

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

LOGIC, SIGNS AND NATURE IN THE RENAISSANCE

The Case of Learned Medicine

How and what were doctors in the Renaissance trained to think, and how did they interpret the evidence at their disposal for making diagnoses and prognoses? *Logic, Signs and Nature in the Renaissance* addresses these questions in the broad context of the world of learning: its institutions, its means of conveying and disseminating information, and the relationship between university faculties. The uptake by doctors from the university arts course, which was the foundation for medical studies, is examined in detail, as are the theoretical and empirical bases for medical knowledge, including its concepts of nature, health, disease and normality.

The book ends with a detailed investigation of semiotic, which was one of the five parts of the discipline of medicine, in the context of the various versions of semiology available to scholars at the time. From this survey, a new assessment is made of the relationship of Renaissance medicine to the new science of the seventeenth century.

IAN MACLEAN is Senior Research Fellow at All Souls College, Oxford, and Titular Professor of Renaissance Studies at the University of Oxford. His many publications include *The Renaissance Notion of Women* (1980), *The Political Responsibility of Intellectuals* (edited, with Alan Montefiore and Peter Winch; 1990), *Interpretation and Meaning in the Renaissance: The Case of Law* (1992) and *Montaigne Philosophe* (1996).

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

IDEAS IN CONTEXT

Edited by Quentin Skinner (*General Editor*), Lorraine Daston,
Dorothy Ross and James Tully

The books in this series will discuss the emergence of intellectual traditions and of related new disciplines. The procedures, aims and vocabularies that were generated will be set in the context of the alternatives available within the contemporary frameworks of ideas and institutions. Through detailed studies of the evolution of such traditions, and their modification by different audiences, it is hoped that a new picture will form of the development of ideas in their concrete contexts. By this means, artificial distinctions between the history of philosophy, of the various sciences, of society and politics, and of literature may be seen to dissolve.

The series is published with the support of the Exxon Foundation.

A list of books in the series will be found at the end of the volume.

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

LOGIC, SIGNS AND NATURE IN THE RENAISSANCE

The Case of Learned Medicine

IAN MACLEAN

All Souls College, Oxford



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521806480

© Ian Maclean 2002

This publication 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 2002

This digitally printed version 2007

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

Library of Congress Cataloguing in Publication data

Maclean, Ian, 1945–

Logic, signs and nature: learned medicine in the Renaissance/Ian Maclean.

p. cm. (Ideas in context: 62)

Includes bibliographical references and index.

ISBN 0 521 80648 8

1. Medicine – Europe – Philosophy – History – 16th century.
2. Medical education – Europe – History – 16th century.
3. Medicine – Europe – Philosophy – History – 17th century.
4. Medical education – Europe – History – 17th century.
5. Renaissance – Europe – History. I. Title. II. Series.

R484.M33 2001

610'.94'09031 – dc21 2001025612

ISBN 978-0-521-80648-0 hardback

ISBN 978-0-521-03627-6 paperback

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

For my long-suffering family

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)*Contents*

<i>List of illustrations</i>	page xi
<i>Acknowledgements</i>	xiii
<i>Notes on the text and its modes of reference</i>	xv
Introduction	1
1 Learned medicine 1500–1630	14
1.1 Introduction	14
1.2 Universities in the broader medical context	15
1.3 Humanism	18
1.4 New developments	22
1.5 Medicine in the universities	29
1.6 The state of medicine in 1630	33
2 The transmission of medical knowledge	36
2.1 Introduction	36
2.2 Modes of diffusion	41
2.3 Book fairs, authors and publishers	46
2.4 Format and genre	55
2.5 Bibliographies and libraries	63
2.6 Conclusions	66
3 The discipline of medicine	68
3.1 Introduction	68
3.2 Art and science	70
3.3 Medical sects	76
3.4 Medicine and other discourses: natural philosophy	80
3.5 Medicine and other discourses: law	84
3.6 Medicine and other discourses: theology	87
3.7 The professional doctor	92
3.8 Conclusion: the doctor as master and servant of his art	99
4 The arts course: grammar, logic and dialectics	101
4.1 Introduction	101

