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PHILOSOPHY OF SCIENCE AT THE THRESHOLD
OF THE 21ST CENTURY:
NEOJUSTIFICATIONISM, ARGUMENTATION, COMPUTER REVOLUTION

Abstract

The present essay deals with the problem of justification, as re-emerging issue in current epistemological debate. Firstly, it states that contemporary epistemology refers to “justification” at two different levels: (A) as justification of scientific statements (analytic or synthetic; singular or universal, such as laws, theories, or theoretical systems, etc.); (B) as justification of the formation of scientists’ hypotheses and decisions in choosing between rival theories (within the same theoretical context, or belonging to different contexts). It emerges that in the last decades of the 20th century the attention of philosophers of science has increasingly focussed on (B), as a consequence of the radical change which has taken place in their discipline from a structuralist (logical-syntactical) to a dynamic (historical-sociological) conception of science. Nowadays things are again changing radically. This paper claims that it is the shift from a structuralist (A) to a dynamic (B) aspect of justification that has led philosophy of science to its current turning-point, characterized by the crisis of post-empiricism and the concomitant reassessment of inductivism and justificationism. In addition, the impact of the computer revolution is one of the reasons for this turning-point and is destined to play an increasingly important role in the revision of the foundations both of science and philosophy of science in the near future.