



**BSHS Annual Conference
Liverpool Hope University College
June 25-27, 2004**

Contents

Welcome	2
Conference Programme	3
Education Section Programme	5
Abstracts	10
Participants	33
Social Events	34
Organisation	35

Welcome

It is my pleasure to welcome delegates to this conference of the British Society for the History of Science. I am delighted that Liverpool Hope University College is hosting this event and that you will be in our city for a few days. As you know Liverpool has won the European City of Culture 2008 title and those who have been here before will notice the new energy and vitality in the renewed Liverpool.

Liverpool Hope is the UK's only higher education institution with an ecumenical foundation and is 160 years old. Its vision to "educate in the round" has guided its scholarly ambitions and its "rounded" humanities, liberal arts, education, commerce, science and science programmes. Your Society's focus on the history of science has synergies with both our humanities and philosophy of science interests.

Please feel welcome at Liverpool Hope. My best wishes for a fruitful conference.

Gerald J. Pillay
Rector & Chief Executive

MAIN SESSIONS – Friday 25 June

09.00 onwards **Registration in the foyer**

13.00-14.00 **Lunch in the Refectory**

14.00-16.00, Room 214
Session 1: Ancient and Early Modern Science
 Chair: Jim Bennett

Zilan Wang, Needham Research Institute, University of Cambridge and
 Keling Wang, Department of Historical Geography, Wuhan University,
 China
Chinese Surveying and Mapping Technology 2000 Years Ago

Karin Tybjerg, Darwin College, Cambridge University
Diagrams, Machines and Texts in Ancient Mechanical Writings

Tayra Lanuza, Universidad de Valencia
*Conjunctions as a Theory of History in Astrological Spanish Texts of the
 16th and 17th Centuries*

Russell Smith, Huddersfield
*The Natural Philosophy of Light Motion: Optical Foundations of 17th
 Century Mechanics*

14.00-16.00, Grace Room (114)
Session 2: Science and Enterprise
 Chair: Sophie Forgan

Anne Scott and Crosbie Smith, Centre for History & Cultural Studies of
 Science, University of Kent
Trust in Providence: Making Credible the Cunard Line of Steamships

Jean-François Auger, Université Louis-Pasteur, Strasbourg
*Revisiting the Origins of Industrial Research: Mining and Metallurgical
 Research in Canada During the Second Industrial Revolution*

Jenny Marie, Max Planck Institute for the History of Science, Berlin
Why Use Pedigree Pets for Genetics?

Robert Bud, Science Museum, London
*Mode 2 in World War 2: Public Engagement, Teamwork and Radical
 Discontinuity in the Nature of Science – the Case Study of Penicillin*

16.00 **Tea & coffee in the foyer**

16.30-18.00, Room 214
Session 3: Diagnosis, Disorders and Disease
 Chair: Malcolm Nicolson

Amna Khalid, St. Antony's College, Oxford University
Positioning Public Health: Police, Pilgrims and the Colonial State

Justin Kastner, Department of Diagnostic Medicine/Pathobiology, Kansas
 State University, Kansas
*Scientific Conviction Amidst Scientific Controversy: William Williams and
 the 19th-century Transatlantic Trade Dispute over Diseased Livestock*

Emese Lafferton, History and Philosophy of Science, Cambridge
 University
*The Dissected Patient. Controversies Around "Laboratory" Hypnosis
 Research in Hungary, 1880s-1890s*

16.30-18.00, Grace Room (114)
Session 4: Representations of Science
 (The Roy Porter Memorial Session)
 Chair: Janet Browne

Alison Falby, History Department, Trent University, Ontario
*British Idealism and the BBC: Popular Science and Political Ideology in
 Britain Between the Wars*

Robert A. Jones, Meols, Wirral
*'I've brought you a cup of tea': Women Scientists in British Films of the
 Post-War Period*

Manon Niquette, Université Laval, Ste-Foy Quebec and William J. Buxton,
 Concordia University, Montreal, Quebec
*The Rockefeller Foundation's Support for the Communicative turn in
 Science Museums*

18.30 **Reception and welcome in the foyer**

19.30 **Dinner in the Festival Room**

EDUCATION SECTION SESSIONS – Friday 25 June

9.00–9.30, **Registration in the foyer**

9.30–10.45, Room 214

Introduction by Peter Fowler

Turning the Heat on history of science: an example of teaching history of science to gifted and talented pupils by Peter Fowler

