\mathbf{II}

Wittgenstein's Two Visions of Language

Was accomplished in two distinct periods of his life, separated by a decade, and characterized among other things by radically different conceptions of the nature of language. Wittgenstein's early work may be seen as the culmination of an ancient and well-established tradition which conceives of language as reference, as our way of referring to things in the world. That tradition still predominates, and is deeply ingrained in our unexamined assumptions. In his later writings, Wittgenstein develops a powerful and original version of a different view, also with some antecedents in the tradition but much less influential. It conceives of language as speech, as an activity. In this chapter we shall examine the two views, and how Wittgenstein came to make the transition from the one to the other.

Wittgenstein is not a man easy to characterize, except by saying that he was extraordinary, "a man of the rarest genius." In addition to his philosophical achievements, he was a master of literary style, a promising engineer, the architect of a modern mansion and the builder of a mountain cabin, a gifted sculptor, a talented musician who might have made his career as a conductor, several times a hermit by choice, a rich man who gave up his wealth, a Cambridge professor who loathed the academic life (he called it a "philosophical desert," considered the "absurd job" of being a professor of philosophy "a kind of living death"). He taught classes not by lecturing, nor yet by what we usually think of as discussion. Wittgenstein thought aloud before his class. "The impression was of a tremendous concentration.... There were frequent and prolonged periods of silence, with only an occasional mutter from Wittgenstein, and the stillest attention from the others. During these silences, Wittgenstein was extremely tense and active. His gaze was concentrated; his face was alive;

¹ Erich Heller, The Artist's Journey into the Interior (New York: Random House, 1959), p. 201.

his hands made arresting movements; his expression was stern. One knew that one was in the presence of extreme seriousness, absorption, and force of intellect." Wittgenstein was always exhausted by his teaching, and often revolted by it. Sometimes he would stop, put his head in his hands, and exclaim something like "I'm a fool!" or "You have a dreadful teacher!"2 After class, he would flee to a movie, where he would sit in the front row, struggling to lose himself and his thoughts in the screen.

Ludwig Josef Johann Wittgenstein was born in Vienna in 1889, but came to study in England, first at the University of Manchester and later at Cambridge. Moving from engineering into mathematics, and from mathematics into philosophy, he finally became a student of Bertrand Russell's at Cambridge. In 1921 he published a slim volume of philosophy called Tractatus Logico-Philosophicus, for the English edition of which Russell wrote an introduction.3

Wittgenstein said at the time that he regarded the Tractatus as having solved all philosophical problems—as essentially putting an end to philosophy.4 Of course the book did not do that; instead, it became the inspiration for a whole new school of philosophy that began in a group known as the Vienna Circle, and is now generally called logical positivism.5 But the book did put an end to philosophy for Wittgenstein himself. He was unhappy with Russell's introduction, and they quarreled over the work. Earlier, in 1912, Wittgenstein's father had died, leaving him a considerable fortune. Now Wittgenstein gave this money away, abandoned philosophy, and became a village grammar-school teacher in rural lower Austria. Later, for a time, he was a gardener's assistant in a monastery, and himself considered becoming a monk. Then he returned to Vienna to design a mansion for his sister. In all this time, and indeed for the rest of his life, he lived in the simplest and most frugal style. "His dress was unconventional; it is impossible to imagine him with necktie or hat. A bed, a table, and a few deck-chairs were all of his furniture. Ornamental objects of whatever kind were banished from his surroundings."6

In 1929, at the age of forty, Wittgenstein returned to Cambridge and to philosophy, saying he felt that now he could do creative work again.7

⁷ Malcolm, Ludwig Wittgenstein, p. 12.

Norman Malcolm, Ludwig Wittgenstein, A Memoir (London: Oxford University Press, 1962), pp. 16, 26; Ludwig Wittgenstein: The Man and His Philosophy, ed. by K. T. Fann (New York: Dell, 1967), pp. 52, 57, 60.

³ Malcolm, Ludwig Wittgenstein, pp. 11-12.
⁴ Ibid., p. 11; K. T. Fann, Wittgenstein's Conception of Philosophy (Berkeley and Los Angeles: University of California Press, 1969), p. 4n, and Ludwig Wittgen-

⁵ For an introduction to Wittgenstein's influence on the Vienna Circle, see Justus Hartnack, Wittgenstein and Modern Philosophy, tr. by Maurice Cranston (Garden City: Doubleday, 1965), Ch. III. For more detail, see Friedrich Waismann, Wittgenstein und der Wiener Kreis, ed. by B. F. McGuinness (London: Basil Blackwell, 1967).

⁶ Malcolm, Ludwig Wittgenstein, p. 10; Hartnack, Wittgenstein and Modern Philosophy, p. 7.

In June of that year he was awarded a D. Phil., submitting the *Tractatus* for a dissertation. The following month he was scheduled to read a paper on logical form, clearly related to the ideas of the *Tractatus*, before an annual meeting of British philosophers. But at the last moment he refused to read it, explaining years later to G. E. Moore "something to the effect that, when he wrote [the paper] he was getting new ideas about which he was still confused, and that he did not think it deserved any attention."

Then Wittgenstein began to teach about these new ideas at Cambridge, and he dictated and wrote several interrelated manuscripts about them. But none of this material was published during his lifetime; he died in 1951 with the *Tractatus* his only published work. Only then did his later writings begin to appear, the most significant ones being the *Philosophical Investigations* (1953), *Remarks on the Foundations of Mathematics* (1958), and *The Blue and Brown Books* (1958). This last work originated as transcriptions of Wittgenstein's Cambridge lectures in 1933–34 and 1934–35, taken down by students and circulated as mimeographed manuscripts in blue and brown covers, respectively. Its full title begins *Preliminary Studies for the 'Philosophical Investigations.'* 10

Because his later writings were not publicly available until very recently, Wittgenstein was known almost exclusively for the *Tractatus*, and many people still think of him as a logical positivist. But that is a serious misunderstanding. For the incident of the canceled lecture in 1929 really did mark a turning point in Wittgenstein's thought, at which he had begun "getting new ideas." He himself construed the entire body of his later writing and teaching as a sustained and radical *criticism* of the *Tractatus* and of his own earlier views. And so one must distinguish between the "early" and the "later" Wittgenstein. Perhaps we need not accept Wittgenstein's own judgment on this matter as definitive. Certainly there are also some profound continuities in his work. But on the subject of language and the relationship between language and philosophy, the later works really are a rejection of the *Tractatus*. And since language is the subject with which we will begin here, we must respect Wittgenstein's own im-

⁸ Stanley Cavell, Must We Mean What We Say? (New York: Charles Scribner's Sons, 1969), p. 44; compare Fann, Ludwig Wittgenstein, p. 58.

⁹ Toulmin suggests that Wittgenstein's later reluctance to publish grew out of the traumatic experience of his quarrels with Russell over Russell's unsatisfactory introduction to the *Tractatus*: Stephen Toulmin, "Ludwig Wittgenstein," *Encounter*, XXXII (January 1969), 58.

Other posthumous publications include: Notebooks 1914-1916, tr. by G. E. M. Anscombe (Oxford: Basil Blackwell, 1961); Philosophische Bemerkungen, ed. by Rush Rhees (Oxford: Basil Blackwell, 1964); Zettel, tr. by G. E. M. Anscombe, ed. by G. E. M. Anscombe and G. H. von Wright (Berkeley and Los Angeles: University of California Press, 1967); Lectures and Conversations on Aesthetics, Psychology and Religious Belief, ed. by Cyril Barrett (Berkeley and Los Angeles: University of California Press, 1967); Paul Engelmann, Letters from Ludwig Wittgenstein, with a Memoir, tr. by L. Furtmüller, ed. by B. F. McGuinness (New York: Horizon Press, 1968); and On Certainty, tr. by Denis Paul and G. E. M. Anscombe, ed. by G. E. M. Anscombe and G. H. von Wright (New York and Evanston: Harper & Row, 1969).

pulse that the *Investigations* and the *Tractatus* ought really to be read together, because the former can "be seen in the right light only by contrast with and against the background of my old way of thinking." We shall therefore begin with a review of Wittgenstein's early ideas on language and meaning.

