

UNIVERSITY OF CAMBRIDGE

DEPARTMENT OF
HISTORY AND PHILOSOPHY OF SCIENCE

ANNUAL REPORT 1997

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INTRODUCTION

This report summarises the activities of the Department, Library and the Whipple Museum between January and December 1997. A separate report on the Wellcome Unit for the History of Medicine begins on page 139.

Staff

John Forrester was keynote speaker at the 21st Annual Freud Conference at Deakin University, Melbourne, Victoria, Australia in March. He was Visiting Professor at Institut für Wissenschafts- und Technikforschung, University of Bielefeld, Germany in June. Harvard University Press published *Dispatches from the Freud Wars. Psychoanalysis and its Passions* (March) and *Truth Games. Lies, Money and Psychoanalysis* (December); the former was named a Book of the Year by A.S. Byatt (The Sunday Times) and by Hanif Kureishi (The Observer).

Roger French organised, with Prof. C O' Boyle, a conference of classroom practice in medieval medical education to take place 7-9 January 1998 in King's College Cambridge and he secured Wellcome funding for this project. He completed a monograph, *Canonical Medicine: Gentile da Foligno and the Nature of Scholasticism*, and begun another, under contract with Scolar Press, *Dissection and Vivisection in the Renaissance of Europe*. He also completed the first phase of the Wellcome-funded Articella project.

Nick Jardine and Marina Frasca-Spada continued to edit *Studies in History and Philosophy of Science* and, with the help of Harmke Kamminga, have set up a 'daughter' journal, *Studies in History and Philosophy of Biological and Biomedical Sciences*, to begin publication at the beginning of 1998.

Nick Jardine has continued to work on his collaborative project with Alain Segonds (CNRS, Paris) on *Priority and Conflict in Early Modern Cosmology*.

The Flamsteed Letters Project, administered by Nick Jardine and carried out by Frances Willmoth, is flourishing: two magnificent volumes have been published by the Institute of Physics Publishing (1995 and 1996); the third volume is well in hand and should appear in 1999; and the proceedings of the conference *Flamsteed at Greenwich*, organised by Frances Willmoth and held at Greenwich in October 1995, are about to be published by Boydell and Brewer.

Martin Kusch joined the department as a lecturer in October. During much of 1997 he was the holder of a Humboldt Research Fellowship and worked at the Max-Planck Institute for Psychological Research in Munich. He is Advisory Editor of *Studies in the History and Philosophy of Science*. Together with John Forrester and Deborah Thom, he organises the 'Psy Studies' seminars in the department.

Sachiko Kusukawa was appointed Assistant College Lecturer in History and Philosophy of Science at Trinity College, Cambridge, from October. During July, she lectured on the history of scientific illustrations in the International Summer School run by the University of Cambridge.

Peter Lipton became Professor of the History and Philosophy of Science in October. He was Head of Department throughout the year and continued to serve as Advisory Editor for *Studies in the History and Philosophy of Science*, on the Editorial Board of *The British Journal for the Philosophy of Science*, and as External Examiner at Imperial College London.

In 1997 Simon Schaffer started collaborative work with colleagues in Berlin, Paris and elsewhere on a project on scientific travel and instrumentation in the eighteenth and nineteenth centuries. The project will culminate in a book and exhibition on the theme. He also helped co-ordinate an international summer school in the Max Planck Institute for History of Science, Berlin, on environmental history and history of science.

Jim Secord was awarded a British Academy Research Leave Fellowship, and will spend the 1997-98 academic year completing a book on early Victorian evolutionary debates under contract to the University of Chicago Press. Jon Topham, James Moore and Patricia Fara will take on his teaching duties for the leave year. He co-organized a one-day workshop at Newnham College on 'Geniuses and Heroes in Science' in January, and organized a meeting at Geological Society of London on 'Publishing and the World of Print in the Making of Geology' in March.

Liba Taub organized (with Jim Bennett) and chaired a session on 'History of Science as Public Culture: The case of museums', Fiftieth Anniversary conference, British Society for the History of Science, Leeds, September. The Forum of the History of Science, Technology and Medicine invited her to lead a discussion on the role of museums in HSTM, in November. She was also invited to lead a discussion on documenting objects and collections at a workshop sponsored by the (U.S.) National Science Foundation, at Tufts University, on Electronic Publication in the History of Science, in December. She was elected Treasurer of the History of Science Division, International Union of the History and Philosophy of Science.

Undergraduate Teaching

There were 91 Part IB (second year) and 24 Part II (third year) undergraduates examined at the end of the year. In Part IB 18% obtained Firsts which is a small increase from 1996 and 44% gained II.1s which continues an upward trend since the late eighties in the number of candidates gaining upper seconds. In Part II, 29% gained Firsts, an increase of 7% on last year. The Jacob Bronowski Prize was awarded jointly to Clare Davis and Alice Wrangham. Details of Part II dissertation titles are given later in the report.

Graduate Teaching

The total number of Ph.D students during the year was 41 and the total M.Phil intake in October was 15. Details of Ph.D.s and M.Phil.s awarded as well as doctoral research in progress during the year are listed later in this Report. The recently restructured M. Phil seminars, which replaced separate history and philosophy seminars with a single integrated weekly meeting, have continued

to be a great success, further promoting interaction between the two halves of the discipline. The Jenny Redhead Prize for the best M.Phil Essays was awarded to David Rose.

General

Michael Redhead retired as Professor of the History and Philosophy of Science in September, after 7 years in the chair. He made an enormous contribution in research, teaching and leadership: the Department flourished under his care and he is already sorely missed. In June the Department held an international two-day conference in his honour, and Cambridge University Press will publish a *Festschrift* entitled *From Physics to Philosophy*.

In June it was announced that the Whipple Museum of the History of Science was one of only 26 non-national museums in the country to be Designated as a pre-eminent collection by the government. Congratulations to Liba Taub, our Curator, for this splendid achievement

We are pleased to announce that Catriona West became the Whipple Museum Assistant in March. In July, Tamara Hug became Departmental Administrator and John McWilliams's position as Administrative Assistant was made permanent. Kirsty Turner became Whipple Library Assistant in September.

The Department continued to benefit from the generosity of the Rausing family. Thanks to their support, we were able to hold the second annual Hans Rausing Lecture in the History of Technology and Industry, with a lecture by Professor Francesca Bray entitled 'Machines for Living: Domestic Architecture and Engineering of Social Order in Late Imperial China' (see the Easter Term Departmental Seminar Schedule, below), and to set up a research support fund.

STAFF, AFFILIATES AND VISITORS

Administrative Staff

Ms Tamara Hug (HPS Administrator)
Mrs Mel Leggatt (Computer Officer)
Mr John McWilliams (Administrative Assistant)

Cleaning Staff

Mr Robert Baldrey
Mr Brian Rowley

Library Staff

Dr Silvia De Renzi (Rare Book Researcher)
Miss Kirsty Turner (Library Assistant)
Dr Linda Washington (Librarian)

Museum Staff

Mr Kemal de Soysa (Documentation Assistant)
Dr Hester Higton (Documentation Specialist)
Ms Tacye Phillipson
Mr Steve Watts (Custodian/Cleaner)
Ms Catriona West (Museum Assistant)

UTOs and Wellcome Core Staff

Dr Andrew Cunningham (Wellcome)
Dr John Forrester
Dr Roger French
Professor Nick Jardine
Dr Harmke Kamminga (Wellcome)
Dr Martin Kusch (M.Phil. Manager)
Professor Peter Lipton (Head of Department)
Dr Simon Schaffer (B.A. Manager and Director of Graduate Studies)
Dr Jim Secord
Dr Liba Taub (Museum Curator)

Associate Lecturer

Dr Deborah Thom

Affiliated Lecturers

Dr Soraya de Chadarevian (Senior Research Associate)
Dr Patricia Fara
Dr Marina Frasca-Spada
Dr Richard Jennings
Dr Sachiko Kusukawa

Dr James Moore

College Research Fellows

Dr Serafina Cuomo (Christ's)

Dr Silvia Frenk (Newnham)

Ms Katherine Hawley (Newnham)

Dr Matthias Hild (Christ's)

Dr Reviel Netz (Caus)

Dr Constantine Pagonis (Wolfson)

Wellcome Research Fellows

Dr Silvia Frenk (Wellcome)

Dr Ole Grell (Wellcome Senior Research Fellow)

Dr John Henderson (Wellcome Senior Research Fellow)

Dr Michael Stolberg (Heisenberg Fellow)

Dr Helen Valls (Wellcome)