Discussion: analysis and evaluation - All participants

10.45 – 11.15 **Tea & Coffee in the foyer**

11.15–12.30, Room 214

Retrospective Nobel Prizes: an example of teaching history of science in further education by John Cartwright

Discussion: analysis and evaluation - All participants

12.30–13.00, Room 214

Evaluation so far - All participants

Introduction to group activities by Peter Fowler

13.00 **Lunch in Refectory**

14.00–15.30, The Balcony

Groups: Preparation of individual/group resources

15.30–16.00, The Balcony

Closing feedback on work done - All participants

Setting up of e-mail network by Peter Fowler

16.00 **Tea & Coffee in the foyer**

16.30–18.00, The Balcony

Teaching the history of technology by Graeme Gooday and team

18.00-18.15, The Balcony

Closing remarks by Janet Brown & Peter Bowler

MAIN SESSIONS – Saturday 26 June

9.00-11.00, Great Hall

Session 5: Technology, Imagery and Identity

Organiser: Graeme Gooday

Chair: Will Ashworth

Graeme Gooday, History and Philosophy of Science, University of Leeds
The Adams and Eves of Electricity - Or, Revisiting the Virgin and the Dynamo Yet Again

Christine Macleod, Department of Historical Studies, University of Bristol
and Jennifer Tann, University of Birmingham
'What Watt Did for you': Commercialising Reputation in Inter-war Britain

Ben Marsden, School of Divinity, History and Philosophy, University of Aberdeen
Imprinting Engineers: Reading, Writing and Technological Identities in 19th-century Britain

James Sumner, Centre for the History of Science, Technology and Medicine, University of Manchester
'A Magnificence Unspeakable': Images of the Porter Brewery as Technological Marvel

9.00-11.00, Grace Room (114)

Session 6: Science in Culture

Chair: Geoff Bunn

Michael Rand Hoare, Royal Holloway College, University of London
Strindberg's Alternative Paradigm: The Weird Science of Antibarbarus and the Blue Books

James Kennaway, Dept of Musicology, UCLA, California
Nervous Music: Physiological and Psychological Nerves and 19th-Century Music

Jimena Canales, MIT, Boston, Massachusetts
AUTO, NOMOS, AND MATIC: Boundaries Between "Impersonal" and "Personal" Representations

Christer Nordlund, Department of Historical Studies (History of Science and Ideas), Umeå University, Sweden
Hormones and Visions in 1930s America: Louis Berman's Ideas on New Creations in Human Beings

11.00

Tea & coffee in the foyer

11.30-13.00, Great Hall

Session 7: Working with Beasts: Big Biology and Human Society in the 20th Century

Organiser: Charlotte Sleigh

Chair: Aileen Fyfe

Amanda Rees, Dept of Sociology, University of York
Representations of Human Identity, Society and Evolution in Narratives of Popular Science

Charlotte Sleigh, Centre for History and Cultural Studies of Science, University of Kent, Canterbury
A Bug in the System: E O Wilson, T C Schneirla and the Problem of Ant and Human Communication

Janet Browne, Wellcome Trust Centre for the History of Medicine, University College London
Gorillas in the Field and Film: Representing the Great Apes in the 1930s.

11.30-13.00, Grace Room (114)

Session 8: Communicating Botany in the Late 18th Century

Organiser: Alexandra Cook

Chair: Alexandra Cook

Alexandra Cook, Department of Philosophy, University of Hong Kong, Hong Kong
The Herbaria of Jean-Jacques Rousseau

Susan McMahon, Cochrane, Alberta, Canada
Botany at the Jardin du Roi, 1680-1700

continues

MAIN SESSIONS – Saturday 26 June

11.30-13.00, Room 214

Session 9: Modes of Inquiry

Chair: Jeff Hughes

Jonathan Tallant, Department of Philosophy, University of Durham
An exploration of the Relatedness of the "Time Concept" and the Mathematical Paradigm

Sandro Caparrini
Università di Torino, Turin, Italy
Early theories of vectors

Robert Bud, Science Museum.
Demonstration of Science Museum, National Railway Museum and National Museum of Photography, Film & Television websites *Ingenious* and *Making the Modern World*
NB this demonstration will take place on The Balcony

18.00, Grace Room (114)

Keynote Speaker

Professor Steven Shapin, Harvard University
'A little of what you fancy does you good': the Atkins diet in Cultural Historical Perspective