The fundamental assumption of the Tractatus is that language is a picture of reality; its function is to represent the world to us. Wittgenstein told one of his students how this idea came to him.12 It was during the First World War, in the trenches, while he was serving in the Austrian army. He was reading a magazine that contained a schematic drawing showing the possible sequence of events in an automobile accident. Looking at the drawing, Wittgenstein was struck by the way it resembled a statement or proposition-an allegation-about what happened. It depicted or described a possible state of affairs. And it was able to do so because the various parts of the picture corresponded to various things in the world. Wittgenstein said that this gave him the idea of the inverse relationship: that a proposition is like a picture, by virtue of similar correspondence between its parts and things in the world. The parts of a sentence or proposition are, of course, words. Each of these words stands for an object, and the way the proposition relates them to each other is supposed to correspond to the way the objects are related in the world. "I hit John" is one state of affairs; "John hit me" is a different state of affairs.

In the Tractatus, Wittgenstein calls a proposition "a picture of reality," and "a model of reality as we imagine it." And he says, "we picture facts to ourselves." Such a picture can be accurate or inaccurate, true or false, depending on whether it "agrees with reality," and that agreement is essentially a matter of correspondence of parts. A proposition has "exactly as many distinguishable parts as . . . the situation that it represents," and these parts are essentially the names of the objects in the world that are combined in the particular situation. Each word is the name of a thing, and the proposition relates them to each other in a certain pattern, thereby purporting to say something true about reality. "The fact that the elements of a picture are related to one another in a determinate way represents that things are related to one another in the same way." The proposition is a kind of blueprint or map, where real relationships are represented by corresponding relationships in a different medium.

Clearly Wittgenstein's model of a typical proposition is a declarative

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11 Wittgenstein, Philosophical Investigations, p. x.
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¹² Malcolm, Ludwig Wittgenstein, p. 8.

¹³ Ludwig Wittgenstein, Tractatus Logico-Philosophicus, tr. by D. F. Pears and B. F. McGuinness (New York: Humanities Press, 1961), par. 4.01.

¹⁴ Ibid., par. 2.1.

¹⁵ Ibid., par. 2.21. 16 Ibid., pars. 4.04, 4.22, 4.221.

¹⁷ Ibid., par. 2.15.

¹⁸ Ibid., pars. 2.13, 4.014, 4.0312, 5.5423.

sentence, used to say something true or false about the world, "the existence of a state of affairs." Truth and falsity are the only relevant modes. "A proposition must restrict reality to two alternatives: yes or no." And what the proposition asserts truly or falsely is its meaning or sense, the thing one grasps when one understands the proposition. "The sense of a proposition is its agreement and disagreement with possibilities of existence and non-existence of states of affairs." Hence, understanding a proposition means knowing "the situation that it represents," knowing "what is the case if it is true," what would count as verification or falsification of it. 22 "A proposition is the expression of its truth-conditions." 23

Of course there are also other forms of expression in language, but either they can be translated into such basic propositions or else they are meaningless. A complex sentence, for instance, could be taken apart into the "elementary propositions" of which it is composed. "A proposition is a truth-function of elementary propositions."24 Or a question, though not itself an assertion or a picture of reality purporting to tell us something, nevertheless is related to and can be translated into a corresponding simple proposition about reality-roughly, the proposition that would answer the question. The question is, as it were, just a different form of that proposition. And a negative proposition is just a different form of its positive counterpart. In other words, "I hit John" and "I did not hit John" and "Did I hit John?" are like different modes or different forms of the same picture of reality; they share a single core of meaning, except that one asserts, one negates, and one questions.25 To understand their meaning one must understand the meaning of the basic core assertion into which they can be analyzed, must know what would have to be the case in the world for it to be true. Understanding "Did I hit John?" requires knowing what would count as my having hit John. Thus the meaning, the thought in language, is often "disguised," and must be laid bare by analysis, translating complex sentences into their elementary propositions, each of which consists of "names in immediate combination."26

This kind of analysis is the task of philosophy, properly understood. "Philosophy aims at the logical clarification of thoughts." Rather than generate original propositions of its own, philosophy should "clarify" propositions. For, "without philosophy thoughts are, as it were, cloudy

¹⁹ Ibid., par. 4.21; compare par. 4.5: "The general form of a proposition is: This is how things stand."

²⁰ Ibid., par. 4.023.

²¹ Ibid., par. 4.2.

²² Ibid., pars. 4.021, 4.024.

²³ Ibid., par. 4.431.

²⁴ Ibid., par. 5.

²⁵ There is an interesting parallel here to Freud's theory that unconscious thought, for instance as expressed in dreams, merely pictures states of affairs; so that the psychoanalyst must figure out whether they are being affirmed, denied, wished for, feared, questioned, supposed, and so on. Sigmund Freud, The Interpretation of Dreams, tr. by James Strachey (New York: Basic Books, 1961), pp. 310-338.

²⁶ Wittgenstein, Tractatus, pars. 4.002, 4.221.

and indistinct: its task is to make them clear and to give them sharp boundaries."²⁷ Each proposition has one and only one correct, complete analysis, in accord with the logic of the language.²⁸ "What a proposition expresses it expresses in a determinate manner, which can be set out clearly."²⁹ Language, in short, is a kind of logical calculus operating according to strict, definite rules, and the job of philosophy is to study these rules and make them explicit.³⁰

Whatever in language cannot be analyzed into elementary propositions is either lacking in sense or nonsensical. Wittgenstein does recognize a special category of propositions which cannot be verified or falsified even in principle but which are not nonsensical. This category consists of tautologies, which are true a priori, by definition, and contradictions, which are false a priori, by definition. Tautologies include the rules of logic and the propositions of mathematics. Tautologies and contradictions "say nothing," tell us nothing about the world. "For example, I know nothing about the weather when I know that it is either raining or not raining." Though they are not nonsensical, they "lack sense." They are simply part of our system of symbols, its "limiting cases."

If a proposition cannot be analyzed into testable elementary propositions and is neither a tautology nor a contradiction, then it is simply senseless or nonsensical. It may look as if it makes sense, but in fact it means nothing because it represents no alleged state of affairs in the world. Nothing could prove it true or false; it is just a lot of words strung together. Wittgenstein argues in the Tractatus that unfortunately much of what we try to do with language-including the bulk of traditional philosophy-falls into this category. For example, any proposition about good or bad, right or wrong, beauty or ugliness-any proposition about "value" -falls into this category. For the meaning of a proposition is the worldly state of affairs that would exist if it were true. But the world, in and of itself, contains no value. In the real, factual world, "everything happens as it does happen: in it no value exists."32 Consequently, value propositions cannot be meaningful. "It is clear that ethics cannot be put into words. Ethics is transcendental."33 And the same is true of esthetics and metaphysics. Thus, "most of the propositions and questions to be found in philosophical works are not false but nonsensical."34 Philosophical propositions are "not irrefutable, but evidently nonsensical"; for they try "to raise doubt where no question can be asked." A question can exist

²⁷ Ibid., par. 4.112. But compare par. 5.5563: "In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order."

Ibid., par. 3.25.
 Ibid., par. 3.251.

³⁰ Compare Wittgenstein's own later summation of his early views: Philosophical Investigations, par. 81.

³¹ Wittgenstein, Tractatus, pars. 4.461, 4.466.

³² Ibid., par. 6.41.

³³ Ibid., par. 6.421.

