

History of Rationalities

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Ways of Thinking from Vico to Hacking
and Beyond

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To my daughter Patrizia

PREFACE

This is a book about the idea that in human history it is possible to recognize distinct ways of thinking. It is my contention that, although this idea is dense with important philosophical implications and constitutes a significant ingredient of the philosophies of several noteworthy thinkers, it has not always received the attention it deserves. To think means to direct one's mind towards someone or something in order to accomplish certain tasks, the most interesting of which will, for us, be those concerning the acquisition of knowledge. Thus, before delving deeper into the concept, we can say that a 'way of thinking' is a manner of using one's mind actively for finding out, understanding the world, acquiring knowledge, solving problems, evaluating issues, deciding between various options, analysing ideas or reflecting on one's experience. These are examples of mental actions that can be performed in different ways. For instance, one can understand the world from a certain perspective, make a choice by appealing to a particular value or acquire knowledge by relying on certain methods and preconceptions rather than others.

For the time being, I will consider the characterization above as a working definition of the concept of 'ways of thinking'. I will modify and refine it in the next chapter with additional commentary and nuances, once I have provided the relevant philosophical context for the discussion of why the concept of 'ways of thinking' commands our attention. As to the label I am using, by no means is 'ways of thinking' the only possible choice: 'forms of thought', 'modes of thinking', 'ways of knowing', 'ways of

reasoning', 'mental attitudes' and 'worldviews' are only some of the phrases that are used in the same sense and which would have been just as apt.

The concept of 'ways of thinking' has played a crucial role in philosophy at least since the Enlightenment. It appears in different versions, as if they were species of the same genus. In other words, implicitly or not, philosophers have proposed different notions of the concept of 'ways of thinking'. Thinkers such as Giambattista Vico (1668–1744) or Auguste Comte (1798–1857), who have combined the study of history with that of philosophy in an attempt to understand human knowledge, had argued that human beings have thought differently in different historical contexts. However, it was with the emergence of a French tradition in philosophy of science called historical epistemology, which studies the changes and the evolution of epistemological concepts, that the concept of 'ways of thinking' began to acquire considerable weight. Within that tradition, the philosopher Lucien Lévy-Bruhl (1857–1939) was the first to reject the idea of a timeless and universal way of thinking. Based on anthropological studies, he suggested that certain traditional non-literate societies thought in a different way from modern people. His notion of 'primitive mentality', the way of thinking of primitive societies, was of help to other historical epistemologists who reflected on the role in the history of science of concepts such as objectivity, rationality, truth and many others. After him, philosophers and historians of science such as Héléne Metzger (1889–1944), Gaston Bachelard (1884–1962), Ludwik Fleck (1896–1961), Alexandre Koyré (1892–1964) and Michel Foucault (1926–1984) put forward, implicitly or not, their own notions of the concept of 'ways of thinking'. Their ideas were then crucial for the development of other notions, such as that of Thomas Kuhn's 'paradigm' and that of Ian Hacking's 'style of reasoning'. In the 1980s, the latter put forward the idea that there exist distinct styles of reasoning which can be viewed as broad frameworks that govern a certain way of investigating the world. Styles of reasoning have emerged and stabilized at different points within the history of the sciences and involve new types of evidence, questions and methods of inquiry.

This book is motivated by the following thoughts. In its different notions, the concept of 'ways of thinking' is central to historical epistemology. Therefore, a careful analysis of it could provide a new perspective

for studying this tradition of thought. Furthermore, a comparative analysis of the different notions of ‘ways of thinking’ could help us to highlight their merits and defects for the study of the development of human knowledge; and going back in time to the uses of the concept of ‘ways of thinking’ could allow us to understand more deeply notions that have been put forward more recently, especially when thinking about scientific research. For example, Hacking’s project of styles of reasoning can be considered the latest sophisticated attempt to reconstruct the different ways of finding out that can be recognized in the history of science. Among the other things, his original thesis has never been assessed and developed into a comprehensive theory.

Furthermore, the concept of ‘ways of thinking’ is at the root of two crucial philosophical problems that have always attracted the attention of philosophers: the problem of relativism and the problem of contingency. As for the first problem, one may ask whether or not there are trans-historical and independent criteria for justifying claims made using different ways of thinking. This is an issue of incommensurability between different frameworks: the claim that there might not be common standards of evaluation external to distinct ways of thinking. As for the second problem, in literature it is often asked whether a particular field of science could have taken a different route from the actual one or whether the achievement of certain scientific result has been contingent. However, the achievement of certain scientific results might depend on the emergence of a certain way of thinking. It might therefore be useful to include the concept of ‘ways of thinking’ in the discussions above regarding the contingency issue.

