

This book examines Aristotle's metaphysics and his account of nature, stressing the ways in which his desire to explain observed natural processes shaped his philosophical thought. It departs radically from a tradition of interpretation in which Aristotle is understood to have approached problems with a set of abstract principles in hand – principles derived from critical reflection on the views of his predecessors.

A central example in the book interprets Aristotle's essentialism as deriving from an examination of the kinds of unity that various sorts of things have, and from his account of elemental motion, alteration, transformation, and the growth of organisms. An important conclusion of this argument is that a substance may, under certain circumstances, lack some of its essential attributes.

The book goes on to develop a notion of incomplete substance and explores the connection between Aristotle's concept of nature and its role in scientific explanation. In this way Cohen breaks down the sharp division that many interpreters have chosen to see between Aristotle's natural science and his philosophy.



Aristotle on Nature and Incomplete Substance



Aristotle on Nature and Incomplete Substance

SHELDON M. COHEN

University of Tennessee





PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK 40 West 20th Street, New York NY 10011-4211, USA 477 Williamstown Road, Port Melbourne, VIC 3207, Australia Ruiz de Alarcón 13, 28014 Madrid, Spain Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

© Sheldon M. Cohen 1996

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 1996 First paperback edition 2002

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing-in-Publication Data Cohen, Sheldon M.

Aristotle on nature and incomplete substance / Sheldon M. Cohen.

p. cm.

Includes bibliographical references and index. ISBN 0-521-56081-0 hardback

1. Aristotle – Contributions in metaphysics. 2. Metaphysics.

3. Philosophy of nature. 4. Substance (Philosophy) I. Title.

B491.M4C64 1996 110'.92 - dc20 95-51036

CIP

ISBN 0 521 56081 0 hardback ISBN 0 521 53313 9 paperback

Portions of this book are based on articles that previously appeared in *Ancient Philosophy, New Scholasticism, The Philosophical Review,* and *Phronesis.*



On the fiftieth anniversary of the end of the Second World War in Europe:

- to Joseph P. Rivers, for the care with which he supervises the American military cemetery at St. Laurent-sur-Mer, portal of freedom
- to Robert Elmer, Salerno beachmaster, who also served in North Africa, Noumea, at Utah Beach, and in Operation Anvil, and who landed Darby's Rangers at Gella
- to Jacques Vico, president of the Union des combattants volontaires de la Résistance du Calvados
- to my uncles, Irving Schiller, 741st U.S. Tank Battalion, wounded in action, September 1944, in the liberation of Brest, and Maurice Basem, 702d U.S. Tank Destroyer Battalion, wounded in action early June 1944, at an unknown location in Normandy; August 1, 1944, in the liberation of Tessy-sur-Vire; and near Puffendorf, Germany, in the spring of 1945
- and to their comrades in arms who rest in honor and glory in England, France, Belgium, and Luxembourg.



Contents

Acknowledgments Introduction		page ix 1
	I Before the <i>Physics</i>	10
	II Physics I	19
2	Elemental Motion and Alteration	33
	I Aristotle's Elements	33
	II Elemental Motion	37
	III Elemental Change and Substances That Lack	
	Some of Their Essential Characteristics	45
3	Elemental Transformation and the Persistence of	
	Matter	55
	I Change and Continuity	55
	II Compounds	88
4	Unity	101
	I The Unity of Definition	101
	II Unity	116
5	Living Things	136
	I Chemical Reactions and Biological Organisms	138
	II The Account of the Soul	157
	III Concluding Speculation	176
Bi	Bibliography	
Index		185
Index Locorum		188



Acknowledgments

I would like to thank the University of Tennessee Department of Philosophy for giving me a semester off to finish this book, and my colleagues George Brenkert and Richard Aquila for their particular support and encouragement.

It is not my custom to ask other philosophers for comments on works in progress, so I have no one to thank on that score – much to everyone's relief, no doubt. I have nonetheless benefited a great deal from other people's efforts. Mary Louise Gill is perhaps the person I cite most often – usually in opposition, but that is a measure of my respect for her work. Sarah Waterlow Broadie's work has also been of immense value to me, as has been that of William Charlton, Frank Lewis, Dorothea Frede, Gary Matthews, Myles Burnyeat, Jonathan Barnes, and the comments of two anonymous Cambridge University Press readers – to name just a few. I mention these people because of particular points they have made that have helped me along my own way, but I owe at least an equal debt to many others who have labored in these same fields.

And I must grudgingly acknowledge one person who works in a different field: William R. Carter, who has gravely and graciously warned me about some of my more dangerous ideas.

S.M.C.