HPS Affiliated Research Scholars

Dr Emm Barnes

Dr Andrew Barry

Dr German Berrios

Professor Andrew Bowie

Dr Michael Bravo

Dr Janet Browne

Mr Gerd Buchdahl

Dr Jeremy Butterfield

Dr Brian Dolan

Dr Matthew Donald

Dr Richard Grove

Professor Mary Hesse

Dr Mark Hogarth

Dr Nick Hopwood

Professor Geoffrey Lloyd

Professor Stephen Mason

Dr Joan Mason

Dr Hélène Mialet

Dr Dorinda Outram

Dr Sandu Popescu

Professor Michael Redhead

Professor Martin Rudwick

Dr Otto Sibum

Dr William Smeaton

Dr Richard Smith

Dr Emma Spary

Dr Jon Topham

Professor Gerard Turner

Dr Paul White

Dr Frances Willmoth

Professor Elie Zahar

Wellcome Associates 1997

Dr Debbie Banham

Dr Helen Brock

Dr Peter Jones

Dr Roger King

Dr Julius Rocca

Dr Christine Salazar

Ms Anne Secord

Dr Mark Weatherall

HPS Visiting Scholars

Professor Alick Bearn

Dr Joseph Berkovitz

Dr Emmanuel Eze

Professor Robert Fox

Professor Judith Grabiner

Dr Emily Grosholz

Dr David Howie

Dr Federico Laudisa

Dr Philip Rehbock

Dr Orly Shenker

Dr Ana Simoes

Professor Matti Sintonen

HPS Visiting Students

Mr Darrin Belousek

Dr Montse Cabre

Ms Elizabeth Green Musselman

Mr Helios Herrera

Mr Andreas Mayer

Mr Massimiliano Pagani

Ms Silvia Persicone

Mr Michael Reidy

Dr Janneke van Dis

Wellcome Visiting Scholars

Dr Bruce Moran

Dr Terrie Romano

Dr David West

Wellcome Visiting Students

Mr Carmel Ferragud

Ms Cristina Sendra-Mocholi

Mr Alfons Zaroso

PUBLICATIONS, LECTURES AND CONFERENCES

German Berrios

Publications

With F. Fuentenebro, *Delirio* (Madrid: Trotta, 1997)

'Behavioural Disorders' in R. Macfarlane D.G. Hardy (eds), *Outcome after Head, Neck and Spinal Trauma and medicolegal guide*. (Oxford: Butterworth Heinemann, 1997), 100-106.

With J.I. Quemada, 'La neuropsiquiatria del daño cerebral traumático' in C. Pelegrin, J.M. Muñoz and J.I. Quemada (eds), *Neuropsiquiatria del daño cerebral traumático*. (Barcelona: Prous Science, 1997), 1-10.

'Historical aspects of Obsessive-Compulsive disorder' in J.A. Den Boer and H.G.M. Westernberg (eds), *Focus on Obsessive-Compulsive Disorder*. (Amsterdam: Syn-Thesis, 1997), 11-31.

'El Nacimiento de una Revista' in *Revista Gallega de Psiquiatría y Neurociencias* 1 (1997), 3-6.

With J. Olivares, 'Por qué la Historia debería ser una ciencia básica para la psiquiatría?' in *Revista Gallega de Psiquiatría y Neurociencias* 1 (1997), 70-83.

'The Origins of Psychosurgery' in *History of Psychiatry* 8 (1997), 61-82.

'The scientific origins of electroconvulsive therapy' *History of Psychiatry* 8 (1997), 105-119.

With D.M. Girling, 'On the symptomatology of left-sided temporal lobe atrophy by A. Pick' in *History of Psychiatry* 8 (1997), 149-162.

With M. Sierra, 'Depersonalization: a conceptual history' in *History of Psychiatry* 8 (1997), 213-229.

With F. Fuentenebro, 'Charles Blondel and La Conscience Morbide' in *History of Psychiatry* 8 (1997), 277-295.

Lectures, Conferences and Other Presentations

January 1997

'Dysthymia', Barcelona.

March 1997

'Psychopathology', Lausanne.

July 1997

'Memory disorders', Heidelberg.

September 1997

'Psychopathology', Paris.

October 1997

'Henry Ey and his contribution to Psychiatry', Perpignan.

'Research in Psychiatry', Vigo.

December 1997

'Nineteenth Century British Views on the Relationship between Mental Illness and Suicide', Bordeaux.

In Press

With E.S. Paykel, *Psychiatric consequences of brain damage* in Fawcett et al (eds) *Brain Damage and Brain Repair* (Oxford University Press).

'History of Psychiatric Taxonomy During the 19th Century' in Wallace H (ed.) *Handbook of History of Psychiatry* (Yale University Press).

With I.S. Marková, 'Insight in the Psychosis: a Conceptual History' in A. David and D. Amador (eds), *Insight in the psychosis* (New York: Oxford University Press).

With C.S. Kan 'Dysmorphophobia: from Morselli to ICD-10' in L. Sanchez-Planell and L. Hollander (eds), *Dysmorphophobia* (American Psychiatric Press).

With E. Chen, 'Neural Network Models in Psychiatric Diagnosis and Symptom Recognition' in D.J. Stein (ed.), *Neural Networks and Psychopathology*, (Cambridge: Cambridge University Press).

With E. Chen, 'The Nature of Delusions: a hierarchical Neural-Network Approach' in D.J. Stein (ed.), *Neural Networks and Psychopathology*, (Cambridge: Cambridge University Press).

'The History of Psychiatric Concepts' in Helmchen H. et al (eds) *Psychiatrie der Gegenwart* (Berlin: Springer).

'Late Onset Mental Disorders: a Conceptual History' in Marneros (ed.), *Late Onset Mental Disorders* (London: Gaskell).

R. Sprengelmeyer and G.E. Berrios et al, 'Disgust Implicated in Obsessive-Compulsive Disorder' in *Proceedings of the Royal Society: Biological Sciences*.

A. Bulbena and G.E. Berrios (eds), *Measurement in Psychiatry* (Aran: Madrid).

With J.Hodges, *Memory Complaints: Neuropsychiatric Aspects* (Cambridge, Cambridge University Press).

Andrew Bowie

Publications

From Romanticism to Critical Theory. The Philosophy of German Literary Theory (London: Routledge, 1997).

Edited and Introduced, *Manfred Frank: The Subject and the Text. Essays in Literary Theory and Philosophy* (Cambridge: Cambridge University Press, 1997).
 'The Meaning of the Hermeneutic Tradition in Contemporary Philosophy' in A. O'Hear (ed.), *'Verstehen' and Humane Understanding*, Royal Institute of Philosophy Lectures (Cambridge: Cambridge University Press, 1997), 121-144.
 'Beyond the Derrida Affair, The Future of British Philosophy in Europe' in Baldwin, Thomas (ed.) *Taking Derrida Seriously* (Cambridge: Cambridge University Press, 1997).
 'Critiques of Culture' in W. van der Will and E. Kolinsky (eds), *Cambridge Companion to Modern German Culture* (Cambridge: Cambridge University Press, 1997).
 'Confessions of a 'New Aesthete': a Response to the 'New Philistines'' in *New Left Review* September-October (1997).

In Press

Introduction to, Edition and Translation of, *F.D.E. Schleiermacher, Hermeneutics and Criticism, and Other Texts on Hermeneutics* (Cambridge: Cambridge University Press, 1998).
Cambridge Companion to Schelling (Cambridge: Cambridge University Press, forthcoming).
 'Aesthetics of Music' in *New Grove Dictionary of Music and Musicians* (London: Macmillan, 1998).
 'F.W.J. Schelling' in *New Routledge Encyclopedia of Philosophy* (London: Routledge, 1998).
 'Critical Theory and Literature' in C. Norris (ed.), *Cambridge Companion to Literary Theory* (Cambridge: Cambridge University Press, 1998).
 'Romantic Music Aesthetics' in Jim Samson (ed.), *Cambridge History of Nineteenth Century Music* (Cambridge: Cambridge University Press, 1998).
 'German Philosophy Today: Between Idealism, Romanticism and Pragmatism', Royal Institute of Philosophy Lectures, *German Philosophy Since Kant* (Cambridge: Cambridge University Press, 1999).

Michael Bravo

Lectures, Conferences and Other Presentations

April 1997

'The Precise Scientific Traveller', Department of Environmental History and History of Ideas, Umeå University, Sweden.

'Collection and Comparison in the Sciences', Museum of the History of Science, Oxford University.

May 1997

'The Anti-Anthropology of Islanders and Highlanders', precirculated paper, with commentary by Professor John Gledhill, History and Anthropology seminar, Manchester University.

'Historioloquy and Hospitality in the Field', precirculated paper, with commentary by Dr. Dorinda Outram.

June 1997

'Varieties of Scientific Experience' conference, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin.

November 1997

Senior Seminar, Social Anthropology, Manchester University.

August 1997

'The Use of Fieldwork as a Research Method for Understanding the Scientific Practices of Maritime Coastal Sketching'. Presentation delivered to the Swedish Polar Secretariat and the Northern Space Group, aboard the icebreaker Polar Star (79°30'N, 10°E).

'The Accuracy of Ethnoscience', pre-circulated paper, with commentaries by Peder Anker and Nina Hinke. 'Nature's Histories' conference, Summerakademie, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin.

Commentary for Professor Gregg Mitman, 'High Over the Borders: Visions of International Conservation from Pan Americanism to the Arusha Conference', precirculated paper presented in conjunction with three documentary films about natural history. 'Nature's Histories' conference, Summerakademie, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin.

In Press

'The Anti-Anthropology of Highlanders and Islanders' in *Studies in the History and Philosophy of Science*.

'Precision and Curiosity in Scientific Travel: James Rennell and the Orientalist Geography of the New Imperial Age 1760-1830' in J. Elsner & J. P. Rubiés (eds), *Voyages and Visions: Towards a Cultural History of Travel* (London: Reaktion Books, forthcoming).

