

Preface to the Mandarin Edition

John A. Schuster [2013] 科学革命: 科学史与科学哲学导论. (上海科学技术出版社, 上海) 520pp. + 129 figures. ISBN 978-7-5428-5670-8 [*The Scientific Revolution: Introduction to the History & Philosophy of Science*. Trans. An Weifu (Shanghai Scientific and Technological Education Publishing, Shanghai)]

This textbook has evolved over many years through my teaching and research about the Scientific Revolution of the 16th and 17th centuries, and more generally through my reflections on the needs of students beginning the study of History and Philosophy of Science, or Science and Technology Studies, as it is sometimes called. The first version of this book was written to be used in distance-learning mode by the Open Learning Australia Consortium who contracted me to do this work in the mid 1990s. I wrote the first version of the book in the following way: My lectures were first recorded and then transcribed back into written form. Then they were edited into more scholarly style, and finally they were shaped into a book. In recent years I have modified some material, and also added certain passages. This book is thus the fruit of thirty-five years of teaching in the area and of forty years of research.

In teaching introductory university courses on the Scientific Revolution, there are historiographical, conceptual and narrative constraints upon content, order and style of presentation. This has meant that my course designs, and this textbook, have evolved over many years to consist in a pattern of sedimentary layers—sequential sections of the book, alternating between narrative and conceptual-theoretical moments. The narrative segments use only the conceptual apparatus already supplied; but, they are also designed to acquaint students with a small part of the next layer of conceptual apparatus, prior to revealing its presence. For example, when students study the Copernican Revolution in Section 2 of the book, they are also being subtly informed about a few aspects of the famous views of Thomas S. Kuhn concerning the ‘structure of scientific revolutions’, before being formally presented with those theories (and criticisms of them) in Section 5. Similarly, the broad issues of historical explanation and historiography raised in Sections 6 and 7 draw upon factual and conceptual foundations set down in earlier sections. In general, therefore, the book is designed to fit into and strengthen the experience of beginning students in History and Philosophy of Science or Science and Technology Studies. There is a strong expectation that up to date perspectives from these disciplines delivered by the book will eventually form a permanent part of their mental universe. This book is not just another narrative introduction to the history of science only.

Readers of English will find an earlier English version of this book on my website, <http://descartes-agonistes.com/> along with many examples of my detailed research in the field. I wish to acknowledge the manifold ways in which over the years the materials and ideas in this book were stimulated, shaped and corrected by my colleagues at various universities at which I studied, taught, or had extended research stays: Princeton, Leeds, Cambridge, Wollongong, Melbourne, Utrecht, New South Wales, and, recently Sydney.

This Chinese translation is based on my most recent corrections and modifications to the text. The idea for this translation project came from my esteemed colleague, Professor An Weifu, of East China Normal University, Shanghai, who kindly further facilitated the publication and liaised with the staff of the Shanghai Scientific and

Technical Publishing Company. Most importantly, he has also supervised and revised the translation.

Finally, it should be noted that Chinese readers who wish to pursue these matters may be interested to read the Chinese translation of my well known paper on ‘The Scientific Revolution’ [in R. Olby, G. Cantor and J. Hodge, Editors, *The Companion to the History of Modern Science* (London, 1990), pp. 217-242] which has appeared in the Chinese publication: Liu Dun and Wang Yangzong (Editors) *Chinese Science and the Scientific Revolution: Selected Writings on the Needham Problem and Related Issues* (Liaoning Education Publishing House, Shenyang, 2002) pp. 835-869 (ISBN 7-5382-6302-0/N 19) This very useful work contains many important studies of the ‘Needham Problem’, the problem first raised by the noted Cambridge historian and Sinologist, Joseph Needham, concerning why modern science first arose in early modern Europe, despite the considerable advances in science, technology and social organization that China had accomplished well before these events transpired in the West.

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