BERTRAND RUSSELL'S REVIEW OF THE MEANING OF MEANING

WITH INTRODUCTORY COMMENTS BY W. SCOTT WOOD

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In his review, reprinted here, Bertrand Russell responded to some discrepancies between his account of language in *The Analysis of Mind* (1921) and the approach taken by C. K. Ogden and I. A. Richards in *The Meaning of Meaning* (1926). Both his comments in the *Dial* review and his earlier discussion of language in *The Analysis of Mind* were intended to reflect the behavioral views of John B. Watson. It is fair to say, however, that they were a considerable improvement over Watson's discussions on the behavioral nature of language.

Nevertheless, Russell saw only limited value in Watsonian behaviorism as a philosophy, and was quite critical of its shortcomings. He characterized his interest as one of examining what could and what could not be explained in human behavior by a wholly objective approach (Russell, 1959, pp. 129-130). For example, Russell was dissatisfied with Watson's account of imagery; Watson variously ignored or denied the existence of images (Watson, 1913), or equated them with eye muscle strains and adjustments (Watson, 1922). Russell favored an account that emphasized psychological ("mnemic") rather than physiological or mechanistic causation (Russell, 1921). In retrospect, Russell's reservations regarding at least Watson's methods for dealing with private events seem very reasonable.

Watson was quite enthusiastic about Russell's even limited acceptance of his view—and hoped for more. In reviewing *The Analysis of Mind*, Watson commented: "If he [Russell] had been willing to live behaviourism for two years, working on its hypothesis he would have given us we believe a metaphysical science that would have included all of the behaviouristic tenets" (Watson, 1922, p. 99).

Russell's review plays a specific role in the history of psychology principally because of its impact on the young B. F. Skinner. Skinner has often acknowledged the influence of Russell (e.g., Skinner, 1984, p. 659), and has stated that it was this review that introduced him to behavioral psychology (Skinner, 1976, pp. 298-300). Some of the reason for that influence becomes clear when one reads Russell's skillful discussions of behavioral psychology

both in the analysis of human activity, as in this review, or in *Philosophy* (1927), and also regarding its potential as a technology for cultural design (e.g., Russell, 1931). Of course, there may have been other factors in Skinner's early family, social, and educational experiences that predisposed him to assimilate or agree with Russell's views on behavioral science and on society as well, as Coleman (1985) suggests.

One is not sure just how many of Russell's var-

One is not sure just how many of Russell's various books and articles that include accounts of behavioral psychology Skinner actually read or, for that matter, how carefully he read them. For example, Skinner has noted that he never finished Philosophy (1927), even though he was very impressed with its early chapters (Skinner, 1979, pp. 10-11). Inasmuch as the latter sections of the book were considered by Russell to be a decisive refutation of certain behavioristic claims, Skinner apparently missed quite a bit. At certain times in his career, however, Skinner has indicated considerable familiarity with Russell's views. For example, Skinner states that his 1946 William James Lectures, later revised and published as Verbal Behavior (1957), were to some extent in response to Russell's 1940 Williams James Lectures, published in 1940 as An Inquiry into Meaning and Truth (Skinner, 1979, p. 324). Russell's lecture series and book focused on language, and the book is cited several times by Skinner in Verbal Behavior. Only Freud and Shakespeare are referenced more frequently.

Skinner eventually came to deal with the Watson-Russell debate over imagery by discussing covert "seeing" as private-event-type responding established by either or both classical and operant conditioning. This is an account that parallels Russell's earlier perspective, at least insofar as the explanation is directed toward conditioning processes rather than toward the physiological substrate of the phenomenon in question. Descriptive verbal behavior under the stimulus control of such events is then analyzed as an operant repertoire shaped by social consequences (e.g., Skinner, 1945, 1957). It is unknown whether or not Russell ever became aware of this particular account (Skinner, 1983, p. 131).

