The British

Journal

for the

History of

Science

## BJHS

Volume 53 Part 1 No. 196

## March 2020

ISSN 0007-0874

Published for The British Society for the History of Science by Cambridge University Press



## **EDITORS**

Amanda Rees (Editor) University of York Simon Werrett (BJHS Themes Editor) University College London

## EDITORIAL BOARD

Samuel Robinson

(Reviews Editor) University of Kent

**Daryn Lehoux** 

Queen's University, Canada

**Jennifer M. Rampling** Princeton University

Anna Marie Roos

University of Lincoln

Jessica Riskin

Stanford University

Vanessa Heggie

University of Birmingham

James Sumner

University of Manchester

Gowan Dawson

University of Leicester

**Richard Staley** 

University of Cambridge

**Jim Endersby** 

University of Sussex

**Zuoyue Wang** 

California State Polytechnic University, Pomona

Jahnavi Phalkey

Science Gallery, Bengaluru

**Justin Stearns** 

New York University

Omar Nasim

University of Regensburg

The *British Journal for the History of Science* (BJHS) is the journal of the British Society for the History of Science, the major national body for this subject in Britain. One of the premier journals in the field, it publishes high quality papers and review articles in all aspects of the history of science. There are four issues per year comprising an annual volume of around 750 pages. BJHS also includes an extensive book review section. Occasional thematic issues are published on important problems or topics.

Contributions are very welcome. They should be sent to the Editorial Assistant, Mrs P. Hatton, email bjhs.assistant@bshs.org.uk. They are considered on the understanding that they are unpublished and are not on offer to another journal. Contributions should be submitted in electronic form as an email attachment, preferably in MS Word format.

For instructions on how to submit a paper to BJHS, visit http://www.bshs.org.uk/publications/bjhs and click on 'Instructions for contributors'. Please be sure to follow all instructions carefully as failure to do so may impair the Editor's and Publisher's ability to treat the submission in a timely fashion. Informal editorial enquiries (not submissions) may be sent to the Editor, Dr Amanda Rees, Department of Sociology, University of, York, Wentworth College, W/239, Heslington, YO10 5DD, UK, amanda.rees@york.ac.uk Books for review should be sent to the Reviews Editor, Samuel Robinson, email reviews.editor@bshs.org.uk.

© British Society for the History of Science. The British Society for the History of Science retains copyright for all articles published. It is the author's responsibility to secure any necessary permission for publication. Single copies of articles may be made for research or private study. Permission to make multiple copies must be obtained from the Society. Typescripts are not normally returned to authors. In all matters concerning the publication of the article, the Editor's decision is final. The Editor, Editorial Board and Council of the Society cannot accept responsibility for any views expressed by contributors in articles published by the Journal.

Subscriptions: BJHS The British Journal for the History of Science (ISSN: 0007-0874) is published quarterly in March, June, September and December by Cambridge University Press, University Printing House, Shaftesbury Road, Cambridge CB2 8BS, UK. The subscription price (excluding VAT) of Volume 53, 2020, is £240 net (USA, Canada and Mexico US \$456) post free institutions print and electronic, institutions electronic only £215/\$406; single parts cost £70 net (USA, Canada and Mexico US \$131) plus postage. Four parts form a volume. Orders, which must be accompanied by payment, may be sent to any bookseller, subscription agent or to the publisher: Cambridge University Press, Journals Fulfillment Department, University Printing House, Shaftesbury Road, Cambridge CB2 8BS or in the USA, Canada and Mexico to Cambridge University Press, Journals Fulfillment Department, 1 Liberty Plaza, Floor 20, New York, NY 10006, USA. Copies of the journal for subscribers in the USA, Canada and Mexico are sent by air to New York to arrive with minimum delay. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT registered subscribers should provide their VAT registration number. Japanese prices for institutions are available from Kinokuniya Company Ltd, PO Box 55, Chitose, Tokyo 156, Japan. Prices include delivery by air. Periodicals postage paid at New York, NY and at additional mailing offices.