

To Appear in Our Next Issue (December 2015)

- | | | |
|-------------------|----|--|
| Andrea Sangiacomo | on | The Ontology of Determination:
From Descartes to Spinoza |
| Jemma Lorenat | on | Polemics in Public: Controversies
around the Principle of Duality in
Early Nineteenth-Century Geometry |
| Helena Ekerholm | on | Keeping a House for Science: Sofia
Kristensson as Matriarch and
Gatekeeper at Krisineberg Zoological
Station, 1877–1892 |
| Thomas Mueller | on | The Boussinesq Debate: Reversibility,
Instability, and Free Will |
| Annalisa Capristo | on | Volterra, Fascism, and France |
| Till Grüne-Yanoff | on | Models of Temporal Discounting,
1937–2000: An Interdisciplinary
Exchange between Economics and
Psychology |

CAMBRIDGE



ANIMAL EVOLUTION FROM THE BEGINNING...

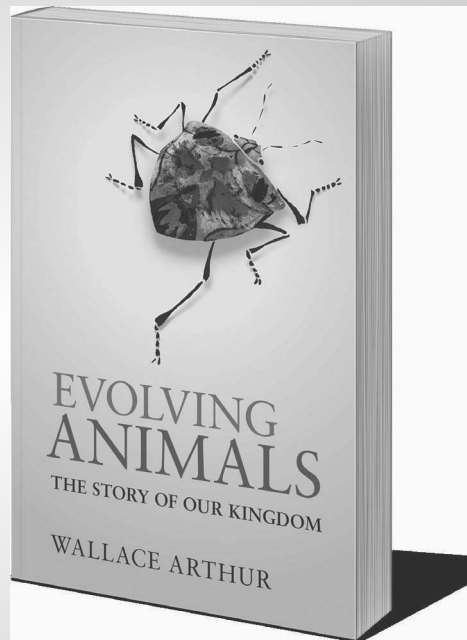
EVOLVING ANIMALS

THE STORY OF OUR KINGDOM

Wallace Arthur,
National University of Ireland, Galway

Paperback 9781107627956 £19.99 / \$29.99

Hardback 9781107049635 £50.00 / \$80.00



Covering all the main animal groups,
from jellyfish to mammals, this book
unravels the story of animal evolution.

www.cambridge.org/ea



CAMBRIDGE
UNIVERSITY PRESS

Professor of History of Exact Sciences

→ The Department of Humanities, Social and Political Sciences at ETH Zurich (www.gess.ethz.ch) invites applications for the above-mentioned professorship.

→ The candidate should have an internationally recognized track record in history of formal sciences, e.g. either in history of mathematics, history of physics or history of computer science. Besides, he or she should have an expertise in non-Western scientific traditions (preferably the Islamic World, South Asia or East Asia) and be proficient in at least one non-European language relevant for the region under study. The successful candidate ought to be able to build and sustain an excellent research and teaching program in an interdisciplinary environment. The position is based in the "Knowledge"-section of the department, focused on critically reflecting upon the historical, societal and philosophical aspects of science and technology, and on the broader issues related to the production, circulation and reception of knowledge.

→ **Please apply online at www.facultyaffairs.ethz.ch**

→ Applications should include a curriculum vitae, a list of publications, a project list, and a statement of future research and teaching interests. The letter of application should be addressed **to the President of ETH Zurich, Prof. Dr. Lino Guzzella. The closing date for applications is 30 September 2015.** ETH Zurich is an equal opportunity and family friendly employer and is further responsive to the needs of dual career couples. We specifically encourage women to apply.

CAMBRIDGE

JOURNALS

Arabic Sciences and Philosophy

A Historical Journal

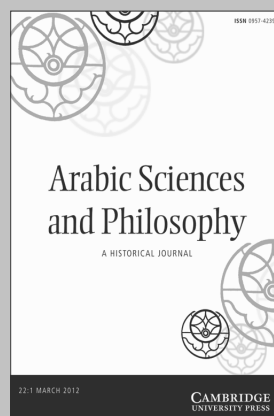
Executive Editor

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

British Journal for the History of Science

Published for the British Society for the History of Science

Editor

Jon Agar, *University College London, UK*

This leading international journal publishes scholarly papers and review articles on all aspects of the history of science. History of science is interpreted widely to include medicine, technology and social studies of science.

BJHS papers make important and lively contributions to scholarship and the journal has been an essential library resource for more than thirty years. It is also used extensively by historians and scholars in related fields. A substantial book review section is a central feature. There are four issues a year, comprising an annual volume of over 600 pages.



British Journal for the History of Science

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

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/bjh>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

The Historical Journal

Editors

Andrew Preston, *University of Cambridge, UK*

Phil Withington, *University of Sheffield, UK*

Founded in 1958, *The Historical Journal* publishes on all aspects of history since 1500, providing a forum for younger scholars making a distinguished debut as well as publishing the work of historians with an international reputation. The journal publishes original research in full-length articles and shorter communications and major surveys of the field in historiographical reviews and review articles. Contributions are aimed both at specialists and non-specialists.