Wittgenstein, of course, approached the language of private events in a way that some have compared to Skinner's approach (e.g., Bloor, 1983; Day, 1969). Wittgenstein also was Russell's best known student, although the directions of influence are not always clear. Nevertheless, Russell's early and persuasive

¹ Russell's review, reprinted here in its entirety, originally appeared in the August 1926 issue of *Dial* (Vol. 81, pp. 114–121).

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behavioral accounts of the social origin of lanaguage certainly laid a foundation for the kind of philosophical analyses that linguistic or conceptual analysts such as Wittgenstein later came to pursue. Russell himself, however, became very hostile to that trend (Russell, 1959).

In any case, Bertrand Russell provided several philosophical (e.g., 1921, 1940) and popular (e.g., 1927, 1931) treatments of human activities from a behavioristic perspective. Unfortunately, few psychologists or philosophers appear to have paid much attention. On the other hand, those who have—such as Watson and Skinner among psychologists and perhaps Wittgenstein among philosophers—certainly are among the most influential in their respective fields. Thus, although Russell never endorsed behaviorism as a satisfactory philosophy of science, his analyses of the conceptual and practical implications of behavioral psychology make fascinating reading for the contemporary behaviorist interested in historical influences on the field.

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THE MEANING OF MEANING BY BERTRAND RUSSELL

The book by Messrs Ogden and Richards¹ which bears the above title is one of considerable importance—I will not say "philosophical" importance for fear of being asked what I "mean" by that word. The importance of their book lies, first, in the importance of their problem, which has been strangely neglected in traditional philosophy. (I know what I mean by the word this time: I mean the writings of those labelled "philosophers" in catalogues, or whatever is not theology in the section "theology and philosophy" in a bookseller's list. To this meaning, which is precise and clear, I propose to adhere in what follows.) A second and no less weighty reason for welcoming this book is that its methods and theories are scientific, not mythical. A third reason is that quite possibly some of those theories may be true. I think myself that the authors suffer slightly from a form of optimism, namely the belief that most problems are simple at bottom—which affects me much like the theory that there is good in everybody, to which I have a wholly irrational aversion. My own form of optimism is different: it consists in thinking that most problems need mathematical logic for their solution. I recognize, however, that this is a less kindly optimism than the other; I shall not attempt, therefore, to enlist the reader's sympathy on this count.

To begin with a little autobiography. When, in youth, I learned what was called "philosophy" (and was philosophy, by the above definition), no one ever mentioned to me the question of "meaning." Later, I became acquainted with Lady Welby's work on the subject, but failed to take it seriously. I imagined that logic could be pursued by taking it for granted that symbols were always, so to speak, transparent, and in no way distorted the objects they were supposed to "mean." Purely logical problems have gradually led me further and further from this point of view. Beginning with the question whether the class

of all those classes which are not members of themselves is, or is not, a member of itself; continuing with the problem whether the man who says "I am lying" is lying or speaking the truth; passing through the riddle "is the present King of France bald or not bald, or is the law of excluded middle false?" I have now come to believe that the order of words in time or space is an ineradicable part of much of their significance—in fact, that the reason they can express space-time occurrences is that they are space-time occurrences, so that a logic independent of the accidental nature of spacetime becomes an idle dream. These conclusions are unpleasant to my vanity, but pleasant to my love of philosophical activity: until vitality fails, there is no reason to be wedded to one's past theories. So here goes.

Let us begin by enumerating a set of truisms about words, which it seems desirable to fix in our minds (or larynxes, as Dr J. B. Watson would say) before attempting any elaborate theory.

- 1. Words are social. They are, that is to say, like laws and governments and parliaments, part of the mechanism by means of which people manage to live in communities. The natural function of words is to have effects upon hearers which the speaker desires. (For simplicity I shall ignore written words, and confine myself to such as are spoken.)
- 2. Words are bodily movements. Strictly speaking, a word is a class of bodily movements. There are as many instances of the word "dog" as there are occasions when the word is spoken; the word "dog" is a class, just as Dog is a class. But each instance of the word is a bodily movement. Only convenience has led to the choice of movements in the mouth and throat; any bodily movement may serve as a word, e.g. a shrug of the shoulders, or a long nose.
- 3. Words are means of producing effects on others. I once canvassed a retired Colonel in the Liberal interest during an election, and he said: "Get out, or I'll set the dogs upon you." These words had, and were intended to have, the same effect as the dogs would have had.
- 4. Words, like other bodily movements, are caused by stimuli. The stimulus need not, of course, be external to the body; it may be a toothache, for example. When we know that the stimulus is not external to the body, but cannot localize it accurately, we attribute the

