Philosophy

http://open.bu.edu

CAS: Philosophy: Scholarly Papers

1973

The Objectivity of a Methodology

Martin, Michael. "The Objectivity of a Methodology." Philosophy of Science 40:447-50. 1973. https://hdl.handle.net/2144/3675 *Boston University*

DISCUSSION

THE OBJECTIVITY OF A METHODOLOGY*

MICHAEL MARTIN

Boston University

In this paper I consider critically Richard Rudner's account of the objectivity of a methodology. I show that Rudner's analysis provides neither a sufficient condition nor a necessary condition for one method being more objective than another.

1. Rudner's Account of Objectivity. 'Objectivity' can be predicated of people, sentences, methods, and so on. Rudner, in his book *Philosophy of Social Science*,¹ considers several of these different uses of 'objectivity' and gives an account of what it means to say that one method is more objective than others. A method, according to Rudner, is the logic or criteria of justification which provides the rationale by which sentences are accepted or rejected. According to Rudner one method is more objective than another if it is more reliable than the other and a method is more reliable than another if its continued employment is less liable to error than the continued employment of the other method. Rudner explains that one method is less liable to error than another if it is less likely to result in its users continuing to believe or coming to believe false sentences than is the other method.

Given this account of objectivity Rudner argues that a method is maximally reliable if it minimizes the likelihood of error more than the alternatives and a method is absolutely reliable if it makes error impossible. Now Rudner argues that no method of empirical inquiry is absolutely reliable in this sense. Consequently scientific method is not absolutely reliable. However he maintains that the course of history shows that scientific method is maximally reliable in terms of other methods. According to Rudner this is because of the self-correcting nature of scientific method: no hypothesis is ever immune from revision and the continued application of scientific method will make it likely that false hypotheses will be eliminated.

I do not want to question Rudner's contention that scientific method is the most objective method or his explanation of this objectivity. I will argue that Rudner's account of objectivity is not adequate. First, I will show that there are some methods clearly less objective than scientific method which turn out to be more objective on Rudner's account. Rudner's view at least needs supplementation. Hence, his account is not a sufficient condition for the objectivity of method. Secondly I will show that there are certain historical methods which may be more objective than other historical methods and yet do not meet his definition. Hence his account does not provide a necessary condition of the objectivity of method.

* Received November, 1972.

¹ Richard Rudner, *Philosophy of Social Science* (Englewood Cliffs, Prentice-Hall, 1966), pp. 73–83.

MICHAEL MARTIN

2. The Problem of Cautious Methods. Rudner's definition of objectivity with respect to methods is this:

(1) A method A is more objective than a method B if and only if the use of method A is less likely than method B to result in its users continuing to believe, or coming to believe, false sentences.

Consider, for example, a methodology that would entail that one should not believe or disbelieve any synthetic sentence. Let us call this methodology, a method of extreme caution. This method would be more reliable than scientific method given Rudner's definition for users of this method neither continue to believe nor come to believe any synthetic statement. Hence they would not continue to believe or come to believe any false synthetic sentence. Consequently a method of extreme caution would be absolutely reliable and thus it would be more objective than scientific method. But that this method is more objective than scientific method is clearly absurd. Hence there must be something wrong with (1).

Now the above criticism may be thought to be unfair to Rudner. Clearly, it might be said, Rudner is thinking of a method in which people do believe or disbelieve some synthetic sentences. Undoubtedly he is, although this is not explicitly stated in his writing. Taking this supposition into account we can reformulate his definition thus:

(2) A method A is more objective than method B if and only if (a) the use of A is less likely than method B to result in its users continuing to believe, or coming to believe, false sentences and (b) the users of method A continue to believe and come to believe some synthetic sentences and the users of method B continue to believe and come to believe some synthetic sentences.

But (2) still has problems. For consider a methodology which would entail that one should not believe any sentence except a sentence with a probability equal to or greater than 0.99999999. Let us call this methodology, a method of moderate caution. Suppose that there are sentences which meet this restricted requirement. This method would be more objective than scientific method for it is surely the case that a method of moderate caution would be less likely to result in its users coming to believe or continuing to believe false sentences than would scientific method which on any plausible formulation would allow belief in more speculative and less well established hypotheses. Consequently a method of moderate caution would be more objective than scientific method. But this again seems wrong and suggests that (2) is not an adequate account of the objectivity of method.