³⁴ Ibid., par. 4.003.

only where an answer can exist, and "an answer only where something can be said."35

These ideas have obvious affinities with logical positivism. But unlike many of the logical positivists, Wittgenstein-even in his early workcherishes ethics and esthetics and religion and question of value. Such matters are not worthless or unimportant to him; only they cannot be talked about in a meaningful, sensible way. Meaningful talk consists only of propositions, and "propositions can express nothing of what is higher."36 That which is "higher"—the beautiful and the good—"cannot be put into words"; such things "make themselves manifest. They are what is mystical."37 Thus the meaningful sector of language is confined within narrow limits and governed by clear, unequivocal rules; the task of philosophy is to separate the meaningless from the meaningful use of language by clarifying the latter in accord with the rules, showing "what cannot be said, by presenting clearly what can be said."38 And though what lies outside the narrow boundaries may be of the greatest importance, it cannot be expressed verbally. "What can be said at all can be said clearly, and what we cannot talk about we must consign to silence."39

THE LATER PHILOSOPHY

These, then, are Wittgenstein's views in the *Tractatus*. They embody a conception of language in which words stand for, or refer to, (classes of) phenomena in the world; and sentences make true or false assertions about combinations of such phenomena. It is a conception traditional at least since Plato and Aristotle, and almost universally accepted today, if only for lack of an accessible alternative. It has, as we shall see, the most profound implications for basic questions such as how men understand each other and what the world is like. In his later writings, Wittgenstein rejects almost every feature of this view of language. He denies that the essential function of language is to picture reality, that the basic model of a meaningful sentence is a true or false proposition about things in the world, that language is a logical calculus operating according to strict rules, that propositions about value or metaphysics are meaningless, and that the job of philosophy is to correct our messy, careless, ordinary ways

³⁵ Ibid., par. 6.51. "Evidently" is my translation for "offenbar," where Pears and McGuinness have "obviously."

³⁶ Ibid., par. 6.42. The German text is "können nichts Höheres ausdrücken." On the extent to which Wittgenstein's attitude toward higher things was "not a mocking, but a respectful silence," unlike that of the logical positivists, see Toulmin, "Ludwig Wittgenstein," and Fann, Wittgenstein's Conception, p. 25.

³⁷ Wittgenstein, Tractatus, par. 6.522; compare par. 5.62: "What the solipsist means is quite correct; only it cannot be said."

³⁸ Ibid., par. 4.115.

³⁹ *Ibid.*, p. 3; compare par. 7.

⁴⁰ Karl-Otto Apel, Analytic Philosophy of Language and the Geisteswissenschaften, tr. by Harald Holstelilie (Dordrecht: D. Reidel, 1967), p. 37.

of talking. Wittgenstein's major later work, the *Philosophical Investiga*tions, begins with a quotation from Saint Augustine's *Confessions*, which is then examined and criticized. The passage is an account of how Augustine first learned to talk; and it soon becomes clear that in criticizing Augustine, Wittgenstein is really criticizing his own earlier views. Augustine says:

When they (my elders) named some object, and accordingly moved toward something, I saw this and I grasped that the thing was called by the sound they uttered when they meant to point it out. Their intention was shewn by their bodily movements, as it were the natural language of all peoples: the expression of the face, the play of the eyes, the movement of other parts of the body, and the tone of voice which expresses our state of mind in seeking, having, rejecting or avoiding something. Thus, as I heard words repeatedly used in their proper places in various sentences, I gradually learnt to understand what objects they signified; and after I had trained my mouth to form these signs, I used them to express my own desires.⁴¹

As an introspective, imaginative account of what language-learning "must have been like," this passage is perhaps familiar and innocent enough. But Wittgenstein proceeds to show that it rests on a number of unwarranted and false assumptions, assumptions which he himself once shared.

Wittgenstein's first direct comment is that the passage from Augustine presents us with a "picture of language," in which words are essentially the names of objects in the world, so that each word could be attached to the appropriate object like a label.42 "The individual words in language name objects . . . Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands."43 The basic function of a word is to signify or refer, to stand for an object. Such assumptions are, again, familiar enough and not unreasonable. They remind us of some of the ways in which we do teach children the names of certain kinds of objects, or colors, or the numbers from one to ten. We point to the object, or a picture, or a color, or a group of objects, and say the appropriate word, and the child repeats it. After a while the child can name the object correctly without the adult's example. Because this is a common procedure when an adult consciously sets out to teach a child a certain word or vocabulary set, it springs readily to mind as a good example of the nature of language-learning.

But, to begin with, certain words cannot be taught that way, by ostensive definition. No adult can point out a "the" or a "today" or a "whether"; yet children do somehow acquire these words as well.⁴⁴ Nor is the problem

⁴¹ Augustine, Confessions, I. 8., cited in Wittgenstein, Philosophical Investigations, par. 1.

⁴² Wittgenstein, Philosophical Investigations, par. 15; compare Waismann, Wittgenstein, p. 169.

⁴³ Wittgenstein, Philosophical Investigations, par. 1.

⁴⁴ Compare Wittgenstein, Blue and Brown Books (New York and Evanston: Harper & Row, 1964), p. 77; and Paul Ziff, Semantic Analysis (Ithaca: Cornell University Press, 1960), p. 82: "Owing to their unduly narrow focus philosophers

confined to prepositions, articles, and conjunctions. Though one can point to a bachelor, one cannot teach the meaning of "bachelor" by pointing, nor that of "divorce" or "challenge" or "interlude." Captivated by the "Augustinian" picture, one is likely to brush such words aside, as being somehow acquired later in other ways. Wittgenstein says, "If you describe the learning of language in this way you are, I believe, thinking primarily of nouns like 'table', 'chair', 'bread', and of people's names, and only secondarily of the names of certain actions and properties; and of the remaining kinds of word as something that will take care of itself."45 But of course the remaining kinds of word will not "take care of itself," and until one has an account of language-learning that explains how children learn those words, any explanation of how they learn "chair" or "bread" should be highly suspect. A common philosophical assumption at this juncture is that other words can somehow be explained or learned out of various combinations of the ones learned ostensively. But even a moment's serious reflection shows the total inadequacy of that assumption. Just try to construct the meaning of, say, "when" out of simple nouns that we teach by pointing to objects.

Moreover, Augustine takes a great deal for granted about what goes on when we point and speak and the child speaks after us. What, Wittgenstein asks, if the child just "naturally reacted to the gesture of pointing with the hand by looking in the direction of the line from finger-tip to wrist, not from wrist to finger-tip"? Or, as Ziff puts it even more strikingly, "I throw a cat a piece of meat. It does not see where the meat fell. I point to the meat: the cat smells my finger." As a matter of fact, both Wittgenstein and Augustine make the mistake of assuming that children just naturally follow the pointing finger in the right direction, whereas in reality even this simple reaction has to be learned. But it can be learned by the child, and it must be mastered before ostensive definitions can work.

But this is still a relatively minor point. Much more vital is the problem of the child's capacity to figure out what the adult is pointing at. After all, an adult standing in the kitchen with his child, facing toward the stove, might point forward and downward and teach the child the meaning of "stove," or "oven," or "hot," or "white," or "enamel," or "scratch," or "dirt," or "baking," or "cooking," or "dinner," or "object," or "thing," and so on. How does the child know what he is pointing to, what he intends? "One can ostensively define a proper name, the name of a colour, the name of a material, a numeral, the name of a point of the compass and so on. The definition of the number two, 'That is called "two" '—pointing to two nuts—is perfectly exact. —But how can two be

have failed to realize that what is fundamental here are conditions, not referents and not truth conditions and not even the satisfaction of conditions but simply conditions. 'Hello' has no referent. It cannot be associated with truth conditions."

⁴⁵ Wittgenstein, Philosophical Investigations, par. 1.

⁴⁶ Ibid., par. 185.

⁴⁷ Ziff, Semantic Analysis, pp. 92-93.

defined like that? The person one gives the definition to doesn't know what one wants to call 'two'; he will suppose that 'two' is the name given to this group of nuts! —He may suppose this; but perhaps he does not.

. . . An ostensive definition can be variously interpreted in every case."48

It is not that one cannot teach a child some words by pointing, but rather that the process cannot be as Augustine imagines it; we need a better understanding of what actually goes on. It helps to consider, with Cavell, a real example of the way a child, as we say, "learns a new word." Consider the little girl whose parents can tell you that she already "knows" two dozen words, including the word "kitty." What does it mean to say that she has learned it? One day, after her father said "kitty" and pointed to the kitten, she repeated the word and also pointed to the kitten. But what does "repeating the word" mean here, and what was she pointing at? All we know is that she made a sound her father "accepted, responded to (with smiles, hugs, words of encouragement, etc.)" as a repetition of what he had said, and that she made a gesture he took as pointing to what he had pointed at. Then, "the next time a cat came by, on the prowl or in a picture book she did it again." We conclude she knows, has learned a new word.

