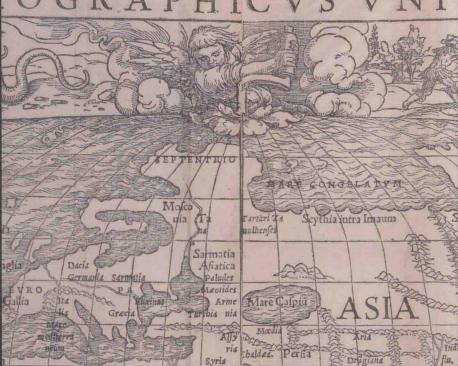
MEDIEVAL AND EARLY MODERN SCIENCE 23

# rnicus in the Cultural **Debates of the Renaissance** Reception, Legacy, Transformation

PIETRO DANIEL OMODEO

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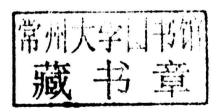
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## Copernicus in the Cultural Debates of the Renaissance

Reception, Legacy, Transformation

Ву

Pietro Daniel Omodeo





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Cover illustration: Sebastian Münster's Universal Map with the Earth in rotation about its axis. Courtesy of the Dibner Library of the History of Science and Technology at the Smithsonian Institution Libraries (Washington, DC, USA).

Library of Congress Cataloging-in-Publication Data

Omodeo, Pietro Daniel, author.

Copernicus in the cultural debates of the Renaissance reception, legacy, transformation / by Pietro Daniel Omodeo.

pages cm. — (History of science and medicine library; volume 45)

Includes bibliographical references and index.

ISBN 978-90-04-25178-6 (hardback : alk. paper) — ISBN 978-90-04-25450-3 (e-book)

1. Science, Renaissance. 2. Science—History—16th century. 3. Copernicus, Nicolaus, 1473–1543—Influence. I. Title.

Q125.2.O46 2014 509.4'09031—dc23

2014014052

This publication has been typeset in the multilingual 'Brill' typeface. With over 5,100 characters covering Latin, IPA, Greek, and Cyrillic, this typeface is especially suitable for use in the humanities. For more information, please see brill.com/brill-typeface.

ISSN 1567-8393 ISBN 978 90 04 25178 6 (hardback) ISBN 978 90 04 25450 3 (e-book)

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Printed by Printforce, the Netherlands

Copernicus in the Cultural Debates of the Renaissance

# History of Science and Medicine Library

VOLUME 45

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## Acknowledgments

Since the original idea of this book is derived from my PhD thesis in philosophy, defended at the Università degli Studi di Torino (University of Turin, Italy) in October 2008, I would like to thank first of all my Turin advisors, in particular Professor Enrico Pasini, who introduced me to intellectual history, as well as Professor Pietro Bassiano Rossi and Professor Daniela Steila. I would also like to thank the Collaborative Research Centre "Episteme in Bewegung" (CRC 980, Freie Universität of Berlin) in the framework of which I was able to accomplish the last, significant part of this research. For the financial support accorded to me during the last few years, I am particularly grateful to the Deutsche Forschungsgemeinschaft.

The list of institutions that supported my research on Renaissance science and philosophy is long but I would like to express my gratitude to them all. The foundation Rolf und Ursula Schneider Stiftung and the Herzog August Bibliothek supported long periods of research in Wolfenbüttel in 2007 and 2010. The Fondazione Filippo Burzio (Turin, Italy) supported in 2008 a research project on Renaissance science in Turin that focused on Giovanni Battista Benedetti and his environment. In 2009, thanks to a Kristeller-Popkin Travel Fellowship, sponsored by the Journal of the History of Philosophy and the hospitality of the Institut für Cusanus-Forschung, I was able to spend three months in Trier, Germany, to investigate Nicholas Cusanus's views on nature. In 2010, I benefited from a Fritz Thyssen Fellowship for a post-doctoral research period at the Herzog Ernst Bibliothek of Gotha (Forschungszentrum Gotha für kultur- und sozialwissenschaftliche Studien der Universität Erfurt) where I benefited from exchanges with the research group led by Professor Martin Mulsow. I owe special thanks to the Dibner Library of the History of Science and Technology at the Smithsonian Institution for supporting two stays in Washington, DC, in 2011 and 2012, when I examined the rare books and manuscripts relevant for this book. The advice of Director Lilla Vekerdy and the assistance of all librarians, in particular Kirsten van der Veen, was very helpful, especially for detecting primary sources and images, some of which are printed in this book. I also wish to acknowledge the Warburg Institute (London) and the Centro Internazionale di Studi Bruniani "Giovanni Aquilecchia" of the Istituto Italiano per gli Studi Filosofici (Naples) for inviting me to participate in the 11th Seminar on Bruno (2010) at the Warburg Institute on Bruno's Copernicanism and early modern mechanics; as well as the Andrew W. Mellon Travel Fellowship for covering the expenses of a visit to the History of Science Collections of the Oklahoma University Libraries in Norman (Oklahoma) in 2011, to view sources on astronomy and mathematics. Furthermore, I would like to acknowledge the Centre for Early Modern Studies, University of Aberdeen (Great Britain) and Professor Karin Friedrich, co-director of the centre, for inviting me to Scotland, in July 2012, to carry out a research