Humboldtian Science in G. Good (ed.), *Sciences of the Earth: an Historical Encyclopaedia* (Garland, forthcoming).

'Polar Science' in A. Hessenbruch (ed.), *Reader's Guide to the History of Science* (London and Chicago: Fitzroy Dearborn, forthcoming).

'Expeditions' in A. Hessenbruch (ed.), *Reader's Guide to the History of Science* (London and Chicago: Fitzroy Dearborn, forthcoming).

Review of Barbara E. Mundy, *The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas* in *Bulletin of Latin American Studies* 17 (forthcoming).

Janet Browne

Publications

'Officers and Council Members of the British Society for the History of Science 1947-1997' in *British Journal for the History of Science* 30 (1997), 77-89.

'What Darwin Started: Sexual Selection and Human Diversity' in *King's College Research Centre Newsletter* 1 (1997).

Lectures, Conferences and Other Presentations

February 1997

'Charles Darwin and the Origin of Species', Sermon, King's College Chapel.

October 1997

'A Green History of the Planet', BBC World Service, Programmes 4, 5 and 7.

Gerd Buchdal

Michael Power, 'Speaking Volumes: On Gerd Buchdal's *Metaphysics and the Philosophy of Science*' in the *Times Higher Education Supplement* 18th July (1997). See Press Cuttings, below.

Jeremy Butterfield

Lectures, Conferences and Other Presentations

March 1997

'Philosophical Aspects of Consistent Histories', Florence University.

November 1997

'Aspects of Determinism', Bologna University.

In Press

'Quantum Curiosities of Psychophysics' in John Cornwell (ed.) *Consciousness and Human Identity* (Oxford: Oxford University Press, 1998), 35 pages.

'Determinism and Indeterminism', in Edward Craig (ed.), *Routledge Encyclopedia of Philosophy* (London: Routledge, 1998), 12 pages.

Anjan Chakravartty

In Press

'Semirealism' in *Studies in History and Philosophy of Science*.

Serafina Cuomo

Publications

'Shooting by the book: Notes on Tartaglia's *Scientia Nova*', in *History of Science* 35 (1997), 155–188.

Review of M.D. Wright's *Cosmology in Antiquity* in *The Classical Review* 47 (1997), 185–187.

Lectures, Conferences and Other Presentations

March 1997

'Pappus and the Five Platonic Bodies', Faculty of History and Philosophy of the Università, La Sapienza, Roma.

September 1997

'The truth of the land: Frontinus and Roman land-surveying' at 'Mathematics in the Ancient World' a joint conference of the British Society for the History of Mathematics and of the Board of Continuing Education of the University of Oxford, Oxford.

In Press

'Collecting Authorities, Constructing Authority in Pappus of Alexandria's *Synagoghe*', in W. Kullmann, J. Althoff and M. Asper (eds), *Gattungen Wissenschaftlicher Literatur in der Antike* (Tuebingen: Narr, 1998), 219–238.

Entry on 'Roman Engineering' for the first volume of the *Enciclopedia Italiana di Storia della Scienza* (Istituto dell'Enciclopedia Italiana, forthcoming).

Lucia Dacome

Publications

'Thomas Reid e la Natura del Se' in *Discipline Filosofiche* VI (1996), 191–203.

Lectures, Conferences and Other Presentations

January 1997

'Vanity and Illusion of the Self in Late Baroque Thought', St John's College, Oxford.

Sylvia De Renzi

Publications

'I draghi di Aldrovandi e le vipere di Redi: a proposito di musei e storia naturale nell'Italia del tardo Rinascimento' in *Intersezioni* 17 (1997) 23-130.

Lectures, Conferences and Other Presentations

May 1997

'Collectors and Conjectures: Identifying Nature in the 17th Century', Museum of the History of Science, Oxford.

'The Speaking Person in the Novel', Discussion on M. Bakhtin, Cambridge Historiography Group, HPS, Cambridge.

July 1997

'What is a Civet? Exotic Animals as Facts and Fictions in 17th-century Rome', SHARP Conference, Magdalene College, Cambridge.

November 1997

'Herodotus and the Microscope: Investigating Dragons in 17th-Century Rome', Natural History Cabinet, HPS, Cambridge.

December 1997

'Robert S. Whipple and the Market in Rare Books of Science, 1920-1950, Birkbeck College, University of London, Conference on 'Medicine, Mortality and the Booktrade'.

In press

'Accademia dei Lincei', 'Accademia del Cimento', entries in A. Hessenbruch (ed.), *Reader's Guide to the History of Science* (London: Fitzoy Dearborn).

'A Fountain for the Thirsty and a Bank for the Pope: Charity, Conflicts and Medical Careers at the Hospital of Santo Spirito in 17th-Century Rome', to be published in A. Cunningham and O. Grell (eds.), *Health Care Provision and Poor Relief in Southern Counter-Reformation Europe* (London: Routledge).

Brian Dolan

Publications

Edited *Science Unbound: Geography, Space and Discipline* (Umeå: Umeå University Press, 1997).

'Introduction: Locating Science' in B. Dolan (ed.), *Science Unbound: Geography, Space and Discipline* (Umeå: Umeå University Press, 1997).

'Transferring Skill: Blowpipe Analysis in Sweden and Britain, 1750–1850' in B. Dolan (ed.), *Science Unbound: Geography, Space and Discipline* (Umeå: Umeå University Press, 1997).

Review of F. Burkhardt, D. Porter, J. Harvey and M. Richmond (eds), *The Correspondence of Charles Darwin, Volume 9* and F. Burkhardt (ed.), *Charles Darwin's Letters: a Selection 1825–1859* in *Annals of Science* 54 (1997), 424–425.

Lectures, Conferences and Other Presentations

March 1997

'Charles Babbage, the 'Temple of Serapis', and the Uniform Representation of Geological Time' for 'Publishing and the World of Print in the Making of Geology', Geological Society of London.

April 1997

'Colourful Features of Nineteenth-Century Natural History Illustration', Wellcome Institute for the History of Medicine, London.

May 1997

'Analysing Antiquity in the Laboratory: Collections, Classifications, and Chemistry', for 'Collection and Comparison in the Sciences', Museum for the History of Science, Oxford University.

In Press

'The Language of Experiment in Chemical Textbooks: Examples from Georgian Britain' in A. Lundgren and B. Bensaude-Vincent (eds), *Communicating Chemistry: Textbooks and their Audiences, 1789–1939* (New York: Science History Publications, 1998).

'Great Chain of Being' for *Oxford Companion to the Body* (Oxford: Oxford University Press, forthcoming).

'Chemistry' and 'John Dalton' in I. McCalman (ed.) *The Age of Romanticism and Revolution: An Oxford Companion to British Culture, 1776–1832* (Oxford: Oxford University Press, 1998).

'Professionalism', 'Affinity', 'Galvanic Battery' and 'Blowpipe' for A. Hessenbruch (ed.) *Reader's Guide to the History of Science* (London: Fitzroy Dearborn, forthcoming).

'Pedagogy Through Print: James Sowerby, John Mawe, and the Problem of Colour Illustration in Early Nineteenth Century Natural History' in *British Journal for the History of Science* (1998).

'Representing Novelty: Charles Babbage, Charles Lyell and the Experiments in Early Victorian Geology' in *History of Science* (1998).

'Crucibles, Fires, Batteries: Humphry Davy, Edward Daniel Clarke and Experimental Chemistry in the Early Nineteenth Century' in *Ambix* (1998).

Review of D.P. Miller and P.H. Reill (eds), *Visions of Empire: Voyages, Botany, and Representations of Nature in British Journal for the History of Science*.

Review of P. Fara, *Sympathetic Attractions: Magnetic Practices, Beliefs, and Symbolism in Eighteenth-Century England* in *Notes and Records of the Royal Society of London*.

Review of P. Theerman and K. Marshall (eds), *Experiencing Nature: Proceedings of a Conference in Honor of Allen G. Debus* in *Bulletin for the History of Medicine*.

Review of G. Williams, *The Great South Sea: English Voyages and Encounters, 1570–1750* in *Journal of Historical Geography*.

Patricia Fara

Publications

'The Attraction of National Interest: Navigational Compasses as Cultural Artefacts' in *British Journal for 18th-Century Studies* 20 (1997).

'The Royal Society's Portrait of Joseph Banks' in *Notes and Records of the Royal Society* 51 (1997), 199–210.

'The Appliance of Science: the Georgian British Museum' in *History Today* 47(8) (1997), 39–45.

'Disciplinary Stories' in *Intellectual News* 2 (1997), 26–9.

Review of Francis Spufford and Jenny Uglow (eds), *Cultural Babbage: Technology, Time and Invention* in *Times Literary Supplement*, 13 June 1997, 36.

Review of Marcia Pointon, *Strategies for Showing: Women, Possession, and Representation in English Visual Culture 1665–1800* in *Textual Practice* 11 (1997), 556–60.

Lectures, Conferences and Other Presentations

January 1997

'Putting Newton on the Mantelpiece', Department of History and Philosophy of Science, University of Cambridge.

'Disciplining Men: Masculinity, Science and the Portraits of Joseph Banks', Clare Hall, University of Cambridge.

March 1997

'How Magnetism Became a Science in the Eighteenth Century', Department of Physics, Loughborough University.

