Science in Medieval Jewish Cultures

Science in Medieval Jewish Cultures provides the first comprehensive overview by world-renowned experts of what we know today of medieval Jews’ engagement with the sciences. Many medieval Jews, whether living in Islamic or Christian civilizations, joined Maimonides in accepting the rationalist philosophical-scientific tradition and appropriated extensive bodies of scientific knowledge in various disciplines: astronomy, astrology, mathematics, logic, physics, meteorology, biology, psychology, the science of language, and medicine. The appropriated texts – in the original or in Hebrew translation – were the starting points for Jews’ own contributions to medieval science and also informed other literary genres: religious-philosophical works, biblical commentaries, and even belles lettres and halakhic (legal) discussions. This volume’s essays will provide readers with background knowledge of medieval scientific thought necessary to properly understand this wide array of canonical Jewish literature. Its breadth reflects the diversity of Jewish cultures in the Middle Ages and the need to consider the fortunes of science in each one within its specific context.

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Science in Medieval Jewish Cultures

Edited by

GAD FREUDENTHAL
For my parents, Renate and Heinz Freudenthal,
in loving memory
and
for my sons, Emmanuel and Michael,
in love.
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Preface and Acknowledgments

This volume on the history of science in medieval Jewish cultures has its own history. My first attempt, in 2000, to produce a volume on “Science in Medieval Jewish Cultures” did not bear fruit. I then joined forces with Prof. Mark Geller of the Institute of Jewish Studies, University College, London, in organizing an international conference on “Science in Medieval Jewish Thought,” held at the Institute of Jewish Studies in London on June 16–19, 2003. This conference brought together eighteen scholars, most of whom subsequently wrote papers that are included here. I am grateful to Prof. Geller for his very friendly collaboration and to the Institute of Jewish Studies for its partial support for the preparation of this volume.

Other scholars joined the venture later, some of them through a study group on the “Transmission and Appropriation of the Secular Sciences and Philosophy in Medieval Judaism: Comparative Perspectives, Universal and National Aspects,” led by Prof. Ruth Glasner of the Hebrew University of Jerusalem and by me at the Jerusalem Institute for Advanced Study (IAS) from March to August 2007. It was in the particularly agreeable ambiance of IAS that the enterprise finally neared completion. IAS also partly supported the publication of this volume, and its help is gratefully acknowledged.

This collection has been five long years in preparation. For their sage advice and crucial support on more than one occasion, I am much indebted to Prof. Ruth Glasner and to Prof. Bernard R. Goldstein (Pittsburgh). Two readers for Cambridge University Press made very insightful and useful suggestions: I am grateful to them for their close reading of the entire volume, although time constraints did not allow me to follow their advice as fully as I would have wished. To Mr. Lenn Schramm (Jerusalem) I am once again most grateful for his exigent and resourceful editorial work on the text of the entire volume.

It is with great pleasure that I express my deep appreciation and thanks also to the twenty scholars who generously contributed of the fruits of their knowledge and labor to this volume and patiently endured the years during which it was in the making. I have repeatedly asked them to join me in accepting the following sage advice, which I owe to Franz Rosenthal: “Do not try to do whatever you do in a hurry, but try to do it well; for people will not ask how long it took a man to do a particular piece of work, but they will ask how well he did it.”¹

Preface and Acknowledgments

Last but not least, I record my indebtedness to the Centre national de la recherche scientifique (CNRS) in Paris, which gave me unrestricted liberty to engage in research for many years. My former director at the CNRS, Prof. Roshdi Rashed, deserves my special gratitude for having lured me to this area of research and for his continued friendship over more than three decades. The *Encyclopedia of the History of Arabic Science* (Routledge, 1996), which he edited in collaboration with Prof. Régis Morelon, was an obvious source of inspiration for the present volume.

G. F.