Goodman's requirement. A line exactly one inch long does not comply with both A and B (in fact neither); yet it is not theoretically possible to determine either that it does not comply with A or that it does not comply with B.[2]

The following reformulation of the syntactic requirement avoids the difficulty discussed above; and is I believe adequate for Goodman's needs: *For every character K and every mark m, determination either that m does not belong to K or that m belongs either to K or to no character is theoretically possible.* The pressure gauge fails the requirement so stated, as it should, and for the reason Goodman gives, viz. the impossibility of determining the position of the pointer with "absolute precision." Let m and K be any mark and character such that m in fact belongs to K. Determination that m does not belong to K is of course not possible, since it does. And determination that m belongs either to K or to no character is not possible, because it does belong to some character and determining that it belongs to K would require determining the pointer's position exactly.

The semantic requirement should be restated in corresponding fashion, i.e., *For every character K and every object h, determination either that h does not comply with K or that h complies either with K or with no character is theoretically possible.* This formulation also allows the redundant system referred to above to be semantically differentiated, as Goodman's does not.

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NOTES

[1] Indianapolis: Bobbs-Merrill, 1968. All page references are to this source.

[2] Correspondence with Professor Goodman confirms that he intends the semantic differentiation requirement not to exclude this example. Other comments of his, and suggestions by Gordon Lee Bowie, were helpful in the writing of this note.

Two Concepts of Psychologism

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THE traditional concept of psychologism appears to be discrepant with the use of the term in certain contexts of current philosophical interest. As a result the term "psychologism" remains ambiguous. This paper is an at-

tempt to remove this ambiguity by defining and illustrating what may be regarded as two concepts of psychologism both of which are of unquestionable importance for philosophy.

I

Historically, the traditional concept of psychologism was put forth by some nineteenth-century philosophers and logicians as a theory according to which philosophy and logic were to be conceived of and pursued as important branches of what was further thought to be the one sovereign discipline of psychology.[1] In the contemporary context of the complete mathematical character of logic, many philosophers have tried, with great success, to rehabilitate philosophy as the logic and methodology of sciences. Accordingly it is taken for granted now that philosophy has been ultimately de-psychologized and thus restored to its autonomy along with logic. However, a close examination of the recent literature in philosophy would reveal (a) that this claim can generally be accepted only if psychologism is understood in its above-mentioned traditional sense, but (b) that it can be accepted only partially insofar as psychologism in a different sense is traceable in the writings of those who attack it in its traditional sense. This leads us to consider the distinction in terms of which the discrepancy mentioned at the very outset may be resolved.

II

A close examination of the contemporary philosophical writings of those who have tried to eliminate psychologism by laying down nonpsychologistic foundations of philosophy warrants that we must distinguish between what I shall henceforth call *reductive* psychologism on the one hand and *methodological* psychologism on the other. By the former I intend to refer to the traditional concept of psychologism as a reductionist doctrine according to which logic and philosophy must be founded upon, and in effect reducible to, the laws of psychology. Reductive psychologism is traceable piecemeal even in certain contemporary philosophical theses which involve confusion of logical or philosophical issues with psychological ones.[2]

On the other hand, however, psychologism of a different and more subtle variety may set in even in the absence of reductionism that is central to the traditional concept of psychologism. This may be called methodological psychologism by which I intend to refer to the procedure of formulating a philosophical explication with the help of a psychological concept — i.e., the procedure of either formulating an explicandum with the help of a psychological concept or a psychological concept being assigned a classificatory role within the formulation of a philosophical

explication. It will be made clear subsequently that psychologism in this latter sense turns out to be a problem of methodology for philosophy — i.e., a special case of the problem of a precise, nondiscrepant, and hence relatively correct formulation of a proposed philosophical explication.

It may be mentioned that Rudolf Carnap's well-known thesis of modes of speech[3] appears to be of considerable relevance to methodological psychologism insofar as his thesis is of great methodological significance to philosophy. Its methodological significance consists in the fact that it introduces into the foundations of philosophy the basic issue regarding the character of a suitable metalanguage which one may employ in order to investigate fruitfully the philosophical problems of the specialized sciences. Since the question of the modes of speech is a methodological question of the choice of a consistent and suitable terminology for purposes of philosophical explication, its great relevance to the question of the methodological psychologism should be very obvious.

In order that language of philosophy have smooth operations, unobstructed by the obscurities and contradictions characteristic of the use of the customary "material mode of speech," Carnap proposes the use of the "formal mode of speech" as always advisable. He goes further to make " 'translatability' into the formal mode of speech the touchstone for all philosophical sentences." It is implied, it seems, that the use of the formal mode of speech saves one from falling into not only the obscurities and contradictions but also the methodological discrepancies that arise from the use of the material mode of speech — a mode of speech which is quite inconsistent with the conception of philosophy as the logic and methodology of sciences. Methodological psychologism is a special case of such a methodological discrepancy. These two concepts will be made more precise in the following section.