April 1997

'Representations of Newton in the Eighteenth Century', Department of History, University of York.

'Visualizing Genius', Social History Seminar, University of Cambridge.

May 1997

'Disciplining Men: Masculinity, Science and the Portraits of Joseph Banks', National Portrait Gallery, London.

'Representations of Newton in the Eighteenth Century', Department of Art History, University of East Anglia.

June 1997

'Making Isaac Newton a Public Hero', Whipple Museum, University of Cambridge.

August 1997

'Science and Enlightenment', 5-day residential course at Madingley Centre for Continuing Education, University of Cambridge.

November 1997

'Science, Masculinity and the Portraits of Joseph Banks', Institute of Commonwealth Studies, University of London.

'Making a Genius: Representations of Isaac Newton in Eighteenth Century England', Department of Art History, University of Manchester.

'Erasmus Darwin', interview for BBC Radio Scotland.

In Press

Memory (co-edited) (Cambridge: Cambridge University Press, 1998).

'Marginalized Practices' Roy Porter (ed.), *The Cambridge History of Science, Volume 4: Science in the Eighteenth Century* (Cambridge: Cambridge University Press, 1999).

'Historiographical Issues for Eighteenth Century England' in Gregory Good (ed.), *History of the Geosciences* (New York: Garland Encyclopaedias in the History of Science, 1998).

Kate Fletcher

Publications

'The Culture of the Personality': Jan Smuts, Philosophy and Education' in *South African Historical Journal* 34 (1996).

'Bibliography of Recent Works on the History of Science, Medicine and Empire', Web-Page of the Society for the Social History of Medicine, special interest group on *History of Science, Medicine and Empire*.

In Press

'Flower, Sir William Henry (1831-1899)', *New Dictionary of National Biography* (forthcoming).

'Cudworth, Damaris, Lady Masham (1659-1708)', *Dictionary of Literary Biography: British Philosophers, 1500-1899* forthcoming.

John Forrester

Publications

Dispatches from the Freud Wars. Psychoanalysis and Its Passions (Cambridge, Mass. & London: Harvard University Press, 1997).

Truth Games. Lies, Money, and Psychoanalysis, Foreword by Adam Phillips (Cambridge, Mass. & London: Harvard University Press, 1997).

'Psychoanalysis and the Strange Destiny of Envy' in A.S. Byatt and Peter Porter (eds), *New Writing 6* (London: Vintage in association with the British Council, 1997), 47-62.

'Lacan's Debt to Freud: How the Ratman Paid-Off His Debt' in: Todd Dufresne (ed.), *Returns of the "French Freud". Freud, Lacan and Beyond* (New York & London: Routledge, 1997), 67-89.

'Casualties of Truth' in: Suzanne Marchand and Elizabeth Lunbeck (eds.), *Proof and Persuasion. Essays on Authority, Objectivity and Evidence* (Belgium: Brepols, 1996), 219-262.

'On Holding as Metaphor: Winnicott and the Figure of St Christopher' in Val Richards and Gillian Wilce (eds), *Fathers, Families and the Outside World* (London: Karnac Books for the Squiggle Foundation, 1997), 41-58.

Lectures, Conferences and Other Presentations

March 1997

(with Lisa Appignanesi) 'Freud's Women Revisited' Keynote Address, 21st Annual Freud Conference, Deakin University, Victoria, Australia.

'Lessons from the Freud Wars' Keynote Address, 21st Annual Freud Conference, Deakin University, Victoria, Australia.

June 1997

'Research Seminar on Cases' Institut für Wissenschafts- und Technikforschung, University of Bielefeld, Germany.

'The Epistemology and Ethics of Deception in the Human Sciences' Public Lecture, Institut für Wissenschafts- und Technikforschung, University of Bielefeld, Germany.

October 1997

'Psychoanalysis, Science and the Truths of Everyday Life' Paper given to Zangwill Club, Dept. of Experimental Psychology, Cambridge.

December 1997

'Who is in Analysis with Whom? A Reprise', paper given to Universität Klinik für Tiefenpsychologie und Psychotherapie, Vienna.

Marina Frasca-Spada

Publications

'David Hume, the Caliph Omar, and the Burning Issue of Metaphysics' in *Transactions of the Cambridge Bibliographical Society* 11 (1996), 49–58.

'Notes on Intellectual History, History of Philosophy and History of Ideas' in *Intellectual News*, the Newsletter of the International Society for Intellectual History 1 (1996) 30.

'Splendours and Miseries of the Science Wars', editorial article in collaboration with N. Jardine, *Studies in History and Philosophy of Science* 28/2 (1997), 219–35.

'Reality and the Coloured Points in Hume's *Treatise*', two-part article, Part 1, *British Journal for the History of Philosophy* 5/2 (1997), 297–319.

Lectures, Conferences and Other Presentations

January 1997

'Feeling the Pages': Reading, Sentiment, and Hume's 'Science of Human Nature', 26th Annual Conference of the British Society for Eighteenth Century Studies, St John's College, Oxford.

June 1997

Invited member of the Liberty Fund Colloquium 'The Arts of Conversation and Judgement', Edinburgh.

July 1997

'A Passion for Reading: Books, the Imagination and 'Conversibility' in the Eighteenth Century', 5th Annual Conference of the SHARP (Society for the History of Authorship, Reading and Publishing), Magdalene College, Cambridge.

In press

Space and the Self in Hume's 'Treatise' (Cambridge: Cambridge University Press 1998).

'Reality and the Coloured Points in Hume's *Treatise*', two-part article, Part 2 in press, *British Journal for the History of Philosophy* 6/1 (March 1998).

'The Science and Conversation of Human Nature', forthcoming in W. Clark, J. Golinski and S. Schaffer (eds), *The Sciences in Enlightened Europe* (Chicago: The University of Chicago Press, 1998).

'The Existence of External Objects in Hume's *Treatise*: Realism, Scepticism, and the Task of Philosophy', in R. Popkin and J. van der Zande (eds), *The Skeptical Tradition Around 1800: Skepticism in Philosophy, Science and Society* (Dordrecht: Kluwer, 1998).

'Hume's Philosophy *More Geometrico Demonstrata*', review article on D. Garrett, *Cognition and Commitment in Hume's Philosophy* (Oxford: Oxford University Press, 1997) in *British Journal for the History of Philosophy*.

Roger French

Publications

'The use of Alfred of Shareshill's Commentary on *De Plantis* in University Teaching in the Thirteenth Century' in *Viator* 28 (1997).

'Teaching Aristotle's Physical Works in the Early English Universities: *De Plantis*' in *Physis* (1997).

'Foretelling the Future: Arabic Astrology and English Medicine in the Late Twelfth Century' in *Isis* 87 (3) (1997), 453-380.

With Jon Arrizabalaga and John Henderson, *The Great Pox. The French Disease in Renaissance Europe* (Yale University Press, 1997).

In Press

'A life of William Harvey' for a *Genesis* Publication of the English translations of Harvey's Works.

'Berengario da Carpi' in *The Scientific Revolution: an Encyclopedia* (New York: Garland Publishing).

Paula Gould

Publications

'Women and the Culture of University Physics in Late Nineteenth Century Cambridge' in *British Journal for the History of Science* 30 (1997), 127-149.

'Massaging the Message' in *Daily Telegraph*, 6 August (1997) 14. Overall winner of 1997 Daily Telegraph Young Science Writer Competition.

Extract of 'Invisible Minds and Visible Bodies' in *Times Higher Educational Supplement*, 5 September (1997) iv. First Prize in 1997 Menerva Trust /THES essay-writing competition.

Lectures, Conferences and Other Presentations

February 1997

'Visible Electricians and Invisible Technicians: An Experiment in Feminizing the History of Physics', Cambridge Historiography Group, Department of History and Philosophy of Science, Cambridge.

May 1997

'Science on the Mountainside: Gender and Geological Fieldwork, 1870-1914', postgraduate seminar, Centre for History of Science, Technology and Medicine, University of Manchester.

September 1997

'Hertha Ayrton: Public Scientist, Private Suffragist?', conference on 'Voices, Narratives, Identities', Women's History Network, University of Sussex.

In Press

Review of Ruth Lewin Sime Lise Meitner, *A Life in Physics* (Berkeley: University of California Press, 1996) in *Gender and History*.

Katherine Hawley

Publications

'Types of Personal Identity' in *Cogito* 11 (1997), 117–122.

'Thomas S. Kuhn's Mysterious Worlds' in *Studies in History and Philosophy of Science* 27 (1996), 291–300.

Review of James W. McAllister, *Beauty and Revolution in Science*, in *British Journal for the Philosophy of Science* 48 (1997), 297–299.

Lectures, Conferences and Other Presentations

October 1996

'Types of Personal Identity', Amoral Sciences Club, Cambridge.

December 1996

'Identity over Time', Philosophy Faculty, Cambridge.

July 1997

'Temporary Properties', Joint Session of the Aristotelian Society and the Mind Association, Warwick.

November 1997

'Criteria of Identity', University of Sheffield.

December 1997

'Criteria of Identity', Moral Sciences Club, Cambridge.

'Fading Away', Department of History and Philosophy of Science, University of Cambridge.

In Press

'Why Temporary Properties are not Relations between Physical Objects and Times' in *Proceedings of the Aristotelian Society* (1997–98).

