

CAMBRIDGE

JOURNALS

Knowledge is no longer shelved

The *Cambridge Journals Digital Archive* contains more than 160 journals, more than 3 million pages and more than 8 million linked references. Knowledge is now more visible and more searchable than ever.



journals.cambridge.org/archives

 CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

Arabic Sciences and Philosophy

A Historical Journal

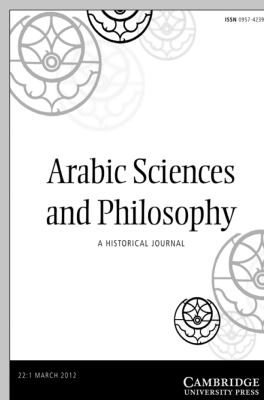
Executive Editor

Roshdi Rashed, *CNRS, Paris, France & University of Tokyo, Japan*

Managing Editor

Ahmed Hasnaoui, *CNRS, Paris, France*

Arabic Sciences and Philosophy (ASP) is an international journal devoted to the Arabic sciences, mathematics and philosophy in the world of Islam between the eighth and eighteenth centuries, in a cross-cultural context. In 2009, the journal extended its scope to include important papers on scientific modernization from the nineteenth century in the Islamic world. Together with original studies on the history of all these fields, *ASP* also offers work on the inter-relations between Arabic and Greek, Indian, Chinese, Latin, Byzantine, Syriac and Hebrew sciences and philosophy. Casting new light on the growth of these disciplines, as well as on the social and ideological context in which this growth took place, *ASP* is essential reading for those interested in these areas.



Arabic Sciences and Philosophy is available online at:
<http://journals.cambridge.org/asp>

To subscribe contact Customer Services

in Cambridge:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

in New York:

Phone (845) 353 7500

Fax (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Free email alerts

Keep up-to-date with new material – sign up at

journals.cambridge.org/register

For free online content visit:
<http://journals.cambridge.org/asp>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

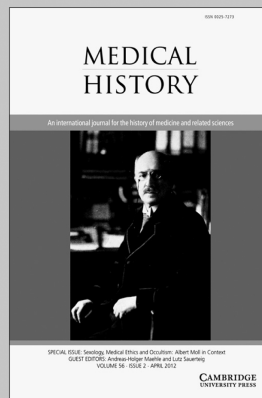
Medical History

An International Journal for the History of Medicine and Related Sciences

Editor

Sanjoy Bhattacharya, *University of York, UK*

Medical History is a refereed journal devoted to all aspects of the history of medicine, health and related sciences, with the goal of broadening and deepening the understanding of the field, in the widest sense, by historical studies of the highest quality. It is associated with the European Association for the History of Medicine and Health, the Asian Society for the History of Medicine, and the World Health Organization's Global Health Histories initiative. The membership of the Editorial Board reflects the commitment to the finest international standards in refereeing of submitted papers and the reviewing of books.



Medical History

is available online at:
<http://journals.cambridge.org/mdh>

To subscribe contact Customer Services

Americas:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Rest of world:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

Free email alerts

Keep up-to-date with new material – sign up at

journals.cambridge.org/register

For free online content visit:
<http://journals.cambridge.org/mdh>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

Modern Intellectual History

Editors

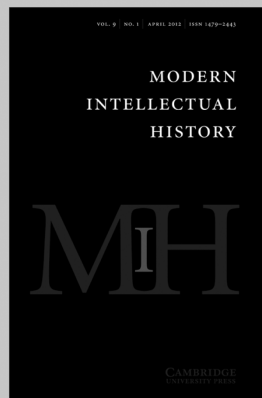
Charles Capper, *Charles Capper*

Duncan Kelly, *University of Cambridge, UK*

Anthony J. LaVopa, *North Carolina State University, USA*

Samuel Moyn, *Columbia University, USA*

This important journal serves as a focal point and forum for scholarship on intellectual and cultural history from the mid-seventeenth century to the present, with primary attention to Europe and the Americas and to transnational developments that encompass the non-West. *MIH* enquires into this era's intellectual discourses and texts, their contextual origins and reception, and the recovery of their historical meanings. The journal encompasses various forms of intellectual and cultural history, including political thought and culture, philosophy, religion, literature and literary criticism, social sciences, natural sciences, visual arts and aesthetic theory, communications, law, economic thought, social and cultural theory, psychology, anthropology, music and the history of the book.



