

FROM CRITICAL REALISM TO A METHODOLOGICAL APPROACH: RESPONSE TO ROBBINS, VAN HUYSSTEEN, AND HEFNER

by Nancey C. Murphy

Abstract. Critical realism is a problematic philosophical doctrine that unnecessarily complicates attempts to relate theology and science. A more satisfactory approach employs the scientific methodology of Imre Lakatos for the reconstruction of theology along scientific lines. Theological research programs would automatically include auxiliary hypotheses of both theological and scientific origin.

Keywords: critical realism; Lakatos, Imre; theology and science.

The major portion of my article attempts to tease out of these interesting but rather disparate essays a single line of argument. Afterwards I shall make some assorted criticisms and reflections.

My argument proceeds as follows: J. Wesley Robbins illustrates that critical realism is a problematic philosophical position. However, Wentzel van Huyssteen shows, whether he intends to or not, that nothing is lost by abandoning critical realism in favor of a concentration on the *explanatory progress* of theories in theology and science. Philip Hefner provides an example of fruitful work in theology and science that implements the recommendation to concentrate on progress in explanation.

Robbins pursues three lines: criticism of critical realism, advocacy of a pragmatist conception of knowledge in its stead, and a negative assessment of Ian Barbour's and Arthur Peacocke's accounts of the relations between religion and science. It is not necessary that Robbins's pragmatism be adopted, or even that his particular arguments against critical realism be accepted in order to make my point. I wish only to

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claim, on the basis of his paper, that critical realism is a problematic position from the point of view of contemporary philosophy. Robbins has marshalled some big guns to substantiate this point: Ian Hacking and Richard Rorty. We might also add Hilary Putnam, who has recently abandoned his realist position.

Although I am sympathetic with certain arguments against critical realism, I shall not attempt to add to them here. I believe that the most important objections exploit significant changes in conceptions of both knowledge and language that make general philosophical theories such as critical realism simply beside the point. However, a Gestalt switch from the modern philosophical “paradigm” to the newer one now emerging is not likely to be produced by a few more minutes of argument. I suggest, instead, that relating theology and science is problematic enough, thanks to several hundred years of deliberate attempts to separate them, without the unnecessary invocation of a questionable philosophical doctrine. Therefore, pragmatic if not philosophical grounds suggest that we see where we can get without critical realism.

I turn now to van Huyssteen. Although an advocate of critical realism, van Huyssteen focuses more closely on the justification of the cognitive claims of theology, and the relations between such justification and that in science. In both cases, he claims, rationality is a function of explanatory success. Furthermore, he concludes that “In critical realism the only means open to us for judging the provisional and approximate truth of a theory is therefore through an assessment of its explanatory progress” (van Huyssteen 1988, 258). Or, in other words, claims for representation-to-world connections (Robbins’s term) are only supportable on the basis of the theory’s explanatory power.

My suggestion is the following: Critical realists argue from explanatory adequacy, to realism, to comparable epistemic status for theology and science, to the possibility for meaningful interactions between theology and science. However, the argument goes forward just as well if the troublesome doctrine of critical realism is omitted—and perhaps even better, since both Robbins and van Huyssteen question whether critical realism indeed legitimates the interaction between theology and science.

We see persuasive evidence that critical realism is an unnecessary step in the argument by examining Hefner’s work. Hefner focuses sharply on the actual justification of theological theories and comparison *in this regard* with science. Hefner has taken Karl Popper’s and Imre Lakatos’s views regarding the justification of scientific theories, and has shown that Lakatos’s especially is directly applicable to theological theories (of his “apologetic” type). Lakatos’s methodology makes *ex-*

planatory progress (van Huyssteen's term), meaning progress in explaining an ever wider domain of data, the central criterion for rational evaluation of theories.

Notice that the inclusion of God in the hard core of Hefner's research program provides an answer to van Huyssteen's question "how religious language can claim to be about God at all" (van Huyssteen 1988, 251). Furthermore, the interaction between theology and science happens as a matter of course in Hefner's scheme. The theological hard core is elaborated by means of both theological and scientific auxiliary hypotheses, and thereby related to data from both scientific and religious domains.

I turn now to some assorted comments on the papers. First, I would like to ask Hefner why he substituted for Lakatos's clear and tough-minded notion of "novel facts" the fuzzy one of "interpretations of the world of experience" (Hefner 1988, 270). I would not know how to judge whether an interpretation is "empirically credible," but novel facts are just there or not.

Second, a suggestion. Perhaps another way to formulate the relation between dogmatic theology and apologetic theology (as defined by Hefner) is that the doctrines or dogmas of the Christian church play a role in the positive heuristic of the latter. That is, part of the plan for articulation of the research program is to do so in a way consistent with those formulations worked out within the context of the community of faith.

My question to van Huyssteen is the following: In attempting to guarantee the reference of theoretical terms, does not reliance on the chain of communication from the introduction of the term to the present simply push back the question from the present to that original use? Does not "continuity of reference" simply assume that which is to be proved?

I begin with a question to Robbins as well. In the discussion of critical realism, whence comes the notion that what theories correspond to is a "propositional structure, the propositions that are the truth about the world" (Robbins 1988, 232)? Both Barbour and Peacocke are talking about correspondence between theories and the world—a notion, by the way, that Rorty and others find unintelligible. It would seem at first glance that by making both sides of the correspondence *linguistic* the problems are ameliorated, but actually they only arise again when one asks what is the relation between the world and the propositions that are the truth about the world, other than to repeat tautologically, that the latter are true. I do not wish to try to sort this out, but I do note that the change from aspects of the world to propositions as the terms of the relation with theories and models leads to an unfair criticism of Bar-

bour, namely, that he gives no account of how models map onto the propositional structure that is the truth about the world. He never intended to and nothing would be gained if he did. Also, it is inaccurate to characterize Barbour as saying that religious models stand alone, apart from *any* association with a theory. One such association appears in Robbins's own quotation from Barbour: formal beliefs and doctrines are "derived from" models (see Robbins 1988, 235).

In conclusion, a word about Robbins's pragmatism. It seems that pragmatism is a more palatable doctrine when we recognize intellectual pursuits among our assorted purposes. The Lakatosian theory employed by Hefner makes the discovery of new information a primary value in the weighing of theories. Pursuit of novel facts along with coherence and simplicity might well be included among the practical goals whose satisfaction serves as the criterion for theory acceptance.

REFERENCES

- Hefner, Philip. 1988. "Theology's Truth and Scientific Formulation." *Zygon: Journal of Religion and Science* 23:263-79.
- Robbins, J. Wesley. 1988. "Seriously, But Not Literally." *Zygon: Journal of Religion and Science* 23:229-45.
- van Huyssteen, Wentzel. 1988. "Experience and Explanation: The Justification of Cognitive Claims in Theology." *Zygon: Journal of Religion and Science* 23:247-61.

Notice

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