But one day, some weeks later, the child smiles at a fur piece, strokes it, and says "kitty," Her parents' first reaction is one of surprise, and perhaps disappointment: the child hasn't mastered the word after all. But the second reaction is happier: "she means by 'kitty' what I mean by 'fur.' Or was it what I mean by 'soft,' or perhaps 'nice to stroke'?" She has learned to say the word right enough, but has not understood the idea of a kitten. Grasping our concept of "kitty," understanding what a kitty is, is another matter. But the parents' happier second reaction still runs as if the child had a certain number of concepts ready, in mind, and made the wrong guess from among them. Instead of choosing the concept of a kitty to correspond to the English word "kitty," she mistakenly picked the concept of fur or of softness or of niceness-to-stroke. Alternatively, a philosopher might want to say that she has formulated the wrong inductive generalization: her use of "kitty" refers not merely to kittens but also to fur pieces and perhaps other small, soft, furry things. It is too broad. But if we correct her, she will gradually narrow it down by a process of further induction until she is clear on what does and what does not count as a "kitty."

But why should one suppose that she means "kitty" to be the name of a certain class of objects at all? Cavell continues: "Perhaps she didn't mean at all what in my syntax would be recorded as 'That is an X.' After all, when she sees a real kitten she not only utters her allophonic version

⁴⁹ Stanley Cavell, "The Claim to Rationality" (unpublished dissertation, Harvard University), pp. 205-207.

⁴⁸ Wittgenstein, Philosophical Investigations, par. 28; compare Waismann, Wittgenstein, p. 51.

of 'kitty,' she usually squeals the word over and over, squats down near it, stretches out her arm towards it and opens and closes her fingers (an allomorphic version of 'petting the kitten'?), purses her lips and squints with pleasure. All she did with the fur piece was, smiling, to say 'kitty' once and stroke it. Perhaps, the syntax of that performance should be transcribed as 'This is like a kitty,' or 'Look at the funny kitty' or 'Aren't soft things nice?', or 'See, I remember how pleased you are when I say 'kitty',' or 'I like to be petted.' Can we decide this? Is it a *choice* between these definite alternatives?"⁵⁰

The example still tempts us into the wrong interpretation, because a word like "kitty" can function as a label. But children's early vocabulary need not consist of such nouns. Consider the child that has "learned," has begun to use, "'bye" together with a hand-wave when we encourage it to "wave bye-bye" as we depart. Or consider the child that has begun to say "up," lifting its arms in a characteristic way to be picked up. Here there is much less temptation to suppose that the child has made a correct "inductive generalization" as to what objects count as a "'bye" or as an "up." Instead, we are inclined to say that the child "associates" the sound with a certain situation, as it associates certain gestures with that situation. Neither the sound nor the gesture need be (taken as) the name of anything. The situation recurs; the gestures and sound, or perhaps just the one or the other, are repeated. That is a kind of induction, if you like, but not an induction about recurrent characteristics of an object to which the sound refers; rather, it is an induction about features of the total situation that make it reminiscent of an earlier situation in which the sound was made.51 Does the child at this stage know what "'bye" or "up" means? There can be no clear-cut answer, either affirmative or negative. But the question quickly resolves itself in another, more useful one: What can the child do with the words at this point, and what can it (does it) not yet do?

Cavell means to show us, among other things, that the difference between learning and maturation is not nearly as clear as we suppose, that the question of what a child has learned when it repeats or volunteers a word must be taken as problematic. A child beginning to master language needs to learn not merely the right label for an object, but also what counts as the object to be labeled; not merely the word, but the concept. He needs to learn, as Ernst Cassirer has said, "to come to terms with the

⁵⁰ Ibid., p. 206.

⁵¹ Compare Wittgenstein, On Certainty, par. 538: "The child, I should like to say, learns to react in such-and-such a way; and in so reacting it doesn't so far know anything. Knowing only begins at a later level." I find quite amazing the ubiquity and tenacity of the label-and-object view of language learning in the literature of experimental psychology. Rare exceptions include Z. P. Dienes, Concept Formation and Personality (Leicester: Leicester University Press, 1959); the literature in which a child is observed while actually learning a natural language is much more perceptive.

objective world."52 Being adults and competent speakers ourselves, we tend to think of the child as a small adult with communication trouble. An adult coming into a strange country, Wittgenstein says, "will sometimes learn the language of the inhabitants from ostensive definitions that they give him; and he will often have to guess the meaning of these definitions," guess the corresponding word or words in his own language. In this respect, "Augustine describes the learning of human language as if the child came into a strange country and did not understand the language of the country; that is, as if it already had a language, only not this one."53 But a child in the process of acquiring its first, its native, language is at the same time becoming acquainted with the world, what kinds of objects and entities it contains, what counts as an entity in it.

The child learns simultaneously both what "kitty" means and what a kitty is; and neither process happens all at once, in a flash of insight that might be based on a lucky guess. 4 When we say to the little girl, "kitty," and point to the cat, we are not really, fully, telling her either what "kitty" means or what a kitty is. We cannot yet tell her what "kitty" means because, as Cavell puts it, "It takes two to tell something; you can't give someone a piece of information unless he knows how to ask for that (or comparable) information. . . . You can't tell a child what a word means when the child has yet to learn what 'asking for a meaning' is (i. e., how to ask for a meaning), in the way you can't lend a rattle to a child who has yet to learn what 'being lent (or borrowing) something' means." [Just try to get the child to "return" the rattle that an older child has "lent" her!) Even if we get the child to repeat "kitty" after us, she has at most mastered a new activity, a new game; she has not yet learned the "meaning" of a "word."

Similarly, when we point to the "kitty," we are not yet telling the child what a kitty is. For to know what a kitty is requires knowing that it is a kind of animal, that it is alive, can feel pain, will grow into a cat, will die, is related in one way to lions and in another to dogs, that it can be comforted and punished and teased, and so on. "Kittens—what we call kittens—don't exist in her world yet." Of an older child, "one ignorant of, but ripe for" the concept of, say, a lion, in the sense that she knows what an animal is, how to ask for a name, and so on, one can comfortably say that when we tell her "that is a 'lion,' " she learns both what a lion is and what "lion" means. Even then the process will not be instantaneous or exhaustive. The child may still have some special ideas about lions different from ours—perhaps that they bear some unknown intimate

⁵² Ernst Cassirer, An Essay on Man (Garden City: Doubleday, 1953), p. 171.

⁵⁸ Wittgenstein, Philosophical Investigations, par. 32.

⁵⁴ Lev Semenovich Vygotsky, Thought and Language, ed. and tr. by Eugenia Haufmann and Gertrude Vakar (Cambridge: M.I.T. Press, 1966), p. 27.

⁵⁵ Cavell, "Claim to Rationality," p. 204.

⁵⁶ Ibid., p. 207.

relation to lies or lying. "But," Cavell says, "that probably won't lead to trouble and one day the person who was this child may, for some reason, remember that she believed these things, made these associations, when she was a child." "Although I didn't tell her, and she didn't learn, either what the word 'kitty' means or what a kitty is," Cavell says, if things continue normally, eventually "she will learn both." "58

LANGUAGE AS ACTIVITY

What Wittgenstein offers as a substitute for the misleading picture of language he finds in Augustine, or at least as a first step toward a different and better view, is a conception of language as activity. In a variety of ways and on many levels, he explores the idea that language is founded on speaking and responding to speech, and that these are things we do. Language is first of all speech, and "the speaking of language is part of an activity, or of a form of life."59 In this sense, "words are also deeds."60 Thus, understanding a language is not a matter of grasping some inner essence of meaning, but rather of knowing how to do certain things. "To understand a language means to be master of a technique."61 In this activity, this technique, words are put to use, so that "language is an instrument. Its concepts are instruments."62 Wittgenstein advises us, "Ask yourself: On what occasion, for what purpose, do we say this? What kind of actions accompany these words? (Think of a greeting.) In what scenes will they be used; and what for?"63 Specifically, he embodies and explores this pragmatic understanding of language in two great analogies: the comparison between words and tools, and that between words and pieces or counters or signals in a game.