'Indeterminism and Indeterminacy' in *Analysis* (1998).

Matthias Hild

Lectures, Conferences and Other Presentations

September 1997

A Representation Theorem for Iterated Contractions, Society for Analytic Philosophy, Munich.

October 1997

'What It Takes to be a Group: Pareto vs. Diversity', Popper Seminar, LSE.

'Updating Without the Partitioning Assumption', Department of Economics, Trento.

In Press

'The Coherence Argument Against Conditionalization' in *Synthese*.

With R. Jeffrey and M. Risse, 'A Generalization of Aumann's Theorem', in Skyrms et al (eds.), *The Logic of Strategy* (OUP, forthcoming).

Nick Hopwood

Publications

'Biology between University and Proletariat: The Making of a Red Professor' in *History of Science* 35 (1997), 367-424.

Review of Lynn K. Nyhart, *Biology Takes Form: Animal Morphology and the German Universities, 1800-1900* in *Medical History* 41 (1997), 110-112.

Review of Atina Grossmann, *Reforming Sex: The German Movement for Birth Control and Abortion Reform 1920-1950* in *German History* 15 (1997), 293-294.

Review of Ute Deichmann, *Biologists under Hitler* in *Annals of Science* 54 (1997), 525-526.

Lectures, Conferences and Other Presentations

July 1997

'The Form of Our Body: Modelling, Mechanism and the Microtome in Late Nineteenth-Century Embryology', meeting of the International Society for the History, Philosophy and Social Studies of Biology, Seattle.

November 1997

'Embryology Last Century: Models and Mechanisms', Developmental Biology Seminar Series, University of Cambridge.

'Producing Development: Norming Human Embryos', Society for the Social History of Medicine and British Society for the History of Science conference on The Meanings of Practice, University of Manchester.

December 1997

'Menschliche Embryonen zwischen Darwinismus und Entwicklungsnormen', conference on Evolutionsbiologie von Darwin bis heute, Institut fuer Wissenschaftsgeschichte, University of Goettingen.

In Press

'Haeckel, Ernst Heinrich Philipp August', in Arne Hessenbruch (ed.), *Readers Guide to the History of Science* (London: Fitzroy Dearborn, forthcoming).

'Holism', in *Oxford Companion to the Body* (Oxford: Oxford University Press, forthcoming).

Review of Mitchell G. Ash and Alfons Söllner (eds), *Forced Migration and Scientific Change: Emigré German-Speaking Scientists and Scholars after 1933*, in *German History*, forthcoming.

Review of Manfred Berg and Geoffrey Cocks (eds), *Medicine and Modernity*.

'Public Health and Medical Care in Nineteenth and Twentieth Century Germany', in *The Lancet*, forthcoming.

Nick Jardine

Publications

'The Mantle of Müller and the Ghost of Goethe: on the Entanglements of the Sciences in History', in D. Kelley (ed.), *History and the Disciplines* (Dordrecht: Kluwer, 1997), 297-318.

'Intellectual History and Philosophy of Science' in *Intellectual News*, Newsletter of the International Society for Intellectual History 1 (1996), 33.

'Splendours and Miseries of the Science Wars', editorial article in collaboration with M. Frasca-Spada, *Studies in History and Philosophy of Science* 28/2 (1997), 219-35.

Lectures, Conferences and Other Presentations

February 1997

'Splendours and Miseries of the Science Wars', History and Philosophy of Science.

July 1997

'A challenge to the reader: Petrus Ramus on *astrologia* without hypotheses', Wolfenbuettel (in collaboration with Alain Segonds).

In press

'The places of astronomy in early modern culture' in *Journal for the History of Astronomy* 28 (1997).

'Keeping order in the school of Padua: Jacopo Zabarella and Francesco Piccolomini on the offices of philosophy', in E. Keßler (ed.), *Order and Method in the Renaissance*.

'Inner History: Or, How to End Enlightenment', in W. Clark, J. Golinski and S. Schaffer (eds), *The Sciences in Enlightened Europe* (Chicago: The University of Chicago Press, 1998).

With A. Segonds, 'Kepler as reader and translator of Aristotle', forthcoming in C. Blackwell and S. Kusukawa (eds), *Conversations with Aristotle*.

Richard Jennings

Publications

'Scientific Conduct and Policy' Essay review of Lesley Grayson, *Scientific Deception in Science and Public Policy* 24 (1997), 140-142.

In press

'A Philosophical Consideration of Awareness' in *Applied Animal Behaviour Science*.

'The Social in Science and Science in Society' in *Social Epistemology*.

Martin Kusch

Publications

'Husserl and Heidegger on Meaning', in Jaakko Hintikka, *Lingua Universalis vs. Calculus Rationcinator: An Ultimate Presupposition of Twentieth-Century Philosophy* (Jaakko Hintikka Selected Papers, Volume 2 - Dordrecht: Kluwer, 1997), 240-68.

'Theories of Questions in Turn-of-the-Century German-speaking Philosophy', in Matti Sintonen (ed.), *Knowledge and Inquiry: Essays on Jaakko Hintikka's Epistemology and Philosophy of Science* (Poznan Studies in the Philosophy of Sciences and the Humanities, Volume 51 - Amsterdam: Rodopi, 1997), 41-60.

'The Sociophilosophy of Folk Psychology' in *Studies in the History and Philosophy of Science* 28 (1997), 1-25.

Review of D. E. Leary (ed.), *Metaphors in the History of Psychology* in *British Journal for the History of Science* 30 (1997), 104-105.

Lectures, Conferences and Other Presentations

April 1997

'The Rational and the Social: A Sociologistic Manifesto', Department of History and Philosophy of Science, University of Cambridge.

July 1997

'Folk Psychology as a Social Institution', Department of Medical Psychology, University of Munich.

'The Imageless Thought Controversy Revisited', Max-Planck Institute for Psychological Research, Munich.

October 1997

'Experimental and Social Order in Turn-of-the-Century German Psychological Research Schools', Psy-Studies Seminar, Department of History and Philosophy of Science, University of Cambridge.

Sachiko Kusakawa

Publications

'Leonhart Fuchs on the Importance of Pictures' in *Journal of the History of Ideas* 58-3 (1997), 403-27.

'Vinculum Concordiae: Lutheran method by Philip Melanchthon' in Daniel A. Di Liscia, Eckhard Kessler and C. Methuen (eds), *Method and Order in Renaissance Philosophy of Nature* (Aldershot: Ashgate, 1997).

'Incunables and Sixteenth-Century Books', in A. Hunter (ed.), *Scientific Books, Libraries and Collectors* (Aldershot: Scolar Press, 1997).

Lectures, Conferences and Other Presentations

February 1997

'Wittenberg University Library' History of the Book Seminar, All Souls' College, Oxford.

July 1997

'Faithful Readings: meditational diagrams of Nicholas of Flue', SHARP Conference, Magdalene College, Cambridge.

In Press

Philip Melanchthon: Orations on philosophy and on education wrote introduction and notes; translated with C. F. Salazar (Cambridge: Cambridge University Press, 1998).

'Reading Pictures: Nicole Oresme's Transformation of Aristotelian Philosophy', essay review of Claire Richter Sherman, *Imaging Aristotle: Verbal and Visual Representation in Fourteenth-Century France* (Berkeley and Los Angeles: University of California Press, 1995), to appear in *Studies in History and Philosophy of Science*.

Peter Lipton

Publications

'Inference to the Best Explanation' in Paul Edwards (ed.), *Encyclopedia of Philosophy* (supplementary volume) (New York: Macmillan, 1997).

'Explanation' in *Encarta98 Encyclopedia*.

'Laws of Nature' in *Encarta98 Encyclopedia*.

Lectures, Conferences and Other Presentations

January 1997

'The Epistemology of Testimony', Queen's University Belfast.

'The Epistemology of Testimony', Trinity College, Dublin.

'The Epistemology of Testimony', HPS, Cambridge.

February 1997

'Binding the Mind', Moulton Society, Leys School, Cambridge.

'The Epistemology of Testimony', Historiography Reading Group, Cambridge.

March 1997

'Semantic Externalism', Psychopathology Think Tank, Cambridge.

'The Epistemology of Testimony', King's College London.

June 1997

'All Else Being Equal', Conference in Honour of Michael Redhead, HPS, Cambridge.

July 1997

'Prediction and Prejudice: Cambridge and the Philosophy of Science', International Summer School, Cambridge.

December 1997

'Scientific Testimony', King's College London.

In Press

'Cambridge Philosophy of Science', in S. Ormrod (ed.) *Cambridge Contributions* (Cambridge University Press, forthcoming).

'All Else Being Equal', in H. Brown, J. Butterfield & C. Pagonis (eds.) *From Physics to Philosophy* (Cambridge University Press, forthcoming).

'The Best Explanation of a Scientific Paper', *Philosophy of Science*, forthcoming.

'The Epistemology of Testimony' in *Studies in the History and Philosophy of Science*, forthcoming.

'Induction' (ch. 1 of *Inference to the Best Explanation*) in M. Curd & J. Cover (eds), *Philosophy of Science: The Central Issues* (W. W. Norton, forthcoming).

'Binding the Mind', in J. Cornwell (ed.), *Interdisciplinary Approaches to Consciousness* (Oxford University Press, Forthcoming).