19.00

Reception in the foyer

19.30

Conference Dinner, Great Hall

13.00 Grace Room (114)

EGM of the British Society for the History of Science

All members are invited

13.30 onwards

Lunch in the Refectory

---- Free afternoon ----

16.30-17.30 **Tea & coffee at the Dockside Gallery, Merseyside Maritime Museum - courtesy of the School of History, University of Liverpool and the National Museums Liverpool**

MAIN SESSIONS – Sunday 27 June

9.00-11.00, Grace Room (114)

Session 10: Evolutionary Thought in Society (1)

Chair: Janet Browne

John van Wyhe, History and Philosophy of Science, University of Cambridge
The Descent of Words: The Content and Contexts of Evolutionary Thinking 1780-1880

Ishita Pande, Department of History, Princeton, New Jersey
The 'Hindoo Skull' in Phrenological Theory and Colonial Practice

Thomas Dixon, Faculty of Divinity, Cambridge University
The Sternness and Kindness of a Scientific Ethicist: Herbert Spencer Reappraised

Juliana Adelman, Department of History, National University of Ireland, Galway
Evolution on Display: Popularising Darwin and Natural History at the Dublin Natural History Museum

9.00-11.00, Room 214

Session 11: Circulating Knowledge (1)

Chair: Robert Bud

Yoshiyuki Kikuchi, History of Science, Technology and Medicine, Open University
Hired Foreigners, Overseas Students and the Transfer of a British Model of Chemistry into Meiji Japan

Natalia Priego, Institute of Latin American Studies, University of Liverpool
Science, Society and Politics: Microbiology in Mexico during the Porfiriato

Samiksha Sehrawat, St Hilda's College, Oxford University
The Association of Medical Women in India: Women Doctors and the Responsibility of Indian Women's Healthcare

11.00 **Tea & coffee in the foyer**

11.30—13.00, Grace Room (114)

Session 12: Evolutionary thought in society (2)

Chair: Peter Bowler

Suzanne Paylor, History and Philosophy of Science, University of Leeds
Aping the Scientists: Identity and the Pursuit of Scientific Knowledge in Lay Encounters with Darwinism

Ken Valente, Department of Mathematics, Colgate University, NY
Triangulating the Contributions of George Salmon to Victorian Disputes on Mathematics, Evolution, and Liberal Theology

Anna Philpott, Birkbeck College, University of London
The Descent of Ape, or, Alternative Evolution and Aberrant Ideas of Human Origins

11.30-13.00, Room 214

Session 13: Circulating knowledge (2)

Chair: Crosbie Smith

Jeff Loveland, Romance Languages, University of Cincinnati, Ohio
Another Daubenton, another Histoire Naturelle

Aileen Fyfe, Department of History, National University of Ireland, Galway
Travellers' science: Railways, Guidebooks and Popular Science

Jim Mussell, London
Taking time: Late 19th-century Chemistry and the Rhythm of the Periodical Press

13.00 onwards **Lunch in the Refectory**

MAIN SESSIONS – Sunday 27 June

continues

14.00-16.00, Grace Room (114)

Session 14: Using Objects in the History of Science and Technology

Organiser: Peter Morris

Chair: Peter Morris

Tim Boon, Science Museum, London

'Material: Culture: History: Science'. An Exploration of the Potential of Cultural History for Science Museums and the History of Science

Sean Johnston, Crichton Campus, University of Glasgow

From Classified Research to 'Public Access Holography'

Jim Bennett, Museum of the History of Science, Oxford

For Objects in History: Are Catalogues Any Help?

Malcolm Nicolson

Centre for the History of Medicine, University of Glasgow

Dogs' Bladders and Mens' Thumbs—Recreating Ian Donald's Experiments with Diagnostic Ultrasound

'A Deal of Interesting Matter': Newtonian Studies and the History of Science in the Mid-nineteenth Century

16.00

Tea & Closing Remarks – in the foyer

14.00-16.00, Room 214

Session 15: Science as Tactics

Chair: Janet Browne

Peter Skelton

Wellcome Trust Centre for the History of Medicine, University College London

John Tyndall: Aristocrat of Science

Elizabeth Neswald

Centre for the Study of Human Settlement, National University of Ireland, Galway

Science and Sociability in Provincial Ireland: The Galway Mechanics' Institute

Rebekah Higgitt

Centre for the History of Science, Technology and Medicine, Imperial College, London