[Peter Dear] REVOLUTIONIZING THE

SCIENCES



Dear_Rev... the

REVOLUTIONIZING THE **SCIENCES**

European Knowledge and Its Ambitions, 1500-1700

Second Edition

Peter Dear

Princeton University Press
Princeton and Oxford

Copyright © Peter Dear 2001, 2009

All rights reserved. No reproduction, copy or transmission of this publication may be made without written permission.

No portion of this publication may be reproduced, copied or transmitted save with written permission or in accordance with the provisions of the Copyright, Designs and Patents Act 1988, or under the terms of any license permitting limited copying issued by the Copyright Licensing Agency, Saffron House, 6-10 Kirby Street, London EC1N 8TS.

Any person who does any unauthorized act in relation to this publication \dot{m} ay be liable to criminal prosecution and civil claims for damages.

The author has asserted his right to be identified as the author of this work in accordance with the Copyright, Designs and Patents Act 1988.

First edition 2001

Second edition 2009

Published in the United States and Canada by Princeton University Press, 41 William Street, Princeton, New Jersey 08540

Published in North America under license from Palgrave Macmillan, Houndmills, Basingstoke, Hants RG21 6XS, United Kingdom

Library of Congress Control Number 2008938497

ISBN: 978-0-691-14206-7

press.princeton.edu Printed and bound in China

10 9 8 7 6 5 4

Contents

		33
List of Figures	vi	
Preface	vii	
Introduction: Natural Philosophy and Instrumentality	1	
1 "What Was Worth Knowing" in 1500	10	
2 Humanism and Ancient Wisdom: How to Learn Things in the Sixteenth Century	29	
3 The Alchemist, the Craftsman, and the Scholar	47	
4 Mathematics Challenges Philosophy: Galileo, Kepler, and the Mathematical Practitioners	64	
5 Mechanism and Corpuscles: Descartes Builds a Universe	79	
6 Extra-Curricular Activities: New Homes for Natural Knowledge	99	
7 Experiment: How to Learn Things about Nature in the Seventeenth Century	127	
8 Cartesians and Newtonians	$12^{145}/20/20$, 2	.02
Conclusion: What Was Worth Vnoving by the	14/40/40,4	■: U∠

Conclusion: What Was Worth Knowing by the

OneNote

https://auc-one note. of fice apps. live.com/o/one not...

Eighteenth Century?	164
Notes and References	167
Documentation and Further Reading	176
Dramatis Personae	189
Glossary of Major Terms	193
Index	197

2 of 2 12/20/20, 2:02 PM