¹ The Meaning of Meaning. A Study of the Influence of Language upon Thought and of the Science of Symbolism. By C. K. Ogden and I. A. Richards. With an Introduction by J. P. Postgate and Supplementary Essays by B. Malinowski and F. G. Crookshank. 8vo. 544 pages. Harcourt, Brace and Company. \$3.75.

words to "thought." Thus the more physiology we know, the less we shall think we think.

5. Heard words are stimuli, and are in general intended as such by the speaker, except when overheard by accident. Thus in analysing language as a factor in behaviour, we must consider not only the causes of spoken words, but the effects of heard words. Neither alone suffices, since both are equally essential.

6. It is not of the essence of words to express "ideas." Whether there are such things as "ideas" or not, I propose to leave an open question. What I am saying is that, whether there are "ideas" or not, they are not implied in the ordinary use of language. People used to speak of "association of ideas," but now-adays association is rather between bodily movements. The essential phenomenon is what Dr Watson calls a "learned reaction." Two stimuli A and B occur together, and B causes a bodily movement C. Later on, A may cause C, though it previously had no tendency to do so. All words are "learned reactions" in this sense. There is no need to postulate a "mental" intermediary between the stimulus and the reaction.

7. The distinction between the emotional and the logical use of words is illusory. Since all words are intended to have effects on hearers (except when we talk to ourselves), the question of the way in which these effects are brought about is subsidiary. Sometimes the viscera (especially the ductless glands) play a large part in the causation, sometimes not. When they do, speech is emotional, when not, logical. But the distinction is only one of degree, since there is always both a logical and an emotional aspect to our words.

8. In the individual, heard language is earlier than spoken language. That is to say, an infant hears words and is affected by them as the speaker intends, before it can itself utter words with intention. I think this is of some importance, since it suggests that perhaps our account of language should begin by heard words rather than spoken words. Of course it may be urged that the first spoken word must have preceded by a fraction of a second the first heard word. But this would be a fallacy, both because there cannot have been a first word in any definite sense, and because a sound may serve as a word to a hearer without being so intended by the speaker-e.g. an infant's cry heard by a mother, and interpreted as signifying hunger. The infant soon learns to use the cry as a means of conveying information, but at first it is a pure reflex. This illustrates the fact that a noise may be a word to the hearer, though not to the speaker. The converse occurs whenever two people attempt to converse without knowing each other's languages.

Let us now proceed to frame a theory of "meaning" in accordance with the above truisms; and especially let us see how far the theory of Messrs Ogden and Richards is satisfactory.

These authors urge—rightly, as I now think—that "images" should not be introduced in explaining "meaning." They do not, like Dr Watson, maintain that there are no such things as images, but they hold that "meaning" can be adequately defined without reference to them. It is always well to avoid one problem when dealing with another, if this is in any way possible. Let us, therefore, leave on one side the question whether there are images, and construct, if we can, a theory of "meaning" which makes no reference to them.

"Direct apprehending" is another notion which is criticized by Messrs Ogden and Richards; and in the same connexion they show the ambiguities and confusions lurking in the notion of a "datum." One expects, during their discussion, to find "direct apprehending" rejected altogether, but their conclusion is as follows: "To be directly apprehended is to cause certain happenings in the nerves, as to which at present neurologists go no further than to assert that they occur. Thus what is directly apprehended is a modification of a sense organ, and its apprehension is a further modification of the nervous system." I think myself that "direct apprehension" is not a very useful notion; but if it is to be retained. I should say that it consists, not in a modification of the nervous system, but in the use of words, either out loud or sotto voce. I shall return to this point later, in connexion with verification.