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

x

Contents

4.2	Linguistic issues	104
4.3	Demonstrative logic	114
4.4	Art and dialectics	128
5	The arts course: signs, induction, mathematics, experientia	148
5.1	Signs	148
5.2	Beyond logic: geometry, proportion, quantity	171
5.3	Authority, reason, experience	191
5.4	Pedagogical method and the method of discovery	200
5.5	Conclusions	203
6	Interpreting medical texts	206
6.1	Authority and disauthorisation	206
6.2	Issues of text	213
6.3	Authorial issues	217
6.4	Issues of readers and reading	221
6.5	Conclusions	231
7	The content of medical thought	234
7.1	Introduction	234
7.2	Universal and particular nature	236
7.3	Nature as producer and product	247
7.4	Medicine's terms of art: naturals and non-naturals	251
7.5	Praeter naturam: diseases	259
7.6	Praeter naturam: monsters and mirabilia	269
7.7	Conclusions	273
8	The doctrine of signs	276
8.1	Semiology and medicine	276
8.2	Medical signs	281
8.3	The sign distributed	285
8.4	Pathognomonic signs: syndromes of signs	288
8.5	Signs as evidence: certainty and uncertainty	290
8.6	Signs and time: anamnesis, diagnosis, prognosis	293
8.7	Indications	306
8.8	Conjectural arts or sciences	315
8.9	Conclusions: probability and the conjunction of signs	327
	Postscript	333
	<i>Bibliography</i>	343
	<i>Index of names and terms</i>	397

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of Learned Medicine

Ian Maclean

Frontmatter

[More information](#)*Illustrations*

Frontispiece: Titlepage of Gregor Horst's *Opera medica*,
Nuremberg, 1660

FIGURES

- | | | |
|-------|--|----------|
| 4.1: | Jacopo Zabarella, <i>Opera logica</i> , [Heidelberg,] 1586–7,
vol. 5, p. 33 | page 119 |
| 4.2: | Claude Aubéry, <i>Organon, id est, instrumentum doctrinarum
omnium in duas partes divisum, Nempe, in analyticum
eruditionis modum, et dialecticam, sive methodum disputandi
in utramque partem</i> , Morges, 1584 (AA 119(1) Art),
p. 327 | 120 |
| 4.3a: | The tree of Porphyry | 121 |
| 4.3b: | The tree of Porphyry: Boethius, <i>Opera</i> , Basle, 1570, p. 25 | 122 |
| 4.4: | Giambattista della Porta, <i>Physiognomia</i> , Hanau, 1593,
p. 58 | 125 |
| 5.1: | Jacobus Sylvius (Jacques Dubois), <i>Methodus sex librorum
Galenii in differentiis et causis morborum et symptomatum in tabellis
sex ordine suo coniecta paulo fusius, ne brevitatis obscura lectorem
remoretur et fallat. De signis omnibus medicis, hoc est, salubribus,
insalubribus, et neutris, commentarius omnino necessarius medico
futuro</i> , Paris, 1539, p. 25 (C 2 4 Med(3)) | 174 |
| 5.2: | Giovanni Manardo, <i>In primum Artis parvae Galeni librum
commentaria</i> , Basle, 1536 (4to M 15 (1) Med), p. 63 | 175 |
| 5.3: | Laurentius Maiolus, <i>De gradibus medicinarum</i> , Venice, 1497
(Auct R 2 3 VI), sig. D3v | 177 |
| 5.4: | Benedictus Victorius (Faventinus), <i>Opus theorice latitudinum
medicines ad libros tegni Galeni</i> , Bologna, 1516, fos. 26v–27r | 178 |
| 5.5: | Martin Akakia, <i>Claudii Galeni ars medica quae et ars parva</i> ,
Venice, 1549 (Byw N 2 23), p. 60 | 180 |

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

xii

List of illustrations

- | | | |
|------|---|-----|
| 5.6: | Martin Akakia, <i>Claudii Galeni ars medica quae et ars parva</i> ,
Venice, 1549 (Byw N 2 23), p. 84 | 182 |
| 8.1: | Rondelet's method of diagnosis (to be compared with
Porphyry's tree, fig. 4.3) | 299 |

The frontispiece and fig. 4.3b are reproduced by kind permission of the Provost and Scholars of the Queen's College, Oxford; figs. 4.1 and 4.4 are reproduced by kind permission of the Warden and Fellows of All Souls College, Oxford; figs. 4.2, 5.1, 5.2, 5.3, 5.5 and 5.6 are reproduced by permission of the Bodleian Library, University of Oxford; and fig. 5.4 is reproduced by kind permission of the Principal and Fellows of Jesus College, Oxford.

