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VOLUME 30

BARRY BRUNDELL

*Saint Paul's National Seminary, Sydney, Australia*

# PIERRE GASSENDI

*From Aristotelianism  
to a New Natural Philosophy*

D. REIDEL PUBLISHING COMPANY

A MEMBER OF THE KLUWER



ACADEMIC PUBLISHERS GROUP

DORDRECHT / BOSTON / LANCASTER / TOKYO

**Library of Congress Cataloging in Publication Data**



Brundell, Barry, 1939–

Pierre Gassendi: From Aristotelianism to a new natural philosophy.

(Synthese historical library; v. 30)

Bibliography: p.

Includes index.

1. Gassendi, Pierre, 1592–1655. 2. Aristotle–Influence. 3. Epicurus–Influence. I. Title. II. Series.

B1887.B84 1987 194 86–31348

ISBN-13: 978-94-010-8187-0

e-ISBN-13: 978-94-009-3793-2

DOI: 10.1007/978-94-009-3793-2

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Published by D. Reidel Publishing Company,  
P.O. Box 17, 3300 AA Dordrecht, Holland.

Sold and distributed in the U.S.A. and Canada  
by Kluwer Academic Publishers,  
101 Philip Drive, Assinippi Park, Norwell, MA 02061, U.S.A.

In all other countries, sold and distributed  
by Kluwer Academic Publishers Group,  
P.O. Box 322, 3300 AH Dordrecht, Holland.

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Softcover reprint of the hardcover 1st 1987

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*To the memory of Nellie and Rupe, our parents.*

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## PREFACE

Pierre Gassendi (1592-1655) lived in three civilizations in the span of one life-time: medieval ecclesiastic, Renaissance humanist and modern scientific; and he never cut himself loose from any of them. It is probably because he managed to be at home in all three that history has allocated to him a position somewhere on the fringe of the inner circle of genius in the seventeenth-century scientific revolution. While he was not a front-runner, Gassendi was nevertheless a pioneer of modern corpuscularianism and his influence on the development of empirical science was truly international.

It is precisely because Gassendi was a figure of the second rank - a significant but lesser luminary - that we need to examine his work closely, for the less famous contemporaries help us to explain what the great ones do. It might seem that Gassendi has received his share of attention from scholars, even though it is sometimes suggested otherwise. Several full-length monographs have been published in the past three decades, and there have been a number of articles in scholarly journals. Yet, despite the indisputable worth of these studies, the picture of Gassendi that has emerged from them has been partial and at times wide of the mark, so that the true story remains to be told. The reason for offering this study, therefore, is that it aims to present, if not the definitively true account, at least a "truer" account than has hitherto been given of the work of this well-known but inadequately understood architect of the mechanical philosophy. Philosopher of the more probable that he was, Gassendi would entirely approve of the aim; one hopes that he would also approve of the conclusions.

This book should be of interest to scholars and students of the history and philosophy of science, and to anyone who has an interest in the intellectual history of the seventeenth century. The focus of the study is Gassendi's design to bring about what amounted to a revolution in natural philosophy, and the cultural background of the late Renaissance and early modern era are presented as the context which goes far towards making his radical ambitions intelligible.

The aim has been to study Gassendi's work in the light of his own avowed goals. To achieve that aim a new effort has been made to interpret his almost completely neglected early manuscripts. Particular attention has been paid to some of the more significant developments and modifications of his philosophical positions that are to be discerned by comparing the

contents of the manuscripts with the later, published version of his philosophy. The conclusions reached by these efforts amount to a new interpretation of Gassendi and his philosophy: Gassendi was not a philosopher who made Epicureanism respectable; nor was he a materialist *malgré lui*; nor was he a collaborator with Marin Mersenne in resisting a sceptical crisis. He was essentially an anti-Aristotelian promoter of Epicureanism, the philosophy which he deemed more suitable for the needs of the seventeenth century, both for supporting the Christian faith and for enabling philosophers to participate in and contribute to the progress of the new experimental and observational sciences.

I owe a debt of gratitude to many people. Many scholars have given generously of their time, advice and support; in particular I wish to thank Dr D.R. Oldroyd, Dr O.R. Bloch, Dr A.C. Crombie and Dr J.A. Schuster for their assistance, and my friends and former teachers in the School of History and Philosophy of Science in the University of New South Wales for providing a community of scholarship. I acknowledge with heartfelt thanks the help that I have received from library staffs in a number of places: at the University of New South Wales, the Bibliothèque Nationale, Paris, the Bibliothèque Municipale, Tours, the Bodleian Library, the University Library and Whipple Library, Cambridge. Finally, I thank my fellow-staff members and the students of St Paul's National Seminary, Sydney, who have given me the space to bring this project to its completion.