"Think of the tools in a tool box," he says; "there is a hammer, pliers, a saw, a screw-driver, a rule, a glue-pot, glue, nails and screws. —The functions of words are as diverse as the functions of these objects." The emphasis is now on the "functions" of words, rather than their "meanings"; and not every one can be used for every purpose, though many can be used for a variety of purposes. At the same time, they also have certain features in common, by virtue of the fact that they are tools, things designed for human beings to work with. But that similarity can also deceive us about their great variety of function. "It is like looking into the cabin of a locomotive. We see handles all looking more or less alike. (Nat-

⁵⁷ Ibid., p. 214.

⁵⁸ Ibid., p. 206.

⁵⁹ Wittgenstein, Philosophical Investigations, par. 23. The view Wittgenstein develops has antecedents, to be sure, such as Saussure's stress on parole, and the later Croce.

⁶⁰ Ibid., par. 546.

⁶¹ Ibid., par. 199.

⁶² Ibid., par. 569.

⁶³ Ibid., par. 489.

⁶⁴ Ibid., par. 11.

urally, since they are all supposed to be handled.) But one is the handle of a crank which can be moved continuously (it regulates the opening of a valve); another is the handle of a switch, which has only two effective positions, it is either off or on; a third is the handle of a brake-lever, the harder one pulls on it, the harder it brakes; a fourth, the handle of a pump: it has an effect only so long as it is moved to and fro."65

Different words, like different tools, are used in very different ways. What this means becomes clearer when one turns to the second analogy, much more fully developed in the *Investigations*: the analogy between language and games, between words and the pieces or signals we use in playing games. "Words are a signal; and they have a *function*." One may think of words used as signals in competitive games, like "check" in chess or "double" in bridge. Or better still, one may think of the ritual use of words in children's games, like the cry "olly-olly-oxen free, free, free!" which was used, at least in my childhood, as a ritual expression in hide-and-go-seek, allowing all players to return safely to home base without being tagged. Uttering such an expression in the course of play is obviously not making a true or false assertion about facts. Rather, it changes the status, the relationships, of the players. Uttering such an expression is like making a move in the game, and the expression is just a device by means of which the move is made.

The significance of such expressions in our language can perhaps be made more accessible by means of Austin's notion of "performatives."67 Austin calls our attention to an apparent peculiarity of certain verbs: in their first person singular active form, they are used not for making true or false statements, but for taking an action. They are a way of "doing something rather than merely saying something."68 Specifically, the first person use of these verbs is the performing of the very action which the verb "names." So Austin calls these verbs "performatives." The characteristic example is that of promising. When we say "I promise," we are not describing our activity or our state of mind, not saying anything true or false, but performing the action named-promising. Similarly, if at the appropriate moment "in the course of a marriage ceremony I say, as people will, 'I do,' " then "I am not reporting on a marriage, I am indulging in it." Or again, if I say "I bet you sixpence it will rain tomorrow," I am not making a factual prediction but a bet. Or suppose that in the appropriate circumstances "I have the bottle of champagne in my hand and say

⁶⁵ Ibid., par. 12.

⁶⁶ Wittgenstein, Zettel, par. 601; compare Philosophical Investigations, par. 7; and Waismann, Wittgenstein, pp. 105, 150, 169.

⁶⁷ J. L. Austin, Philosophical Papers (Oxford: Clarendon Press, 1961), pp. 66-67, 220-239; see also his posthumously published How to Do Things with Words, ed. by J. O. Urmson (New York: Oxford University Press, 1965). Something like Austin's notion of performatives is developed also by H. L. A. Hart in "The Ascription of Responsibility and Rights," in Antony Flew, ed., Logic and Language (First and Second Series) (Garden City: Doubleday, 1965).

⁶⁸ Austin, Philosophical Papers, p. 222.

'I name this ship the Queen Elizabeth.' " Then I am not describing a christening ceremony, but performing the christening.69

Performative verbs, Austin points out, display a "typical asymmetry" between their first person singular present active form, and other persons and tenses. "For example, when we say 'I promise that . . .', the case is very different from when we say 'He promises that . . .', or in the past tense 'I promised that . . .'." The latter utterances may be descriptions or assertions or reports of what was said; uttering them is not promising. But uttering "I promise" can, on occasion, itself be promising. Of course, the right words have to be said in the right circumstances. Any of the above utterances said while reading aloud, while reporting on someone else's saying them, while rehearsing a play, as a joke, and so on, will not "perform" the action. The circumstances must be right, the procedure must accord with the appropriate conventions, the speaker must be in a position to perform the action.

Having once discovered performatives, Austin was increasingly struck by the difficulties his concept entailed, and devoted much energy to trying to preserve it despite them. He was forced to acknowledge that the contrast between performatives and words used to make descriptive statements about the world, statements which can be true or false, was not as sharp as he had supposed. Even performative utterances have factual implications, and these may be true and false. For example, when we promise we imply that we think we are able to perform what we promise, and that we intend to perform, and these implications may be true or false. If they are false, we might say that the act of promising was insincere. And with some performatives one can feel the fragility of the distinction between their performative and descriptive use, in examples of such insincerity. Thus, if I say "I condemn you," in a way I am thereby condemning you, no matter how I feel or what I think. That is the performative aspect of the utterance. Yet the utterance also seems to have a descriptive aspect; and if I do not sincerely condemn you in my mind, then as a descriptive utterance it is, in a way, false. Though officially, by pronouncing the words I am condemning you, nevertheless I do not really condemn you.

Moreover, Austin soon noticed that performative utterances can equally well be cast with the verb in the passive voice and in the second or third person. One need not literally say "I warn" in order to warn someone; one can say "Passengers are warned to . . ." One can even warn without using that verb at all, for instance by posting a sign that says "Dangerous Bull." Similarly, in suitable circumstances one can promise simply by saying "you can count on it," or "yes," or any number of other things. So the sharp dividing line between performative and descriptive utterances blurs.

⁶⁹ Ibid.

⁷⁰ Ibid., p. 229; compare p. 66n.

Performatives can (almost) be true or false, and even nonperformatives can be used to perform actions. Eventually Austin conceded that "perhaps indeed there is no great distinction between statements and performative utterances."⁷¹

It remains true that certain verbs have the peculiarity that, in uttering them in the first person singular present active, we are performing the action they name. But the existence of these verbs is relatively uninteresting compared to the far greater discovery implicit in Austin but made explicit by Wittgenstein: that much or perhaps all of language is performative in a looser sense, is what we might call quasi-performative. Though speaking may not always be performing the action named in the speech, it is always performing an action, for whose consequences the speaker is responsible.

To develop this way of looking at language, Wittgenstein introduces what he calls "language games." On one level, a language game is literally a game, the sort of informal but ritualized interaction between a child and an adult by means of which a child is trained in certain features of his native language. For example, the adult points and says a word, and the child repeats it, as in Cavell's example of teaching the child to say "kitty." The adult and the child engage in a kind of game involving both action and speech; but the use of speech in it is still very much like the use of gesture.

More commonly, Wittgenstein means by a language game a kind of drastically simplified version or model of how language works, a sort of primitive instance of language. Though these models are usually invented by Wittgenstein, they are often based on some small part of our actual language. Both the language games from which children learn and the language games which are primitive or reduced parts of a complete language always involve, in Wittgenstein's examples, both speech and other activity linked with that speech. The language game is "the whole, consisting of language and the actions into which it is woven."

The first language games that Wittgenstein invents are meant to illuminate Augustine's account of how he learned to talk. Though the assumptions involved in that account are false about our (or any natural) language, they could be considered "correct for a simpler language than ours." Augustine's "concept of meaning has its place in a primitive idea of the way language functions. But one can also say that it is the idea of a language more primitive than ours." Wittgenstein proceeds to sketch an imaginary primitive version of a "language" for which Augustine's account would be accurate:

⁷¹ Austin, How to Do Things, p. 52.