I come now to the central doctrine of Messrs Ogden and Richards as to what is meant by "meaning." In explaining what we mean by saying that when we strike a match we expect a flame, they say:

"A thought is directed to flame when it is

similar in certain respects to thoughts which have been caused by flame. As has been pointed out above we must now allow the defects of causal language either to mislead us here or alternatively to make us abandon the method of approach so indicated. We shall find, if we improve this language, both that this kind of substitute for 'directed to' loses its strangeness, and also that the same kind of substitution will meet the case of 'direction to the future' and will in fact explain the 'direction' or reference of thinking processes in general. ... The suggestion that to say 'I am thinking of A' is the same thing as to say 'My thought is being caused by A' will shock every rightminded person; and yet when for 'cause' we substitute an expanded account this strange suggestion will be found to be the solution.

They add in a foot-note: "The difference between the theory here developed and that advanced in The Analysis of Mind may be brought out by the rough statement that this is a 'causal' theory and Mr Russell's an 'effect' theory."

Before proceeding further, I will say a few words on this question of "causal" theories and "effect" theories. It is obvious that the causal theory applies to the speaking of words, and the effect theory to the hearing of them. These are different things. As I have said in The Analysis of Mind,1 "We may say that a person understands a word when (a) suitable circumstances make him use it; (b) the hearing of it causes suitable behaviour in him. We may call these two active and passive understanding respectively." I advocated, in that book, an effect theory of passive understanding, and a causal theory of active understanding. Messrs Ogden and Richards do not seem to have considered passive understanding, or to have noticed the parts of my discussion which deal with active understanding. After discussing passive understanding I continue: "To understand the function that words perform in what is called 'thinking,' we must understand both the causes and the effects of their occurrence." The conclusion as to their causes is as follows:

"We may lay it down generally that, whenever we use a word, either aloud or in inner speech, there is some sensation or image (either of which may be itself a word) which has frequently occurred at about the same time as the word, and now, through habit, causes the word. It follows that the law of habit is adequate to account for the use of words in the absence of their objects; moreover, it would be adequate even without introducing images. Although, therefore, images seem undeniable, we cannot derive an additional argument in their favour from the use of words, which could, theoretically, be explained without introducing images."

I cannot therefore admit the justice of the criticism offered by Messrs Ogden and Richards. To explain the causes of speaking, we need a causal theory; to explain the effects of hearing, we need an effect theory. I provided both, whereas they provide only the former.

However, they will reply that they are considering the meaning of a "thought," not of a word. A "thought" is not a social phenomenon, like speech, and therefore does not have the two sides, active and passive, which can be distinguished in speech. I should urge, however, that all the reasons which led our authors to avoid introducing images in explaining meaning should have also led them to avoid introducing "thoughts." If a theory of meaning is to be fitted into natural science as they desire, it is necessary to define the meaning of words without introducing anything "mental" in the sense in which what is "mental" is not subject to the laws of physics. Therefore, for the same reasons for which I now hold that the meaning of words should be explained without introducing imageswhich I argued to be possible in the abovequoted passage—I also hold that meaning in general should be treated without introducing "thoughts," and should be regarded as a property of words considered as physical phenomena. Let us therefore amend their theory. They say: "I am thinking of A' is the same thing as 'My thought is being caused by A." Let us substitute: "I am speaking of A' is the same thing as 'My speech is being caused by A." Can this theory be true?