'Inference to the Best Explanation', in W. Newton-Smith (ed.) *A Companion to the Philosophy of Science* (Blackwell, forthcoming).

Review of Douglas Ehring, *Causation and Persistence* and Michael Tooley, *Time, Tense and Causation* in *The Times Literary Supplement*, forthcoming.

Review of Roger Penrose, *The Large, the Small and the Human Mind* in *Philosophy*, forthcoming.

Geoffrey Lloyd

Publications

Greek Science after Aristotle (Japanese translation).

'Experiment' in *Oxford Classical Dictionary*, 3rd edition, 580–581.

'Finite and Infinite in Greece and China', *Chinese Science* 13 (1997), 11–34.

'The Comparative History of pre-Modern Science; the Pitfalls and the Prizes' in *Studies in the history and philosophy of Science* 28 (1997), 363–368.

'*Exempli Gratia*: to Make an Example of the Greeks' in *Extreme-Orient, Extreme-Occident* 19 (1997), 139–151.

'Appearance v. Reality: Greek and Chinese Comparisons and Contrasts' in H. C. Gunther and A. Rengakos (eds), *Beitrage Zur Antiken Philosophie* (Stuttgart, 1997), 303–317.

Lectures, Conferences and Other Presentations

April 1997

'The Uses and Abuses of Classification: Ancient Greek and Chinese Reflections', Marett Memorial Lecture, Oxford.

'Metaphor and Allegory: The Problem of Metaphor' Corpus Christi College,

April-May 1997

Series of lectures and seminars on various topics, invited by the Ecole des Hautes Etudes en Sciences Sociales (Professors Francois Hartog and Francis Zimmermann) and the Ecole Normale Supérieure (Professor Francis Wolff), Paris.

April 1997

Radio France broadcast, discussion on *Archipel Sciences*.

May 1997

Interview with ESPRIT magazine

'Sur le Bon et Mauvais Usage de la Classification: des Reflexions Grecques et Chinoises', Ecole Normale Supérieure, Paris

'Population Size and Demographic Structure in the Ancient World' conference, Cambridge.

'Kerdos', co-organised conference, Cambridge.

June 1997

'Greco-Roman and Chinese Technology: Stereotypes, Institutions and Ideologies', Universidad Complutense de Madrid.

November 1997

Recorded discussion in BBC Radio Programme 'Giants' Shoulders'.

Joan Mason

Publications

'Not Indeed Sans Reproche', review of Renee Clair (ed.), *The Scientific Education of Girls: Education beyond Reproach?* in *Higher Education Review* 30 (1997), 81-84.

'Gender Dimensions in Science', review of Gerhard Sonnert and Gerald Holton's 'Who Succeeds in Science? The Gender Dimension and 'Gender Differences in Science Careers. The Project Access Study' (Rutgers UP, NJ USA) in *Science and Public Policy*, December (1997).

Lectures, Conferences and Other Presentations

July 1997

'The Rising Tide: the Production of the 1994 Report on Women in Science, Engineering and Technology in the UK', ICHS meeting, Liege.

September 1997

'Women and Science', UN Conference on Human Rights, Murcia, Spain.

Stephen F. Mason

Publications

'The Science and Humanism of Linus Pauling (1901-1994)' in *Chemical Society Reviews* 26 (1997), 29-39.

'Extraterrestrial Handedness' in *Nature* 389 (1997), 804.

Review of Jeremy Bernstein, *A Theory for Everything* in *Endeavour* 21 (1997), 43-44.

Review of C. H. Evans (ed.) *Episodes from the History of the Rare Earth Elements* in *Ambix* 44 (1997), 110-111.

Anna Mayer

Publications

'Moralizing Science: The Uses of Science's Past in National Education in the 1920s', in *British Journal for the History of Science* 30 (1997), 51-70.

Lectures, Conferences and Other Presentations

November 1997

Organised conference, 'Intellectuals, Citizenship, and the Healthy Society. An Interdisciplinary Workshop on Utopianism and Virtue in Interwar Britain', Wellcome Institute, London.

'A Combative Sense of Duty': National Culture, Englishness and the Scientists', Wellcome Institute for the History of Medicine, London.

James Moore

Publications

'Wallace's Malthusian Moment: The Common Context Revisited' in Bernard Lightman (ed.), *Victorian Science in Context* (Chicago: University of Chicago Press, 1997), 290–331.

'Green Gold: The Riches of Baron Ferdinand von Mueller' in *Historical Records of Australian Science* 11 (1997), 371–88.

'All Drama but No Crisis,' review of Peter J. Bowler, *Life's Splendid Drama: Evolutionary Biology and the Reconstruction of Life's Ancestry, 1860–1940* in *Times Higher Education Supplement* 23 May (1997), 21.

'Darwin's Traducer,' review of Joy Harvey, *'Almost a Man of Genius': Clemence Royer, Feminism, and Nineteenth-Century Science* in *Times Literary Supplement* 24 October (1997), 40.

Lectures, Conferences and Other Presentations

April 1997

Interview with Howard Stableford and film extract, *The Knowledge*, Open Saturday, BBC 2.

June 1997

Interview with Howard Stableford and film extract, *Finished with Science?*, Open Saturday, BBC 2.

July 1997

Interview with Sharon Carleton, *The Science Show*, ABC Radio National, Sydney.

September 1997

'The History of Science as Public Culture?', British Society for the History of Science 50th anniversary conference, held with the British Association Annual Festival of Science, University of Leeds.

November 1997

Interview with Libby Purves, *Mysterious Ways*, pt 3, *Church and State*, BBC Radio 4.

December 1997

Interview with Libby Purves, *Mysterious Ways*, pt 5, *Education and the Status of Women*, BBC Radio 4.

In Press

'Counter Movements in Science' in Arthur Marwick et al (eds), *The Sixties: Mainstream Culture and Counter Culture* A103, *An Introduction to the Humanities*, Block 6, Unit 27 (Milton Keynes: Open University Press, 1998).

'Here's History of Science' in Gwilym Beckerlegge and James Moore, *Religion and Science in Context*, A103, An Introduction to the Humanities, Block 4, Units 16-17 (Milton Keynes: Open University Press, 1998).

'Telling Tales: Evangelicals and the Darwin Legend' in David N. Livingstone, Darryl G. Hart, and Mark A. Noll (eds), *Evangelical Encounters with Science* (New York: Oxford University Press, 1998).

(reprint) 'A World Away: Wallace's Malthusian Moment' in Brian P. Dolan (ed.), *Science Unbound: Geography, Space and Discipline* (Umea: Umea Universitet, 1998).

'Darwin, Charles' in Gary B. Ferngren, Edward J. Larson, and Darryl W. Amundsen (eds), *The History of Science and Religion in the Western Tradition: An Encyclopedia* (New York: Garland, 1999).

Reviel Netz

Lectures, Conferences and Other Presentations

January 1997

'What is the Formal Basis of The Mathematical Argument?', Tel Aviv.

April 1997

'Diagrams and Manuscripts', Warwick.

September 1997

'Classical Mathematics in the Classical Mediterranean', Cannigione, Sardinia.

In Press

The Shaping of Deduction in Greek Mathematics: A Study in Cognitive History (Cambridge: Cambridge University Press).

'The Limits of Text in Greek Mathematics' in K. Chemla (ed.) *History of Science, History of Text* (Dordrecht: Reidel)

'Greek Mathematicians: a Group Picture' in C. Tuplin (ed.), *Science Matters* (Oxford: Oxford University Press).

'On a Certain Sense of Historiographical Unease: an Essay-Review on Catherine Goldstein: Un théorème de Fermat et ses lecteurs' in *Studies in History and Philosophy of Science*.

'The Aristotelian Paragraph' in *Proceedings of the Cambridge Philological Society*.

'Classical Mathematics in the Classical Mediterranean' in *Mediterranean Historical Review*.

'Archimedes Transformed: the Case of A Result Stating a Maximum for a

'Cubic Equation' in *Archive for History of Exact Sciences*.

'The Articles on Greek Geometry' (125 pages) for the Storia dellascienza (of the Enciclopedia Italiana).

Greg Radick

Lectures, Conferences and Other Presentations

February 1997

'The Question of Ape Speech and Why it Mattered, 1870-1920', Natural History Cabinet, Department of History and Philosophy of Science, University of Cambridge.

May 1997

'Two Views of Evolutionary Progress', Cambridge Post-Graduate Philosophy Conference, Department of History and Philosophy of Science, University of Cambridge.

July 1997

'The Edison Phonograph, the 'Simian Tongue', and the Victorian Debate on Speech Origins', Language Origins Society Annual Conference, University of West Bohemia, Czech Republic.

September 1997

'Two Explanations of Evolutionary Progress', British Society for the Philosophy of Science Annual Conference, University of Oxford.

In Press

'The Origin Unbound' (review essay of Depew and Weber's *Darwinism Evolving* and Wallace and Amigoni's *The Origin Of Species: New Interdisciplinary Essays*) in *Studies in History and Philosophy of Biological and Biomedical Sciences*, vol. 1 no. 2 (1998).