⁷² But not the language of a "primitive" people!

⁷³ Wittgenstein, Philosophical Investigations, par. 7.

⁷⁴ Wittgenstein, Blue and Brown Books, p. 77.

⁷⁵ Wittgenstein, Philosophical Investigations, par. 2.

The language is meant to serve for communication between a builder A and an assistant B. A is building with buildingstones: there are blocks, pillars, slabs and beams. B has to pass the stones, and that in the order in which A needs them. For this purpose they use a language consisting of the words "block", "pillar", "slab", "beam". A calls them out;—B brings the stone which he has learnt to bring at such-and-such a call.

Wittgenstein invites us to conceive of this as "a complete primitive language," and to imagine a society that has no more language than this. The Children would learn the language from adults by "being trained in its use," as an animal is trained, by "example, reward, punishment, and suchlike." Indeed, an animal could easily be trained to perform the role of the assistant in this game.

A somewhat more complex language game can be generated by extending this one to include the "names" of the cardinal numbers, one through ten.78 The assistant would memorize the series of words, "one", "two," and so on through "ten," in order. When the builder called out, say, "Five slabs!" the assistant would go to the slabs and say the series of number words to himself until he reached five, picking up one slab at each word. Then he would bring the slabs to the builder. But the extension is really a quite different game from the original. For instance, the training for it would be quite different. It would involve memorizing a list of words in order. And though the use of the number words would be taught through the same sort of training as the use of the names of the stones, the way gestures like pointing are used is different in the two processes. In the ostensive teaching of numbers, "the same word, e.g. 'three', will be taught by pointing either to slabs or to bricks, or to columns, etc. And on the other hand, different numerals will be taught by pointing to groups of stones of the same shape."79 When the training was over, the assistant would also be expected to respond to the number words in a very different way from the way he is expected to respond to the names of the stones. These differences show clearly that the number words are "an entirely different kind of instrument" in the language.80

We may be tempted to ask: "But how does the assistant know what to bring when he hears the word 'slab,' and what to do with the word 'five'? Doesn't he need first of all to grasp their meaning?" Wittgenstein responds: "Well, I assume that he acts as I have described. Explanations come to an end somewhere." No such thing as the meaning of the word "five" is in question here, only how the word "five" is used. In this language game, the question of meaning is reduced to either of two extremely simple alternatives. We might say that the assistant understands the

⁷⁶ Ibid.

⁷⁷ Wittgenstein, Blue and Brown Books, p. 77.

⁷⁸ Wittgenstein, Philosophical Investigations, par. 8; Blue and Brown Books, p. 79.

⁷⁹ Wittgenstein, Blue and Brown Books, p. 79.

⁸⁰ Ibid.; compare Philosophical Investigations, par. 17.

⁸¹ Wittgenstein, Philosophical Investigations, par. 1.

meaning of "slab," "block," and so on; but then "understanding the meaning" implies no more and no less than performing certain actions upon hearing the words. A dog could do it. Alternatively, we might want to say that he need not "understand the meaning" of the words at all, that there is no such thing as "meaning" or "understanding the meaning" involved in this language game; there is only how the words are used by A and responded to by B.

In this language, as it is defined, there can be no discourse as we know it, no science or literature or philosophy. There cannot even be so simple an action as "asking the name of" an object, even of one of the blocks. 82 There are no words for asking "what is that?" or "what is that called?" Within the language, it is not even possible to wonder what a certain building stone is called, for the speakers would not have the vocabulary (or syntax) to ask themselves that question. There can be no asking for the meaning of a word, or explaining the meaning of a word, or giving a synonym. And are there even concepts in this language? "It is not in every language-game that there occurs something that one would call a concept." 83

Asking the name of an object "is, we might say, a language-game on its own. That is really to say: we are brought up, trained, to ask: "What is that called?'—upon which the name is given. And there is also a language-game of inventing a name for something." Asking for and explaining the names of things or the meanings of words are themselves language games; and we can expect them to be as different from the builders' game and from each other as the game played with number words was from the game played with the names of the building stones. Thus there emerges still a third aspect of what Wittgenstein means by a language game: besides games by which children are taught language, and imaginary primitive combinations of speech and action, language games also include our many verbal activities, the things we actually do by or with the use of language. "Review the multiplicity of language-games in the following examples, and in others:

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Giving orders, and obeying them—
Describing the appearance of an object, or giving its measurements—
Constructing an object from a description (a drawing)—
Reporting an event—
Speculating about an event—
Forming and testing a hypothesis—
Presenting the results of an experiment in tables and diagrams—
Making up a story; and reading it—
Play-acting—
Singing catches—
Guessing riddles—

82 Ibid., par. 27.
83 Wittgenstein, Foundations of Mathematics, p. 195.
84 Wittgenstein, Philosophical Investigations, par. 27; my italics.
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Making a joke; telling it—
Solving a problem in practical arithmetic—
Translating from one language into another—
Asking, thanking, cursing, greeting, praying."85
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Any of these could be considered as a separate language game, and we could imagine a language consisting only of the words and actions necessary for that game. "It is easy to imagine a language consisting only of orders and reports in battle. —Or a language consisting only of questions and expressions for answering yes and no. And innumerable others."86 In imagining such languages we need to think not only of the necessary vocabulary, but even more of what the speakers of the language do as they talk. In each case "the speaking of language is part of an activity," and, consequently, "to imagine a language means to imagine a form of life."87

One reason Wittgenstein stresses the diversity of language games we play is to show what is wrong with the traditional assumption, formerly shared by him and implicit in the passage from Augustine, that the essential function of language is to make assertions about matters of fact. He says, "It is interesting to compare the multiplicity of tools in language and of the ways they are used, the multiplicity of kinds of word and sentence, with what logicians have said about the structure of language. (Including the author of the Tractatus Logico-Philosophicus.)"88 Confronted with this multiplicity of language uses, we are less likely to suppose that one or two of them must be privileged cases which define the essence of language, and that the others need to be translated into these privileged cases before they can be fully understood. Referring, describing, asserting, stating, appear as just some more language games, no more exemplary than the rest. Wittgenstein no longer feels the need of translating or analyzing ordinary utterances into their true "logical form," the form of a simple assertion. Of course, sometimes in specific cases for specific purposes analysis is useful; it is useful to learn that "when he said X, he really meant Y." But we must not therefore suppose that there exists "something like a final analysis of our forms of language, and so a single completely resolved form of every expression."89 Calling one sentence an analyzed version of another "readily seduces us into thinking that the former is the more fundamental form; that it alone shews what is meant by the other, and so on. For example, we think: If you have only the unanalysed form you miss the analysis; but if you know the analysed form that gives you everything. --But can I not say that an aspect of the matter is lost on you in the latter case as well as the former?"90

⁸⁵ *Ibid.*, par. 23. ⁸⁶ *Ibid.*, par. 19.

⁸⁷ Ibid.

⁸⁸ Ibid., par. 23.

⁸⁹ Ibid., par. 91.

⁹⁰ Ibid., par. 63.

It is not that we never refer or describe, never make true or false assertions, never use words as labels. But these functions are not privileged or definitive. Just so, one can think of a label as a kind of tool, and we might keep some labels in our tool box; but anyone trying to generalize about tools, using only labels as his example, would be badly misled. Taking ostensive definitions as a model, one cannot understand how children learn language. Taking reference as a model, one cannot understand how words have meanings. As Cavell says, the point is not "merely that 'language has many functions' besides naming things; it is also that the way philosophers account for naming makes it incomprehensible how language can so much as perform that function."91

In this respect, the builders' game is meant to show us how different the learning of a natural language must be from that model. In the game, meaning is really indistinguishable from the appropriate action-response. Each word is associated with only a single language game, and when the assistant has mastered this game he knows all there is to know about the word. His training is a training for repetition: to do the same whenever he hears the same command. But a child has barely begun to learn its native language when it has learned to repeat a sound after us as we point. This pointing-and-naming is itself one language game, and mastering it is not mastering any others. Learning the meaning of a word in a natural language means becoming able to use it in all, or most, of its appropriate language games, not merely to repeat it after someone else. Thus, one might summarize Wittgenstein's critique of the passage from Augustine this way: Augustine describes the learning of language as if the child had only to learn new words, in connection with language games which it has already mastered. But the language games in which the word is to be used must also, somehow, be learned. "The ostensive definition," says Wittgenstein, "explains the use-the meaning-of the word [only] when the overall role of the word in the language is clear. Thus if I know that someone means to explain a colour-word to me the ostensive definition 'That is called "sepia" 'will help me to understand the word."92 Only if I know what a color is, am I fully ready for the meaning of "sepia." Here again, knowing what a color is means being able to do something, knowing how color terms are used.