X ACKNOWLEDGMENTS

project on the transfer of scientific knowledge between continental Europe and Great Britain during the Renaissance that relies on primary sources and manuscripts preserved at the University Library, Special Collections Centre.

I am particularly grateful to Professor Jürgen Renn, Director of the Department I of the Max Planck Institute for the History of Science (Berlin), for inviting me to Berlin as a post-doctoral fellow in 2010 and offering me the opportunity to work with him as a research scholar from 2011. His encouragement and suggestions, as well as the approach and spirit of his research group have stimulated my research so deeply and in so many ways that it would not be possible to recount it here. For their constant support, advice, and ideas, I would like to thank Antonio Becchi, Johanna Biank, Sonja Brentjes, Jochen Büttner, Alan Chalmers, Lindy Divarci, Sascha Freyberg, Giulia Giannini, Anna Holterhoff, Nuccio Ordine, Matthias Schemmel, Martin Thiering, Irina Tupikova, Matteo Valleriani, and Klaus Vogel. Special thanks go to Urs Schoepflin and the colleagues of the MPIWG library for their incomparable assistance. The student assistants Alexandra Berndt and Ato Quirin Schweizer also helped me on countless occasions.

During the final composition of this book, I have been lucky to receive feedback, comments and suggestions by several scholars who helped me to improve the manuscript. Therefore I would like to thank especially Owen Gingerich, Miguel Ángel Granada, Michał Kokowski, Richard Kremer, Michel-Pierre Lerner, Enrico Pasini, Jonathan Regier, Karin Reich and Rienk Vermij. In Berlin, I was also able to discuss historical and epistemological issues with scholars from local and international research and academic institutions in the framework of the Collaborative Research Centre Episteme in Motion (CRC 980). I am very grateful to my colleagues at the Freie Universität and the Humboldt Universität (especially at the CRC 644 "Transformations of Antiquity") for their cooperation.

Moreover, I would like to thank my family, especially my father Eugenio and my grandfather Pietro, who have been the first and sometimes most critical readers of my papers. I reserve the last words to my wife Agnieszka since, without her advice, patience and lovely support, my work and research would not have been possible. This book is dedicated to her.

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# List of Abbreviations of Journals and Reference Books

ADB Allgemeine Deutsche Biographie

AIMSS Annali dell'Istituto e Museo di Storia della Scienza di Firenze

B&C Bruniana & Campanelliana

BJHS The British Journal for the History of Science

BOL Bruno, Opere latine conscripta

BP Bibliografia Polska

DBI Dizionario biografico degli Italiani
DNB Dictionary of National Biography
EN Galileo, Opere: Edizione nazionale

ESM Early Science and Medicine

FP La France Protestante (reprint Génève, 2004)

GA Copernicus, Gesamtausgabe

Gal. Galilaeana. Journal of Galilean Studies
GCFI Giornale critico della filosofia italiana
JHA Journal for the History of Astronomy

JHI Journal of the History of Ideas

JWCI Journal of the Warburg and Courtauld Institutes
KGW Kepler, Gesammelte Werke (München, 1937–)

MBW Melanchtons Briefwechsel (Stuttgart-Bad Cannstatt, 1977–)

MFCG Mitteilungen und Forschungsbeiträge der Cusanus-Gesellschaft

NDB Neue Deutsche Biographie

Nunc. Nuncius. Journal of the History of Science
ODNB Oxford Dictionary of National Biography

PAPS Proceedings of the American Philosophical Society

PSB Polski Słownik Biographiczny
RSF Rivista di storia della filosofia

SHPS Studies in History and Philosophy of Science

TAPS Transactions of the American Philosophical Society

VA Vistas in Astronomy

Zedler Johann Heinrich Zedler, Grosses vollständiges Universal-Lexicon

#### Other Abbreviations

appendix app.

library or archive classification/shelf-mark/call number coll.

number n. fn. footnote

thesis th. sub voce

s.v.