Historical Journal
is available online at:
<http://journals.cambridge.org/his>

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/his>



CAMBRIDGE
UNIVERSITY PRESS

CAMBRIDGE

JOURNALS

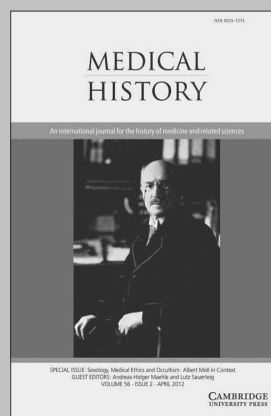
Medical History

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

Modern Intellectual History

Editors

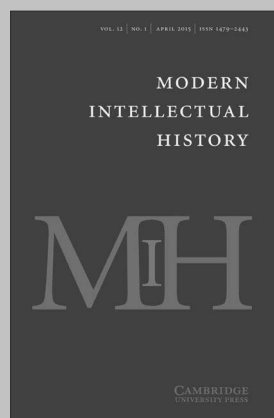
Charles Capper, *Boston University, USA*

Duncan Kelly, *University of Cambridge, UK*

Samuel Moyn, *Harvard University, USA*

Sophia Rosenfeld, *University of Virginia, 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

INSTRUCTIONS FOR AUTHORS

Contributions of about 10,000 words should be submitted by email to the editorial office with a message that includes your name, telephone number, and email address. Submissions should be sent as an attachment in the format .doc or .docx to <sic@post.tau.ac.il>. The editors require that the article be introduced by a paragraph of about 150 words that presents its argument.

The journal follows the author-date reference system that is generally used in the social and natural sciences. 'Documentation 2 Author-Date Citations and Reference Lists' of the *Chicago Manual of Style* and a back issue of the journal should be used as guides. More detailed instructions for contributors and specific guidelines (e. g. for transliteration from Russian or Hebrew) are available from <http://journals.cambridge.org/action/displayJournal?jid=SIC>. Unusual alphabets, special characters, mathematical and chemical formulas, and all diacritical marks should be clearly indicated. Articles may be illustrated by a small number of figures in black and white, formatted in TIFF, with a minimum resolution of 300 dpi for halftones and 600 dpi for line drawings. For further information, contact the editorial office.

SUBSCRIPTIONS

Science in Context (ISSN 0269-8897) is published four times a year in March, June, September, and December. Four issues form a volume. The subscription price which includes electronic access and delivery by air where appropriate (but excluding VAT) of a volume 28 is £253 (US \$453 in USA, Canada, and Mexico) for institutions; £62 (US \$100) for individuals who order directly from the publisher and certify that the journal is for their personal use. The electronic only price available to institutional subscribers is £220 (US \$386 in USA, Canada, and Mexico). Single issues are £68 (US \$122) in USA, Canada, and Mexico plus postage. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered members should provide their VAT registration number. Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd, PO Box 55, Chitose, Tokyo 156, Japan. Orders accompanied by payment may be sent to a bookseller, subscription agent, or directly to the publisher: Cambridge University Press, University Printing House, Shaftesbury Road, Cambridge CB28BS, UK; or in the USA, Canada, and Mexico: Cambridge University Press, Journals Fulfillment Department, 100 Brook Hill Drive, West Nyack, New York, USA 10994-2133.

COPYING

This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. 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 the CCC of the per copy fee of \$12.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 0269-8897/2015 \$12.00. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of a separate article for private use only. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge or from the American Branch of Cambridge University Press.

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.

Internet access: www.journals.cambridge.org/sic

Printed in the UK by Bell & Bain

SCIENCE IN CONTEXT

VOLUME 28 | NUMBER 3 | SEPTEMBER 2015



Topical Section: Surfaces in the History of Modern Science: Inscribing, Separating, Enclosing

Guest Edited by *Mathias Grote and Max Stadler*

- Mathias Grote and Max Stadler:** Introduction: Surface Histories 311
- Chitra Ramalingam:** Dust Plate, Retina, Photograph: Imaging on Experimental Surfaces in Early Nineteenth-Century Physics 317
- Henning Schmidgen:** Leviathan and the Myograph: Hermann Helmholtz's "Second Note" on the Propagation Speed of Nervous Stimulations 357
- Kijan Espahangizi:** From *Topos* to *Oikos*: The Standardization of Glass Containers as Epistemic Boundaries in Modern Laboratory Research (1850–1900) 397
- Alexander von Schwerin:** Shaping Vulnerable Bodies at the Thin Boundary between Environment and Organism: Skin, DNA Repair, and a Genealogy of DNA Care Strategies 427
- Section of Miscellaneous Articles*
- Marquis Berrey:** Reading Communities and Hippocratism in Hellenistic Medicine 465
- Maria Björkman:** The Emergence of Genetic Counseling in Sweden: Examples from Eugenics and Medical Genetics 489

Cover illustration: Drawing by Hermann v. Helmholtz of central components of his myograph, 1852.

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



MIX
Paper from
responsible sources
FSC® C007785

CAMBRIDGE
UNIVERSITY PRESS