debate over logical positivism always seemed to return to the problems of the linguistic theory Ayer had used. And yet during all of the subsequent attempts to patch up the holes that became visible in the positivist argument, it never once occurred either to Ayer or to any of his colleagues or antagonists that since the theory was based on a particular notion of "meaningfulness" in language (as we shall see, a crude one), it might have been useful to see what the history of linguistic theory had to say on that subject.

When the logical positivist theory of meaning was finally routed by the use (among other things) of ideas that had been available for some time in the field of linguistics (though neglected there too) it was a philosopher—Ludwig Wittgenstein—who led the way by showing that the source of the trouble was the notion that words named or stood for things. But in order to do this, Wittgenstein had to rediscover on his own some of the analysis that the linguist Saussure had discovered much earlier.

The damage done by this fragmentation is not simply or even mainly a matter of the inefficiency of a needless duplication of effort. Some of the time Wittgenstein and Saussure did indeed work on much the same parts of the puzzle, but not all of the time: both also worked out aspects that the other had left blank. The result was that both produced incomplete and enigmatic edifices of thought which include much that has been recognized as valuable while also leaving unanswered some fairly obvious questions. In both cases, there are puzzling gaps that have allowed compelling objections to be made to the whole system of thought, with the result that it has been too easy for many to conclude that all of this is interesting but it does not quite work. The crucial point for the argument I shall develop in later chapters, however, is that the gaps in Wittgenstein are not the same as the gaps in Saussure, and that as a result the solutions to serious problems in the one can sometimes be found in the work of the other. This is possible only if the two are looked at side by side as different parts of the same complex of ideas in the theory of language.[11]

Wittgenstein developed a view of language as a kind of game in which the players have to agree on the rules for it to work, and in which the moves are seen as significant above all in relation to other possible moves in that game

rather than to the mental states of the speakers or to ideas or independent "facts" that exist outside the structure of the game. He suggested further that many categories of things (he chose again the example of games, thus inadvertently inviting confusion between the two quite different logical points he made using games) have no one common property but instead only family resemblances in which no single feature needs to be present in all instances but only an overlapping series of traits. This is a striking alternative to the more conventional view that words get their meaning from naming things and classes of things based on specific similarities, but there is one obvious objection: if some categories are made up in the way Wittgenstein suggests, why should this be so, and why only some rather than all? To this, Wittgenstein gives no answer. In failing to deal with even the first question that would occur to a skeptic, Wittgenstein ensured that many would remain skeptical; worse, he allowed considerable uncertainty about where his thought was really pointing, and this uncertainty has given rise to many conflicting interpretations of it.

Now if we look at Saussure's thought, we can see that the notion of a game and its rules occurs there too, and in much the same spirit; both, in fact, mention the game of chess. So far it would seem that a basic thrust common to the two is a rejection of the common theory of the meaning of words as naming, denoting, or referring to things. But Saussure goes on to talk about the basic linguistic principle of differentiation and contrast, as relevant to semantics as it is to phonology, and he suggests that the function of a category of things is not to group similar things but to differentiate one group from another, with the result that linguistic categories present not real but social facts. Once again—just as in Wittgenstein's case—there is an obvious objection: what difference does it make? Do we not still end up with classes distinguished from other classes by factual criteria, and thus with classes defined just as they are by the reference theory? It was actually much less clear in this account than it was in Wittgenstein's that the conventional theory needed to be replaced rather than just supplemented. And once again there is no answer to this point in Saussure, a deficiency that, as before, has promoted skepticism about the value of his thought and misunderstanding of where it really leads.

We need only to look at these cases together, however, to see that they are mirror images of each other. Wittgenstein, because he is concerned with the positivist argument, looks mainly at the structure of categories but neglects the question of their function; Saussure looks mainly at their function but neglects their composition and structure. Each could easily have answered the question that has always been felt to be a stumbling block for the other's thought, a fact that shows how injurious it has been for progress in linguistic theory that their readerships have been largely the separate ones of their two professional disciplines. This, then, was not just duplication of effort but also halving of effect.

The two accounts should have complemented each other if they had been taken together, but that never happened; and it never happened because the two men had different audiences and different immediate aims within their own disciplines.