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### Introduction

In his famous Advis pour dresser une bibliothèque (Advice on Establishing a Library, 1627), the Paris Librarian Gabriel Naudé included Nicholas Copernicus among the authors that a good furnished library ought to include, notwithstanding the fact that the Catholic Church had prohibited any support for the physical reality of the heliocentric system since 1616. Naudé insisted that Copernicus, followed by Kepler and Galileo, had thoroughly changed astronomy (Copernic, Kepler et Galilaeus ont tout changé l'astronomie). 1 Contrary to the views of Roman censorship and projects aiming at "selective libraries," such as that of the Jesuit Antonio Possevino, Naudé argued that all those who innovated (innové) our knowledge (és Sciences) or modified any respect of it (changé quelque chose) merit a place in a good library, even though they cast doubt on ideas that were held for irrefutable by the ancients and those who followed them uncritically.<sup>2</sup> He even listed Copernicus among scientific innovators who brought precious novelties (Est quoque cunctarum novitas gratissima rerum).<sup>3</sup> In a rather libertine esprit, Naudé did not exclude from his ideal library all "heresiarchs," like Luther, Melanchthon and Calvin, arguing that wrong opinions should be transmitted as well, at least in order to rebut them.<sup>4</sup> He also encouraged the acquisition of "rare" books, for which reason he mentioned the Copernican philosopher and heretic Giordano Bruno along with Girolamo Cardano and Pietro Pomponazzi.<sup>5</sup> More in general, Naudé encouraged the dissemination of the "Moderns," including Averroists (such as Zabarella, Achillini, and Nifo), Montaigne, Charron and Bacon, since only a "pedant" could deny the value of their works. Thus, all "innovators" deserve a special place in the pantheon of culture. These are the "Novators who build upon new principles or else reestablish those of the ancients, Empedocles, Epicurus, Philolaus, Pythagoras, and Democritus, for philosophy."7 Apart maybe from Empedocles, the philosophers on whom Naudé judges the novateurs to base their new philosophies are directly or indirectly relevant for the natural debates hinging on Copernicus during the Renaissance. In fact, Pythagoras and Philolaus were

<sup>1</sup> Naudé, Advis, 42.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid., 43. The quotation is from Ovid.

<sup>4</sup> Ibid., 46-48.

<sup>5</sup> Ibid., 45.

<sup>6</sup> Ibid., 56-57.

<sup>7</sup> Ibid., 65. Cf. Engl. ed., 41.

2 INTRODUCTION

generally seen as ancient supporters of the heliocentric model and the atomists were treated in connection with Copernicus in many intellectual circles.

Naudé's perspective offers a synthesis of a widespread image of Copernicus at the beginning of the seventeenth century, that is, an image resulting from the debates that I am going to reconstruct in this book on the early reception of Copernicus. With Naudé, Copernicus potentially enters as a protagonist of the *Querelle des Anciens et des Modernes*. This image accords with one of the most widespread representations of Copernicus, if not the historical *cliché* concerning his person and work. However, the present research on the reception, presence, influence and transformation of Copernicus in the scientific and cultural debates of the Renaissance aims to reconstruct how differently his person and his work were perceived in different moments and in different environments throughout the sixteenth century.

Copernicus's achievement as an astronomer who profoundly changed his discipline occurred in an exceptional period of transition in the European history, when natural investigation flourished and rapidly developed in many fields with unprecedented impetus. This age of "Renaissance" paved the way for crucial scientific, philosophical and cultural developments, not last the scientific habitus, celebrated in later centuries as a unique trait of modernity tout court. Yet, it is undeniable that the medieval roots are no less important to understand the epoch than the new prospects it disclosed. What's more, humanists and Renaissance scholars tended to conceive of their activity as a commitment to the rebirth of classical Antiquity, a fact that accounts for the constant entanglement of innovation and tradition that so distinguishes their age.

As I intend to show, this profound ambiguity also affects Copernicus and his reception. Much like many works of those times, his *De revolutionibus orbium coelestium* (*On the Revolutions of the Heavenly Spheres*, 1543), and the discussions it provoked, were marked by an inner tension between *new* and *old*, i.e., in this case, by the exploration of new conceptual worlds, on the one hand, and the hope and declared intention to reestablish some ancient and almost mythical wisdom, on the other. Thus, I am going to assess the multifariousness of the cultural environment in which Copernicus lived and was received, and more precisely of the "century" that began with the first circulation of his ideas, at the outset of the sixteenth century, and ended about 1616 with the Catholic interdiction of the heliocentric system.

Fifty years ago, Thomas Kuhn had very much in mind the effects produced by Copernicus when he published his theory of scientific revolutions, according to which scientific advancement is a discontinuous process in which apparently stable systems of knowledge, or, as he called them, "paradigms,"