On Rudner's account of objectivity scientific method is less objective than more cautious methods. On these methods one should either believe no synthetic sentence or believe synthetic sentences only under the most stringent conditions. This suggests a way out of the problem. Popper and other methodologists have stressed the importance of bold speculative hypotheses in science. The cautious methods we have considered rule out belief in such hypotheses. Perhaps the objectivity of scientific method consists in the reliability of scientific method with respect to bold and speculative hypotheses. This consideration suggests the following definition:

(3) Method A is more objective than method B if and only if (a) the use of A is less likely than method B to result in the users of A continuing to believe or coming to believe false sentences and (b) the users of A and B continue to believe and come to believe bold and speculative sentences.

This definition certainly has advantages over the others for it seems to eliminate both a method of extreme caution and a method of moderate caution as being more objective than scientific method since neither of these methods allow belief in bold speculative theories and hypotheses. Whether (3) provides a sufficient condition for the objectivity of method is another question which we will consider later. In any case, it is clear that Rudner's account must be supplemented to provide a sufficient condition for the objectivity of method.

3. The Problem of Distorting Omissions. Now condition (a) in definition (3) above is not a necessary condition for the objectivity of a methodology. For one method could be more objective than another and yet not be more reliable in Rudner's sense. Consider two historical methods HM_1 and HM_2 which provide criteria of evaluating historical accounts. Now these historical accounts can be thought of as complex sets of sentences about the past. HM_1 and HM_2 thus provide the rationale for accepting or rejecting these accounts.

Let us suppose that the two methods are used to evaluate different accounts of the histories of various countries. Let us also suppose that HM₁ is a little more reliable than HM₂ in Rudner's sense; it is slightly less likely that the use of HM₁ will result in historians believing or coming to believe false sentences contained in these histories than that the use of HM₂ will. However, although historians using HM₁ will be a little less likely to have false beliefs than historians using HM₂ it is possible that historians using HM₁ would be much more likely to believe accounts of history with gross omissions, accounts which leave out crucial social political movements, battles, people and dates; in sum, accounts which although perhaps containing all true sentences provide a distorted picture of history. On Rudner's account one seems to be forced into saying that HM₁ is more objective than HM₂, despite the gross bias that might result from HM₁ in contrast to HM₂ simply because HM_1 is a little more reliable than HM_2 . However, the contrary seems to be the case. HM₂, although slightly less reliable than HM₁, would presystematically be considered more objective than HM₁ because its use resulted in less distorting omissions. Consequently, condition (a) in definition (2) above does not provide a necessary condition for one method being more objective than another.

Now it might be argued against the above criticism that so long as it is true and about the period under investigation what is included in a historical account can not be decided on methodological grounds. Clearly not all true sentences about,

MICHAEL MARTIN

e.g. English history can be included in a history of England and selection according to one's purposes and interest is required. No doubt this is so. Selection is essential in what is included in historical accounts. But *given certain purposes* certain omissions are distorting while other omissions are not. For example a historian who wrote a history of England with a special emphasis on the courage of the English people during time of war which contained no sentences about the English people's reaction to the Nazi bombing of England during World War II would be guilty of a serious omission, an omission that is seriously distorting. Consequently a methodology whose use would result in a historian accepting this history may well be considered less objective than some other methodology. On the other hand a historian with the above purpose who wrote a history of England and did not include sentences describing the change in Englishmen's hats from 1800–1900 would not be guilty of a distorting omission and a methodology which resulted in the acceptance of historical accounts with such omissions would not because of this, at least, lack objectivity.

4. Rudner's Account Revised. The above criticism also shows that (3) above cannot provide a sufficient condition for the objectivity of a methodology. Historical method HM_1 can meet (a) and (b) in (3) but may not be as objective as historical method HM_2 . Use of HM_1 may make it much more likely than the use of HM_2 that accounts with distorting omissions will be accepted although use of HM_1 is a little less likely than HM_2 to result in its users believing false sentences. Hence HM_1 would not be as objective as HM_2 .

In the light of this criticism one might suggest a further modification in Rudner's definition of the objectivity of a methodology:

(4) Method A is more objective than method B if and only if (a) the use of A is less likely than method B to result in the users of A continuing to believe, or coming to believe, false sentences and (b) the users of A and B continue to believe or come to believe bold and speculative sentences and (c) the use of A is less likely than the use of B to result in the users of A believing accounts with distorting omissions.

However, these modifications will not do and we have already seen why. Conditions (a), (b), and (c) may well provide a sufficient condition for the objectivity of a methodology. But (a) is not a necessary condition. For similar reasons (c) is not a necessary condition. Consequently (4) fails.

Whether a set of necessary conditions can be formulated for the objectivity of method is a question we will not consider. However, the above considerations suggest the difficulty in doing so.