Of course it cannot be true quite crudely. When you see Jones, you say not only "How are you?" but "How is Mrs Jones?" If the theory were strictly and exactly true, you could not mention Mrs Jones in her absence. But

¹ The Analysis of Mind. By Bertrand Russell. 8vo. 310 pages. The Macmillan Company. \$4.

the word "Jones" is associated with the word "Mrs Jones," so that the sensible stimulus of Jones causes first the word "Jones" and then the word "Mrs Jones." There are two possible routes from the spectacle of Jones to the word "Mrs Jones." One is the above, from the spectacle to the word "Jones," and thence to the word "Mrs Jones"; the other is from Jones to Mrs Jones, and thence to the word "Mrs Jones." If you have frequently seen Mr and Mrs Jones together, Mr Jones will tend to have certain of the effects which Mrs Jones would have, and among these is the occurrence of the word "Mrs Jones"; thus either of our two roads may actually be taken. We say that the word "Jones" means Jones rather than his wife, because the associative train to the word from the man is shorter than from the woman. And we say that "Jones" is the name of the man rather than "Mrs Jones," because the associative train from the man to the word "Jones" is shorter than to the word "Mrs Jones." Thus we may say that the name of a phenomenon is the word most closely associated with it, while the meaning of a word is the phenomena most closely associated with it. I say "phenomena," not "phenomenon," because in general a word applies to many phenomena—e.g. "Jones," as used by you, applies to all the appearances which Jones makes in your life. So much for the "meaning" of spoken words.

The "meaning" of heard words is explained in a closely similar way. A word and an object having been frequently experienced together, the word, when spoken in your hearing, tends to produce certain of the effects which the object would produce. The effects which it thus tends to acquire are those called "mnemic," which are more or less peculiar to living matter. They are those which are subject to the law of association, i.e. that they tend to be produced by any stimulus frequently associated with the stimulus which originally produced them. A car coming may cause you to jump aside, or, failing that, may break your bones; the words "car coming" may cause you to jump aside, but cannot break your bones. Similarly the word "Jones" can cause the word "Mrs Jones," but cannot cause the presence of Mrs Jones herself, which Jones (perhaps) can cause.

So much for the meaning of words. It remains to say a word or two about truth and

falsehood. This is a large subject, and I shall only touch on one aspect of it, namely the aspect in which it is concerned with words as the behaviourist treats them. We are continually uttering sentences, and it is generally recognized that these sentences may be either true or false. Of course a sentence may be true to the speaker and false to the hearer, or vice versa, if they do not attach the same meanings to its component words; but we will ignore this complication, and assume that they talk exactly the same language. Our statements are interconnected by all sorts of laws of inference, logical and psychological; but there is in science and daily life a process called "verification," which, when applicable, is supposed to show that a statement is true. What is this process? That is the only question I propose to discuss.

Let us take a simple instance. Suppose that, in the course of a long walk with a friend on a hot day, you both become very thirsty. You say to your friend: "When we get to the next village we shall find an inn where we can get a drink." Your friend says: "I think not; I believe the inn has been shut up." Presently you come in sight of the village and shout: "There's the inn." This is verification. A statement is verified when its repetition is caused by the sensible presence of the objects meant by its substantive words. When a statement can be verified, it is "true." Obviously there are many kinds of statement which are incapable of verification in this simple sense; for them, we shall need more elaborate definitions of truth and falsehood. But at least the above theory has the merit of including what we should naturally regard as most indubitable among matters of fact. We may, in fact, define a proposition as a "datum" when it has been verified in the sense which we have just defined. The theory has another merit, that it is purely behaviouristic, and does not assume that we have "minds"—an assumption which, I am sure, a Martian would regard as unplausible.1

¹ Mr S. E. Hooper, Secretary of the British Institute of Philosophical Studies, has suggested to me that the above should be called the "explosive" theory of truth, a name which I am inclined to adopt. It is not to be inferred that he approves of the theory. It will be seen that the above remarks are strongly influenced by Dr Watson, whose latest book, Behaviorism, I consider massively impressive.

I have not space to deal with the many topics occurring in other parts of The Meaning of Meaning. There are discussions of beauty, of the folly of philosophers, of the wisdom of savages, and a host of subjects more or less cognate to the main theme. Nor have I space to discuss the authors' taste in puns, as ex-

emplified in the precept: "Consider the Mountain Top—it Hums not neither does it Spin." These are matters too grave for my pen; I have confined myself to the lighter aspects of this remarkable volume. To the hardy reader I commend the other aspects as worthy of his serious study.