III

The general methodological rule that clarity and precision of concepts are inseparable from the method of any scientifically founded or oriented inquiry has been clearly advocated by the leading philosophers of this century. It is not surprising therefore that formulating a philosophical problem and formulating an explicandum are regarded as one and the same procedure in the field of "analytic" philosophy.

Now, the sort of terminology (here to be understood as belonging to the level of metalanguage) one may employ within the formulation of a philosophical explication can be determined, at least partly, by a clear and correct specification of the character of the problem or explicandum involved. This seems precisely what is suggested when it is said by such

authors as Carnap that the first step in an explication consists in an "informal" explanation, characterization, or clarification of the explicandum involved. Keeping this in view, the point which I wish to make is this: a methodological discrepancy is bound to crop up when the terminology employed in formulating and defining an explicatum is in some respects inconsistent with the terminology employed in formulating the corresponding explicandum. Thus, a proposed formulation of a philosophical explication will be methodologically discrepant and hence faulty if it contains a concept, other than the explicandum, which is either vague or ambiguous and/or whose character is inconsistent with the initial characterization of the explicandum involved.

Philosophy as the logic and methodology of sciences can ill afford to bring into its method concepts which are properly assignable to the specialized fields of empirical science. Methodological psychologism is a typical case of the violation of this rule. In the following section I shall concentrate on illustrating it in a few typical cases of philosophical explication taken from Carnap's and Karl Popper's philosophical works.

IV

The notion of conceivability, which is so much condemned in its use by Hume and Kant, has, however, very often figured rather in an uncritical manner in certain explications of philosophically interesting concepts by some of the prominent philosophers of this century. Thus, for example, in the context of the problem of explicating the predicate "empirically meaningful" with respect to the class of nonanalytic statements, Carnap uses it in the following formulation: "If it is in principle impossible for any conceivable observational result to be either confirming or disconfirming evidence for a linguistic expression A, then expression A is devoid of meaning."[4] In a different but related context of the problem of explicating the concept of a scientific theory (i.e., the problem of demarcation) Popper at certain places in his *Conjectures and Refutations* makes a similar use of the word "conceivable" when he writes: "A theory which is not refutable by any conceivable event is non-scientific."[5] In the same context he uses it in an alternative formulation thus: "The criterion of falsifiability is a solution to this problem of demarcation, for it says that statements or systems of statements, in order to be ranked as scientific must be capable of conflicting with possible, or conceivable, observations."[6] The use of an ambiguous word like "conceivable" in a philosophical explication of the type quoted above is open to a variety of interpretations each of which will raise the same question regarding the suitability of this word for philosophical purposes. Let me explain this point as follows.

The word "conceivable" is admittedly an ambiguous word in that, to quote Arthur Pap, it is "sometimes used in the sense of 'logically conceivable' (self-consistent) and sometimes in the narrow sense of 'intuitively conceivable' . . ." [7] Keeping this in view there appear to be three possible alternative courses of procedure as regards the question of interpretation of the use of words like "conceivable" in a given philosophical explication. In the first place, the word "conceivable" may be understood in the psychological sense of "imaginable" or what Pap calls "intuitively conceivable," in which case it will render the given philsophical explication psychologistic in the methodological sense of the term. The concept *conceivable* in this sense may be admitted to belong to the class of dispositional concepts of psychology and defined on lines on which any other member of this class is defined in that science. It might be argued at this point that in its empirical psychological sense the word "conceivable" can neither relevantly nor fruitfully be used for purposes of philosophical explication, and that, therefore, it would be a misinterpretation to attribute this empirical psychological sense to Carnap's and Popper's use of the word "conceivable" in their respective formulations. In order to test the force of this alleged argument let us consider the second possible interpretation of the use of the word "conceivable" in the context under consideration.

Alternatively, then, the word "conceivable" may be understood in the logical or formal sense of "self-consistent"—this is again in keeping with Pap's resolution of the ambiguity of the use of "conceivable" in philosophical literature. Taken in this sense, the use of the word "conceivable" as such in a philosophical explication is rendered unwarranted and it is replaceable by an unambiguous word which is well suited to the intended purpose. Thus, for example, as regards Carnap's formulation quoted above, instead of speaking of "any conceivable observational result," one might quite nonmisleadingly speak of "any observational result" or better "any observation statement" which would be generally recognized as an elliptical form of "any self-consistent observation statement." This simple consideration leads us back to the idea of methodological psychologism as a special case of methodological discrepancy which was defined in Section III above.