Michael Redhead

Publications

With P. La Rivière, 'The Relativistic EPR Argument' in P. Cohen, M. Horne and J. Stachel (eds), *Potentiality, Entanglement and Passion-at-a-Distance: Quantum Mechanical Studies for Abner Shimony Vol. 2*, (Kluwer, 1997), 207-215.

Review of T. Maudlin, *Quantum Non-Locality and Relativity* in *The Philosophical Quarterly* 47 (1997), 118-120.

Review of Abner Shimony, *Search for a Naturalistic World View in Synthese* 110 (1997), 335-342.

Review of R.M. Hazen and M. Singer, *Why Aren't Black Holes Black? The Unanswered Questions at the Frontiers of Science* in *The New York Times*, 28th September (1997).

Lectures, Conferences and Other Presentations

March 1997

'The Relativistic Vacuum', Physics Department, University of Utrecht.

'A New Proof of Hegerfeldt's Theorem', Foundations of Physics Unit, University of Utrecht.

April 1997

Chaired discussion on 'What is an Electron?' Science Museum.

June 1997

'Science, Non-Science, and Anti-Science', Pembroke College, Cambridge.

In Press

'Should we Believe in Quarks and QCD?' in L. Brown, M. Dresden, L. Hoddesdon and M. Riordan (eds), *The Rise of the Standard Model* (Cambridge: Cambridge University Press, forthcoming).

'Quantum Field Theory and the Philosopher' in T.Y. Cao (ed.), *An Historical Examination and Philosophical Reflection on the Foundations of Quantum Field Theory* (Kluwer, forthcoming).

'The Philosophical Significance of Relativity Theory' in E. Craig (ed.), *Routledge Encyclopedia of Philosophy*.

With T. Ridderbos, 'The Spin Echo Experiments and the Second Law of Thermodynamics' in *Foundations of Physics*.

With R. Clifton, D. Feldman and A. Wilce, 'Hyperentangled States' in *Physical Review A*.

With F. Wagner, 'Unified Treatment of EPR and Bell Arguments in Algebraic Quantum Field Theory' in *Foundations of Physics Letters*.

With J. Melia, 'On Local Extensions of the Quantum Foundation: a Critique of Angelides' in *Journal of Mathematical Physics*.

Review of D. Deutsch, *The Fabric of Reality* and L. Smolen, *The Life of the Cosmos* in *The Times Literary Supplement*.

Review of S. Auyang, *How is Quantum Field Theory Possible?* in *The British Journal for the Philosophy of Science*.

Martin Rudwick

Publications

Georges Cuvier, Fossil Bones, and Geological Catastrophes: New Translations and Interpretations of the Primary Texts (Chicago: University of Chicago Press, 1997) xvi + 301pp.

'Recherches sur les Ossements Fossiles: Georges Cuvier et la Collecte des Alliés Internationaux' in Claude Blanckaert and Claudine Cohen (eds), *Le Museum au Premier Siècle de Son Histoire* (Paris: Museum National d'Histoire Naturelle, 1997).

'Smith, Cuvier et Brongniart, et la Reconstruction de la Géohistoire' in Gabriel Gohau and Goulven Laurent (eds), *De la Géologie à Son Histoire* (Festschrift for François Ellenberger, Paris: Société Géologique de France, 1997)

Review of Norman Cohn, *Noah's Flood, The Genesis Story in Western Thought* in *Nature* **385** (1997), 407-8.

Review of David R. Oldroyd, *Thinking About the Earth* in *Metascience* **11** (1997), 7-11.

Review of Brian Baigrie (ed.), *Picturing knowledge in Endeavour* **21** (1997), 46.

Lectures, Conferences and Other Presentations

April 1997

'Bursting the Limits of Time: the Early Construction of Earth-History', Australian National University, University of New South Wales, University of Melbourne, James Cook University.

'Georges Cuvier's Fossil Bones: the Museum as a Place of Knowledge', Sydney University.

'Deluges and Ice Ages: Another Look at Catastrophist Geology', Geological Society of Australia, Melbourne.

July 1997

'Re-staging' Early Geological Fieldwork', XXth International Congress of History of Science, Liège (Belgium).

'Lyell and the Principles of Geology', Lyell Bicentennial Meeting, Geological Society, London.

September 1997

'Georges Cuvier's Fossil Bones: the Museum as a Place of Knowledge', Palaeontographical Society Sesquicentennial Meeting, Cambridge.

In Press

'Lyell and the 'Principles of Geology' in D.J. Blundell and A.C. Scott, *Lyell: the Past is the Key to the Present* (London: Geological Society, 1998).

Simon Schaffer

Publications

'The Earth's Fertility as a Social Fact in Early Modern Britain', in B Gustafson, R S Porter and M Teich (eds), *Nature and Society in Historical Perspective* (Cambridge: Cambridge University Press, 1997), 124-47.

'Temporary Contemporary: Some Puzzles of Science in Action', in Graham Farmelo and Janet Carding (eds), *Here and Now: Contemporary Science and Technology in Museums and Science Centres* (London: Science Museum, 1997), 31-39.

'Metrology, Metrication and Victorian Values', in Bernard Lightman (ed.), *Victorian Science in Context* (Chicago: Chicago University Press, 1997), 438-74.

'What is Science?', in John Krige and Dominique Pestre (eds), *Science in the Twentieth Century* (Amsterdam: Harwood Academic, 1997), 27-41.

'Pairs et Hors Pairs: l'Effet du Genie' in *Cahiers de Science et Vie* 40 (1997), 10-14.

Lectures, Conferences and Other Presentations

January 1997

'Saints and scientific geniuses', Meeting on Heroes and Genius in Science, Newnham College Cambridge.

February 1997

'Enlightenment Machines and the Place of Science', Seminar in Early Modern Social History, Clare College Cambridge.

'The Body of Natural Philosophers in Restoration England', All Souls, Oxford.

'Visions of Joseph Priestley', National Portrait Gallery, London.

'Automatic Minds', HyperMedia Studies Programme, University of Westminster.

March 1997

'Forgers and Authors in the Baroque Economy', Conference on the Scientific Author, Harvard University.

May 1997

'Automata in the Enlightenment', Maison Francaise, Oxford.

June 1997

'Weighing Coins', Centre for the Philosophy of Natural and Social Sciences, London School of Economics.

'On Astronomical Drawing', Conference on varieties of scientific experience, Max Planck Institute for History of Science, Berlin.

August 1997

Co-organiser and commentator, conference on Histories of Nature, Max Planck Institute for History of Science, Berlin.

September 1997
'History of Science in the Textbooks', BSHS anniversary conference, University of Leeds.

October 1997
'Discovery, Construction and Exploration', Conversazione on Scientific Knowledge: Discovery or Construction, British Academy.

November 1997
Commentator, Conference on Science, Colonialism and the Body, Centre for History of Science and Technology, La Villette, Paris.
'Pure Gold and Newtonian Treasures', seminar on early modern social history, Clare College, Cambridge.
'Automata in 1800', Institute of Historical Research, London.

December 1997
'Field Trials and the State of Nature', Science Studies Programme, Cornell University.

Jim Secord

Publications

Charles Lyell, *Principles of Geology* (London: Penguin Classics, 1997), xlvii + 472 pp. Selected and Edited and Introduced (pp. ix-xliii).

Review of David Oldroyd, *Thinking about the Earth: A History of Ideas in Geology* (London: Athlone, 1996), in *Times Literary Supplement*, 25 April (1997), 29.

'The Cambridge School?' *Times Literary Supplement*, 14 November (1997), 19.

Lectures, Conferences and Other Presentations

January 1997,
'Marketing Speculation: Scientific and Medical Publishing in the 1840s', Sociology of Texts Seminar Series, Centre for English Studies, School of Advanced Study, University of London.

February 1997
'Selling Science in the Age of Reform', Centre for the History of Science, Technology and Medicine, University of Manchester.
'The Role of Expert Knowledge in Society', Seminar Series on Scientific Ethics, Department of Zoology, University of Cambridge.

March 1997
'Charles Lyell and the Philosophical Foundations of the Earth Sciences', Sedgwick Club, Department of Geology, University of Cambridge.

'The Stone Book': Geology and the Industrial Revolution in Publishing',
History of Geology Group, Geological Society of London.

April 1997

'Charles Lyell and the Crises of Faith in the Nineteenth Century', Lyell
Symposium, Exeter College, Oxford.

May 1997

'Henry De la Beche and the Reform of Science', British Geological Survey,
Keyworth, Nottingham.

'Darnton and Grafton on Reading', Historiography Seminar, Department of
History and Philosophy of Science, University of Cambridge.

'Evolutionary Science as Public Culture since the Enlightenment', Science,
Ethics, and Public Policy Seminar, Division of the Humanities and Social
Sciences, California Institute of Technology, Pasadena, California.

'Narrative Landscapes: Interpreting the Scottish Highlands', Department of
History, University of California at Los Angeles, California.

July 1997

'The Romance of Creation: Conversations in Early Victorian London', Society
for the History of Authorship, Reading and Publishing, Magdalene College,
Cambridge.

'The Principles of Geology in the Age of Reform', Invited evening address,
Linnean Society of London.

August 1997

'Narrative Landscapes: Interpreting the Scottish Highlands', Berlin Summer
Academy meeting on 'Nature's Histories', MPIWG, Berlin, Germany.

