Rethinking the Scientific Revolution

This book challenges the traditional historiography of the Scientific Revolution, probably the single most important unifying concept in the history of science. Usually referring to the period from Copernicus to Newton (roughly 1500 to 1700), the Scientific Revolution is considered to be the central episode in the history of science, the historical moment at which that unique way of looking at the world that we call “modern science” and its attendant institutions emerged.

Reexamination of the preoccupations of early modern natural philosophers undermines many of the assumptions underlying standard accounts of the Scientific Revolution. Starting with a dialogue between Betty Jo Teeter Dobbs and Richard S. Westfall, whose understanding of the Scientific Revolution differed in important ways, the chapters in this volume reconsider canonical figures, their areas of study, and the formation of disciplinary boundaries during this seminal period of European intellectual history.

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Rethinking the Scientific Revolution

Edited by
MARGARET J. OSLER
University of Calgary
In memory of
Betty Jo Teeter Dobbs and Richard S. Westfall,
mentors, colleagues, and friends
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The most satisfying tribute a scholar can receive is serious consideration of his or her work by other scholars. When Betty Jo Teeter Dobbs died suddenly and prematurely on March 29, 1994, I decided to invite a number of her colleagues, students, and friends to contribute papers to a volume in memory of her scholarly interests and the impact of her work. Dobbs’s groundbreaking studies of the meaning of Newton’s alchemy irrevocably altered our understanding of the Scientific Revolution and early modern natural philosophy. The scholarship of her associates reflects this impact — in spirit as well as detail. This volume stands as a tribute to her contributions.

Dobbs herself articulated some of the far-reaching ramifications of her work on Newton in her History of Science Society Distinguished Lecture, “Newton as Final Cause and First Mover,” in which she challenged the received understanding of the Scientific Revolution. This essay, which was originally published in *Isis*, opens the volume and sets the themes for the chapters that follow. Richard S. Westfall contributed an essay that went head-to-head with Dobbs’s and which provides an eloquent defense of the utility — indeed necessity — of thinking in traditional terms about the Scientific Revolution. The debate between these two giants about the central concept in our field provides the broader context for the chapters in the volume. Subsequent events altered the direction of the volume after it was well underway. Westfall’s sudden death on August 21, 1996, reinforced my decision to construct the volume in terms of their debate and, at the same time, to honor Westfall’s memory along with Dobbs’s.

Readers will observe that most of the chapters in the volume lean towards Dobbs’s revisionism rather than Westfall’s reassertion of the received view of the Scientific Revolution. Westfall was aware that his essay was going to serve as something of a foil for the volume. We had a long discussion about this fact some months before his death, and he understood what the tilt of the book would be. Despite the fact
that his views receive serious criticism in many of these chapters, the
outlook of the volume itself was something he understood and
accepted.

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