

The Historiography of the Chemical Revolution: Patterns of Interpretation in the History of Science, John G. McEvoy, Pickering and Chatto, London, 2010, 352 pp, ISBN 978-1-84893-030-8, £60/\$99

As the author points out in his preface, “the Chemical Revolution is generally regarded as the birth of modern chemistry and as the very paradigm of a scientific revolution.” Given the significance of the changes in chemistry between 1770 and 1840, the extent of the attention of historians of chemistry paid to this period is not surprising. John McEvoy’s book is an in-depth examination of that attention. It is a scholarly and analytical work that requires and deserves close reading.

McEvoy’s credentials for undertaking such an enterprise are impressive; a series of at least a dozen substantial articles published between 1988 and 2000, references to which are included in the comprehensive bibliography of this volume, provide some of the background research. The author’s aims are spelled out: “Addressing the needs and concerns of the scholarly practitioner, it is designed to provide the neophyte with a useful guide through the intricate labyrinth of fascinating philosophical and historiographical issues associated with past and present interpretations of the Chemical Revolution ...”

The Introduction to the book covers the philosophical and historiographical terrain and prepares the reader for the chapters that follow. The Chemical Revolution can be regarded as “the Cinderella of ‘scientific revolutions’” compared with the scientific revolution of the seventeenth century and the Darwinian revolution of the nineteenth. But even this Cinderella has drawn a substantial amount of description and commentary, and one aim of this book is to analyze the patterns of interpretation that historians of chemistry have applied. In McEvoy’s judgment there is a relatively small number of such patterns.

The titles of the seven chapters give clear descriptions of the scope of each. Chapter 1 on positivism, whiggism, and the Chemical Revolution discusses the hold that these perhaps earlier views of the Chemical Revolution had on historians of science, and the difficulties more recent historians have had on escaping from the constraints of these views. Chapter 2 discusses

postpositivism and historiography taking as its starting point the 1950s and 1960s, and giving pride of place in the reinterpretation to Henry Guerlac’s 1961 book *Lavoisier—The Crucial Year*.

Postpositivist interpretations of the chemical revolution occupy Chapter 3, which includes attempts to separate the social from the conceptual backgrounds of Lavoisier’s work. Chapter 4 looks at the transition from modernism to postmodernism, and reviews changing philosophical images of science; it looks at David Bloor’s “Strong Programme” (1976) which founded the current discipline of the sociology of scientific knowledge and rejects earlier views of Robert Merton and Karl Mannheim. Chapter 5 on the sociology of scientific knowledge and the history of science continues this theme examining how the social environment of knowledge may shape what we might consider as the essentials of science including discoveries, inferences, and even objectivity and credibility.

Postmodernist and sociological interpretations of the Chemical Revolution are the themes of Chapter 6. These approaches stress the local rather than global cultures of chemistry, rejecting Kuhn’s paradigmatic shift view of the Chemical Revolution in favor of “geographically distributed and culturally differentiated sites of local knowledge production.”

The final chapter (Chapter 7) on the Chemical Revolution as history returns to the complexity and nuances of the revolution, suggesting that rather than focusing on the narrower views of philosophical and sociological interpretations of the revolution, future historians should be looking at integrative solutions that incorporate the complexity of the events and conditions that make up the Chemical Revolution.

This book is a major contribution to the history of chemistry. It includes extensive chapter notes, a comprehensive bibliography, and a full index. I recommend it highly.

Harold Goldwhite, California State University, Los Angeles