Finally, however, one may choose to retain a word like "conceivable" in the formulation of a philosophical explication supposing it to be a useful word and yet take the seemingly easier option of leaving it undefined and, further, letting its precision develop in the course of its actual use—a procedure which Popper adopts somewhat arbitrarily with respect to his use of the term "observable" in his definition of the concept of a basic statement and other involved concepts.[8] But the chief danger in this procedure is that it is likely to give rise to more difficulties than it may solve. More-

over, it seems to be merely a disguised way of admitting and employing a troublesome concept uncritically—a danger which is considerably averted only if there are very decisive reasons in favor of the indefinability of a concept or leaving that concept undefined for certain well-defined purposes.

The considerations above seem conclusive enough to show (a) that the formulations of Carnap and Popper quoted are typical cases of methodologically discrepant philosophical explications, however informally intended these may be, and (b) that there is no reason to prevent one from rejecting these as psychologistic in the methodological sense of the term.

V

There are two different contexts in Popper's *The Logic of Scientific Discovery* in which he makes use of the term "psychologism" and each of these two uses needs special mention here insofar as they are clearly illustrative of the distinction I have drawn between two concepts of psychologism.

On the one hand, in the context of his definition of epistemology as the logic of knowledge Popper rejects the problem of induction and the logical empiricist version of the problem of "empirical basis" (or "foundations") of knowledge as involving "psychologism"—"a confusion of psychological problems with epistemological ones." [9] On the other hand, in the context of his use of the term "observable" in the definition of the concept of a basic statement Popper warns against any attempt to characterize his move as "psychologistic." Here he writes: "No doubt it will now seem as though in demanding observability, I have, after all, allowed psychologism to slip back quietly into my theory. But this is not so. . . . we might lay it down . . . that every basic statement must either be itself a statement about relative positions of physical bodies, or that it must be equivalent to some basic statement of this 'mechanistic' or 'materialistic' kind. . . . Thus, the charge that, in appealing to observability, I have stealthily readmitted psychologism would have no more force than the charge that I have admitted mechanism or materialism. This shows that my theory is really quite neutral and that neither of these labels should be pinned to it. I say all this only so as to save the term 'observable,' as I use it, from the stigma of psychologism." [10]

It should be clear that Popper's use of the term "psychologism" in these two different contexts is an excellent case of the ambiguity of "psychologism" which I have tried to sort out in this paper.

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NOTES

[1] See Paul Edwards, *The Encyclopedia of Philosophy*, vol. 6 (New York: Macmillan and Free Press, 1967), pp. 520–21.

[2] See Karl R. Popper, *The Logic of Scientific Discovery* (London: Hutchinson, 1959), pp. 30–31, 93–95.
[3] See Rudolf Carnap, *The Logical Syntax of Language* (London: Kegan Paul, 1937), p. 277.
[4] P. A. Schilpp, editor, *The Philosophy of Rudolf Carnap* (London: Cambridge University Press, 1963), p. 874.
[5] Karl R. Popper, *Conjectures and Refutations* (London: Routledge and Kegan Paul, 1963), p. 36.
[6] *Ibid.*, p. 39.
[7] Arthur Pap, *Semantics and Necessary Truth* (New Haven, Conn.: Yale University Press, 1958), p. 75.
[8] Popper, *The Logic of Scientific Discovery*, p. 103.
[9] *Ibid.*, pp. 30–31.
[10] *Ibid.*, p. 103.

More on the Equivalence of Act and Rule Utilitarianism

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RICHARD BRANDT argues for the equivalence of act utilitarianism (AU) and a rule utilitarianism (RU) which he states as follows: "An act is right if and only if it conforms with that set of general prescriptions for action such that, if everyone always did, from among all the things which he could do on a given occasion, what conformed with these perscriptions, then at least as much intrinsic good would be produced as by conformity with any other set of general prescriptions."[1] I shall refer to this form of RU as RU_1. I wish to consider some of the criticisms of this position made by Allan Gibbard and Jordan Sobel,[2] criticisms which, I believe, are illustrative of a general move made in discussions concerning the equivalence of AU and RU.

To begin with, however, I shall agree with Sobel that if RU_1 requires a unique set of rules, and so fails to take into account the fact that some systems of rules have equally good alternatives, then in the cases where the equally good alternatives are present "no action is RU right since *the* [italics mine] RU-ideal set of rules does not exist."[3] Although Brandt's language may not be the best, I am not at all certain that 'that set,' taken in the context of his total statement of RU_1, was intended to refer to a unique set of rules. I do not wish to argue the matter, inasmuch as my