LEARNING LANGUAGE GAMES

Words are relatively easy to teach, but how does the child learn concepts, or come to master language games? Wittgenstein answers that the child learns them not by explanation, but by training. "How do I explain the meaning of 'regular', 'uniform', 'same' to anyone? —I shall explain

⁹¹ Cavell, "Claim to Rationality," p. 208.

⁹² Wittgenstein, Philosophical Investigations, par. 30; compare On Certainty, par. 548.

these words to someone who, say, only speaks French by means of the corresponding French words. But if a person has not yet got the *concepts*, I shall teach him to use the words by means of *examples* and by *practice*."93 Training differs from explanation in at least these two ways: it is relatively nonverbal, relying on gestures, facial expressions, and the like; and it aims primarily at producing certain actions from the learner, quite apart from what goes on in his head. Dogs can be trained, but they cannot "understand explanations." One might teach a child the expression "the same," in such ways: "In the course of this teaching I shall shew him the same colours, the same lengths, the same shapes, I shall make him find them and produce them, and so on. I shall, for instance, get him to continue an ornamental pattern uniformly when told to do so. And also to continue progressions. . . . I do it, he does it after me; and I influence him by expressions of agreement, rejection, expectation, encouragement. I let him go his way, or hold him back; and so on."94

Nor would the kind of training given the assistant in the builders' game be sufficient for training a child in the language games of a natural language. For, as Noam Chomsky has recently pointed out, the most striking feature of a natural language is its "creative aspect." We can understand sentences we have never heard before if the words are familiar, and any competent speaker can use familiar words in contexts he has never before encountered. "A mature speaker can produce a new sentence of his language on the appropriate occasion, and other speakers can understand it immediately, though it is equally new to them. Most of our linguistic experience, both as speakers and hearers, is with new sentences; once we have mastered a language, the class of sentences with which we can operate fluently and without difficulty or hesitation is so vast that for all practical purposes (and, obviously, for all theoretical purposes), we can regard it as infinite."95 The creative openness of language is even more striking when we look beyond changing sentences to changing correlations between speech and world. "The normal use of language is not only innovative and potentially infinite in scope, but also free from the control of detectable stimuli, either external or internal. It is because of this freedom from stimulus control that language can serve as an instrument of thought and self-expression, as it does not only for the exceptionally gifted and talented, but also, in fact, for every normal human."96

In short, to master a natural language it is not enough to be trained to do the same thing whenever the same situation occurs. The child does

96 Noam Chomsky, Language and Mind (New York: Harcourt, Brace & World, 1968); p. 11; compare Ziff's excellent discussion in Semantic Analysis, pp. 64-66.

⁹⁸ Wittgenstein, Philosophical Investigations, par. 208.

⁹⁵ Noam Chomsky, "Current Issues in Linguistic Theory," in Jerry A. Fodor and Jerrold J. Katz, eds., The Structure of Language (Englewood Cliffs: Prentice-Hall, 1964), pp. 51, 50; compare Eric Lenneberg, "The Capacity for Language Acquisition," ibid.; and Wittgenstein, Blue and Brown Books, p. 21.

not merely learn to construct new combinations of familiar pieces; it learns to *speak*, to tell us what it sees and thinks and feels. The question is: How is that kind of learning possible? That question has a familiar traditional answer, closely correlated with the traditional view of language as a means of referring to phenomena: The child must somehow be brought to figure out, or intuit, or guess, the "universal" behind the particular examples or instances he is given, the "essence" of a concept, the meaning of a word. This traditional account Wittgenstein wants to challenge in two ways. First, he seeks to show that this explanation is not adequate, that the grasping of definitions or essences or universals cannot explain what needs to be explained. And, second, he tries to show that even the mastery of definitions, principles, generalities, depends ultimately on our natural human capacities and inclinations, which do not themselves have any further explanation.

The kind of training that is necessary to the acquisition of a natural language, Wittgenstein says, requires "inducing the child to go on" in the same way, in new and different cases. This is different from training for repetition, which "is not meant to apply to anything but the examples given"; this teaching "points beyond" the examples given.98 Wittgenstein investigates this kind of training by means of language games that center on expanding a mathematical series. "A writes down a row of numbers. B watches him and tries to find a system in the sequence of these numbers." 99 At some point, B may say, "Now I can go on," and proceed to continue the series. Wittgenstein imagines these games as a kind of training, rather than explanation, the teacher "inducing" the child to go on in such ways as this: "he stops short in his enumeration with a facial expression and a raised tone of voice which we should call one of expectancy."100 The training here is clearly different from that in the builders' game, for here the child must ultimately do more than repeat the same action on command. He will be expected to write down new numbers in accord with the teacher's system. He will be expected not to do the same thing, but to go on in the same way.

Though we might assume that, to continue the series, the learner must think of the correct mathematical formula for it, Wittgenstein argues that grasping the formula is neither necessary nor sufficient. When the learner says he can go on and proceeds to do so, he may just have thought of the formula. But he need not have; he might merely think, "Yes, I know that series," or have a sensation roughly parallel to the thought,

100 Wittgenstein, Blue and Brown Books, p. 105.

⁹⁷ Ziff, Semantic Analysis, p. 61; Fann, Ludwig Wittgenstein, p. 260; Paul Henle, ed., Language, Thought and Culture (Ann Arbor: University of Michigan Press, 1965), Ch. III.

⁹⁸ Wittgenstein, Philosophical Investigations, par. 208; compare Gilbert Ryle, The Concept of Mind (New York: Barnes & Noble, 1949), pp. 42-43.

⁹⁹ Wittgenstein, Blue and Brown Books, p. 112; compare p. 13; Philosophical Investigations, pars. 143, 151, 179-190; and Waismann, Wittgenstein, p. 153.

"That's easy!"-a slight, quick intake of breath.101 The significance of this point will become clear only later, when we turn to the nature of understanding. More important for present purposes is that even if the learner does think of the formula, even if it "comes to mind," he might nevertheless be unable to continue the series correctly. For even an algebraic formula needs to be applied, and that always means that it may be applied incorrectly. Giving the formula to a child that does not yet understand anything about mathematical series would not enable it to continue the series; the formula is helpful only to someone who correctly understands the technique of its application. It seems as though one would need a rule for the application of the formula. But that rule would itself require interpretation and application; so one would need another rule for its correct use. And so on, indefinitely. "A rule stands there like a sign-post. --- Does the sign-post leave no doubt open about the way I have to go?"102 Not only might someone read the arrow as pointing toward its butt rather than toward its head, but he might not even understand that it is meant to point at all, or that he is to follow it, or that he is to proceed in that direction on the path rather than setting out cross-country.

It may seem unfortunate that Wittgenstein uses analogies like games and mathematical series, for they are likely to mislead. They may suggest that Wittgenstein takes language, like games and mathematics, to be a matter of strict rules—rules that the child must learn, that the adult knows, that clearly define the meanings of words and sharply separate correct from incorrect usage. 103 But, of course, that was Wittgenstein's view when he wrote the Tractatus, a view that he says occurs often in philosophizing and that he is concerned to reject in his later writings. Characteristically he does so, as it were, on its own home grounds: by exploring the way rules actually work even in games and mathematical series, by showing that even here rules cannot account for what needs to be explained. Thus, he shows that while some games have formal, explicit rules, there are also informal children's games of which this is not true at all, and games in which one makes up rules as one goes along.104 Moreover, while learning a game may entail explicitly learning its rules, it need not; one might learn it simply by observation and practice.105 And even a game governed by definite, formal rules is not "everywhere circumscribed by rules"; there are no "rules for how high one throws the ball in tennis, or how hard; yet tennis is a game for all that and has rules too."106 And above all, again,

102 Wittgenstein, Philosophical Investigations, par. 85; compare Waismann,

Wittgenstein, pp. 154-155.