Wittgenstein's own interest in theory of language is evidently shaped by his intent to demolish the argument that he himself had helped to construct earlier in his career.[12] That argument had rested on the assumption that the world could be analyzed into simple facts that could not be analyzed further. Wittgenstein's intent was fulfilled once he had shown that assumption to have been false,[13] but from any more general point of view this was an arbitrary place to stop which interrupted the inquiry just as it was getting interesting.

Another example of the ill effects of the fragmentation of linguistic theory is that of Benjamin Lee Whorf, whose ideas might have been taken together with those of Saussure and Wittgenstein but for the fact that they emerged in the context of another discipline—anthropology—and immediately became embroiled in a controversy within that context, only reaching the broader world of linguistic theory in the somewhat caricatured form of the "Whorf hypothesis," which supposedly equates language and culture. Whorf's own formulations are never so extreme, and in a less prejudicial context it might have been apparent that he was simply entering and attempting to map out the area of thought that Wittgenstein had hinted at with his cryptic remark that a language was a "form of life," or that Saussure had been getting at when he said that "language is a social fact."[14] If that had happened, Whorf's analysis might have become one more piece to add to the jigsaw puzzle already worked on by these two other great thinkers, a piece that, as we shall see, is a significant addition only if the Whorf hypothesis is discarded as the misshapen result of the fragmentation of linguistic theory.

What Whorf had fallen foul of—and thus what the further advance of linguistic theory was also handicapped by—was the resentments within the field of anthropology aroused by his giving language greater importance in ethnographic research than it had previously had; this, it was felt, downgraded everything else, including all of the work done hitherto by anthropologists. Once again, as in all the other cases I have discussed, the intellectual limitations imposed by the horizons and internal politics of a particular discipline prevented the original contribution of a talented thinker from taking its place in a wider, unitary context of theoretical reflection on the nature of language, and hindered the development of a larger picture that could have resulted from the piecing together of different parts of the puzzle. Each had worked out what seemed to address his own purposes—those of his own disciplinary context—but none had produced an account of linguistic theory sufficiently complete and rounded to escape obvious objections.

To be sure, in the late 1950s a mood arose in the field of linguistics itself

which at last seemed to promise a determined assault on theory of language in itself and for its own sake, but this too soon turned out to be an impulse created by immediate needs of the field and thus limited from the outset by those needs. This was the time when the achievements and prestige of the natural sciences had begun to reorder the long-standing pecking order within the academy. The humanities had traditionally ranked first in prestige in the world of scholarship, but now they were beginning to fall behind. The social sciences, doubtless responding to this shift of rankings, had begun to insist that they too were sciences. The same need was felt by linguistics, and Noam Chomsky answered it directly. Generative grammar offered the specialized language of a science and thus presented the appearance of precise and controlled analytical thought. But these were only the trappings of science: the real successes of the sciences result from the inspired conceptual thought that guides observation and experiment, and as time went on it became ever clearer that the conceptual thinking at the base of generative grammar was profoundly flawed. The lesson has to be learned the hard way: scientific progress is not about counting, measuring, and analyzing but about knowing what to count and measure, why it is worth doing so, and what the results mean. Today, thirty-five years after the inception of generative grammar, the conceptual basis of what Chomsky initiated and of what he and his heirs (even his heretical heirs) are now doing is no clearer than it ever was.[15] In one respect, however, generative grammar did follow the prevailing habit of linguistic theory: it was yet another "begin again at the beginning" theory, and its neglect of earlier thought was only more thorough than usual, encompassing not only work in other disciplines but also virtually everything in linguistics as well.

The odd result of the strong involvement of many different disciplines in linguistic theory has therefore been not more and better thought but a greater state of confusion and a marked tendency for everyone to return to the starting point regardless of how much progress may have been achieved in previous work. The fragmentation of the field not only prevents the achievement of one area from adding to and deepening that of another but has actually led to a devaluing of everything. The mood can be summed up thus: There is Saussure—but that does not really work, for it seems to suggest that categories of things are a fiction of our language, and it is unable to deal with our strong intuitive sense that there are natural kinds of things in our world; there is Wittgenstein—but that, though suggestive, is full of enigmas; there is Chomsky, but the latest model of generative grammar is constantly being recalled for redesign of structural flaws, and it still breaks down regularly after it is supposed to have been fixed; there is Whorf—but that is imaginative without being sound. Therefore, given this much confusion, we may as well start at the beginning all over again. This mood weakens the sense of obligation that scholars usually have to know and