Modern Intellectual History
is available online at:
<http://journals.cambridge.org/mih>

To subscribe contact Customer Services

Americas:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Rest of world:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

Free email alerts

Keep up-to-date with new
material – sign up at

journals.cambridge.org/register

For free online content visit:
<http://journals.cambridge.org/mih>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

Philosophy

Published for the Royal Institute of Philosophy

Editor

Anthony O'Hear, *University of Buckingham, UK*

Philosophy is the journal of the Royal Institute of Philosophy, which was founded in 1925 to build bridges between specialist philosophers and a wider educated public. The journal continues to fulfil a dual role: it is one of the leading academic journals of philosophy, but it also serves the philosophical interests of specialists in other fields (law, language, literature and the arts, medicine, politics, religion, science, education, psychology, history) and those of the general reader. Contributors are required to avoid needless technicality of language and presentation. Each issue contains an editorial on a topic of philosophical or public interest, and a 'New Books' section.

The institutional subscription includes two supplements and a subscription to *Think*.

Price information

is available at: <http://journals.cambridge.org/phi>

Free email alerts

Keep up-to-date with new material – sign up at
<http://journals.cambridge.org/phi-alerts>



Philosophy
is available online at:
<http://journals.cambridge.org/phi>

To subscribe contact Customer Services

in Cambridge:
Phone +44 (0)1223 326070
Fax +44 (0)1223 325150
Email journals@cambridge.org

in New York:
Phone +1 (845) 353 7500
Fax +1 (845) 353 4141
Email
subscriptions_newyork@cambridge.org

For free online content visit:
<http://journals.cambridge.org/phi>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

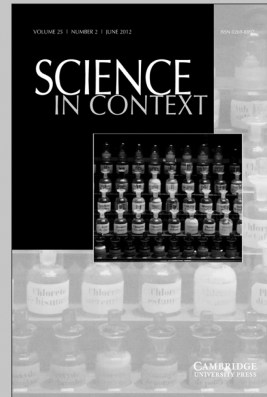
Science in Context

Editors

Leo Corry, *The Cohn Institute for the History and Philosophy of Science and Ideas, Tel Aviv University, Israel*

Jürgen Renn, *Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, Germany*

Science in Context is an international journal edited at The Cohn Institute for the History and Philosophy of Science and Ideas, Tel Aviv University, with the support of the Van Leer Jerusalem Institute. It is devoted to the study of the sciences from the points of view of comparative epistemology and historical sociology of scientific knowledge. The journal is committed to an interdisciplinary approach to the study of science and its cultural development - it does not segregate considerations drawn from history, philosophy and sociology. Controversies within scientific knowledge and debates about methodology are presented in their contexts.



Science in Context

is available online at:

<http://journals.cambridge.org/sic>

To subscribe contact Customer Services

Americas:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Rest of world:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

Free email alerts

Keep up-to-date with new material – sign up at

journals.cambridge.org/register

For free online content visit:
<http://journals.cambridge.org/sic>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

Victorian Literature and Culture

Editors

John Maynard, *New York University, USA*

Adrienne Munich, *State University of New York at Stony Brook, USA*

Victorian Literature and Culture encourages high quality original work concerned with all areas of Victorian literature and culture, including music and the fine arts. The journal presents work at the cutting edge of current research, including exciting new studies in untouched subjects or new methodologies. Contributions are welcomed from internationally established scholars as well as younger members of the profession. Future Editors' topics include 'Food, Drink and the Victorians' and 'Victorian Natural History'. Review essays form a central part of the journal, and offer an authoritative view of important subjects together with a list of relevant works that serves as an up-to-date bibliography. The Works in Progress section allows the communication of parts of major works well in advance of their final publication. The Special Effects section allows publication of primary materials either previously unavailable or unknown to most readers.



Victorian Literature and Culture is available online at:
<http://journals.cambridge.org/vlc>

To subscribe contact Customer Services

Americas:

Phone +1 (845) 353 7500

Fax +1 (845) 353 4141

Email

subscriptions_newyork@cambridge.org

Rest of world:

Phone +44 (0)1223 326070

Fax +44 (0)1223 325150

Email journals@cambridge.org

Free email alerts

Keep up-to-date with new material – sign up at

journals.cambridge.org/register

For free online content visit:
<http://journals.cambridge.org/vlc>



CAMBRIDGE
UNIVERSITY PRESS

THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

Membership of the Society, which includes a subscription to *The British Journal for the History of Science*, is open to all persons approved by the Council of the Society and elected at an Extraordinary General Meeting. Details of the annual subscription can be found on our website www.bsbs.org.uk or from the Executive Secretary at the address below. There is an Introductory offer for the first year.