104 Wittgenstein, Philosophical Investigations, par. 83.

105 Ibid., par. 31.

¹⁰¹ Wittgenstein, Philosophical Investigations, par. 151; compare Blue and Brown Books, pp. 112-113.

¹⁰³ Thus, for example, David Pole, The Later Philosophy of Wittgenstein (London: Athlone Press, 1963). My discussion is based on Cavell's criticism of Pole on this point: Must We Mean What We Say? pp. 47-52.

¹⁰⁶ Ibid., par. 68; compare par. 84.

even the strictest rule or system of rules ultimately requires application.

The rule, the algebraic formula for generating a mathematical series, are analogies for the meaning of a word, in the sense of its dictionary definition. As formulas and rules require application, words in the language need to be used. And just as no rule dictates its own application, the dictionary definition of a word does not tell us how to use that word. It does not tell us, that is, unless we already know a great deal about that word, have the place for it already prepared in our system of concepts, know the language games in which it belongs. That is why, as we noted earlier, a dictionary definition is not much help in philosophy. And that is why language-learning cannot be understood as a matter of "grasping universals" or "essences" or "meanings."

We are almost irresistibly tempted to suppose that the numbers the teacher writes down, the examples he gives, are like clues from which the child is to guess the real message. But Wittgenstein suggests that the teacher's examples, and the child's own attempts, are not merely all that the child has to go on to guess the hidden essence. They are all there is; there is no hidden essence beyond them to guess. "We are tempted," Wittgenstein says, "to think that our examples are indirect means for producing a certain image or idea in a person's mind,—that they hint at something which they cannot show."107 It seems as though "the instructor imparted the meaning to the pupil-without telling him it directly; but in the end the pupil is brought to the point of giving himself the correct ostensive definition. And this is where our illusion is."108 We are tempted to exclaim, "Don't you get him to guess the essential thing? You give him examples,—but he has to guess their drift, to guess your intention."109 But that implies, as we have seen before, that the child already has a language, a conceptual system, among whose elements he then selects one, guessing the meaning we intended or the response we wanted. "There is a queer misunderstanding we are most liable to fall into, which consists in regarding the 'outward means' the teacher uses to induce the child to go on as what we might call an indirect means of making himself understood to the child. We regard the case as though the child already possessed a language in which it thought and that the teacher's job is to induce it to guess his meaning in the realm of meanings before the child's mind, as though the child could in his own private language ask himself such a question as, 'Does he want me to continue, or repeat what he said, or something else?" "110

But, to put it baldly, there is no further knowledge that the teacher has at which his examples only hint. The examples constitute his knowledge, too. When I teach someone a new concept (as distinct from a new name to

¹⁰⁷ Wittgenstein, Blue and Brown Books, p. 125.

¹⁰⁸ Wittgenstein, Philosophical Investigations, par. 362.

¹⁰⁹ Ibid., par. 210.

¹¹⁰ Wittgenstein, Blue and Brown Books, p. 105.

fit into a system of concepts, a language game he has already mastered) by example and practice, "I do not communicate less to him than I know myself." Of course the teacher knows the formula, the rule, the definition; but that can be explained to the pupil who has the necessary concepts, has mastered the relevant language games. For such a pupil, it does not need to be hinted at. The place where explanation fails and training is called for is where the pupil lacks the knowledge of how to use the word. And that kind of knowledge is completely contained in the examples; about how to use the words, the teacher himself knows only from the examples he has mastered. The knowledge of language games is a "knowing how" rather than a "knowing that."

"One gives examples and intends them to be taken in a particular way.

—I do not, however, mean by this that he is supposed to see in those examples that common thing which I—for some reason—was unable to express; but that he is now to employ those examples in a particular way. Here giving examples is not an indirect means of explaining—in default of a better. For any general definition can be misunderstood too." The child is to do certain things and not other things on the basis of the examples; what he is to do is reflected in the teacher's response. The correct, or intended, action by the child will win encouragement or praise. If the child is thereby induced to do the right thing again, and repeatedly, he has "learned" what there is to learn.

But, of course, everything depends on the child responding correctly to the "training methods" we have available and being able to do the things we are trying to train him to do—pronounce our sounds and notice what we notice in the world. Only if the child is encouraged by encouraging gestures, deterred by movements to hold him back, pleased by our signs of agreement, can it be trained at all. And only its natural capacity to perceive and speak as we do enables it to learn. Wittgenstein says, "If a lion could talk, we could not understand him." Characteristically, he does not explain; but Ziff does: "To be able to speak and to understand English one must have (either natural or artificial) sensory organs capable of making contrasts between 'bin', 'fin', 'gin', 'kin', etc., and between a bin, a din, a fin, gin, kin, etc." That much is simply natural; that much must simply be accepted as given.

In teaching the mathematical series language games, what the teacher does by way of encouragement or correction must depend on what specific mistakes the learner makes, where he goes wrong. Perhaps "first of all, series of numbers will be written down for him and he will be required to copy them. . . . And here already there is a normal and abnormal learner's reaction. —At first perhaps we guide his hand in writing out the

¹¹¹ Wittgenstein, Philosophical Investigations, par. 208.

¹¹² Ibid., par. 71.

¹¹³ Ibid., p. 223.

¹¹⁴ Ziff, op. cit., p. 75; compare Willard van Orman Quine, Word and Object (Cambridge: M.I.T. Press, 1960), p. 83.

series . . . ; but then the possibility of getting him to understand will depend on his going on to write it down independently. --- And here we can imagine, e.g., that he does copy the figures independently, but not in the right order: he writes sometimes one sometimes another at random. And then communication stops at that point. —Or again, he makes 'mistakes' in the order."115 At each step, "the effect of any further explanation depends on his reaction,"116

Suppose, for example, that we have gotten our pupil to write the series 2, 4, 6, 8, . . . and tested him on it up to 1,000. Now we get him to continue it beyond 1,000 and he writes 1,000, 1,004, 1,008, 1,012. "We say to him: 'Look what you've done!'-He doesn't understand. We say: 'You were meant to add two: look how you began the series!' --- He answers: 'Yes, isn't it right? I thought that was how I was meant to do it.'----Or suppose he pointed to the series and said: 'But I went on in the same way.' . . . In such a case we might say, perhaps: It comes natural to this person to understand our order with our explanations as we should understand the order 'Add 2 up to 1,000, 4 up to 2,000, 6 up to 3,000, and so on.' "117 Such training must have a foundation in natural, prelinguistic, human reactions.

In his later writings, then, Wittgenstein develops a radically different view of the nature of language-learning, meaning, and language itself. In the traditional view, words stand for things, and the child must somehow form a correct induction about the class of things for which a particular words stands. In Wittgenstein's later view, words are used to do things, and the child must master how they are used. Such learning is necessarily a matter of training rather than explanation since it precedes the possibility of explanation. And it rests ultimately on our natural capacities. Cavell sums up the view this way: "We learn and teach words in certain contexts, and then we are expected, and expect others, to be able to project them into further contexts. Nothing insures that this projection will take place (in particular, not the grasping of universals nor the grasping of books of rules), just as nothing insures that we will make, and understand, the same projections. That on the whole we do is a matter of our sharing routes of interest and feeling, modes of response, senses of humor and of significance and of fulfillment, of what is outrageous, of what is similar to what else, what a rebuke, what forgiveness, of when an utterance is an assertion, when an appeal, when an explanation-all the whirl of organism Wittgenstein calls 'forms of life.' Human speech and activity, sanity and community, rest upon nothing more, but nothing less, than this."118

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115 Wittgenstein, Philosophical Investigations, par. 143.
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¹¹⁶ Ibid., par. 145.

¹¹⁷ Ibid., par. 185. 118 Cavell, Must We Mean What We Say? p. 52.