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

Acknowledgements

It is a great pleasure here to acknowledge the numerous scholarly debts I have incurred in writing this book. The greatest of these I owe to those heroic scholars who undertook to read the whole typescript, and make extensive comments on it, offering references to an immense amount of additional material and countless suggestions for improvement, which are not all individually acknowledged in the notes. Nicholas Jardine and Brian Vickers read the first draft for the Cambridge University Press; Sachiko Kusukawa, Michael McVaugh and Nancy Siraisi did so at my request. I received valuable assistance from Andrew Wear (who generously let me have a copy of his thesis on a cognate subject); Vivian Nutton; from my colleagues in All Souls, especially Robin Briggs, Miles Burnyeat, Eleanor Robson, Peregrine Horden, Scott Mandelbrote and Charles Webster; from Constance Blackwell, Laurence Brockliss, Richard Cooper, Peter Corlett, Chiara Crisciani, Sylvia de Renzi, Eckhard Kessler, Gillian Lewis, Bob Lowrie, Christoph Lüthy, Ewen Maclean, Jan Papy, Margaret Pelling, Martin Porter, David Sackett, and Ron Truman. To the audiences at the Wellcome Unit of the History of Medicine, University of Oxford, the Department of the History and Philosophy of Science, Cambridge, and the participants in the Summer School on the History of Learned Medicine in the Renaissance, who patiently listened to drafts of what follows and submitted me to shrewd but kindly questioning, I am deeply grateful. I owe a special debt to the infinitely patient and resourceful Librarians of the Bodleian Library, the Herzog-August-Bibliothek, Wolfenbüttel, and the two Oxford college libraries where much of this research was done: Queen's and All Souls. The time-honoured formula (that the virtues of the text are theirs, and the remaining errors mine) of course applies. To the same two colleges I am also grateful for indispensable material and financial assistance. I owe special thanks to my copy-editor,

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of
Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

xiv

Acknowledgements

Virginia Catmur, through whose vigilance this *opusculum* has been (to use the formula so frequently abused on Renaissance title pages) ‘ab innumerabilibus mendis purgatum’. It goes without saying that I owe an immeasurable debt to my family for their encouragement and moral support, and for having patiently endured the painful and protracted gestation of this volume.

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of Learned Medicine

Ian Maclean

Frontmatter

[More information](#)*Notes on the text and its modes of reference*

I have followed the Harvard conventions for bibliographical reference except where I have not myself seen an original text, and have felt constrained to cite its full title. In chapter 2, which discusses formats and books as such, I have sometimes included bibliographical details in the footnotes where they are germane to the argument. I have cited Greek as it occurs in quotations; elsewhere I have transcribed it according to the usual conventions for distinguishing long and short vowels.

I have left a number of Latin words in their original form as they are terms of art: 'scientia', 'circumstantiae', 'experientia', 'practica', 'theoria', 'quaestio/quaestiones', 'differentia/differentiae', 'spiritus', 'locus'. I have used both 'semiotic' and 'semiology' to designate this area of medicine; the former is the more common in humanist texts, but the latter has become subsequently dominant. For the form of names (whether vernacular or latinised), I have consulted (but not always adopted) the form given in the published Wellcome Library catalogue; I have where appropriate adopted the modern distinction between 'i' and 'j', 'u' and 'v', and have omitted accents on Latin words where these do not contribute to the sense. There is a great inconsistency in usage in the transcription of surnames (even between the published Wellcome catalogue, and its www version); this I have perpetuated, as my major concern has been to ensure that the reader can locate copies of the texts to which I refer in library catalogues, especially in difficult cases such as Dubois/Sylvius, du Chesne/Quercetanus, Giachini/Jacchinus/Iacchinus and da Monte/Montanus. In cases where it is relevant, I give the dates of the most important authors when these are first mentioned in the text; but it would be wrong to suggest that one could create out of these a simple chronology of influential writers. Not all texts were made available to the wider public at the time of their composition. Some were first published a long time after the death of their authors, but were well known to the academic community

Cambridge University Press

978-0-521-03627-6 - Logic, Signs and Nature in the Renaissance: The Case of Learned Medicine

Ian Maclean

Frontmatter

[More information](#)

xvi

Notes on the text and its modes of reference

before their death; the treatises of Pomponazzi on incantations and fate are good examples of this. Other authors taught generations of students who disseminated their views before they appeared in printed form; a few were 'discovered' after their demise by other scholars or entrepreneurial publishers. The story of the reception of medical ideas is therefore very complex, except in some very striking cases such as those of Vesalius and Fracastoro; this fact (together with the other reasons given above) led me to adopt an ideal-typical rather than chronological approach to Renaissance semiology, although I do offer broad accounts of the development of theories in this area over the period under investigation here.

I have cross-referenced to numbered sections rather than pages throughout. All the longer quotations in Latin in the text (but not in the notes) have been translated, in a freer style than that used in the rendering of the Greek Galen by the assembled scholars whose versions go to make up the standard Giunti edition (1541–2; 9th edition 1625). In some but not all cases, these translations were adopted in the Kühn edition of Galen, 22 vols., Leipzig, 1821–33; I have where possible made reference to this edition also (K, followed by volume number and page); but not all the references and quotations found in Renaissance texts can be easily located there. I refer also to the *Patrologiae cursus completus, series latina*, ed. J. P. Migne, 222 vols., Paris, 1844–1904, via the abbreviation PL.