The British Journal for the History of Science is the official organ of the Society. All correspondence on the contents of the Journal should be addressed to the Editor, Jon Agar, Department of Science and Technology Studies, University College London, London WC1E 6BT, email ucrjhea@ucl.ac.uk

Book reviews: Books for review should be sent to the Reviews Editor, Dr Adam Mosley, School of Arts and Humanities: History and Classics, Swansea University, Singleton Park, Swansea, SA2 8PP, Wales, United Kingdom.

BSHS publications: BSHS Monograph Series is designed to allow the publication of monographic studies in the history of science quickly and cheaply. Monographs 1–13 are available in digital form and can be downloaded for free via the BSHS website. Monographs 12–14 are available via a print-on-demand service.

Recent titles are as follows:

Images of the Earth: Essays in the History of the Environmental Sciences. Edited by L. J. Jordanova and R. Porter. Second edition. 1997. £17.

Science in Art: Works in the National Gallery that illustrate the History of Science and Technology. By J. V. Field and F. A. J. L. James. 1997. £15.

To See the Fellows Fight: Eye-witness accounts of meetings of the Geological Society of London and its Club, 1822-1868. By J. C. Thackray. 2003. £15.

The Society's magazine, *Viewpoint*, an informal publication, appears three times a year. It is free to members, £10.00 for institutions and non-members from the Executive Secretary.

Administrative business of the Society is handled by Lucy Tetlow, Executive Secretary, British Society for the History of Science, PO Box 3401, Norwich, NR7 7JF. The Society is registered in England as a Limited Company (No. 562208) and is a Registered Charity (No. 258854). Email office@bsbs.org.uk.

Information about the Society is available through the Internet: <http://www.bsbs.org.uk>

Copying: This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 09123. Organizations in the USA who are also registered with the CCC may therefore copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC of the per-copy fee of \$12.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0007-0874/2013 \$12.00.

ISI Tear Sheet Service, 3501 Market Street, Philadelphia, Pennsylvania 19104, USA, is authorized to supply single copies of separate articles for private use only.

Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. Articles from the Journal in electronic or microfiche form can be obtained from Cambridge Journals Online (www.journals.cambridge.org), Proquest (www.proquest.com) and NAPC (www.napubco.com).

For all other use, permission should be sought from Cambridge University Press or from its American branch.

Advertising: Contact the Journals Advertising Manager, Cambridge University Press, University Printing House, Shaftesbury Road, Cambridge CB2 8BS.

Back volumes a limited number of back volumes are available from BSHS Executive Secretary, PO Box 3401, Norwich, NR7 7JF, UK. For Volume 24 onwards, apply to Cambridge University Press in printed form.

Information on the *British Journal for the History of Science* and all other Cambridge journals can be accessed via www.journals.cambridge.org

Claims for missing issues should be made immediately on receipt of the subsequent issue.

This journal issue has been printed on FSC-certified paper and cover board. FSC is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. Please see www.fsc.org for information.

Printed in the United Kingdom by MPG Books Ltd

The British
Journal
for the
History of
Science

BJHS

Volume 46
Part 1 No. 167

March 2013

- 1 Replication, re-placing and naval science in comparative context, c.1868–1904
DON LEGGETT
- 23 *Gur, Ghur, Guhr or Bur?* The quest for a metalliferous prime matter in early modern times
ANA MARIA ALFONSO-GOLDFARB AND MARCIA H.M. FERRAZ
- 39 Like birds of a feather: the cultural origins of Iberian geological cooperation and the European
Geological Map of 1896
JESÚS CATALÁ-GORGUES AND ANA CARNEIRO
- Corrigendum
- 71 Like birds of a feather: the cultural origins of Iberian geological cooperation and the European
Geological Map of 1896 – Corrigendum
JESÚS CATALÁ-GORGUES AND ANA CARNEIRO
- 73 Institutions and innovation: experimental zoology and the creation of the *British Journal of Experimental
Biology* and the Society for Experimental Biology
STEINDÓR J. ERLINGSSON
- 97 Teaching natural history at the Museum of Vertebrate Zoology
MARY E. SUNDERLAND
- 123 Experimental physiology, Everest and oxygen: from the ghastly kitchens to the gasping lung
VANESSA HEGGIE
- Erratum
- 149 Charles Darwin's use of theology in the *Origin of Species* – Erratum
STEPHEN DILLEY
- 151 Essay review
- 161 Book reviews
- 175 Books received

B S H S
THE BRITISH
SOCIETY FOR
THE HISTORY
OF SCIENCE

Published for
by

The British Society for the History of Science
Cambridge University Press

Cambridge Journals Online
For further information about this journal
please go to the journal website at:
journals.cambridge.org/bjh



MIX
Paper from
responsible sources
FSC® C018575

CAMBRIDGE
UNIVERSITY PRESS