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ASPECTS OF WILLIAM WHEWELL'S
PHILOSOPHY OF SCIENCE

by

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A thesis submitted for the Degree of
Master of Arts

The Department of Philosophy
(School of General Studies)
The Australian National University

June 1974.

ACKNOWLEDGEMENT

I would like to express my thanks to Dr. Richard Campbell of the School of Philosophy (General Studies) in the Australian National University, and to the staff of the School of the History and Philosophy of Science in the University of New South Wales, for their advice and encouragement in the preparation of this study.

"Between the idea
And the reality
Between the motion
And the act
Falls the shadow."

from "The Hollow Men"

by T.S. Eliot

CONTENTS

	Abbreviations	i
	Preface	ii
Chapter One	THE GENERAL CHARACTER OF WHEWELL'S THOUGHT	7
	1. Whewell's Life and Writings	7
	2. General Outline of Whewell's Philosophical Views	16
Chapter Two	NECESSARY TRUTH	23
Chapter Three	INDUCTION	43
	1. The Clarification of the Elements of Knowledge by Analysis	45
	2. The Colligation of Facts by Means of a Conception	48
	i) Colligation as the type of Induction	49
	ii) Mill's Criticism	52
	3. Verification of the Colligation	61
	i) Three Criteria	61
	ii) The "Logic of Induction"	65
Chapter Four	"THE FUNDAMENTAL ANTITHESIS OF PHILOSOPHY"	75
	1. The Problem Stated	75
	2. Whewell's notion of the Fund- amental Antithesis	80
	i) The Terms of the Antithesis are Not Clearly Disting- uishable	81
	ii) The Terms of the Antithesis are Distinct	84
	3. Whewell's Solution to "The Ultimate Problem of All Philo- sophy"	89
	4. The Rejection of Shelling and Hegel	95
	5. Facts	101

Chapter Five	WHEWELL AND THE NINETEENTH CENTURY	
	IDEALIST MOVEMENT IN BRITAIN	114
	1. "Idealism"	116
	2. James Frederick Ferrier and John Grote	124
	3. Edward Caird and Thomas Hill Green	134
	Recapitulation and Conclusion	145
	Appendix	147
	Booklist	152

ABBREVIATIONS

- PIS1 The Philosophy of the Inductive Sciences,
2 Vols, 1st ed., 1840.
- PIS2 The Philosophy of the Inductive Sciences,
2 Vols, 2nd ed., 1847.
- NOR Novum Organon Renovatum, 1858.
- PD On the Philosophy of Discovery, 1860.
- FA1 "On the Fundamental Antithesis of Philosophy", 1844.
- FA2 "Second Memoir on the Fundamental Antithesis of
Philosophy", 1848.
- OI Of Induction, With Especial Reference to Mr. J.
Stuart Mill's System of Logic, 1849.
- ROAR "Remarks on a Review", A Letter to Sir John F.W.
Herschel, Bart. (April 11, 1844).
- HSI The History of Scientific Ideas, 2 Vols, 1858.
- NTLM "On the Nature of the Truth of the Laws of Motion", 1834.
- RH "Review of Herschel's A Preliminary Discourse on the
Study of Natural Philosophy", 1831.
- CAAI "Criticism of Aristotle's Account of Induction", 1850.
- PW An Essay and a Dialogue on the Plurality of Worlds, 1854.
- HCNP "On Hegel's Criticism of Newton's Principia", 1849.

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Note: For full details of these works consult the booklist
below, p152f.

PREFACE

The name of William Whewell is certainly more familiar to most philosophers nowadays than it was a few years ago. No longer merely regarded as an opponent of Mill, Whewell, over a period of recent years,¹ has emerged as a philosopher of merit in his own right. Indeed this latest judgement has now proceeded to the point where an influential modern thinker can claim in a major work that "throughout this book the view is being maintained that theory can fruitfully be looked upon as the imaginative construction of models according to well-chosen principles, and that, in many ways, the theory of "Ideas" in Whewell's sense, is more helpful in the theory of theories and scientific method generally, than the logic of statements".²

The favour with which aspects of Whewell's thought are being greeted in some quarters, as an aid in the construction of an alternative philosophy of science to that represented by the tradition of Mill, is a noteworthy phenomenon. Its explanation, however, would be a large task involving no less than a critical summation of the whole of Nineteenth and Twentieth Century British philosophy up until the present. Such a task is obviously beyond the scope of this thesis. Yet if any such summation were to be undertaken in the future, the problem of the historical status of Whewell's philosophy within

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1. The contemporary literature on Whewell begins with the appearance of two articles by C.J. Ducasse in Phil Rev, 60 (1951), reprinted in Blake, Ducasse, and Madden (ed).: Theories of Scientific Method.
 2. Harré, R.: The Principles of Scientific Thinking, p42.

its own Century would be an issue of importance. This thesis, therefore, is an attempt to place Whewell's thought within the context of Nineteenth Century philosophical problems and issues, particularly as they are related to matters of science. Consequently, it is more inclined to be a history, though a critical one, than an attempt at direct philosophising. Such a history is required, apart from the intrinsic interest of the topic itself, by any attempt to take the overview of Nineteenth and Twentieth Century British philosophy that has been suggested. This is particularly the case in connection with the problems which Whewell's philosophy, as a species of Kant's, could not solve in its own day, and which continue to trouble philosophers who look back favourably in the direction of Kant.

As a history, the thesis opens in Chapter I with a sketch of Whewell's life, followed by a general statement of the motives and intentions of Whewell's philosophical stance. Chapters II and III treat in turn the two pillars of Whewell's thinking, necessary truth and induction, and trace his attempts to reconcile his particular viewpoints on each. The problems associated with this reconciliation are brought out most fully in Chapter IV, and the Final Chapter deals with the fate of Whewell's philosophy, conditioned as it was by the problems which it faced, during the later Nineteenth Century.