This book addresses the above problems and, in order to provide a taxonomy of the concept of ‘ways of thinking’, I shall in the first part discuss what its different notions have in common and how they differ. Since, as I shall show, these notions can be viewed as transient replacements of Kant’s *a priori*, it is possible to say that this book presents and compares different frameworks for the study of how objectivity is possible. I shall also discuss the relativism issue with particular focus on the notion of ‘style of reasoning’, which I shall develop and present in a more systematic way in the central part of the book. In the final part of the book I shall use Hacking’s notion to discuss the contingency issue. The following are some of the questions I shall address: to what extent are the emergence of the styles of reasoning at a certain point of history a contingent circumstance?

Is science bound to converge on a single answer to a given question? Are styles of reasoning long lasting?

To sum up, the concept of ‘ways of thinking’ is an absolutely fundamental element of most of the philosophies that fall into a tradition of research called ‘historical epistemology’. Of this concept, philosophers and historians of science have presented different notions. This book presents, compares and contrasts them. It then focuses on Hacking’s notion of style of reasoning in order to assess and develop it into a more systematic theory of scientific thought. Finally, this book argues that Hacking’s notion of ‘style of reasoning’ implies epistemic relativism and discusses its implications for the contingency issue. In the first chapter, I shall outline a history of the concept of ‘ways of thinking’. At the end of this presentation, I will better explain the objectives of the book and describe the content of its chapters in more detail.

Most of the reflections that make up this book are the fruit of my doctoral studies at the Department of Philosophy at The Open University and my experience as Research Fellow at the School of Philosophy, Religion and History of Science at the University of Leeds. In those years my work was focused on Hacking’s notion of ‘style of reasoning’. In the following years, as my research on historical epistemology continued, my project became larger until it became a study on the concept of ‘ways of thinking’ in historical epistemology. Consequently, this book can be read on three levels: first, as an introduction to the different notions of way of thinking in historical epistemology; second, as an attempt to develop, correct and present in a more systematic way Hacking’s notion of ‘style of reasoning’; third, as a case-study for a general view on the relativism issue in historical epistemology. There are many people to whom I owe gratitude and appreciation. First of all, I would like to thank Professor Cristina Chimisso for the advice she has provided throughout this project and for all I have learned from her writings. I would also like to thank those members of staff at the Open University, Faculty of Arts and Social Sciences (UK), who have read and provided feedback on the second part of this work when it was still in its infancy, in particular my former second supervisor Professor Sophie Grace Chappell. I am grateful to Professor Gregory Radick for his support and the opportunity to perform research as Visiting Research Fellow in the School of Philosophy, Religion and History of Science, University of Leeds. I should also mention that I really appreciate

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KEYWORDS

Ways of thinking • Historicized Kantianism • French epistemology • Historical epistemology • Thomas Kuhn • Ludwik Fleck • Michel Foucault • Ian Hacking • Styles of reasoning • Objectivity • Relativism • Contingency

ABOUT THE BOOK

This book centres on Ian Hacking's proposal that within the history of Western thought a number of distinct 'styles of reasoning' have accumulated since antiquity. The first part of the book places Hacking's proposal within a lineage of thinkers stretching back to Vico who have shared a concern with exploring rationalities, plural. The second part of the book expounds Hacking's proposal more thoroughly and systematically than Hacking himself has done, then examines the implications for debates about relativism and the contingency of knowledge. The idea that human beings have thought, known or found out in totally different ways in the course of history is an absolutely fundamental element of most of the philosophies that fall into a tradition of research called 'historical epistemology'. This is also a book on the concept of 'ways of thinking' and its different notions proposed in philosophy of science. By providing a comparative analysis of these notions, it gives a new perspective for studying historical epistemology. It then focuses on one of them, Hacking's notion of 'style of reasoning', in order to assess and develop it into a more systematic theory of scientific thought. Ultimately, this work can be read on three levels: first, as an introduction to the different notions of the concept of 'ways of thinking' introduced in philosophy of science; second, as an attempt to develop, correct and present in a more systematic way Hacking's notion of 'style of reasoning'; third, as a case-study for a general view on the relativism issue in historical epistemology.

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