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THE SOCIO-PSYCHOLOGICAL

FOUNDATIONS OF SCIENTIFIC CHANGE

by

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1975

A thesis presented to the University of Auckland in partial fulfilment of the requirements for the degree of Master of Science in Psychology.
ACKNOWLEDGEMENTS

This thesis was supervised by Professor G.M. Vaughan,
University of Auckland,
whose valuable help and guidance are gratefully acknowledged.

The author also wishes to express his gratitude to Maynard Williams and Peter Wills for their help during the preparation of this thesis.
PREFACE

With the rise of logical positivism the idea that scientific knowledge is objective and testable became widespread. Successfully challenging assumptions fundamental to the positivists' standpoint, Popper's famous critique nevertheless endorsed their views that there existed a method unique to scientific inquiry, adherence to which made objective knowledge possible. This alleged objectivity has been seriously challenged in recent discussions concerning the history and philosophy of science. Kuhn and Feyerabend are two philosophers who have spearheaded this movement. Focusing attention mainly on revolutionary developments in the history of science, these two philosophers have forcefully argued that such revolutions were only possible given the existence of subjective determinants.

This essay begins with a brief characterization of positivistic philosophy of science and the views of Popper. Following the claim that subjectivist elements enter into Popper's epistemology, attention is directed to the presentation of the explicitly subjectivistic philosophies of science of Kuhn and Feyerabend.

The relevance of these recent philosophic developments for the place of theory in psychology is demonstrated within the context of a critique of B.F. Skinner's behaviouristic approach to psychology.

Failing to appreciate the critical importance of subjectivist elements in the development of science, scientists in general still cling to positivistic and Popperian views. Social psychologists, still holding objectivist views, are amongst those who consider that the behaviour of the scientist *qua* scientist lies outside their domain of
inquiry. Consequently, social psychologists are not forthcoming with the requisite psychological theories considered by philosophers such as Kuhn and Feyerabend to be necessary to account for scientific change.

While emphasizing the role of subjective factors as determinants of scientific change, Kuhn and Feyerabend have nevertheless failed to suggest a theory accounting for such change in terms of these subjective factors. To rectify this state of affairs a socio-psychological theory of scientific change is proposed. The development of a socio-psychological understanding of the nature and function of scientific theory constitutes an integral part of this programme. In terms of these ideas an attempt is made to identify possible socio-psychological antecedents of scientific change.
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