In Press

Review of Peter Broks, *Media Science before the Great War* (Basingstoke,
Hampshire: Macmillan, 1996), in *Times Literary Supplement*.

Review of Michael Shortland, *Hugh Miller and the Controversies of Victorian
Science* (Oxford: Oxford University Press, 1996), in *British Journal for the History
of Science*.

'Geology' in I. McCalman (ed.) *The Age of Romanticism and Revolution*
(Oxford: Oxford University Press, 1998).

'Robert Chambers' in J. Shattock (ed.), *Cambridge Bibliography of English
Literature MDNM 3d ed., vol. 4* (Cambridge: Cambridge University Press,
forthcoming).

'Andrew Crosse,' 'Henry De la Beche,' 'David Page,' 'John William Salter,'
'Adam Sedgwick,' 'Harry Govier Seeley,' 'Daniel Sharpe,' 'Charles Southwell,'
'William Bernhardt Tegetmeier.' in H. C. G. Matthew (ed.), *New Dictionary of
National Biography* (Oxford: Oxford University Press, forthcoming).

Otto Sibum

Publications

'Charles Augustin Coulomb. Einfache Maschinen in Theorie und Praxis' in Karl von Meyenn (ed.) *Die groben Physiker* (Munchen: Beck, 1997), 243–262.

'Mechanical Equivalent of Heat Apparatus' in Robert Bud and Deborah Warner (eds), *Instruments of Science: A Historical Encyclopaedia vol. 1* (Hamden: Garland Publishing, 1997) 375–377.

Lectures, Conferences and Other Presentations

March 1996

'James Clerk Maxwell and the Education Value of Experiment', delivered at workshop on 'Bedeutung und Vielfalt des Experiments', Zentrum für interdisziplinäre Forschung, Universität Bielefeld.

August 1996

'Experimental Performance and Limits of Representation', Max-Planck-Institute Colloquium, Berlin.

December 1996

'Instrumente der Wissenschaftsgeschichte', delivered at workshop on 'Perspektiven der Instrumentengeschichte in Deutschland', Forschungsinstitut des Deutschen Museums München.

February 1997

'Experimentalkulturen im Wandel: Entstehungsgeschichte eines Modernen Physikalischen Standards', University of Hamburg, Institut für Geschichte der Naturwissenschaften, Mathematik und Technik.

April 1997

'Vermessene Gesten', La Villette, Centre de Recherche en Histoire des Sciences et des Techniques, Paris.

'Experimentalkulturen im Wandel. Zur Entstehungsgeschichte des Energiebegriffs', delivered at conference in commemoration of Hermann von Helmholtz' publication of "Die Erhaltung der Kraft", Magnus Haus, Berlin, June 16th, 1997.

June 1997

'Shifting Scales' delivered at the conference on 'Varieties of Scientific Experience', MPI-WG, Berlin.

July 1997

'Experimentalkulturen im Wandel' delivered at workshop 'Geschichtsdiskurse V: Globale Konflikte, Erinnerungsarbeit und Neuorientierung seit 1945', Centre for Interdisciplinary Research (ZiF), University of Bielefeld.

September 1997

'Experimentelle Wissenschaftsgeschichte', on historiographical and methodological perspectives on the history of experiment and instrumentation

delivered at 80th annual meeting of the Deutsche Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik, Regensburg.

November 1997

Delta Lecture (a joint program of Universities of Cambridge, Oxford, and London) 'Shifting Scales: the Material Culture of Microstudies in Early Victorian Britain', Science Museum, London.

In Press

'Die Sprache der Instrumente. Eine Studie zur Praxis und Representation des Experimentierens' in Michael Heidelberger and Friedrich Steinle (eds), *Experimental Essays - Versuche zum Experiment* (Baden-Baden: Nomos Verlag, 1998).

'An Old Hand in a New System' in Jean-Paul Gaudilliere and Ilana Lowy (eds), *The Invisible Industrialist: Manufactures and the Production of Scientific Knowledge* (London: MacMillan, forthcoming).

'Les Gestes de la Mesure: Joule, les Pratiques de la Brasserie et la Science' in *Annales: Histoire, Science Sociale* spring issue (1998).

'Vosproizvedeniye Mechanicheskogo Ekvivalenta Teploty: Tочnye Instrumenty i Zesty Strogosti v Ranneviktorskoj Anglii', *In Voprosy Istorii Estestvoznaniya i Tekhniki*, forthcoming.

Charlotte Sleight

Publications

Review of Margaret Wertheim, *Pythagoras' Trousers: God, Physics and the Gender Wars in Science and Public Policy* 24 (1997), 281-282.

Lectures, Conferences and Other Presentations

October 1996

'Life, Death and Galvanism', Wellcome Institute, London.

November 1996

'My Faculty and Other Insects: Reading Some Early Twentieth Century Natural History' Historiography Reading Group, History and Philosophy of Science, Cambridge.

May 1997

'The Female of the Species (Must be Deadlier than the Male)', Darwin College, Cambridge.

November 1997

'Basic Instinct: Biology and Anglo-American Literature in the Early Twentieth Century', School of History, University of Kent.

In Press

'Life, Death and Galvanism' in *Studies in History and Philosophy of Science*, forthcoming.

William Smeaton

Publications

'Bertrand Pelletier [1761–1797], Master Pharmacist: his Report on Janety's Preparation of Malleable Platinum' in *Platinum Metals Review* 41 (1997), 86–88.

'History of Science at University College London, 1919–47' in *British Journal for the History of Science* 30 (1997), 25–28.

Richard Smith

Publications

Edited with P. Horden, *The Locus of Care: Families, Communities, Institutions and the Provision of Welfare Since Antiquity* (London: Routledge, 1997).

With P. Horden, 'Introduction', in R.M. Smith and P. Horden (eds.) *The Locus of Care: Families, Communities, Institutions and the Provision of Welfare Since Antiquity* (London: Routledge, 1997), 1–18.

'Periods of 'Feast and Famine': Food Supply and Long-Term Change in European Mortality c. 1200–1800', in S. Cavaciocchi (ed.) *Alimentazione et Nutrizione Secc. XIII-XVIII* (Le Monnier, 1997), 160–86.

'Geographical Diversity in the Resort to Marriage in Late Medieval Europe: Work, Reputation and Unmarried Females in the Household Formation Systems of Northern and Southern Europe', in P.J.P. Goldberg (ed.), *Women in Medieval English Society* (Sutton Publishing, 1997), 16–59.

Lectures, Conferences and Other Presentations

May 1997

'Mortality Levels and Trends Among English Landlords, Monks and

Parishioners c. 1250–1600', University of Oxford Medieval and Economic History Research Seminar, All Souls College, Oxford.

'Poverty, Poor Relief, Gender and Age in English Communities c. 1600–1800', English Early Modern Economic and Social History Seminar, Institute of Historical Research, University of London.

July 1997

'Long Term Trends in English Kin Availability', ESRC Workshop on 'Family, Household and Kin: Social and Spatial Aspects of Change', Kings College, London.

September 1997

'Peasant Marriage in England 1240–1300: The View from the Manorial Court', The Thirteenth Century Conference, University of Durham.

'The Elderly and the English Poor Law c. 1600–1834', International Research centre for Japanese Studies, Kyoto, Japan.

November 1997

'Moral Hazards, Adverse Selection and Free-Riders: Demographic Change and Welfare Provision in England c. 1600–1834', Economic History Society conference on 'The Future of Economic History', Institute of Historical Research.

In Press

'Ageing and Well-Being in Early Modern England: Pension Trends and Gender Preferences Under the English Old Poor Law c. 1650–1800', in P. Johnson and P. Thane (eds) *Old Age from Antiquity to Post-Modernity* (London: Routledge, 1998).

'The English Peasantry 1250–1650', in T. Scott, *The Peasantries of Europe 1200–1700* (London: Longmans, 1998).

'Simulating the Past: SOCSIM and CAMSIM and their Applications in Family and Demographic History', in T.J. Coppock (ed.) *Computers, Information Technology and the Scholarly Disciplines* (Oxford: Oxford University Press, 1998).

Emma Spary

Publications

'Le Spectacle de la Nature. Contrôle du Public et Vision République dans le Muséum Jacobin' in R. Chartier and P. Corsi (eds), *Le Muséum au Premier Siècle de son Histoire* (Paris: Éditions du Muséum, 1997) 13–34.

'L'Invention de l'Expédition Scientifique: l'Histoire Naturelle, l'Empire, et l'Égypte' in B. Lepetit et al. (eds), *L'Invention Scientifique de la Méditerranée* (Paris: Ministère de l'Intérieur 1997).

'Le Musium de Paris. Le Scalpel et l'Etat' in *La Recherche*, July/August (1997), 50-53.

'Making a Science of Taste', *Times Literary Supplement*, January 10, (1997), 14.

'Empires of Vision', review of D. Miller and P. Reill (eds.), *Visions of Empire: Voyages, Botany, and Representations of Nature* in *Metascience* 11 (1997), 189-191.

Review of David J. Sturdy, *Science and Social Status. The Members of the Academie des Sciences, 1666-1750* in *French History* 11 (1997).

Review of Harmke Kamminga and Andrew Cunningham (eds.), *The Science and Culture of Nutrition, 1840-1940* in *British Journal of the History of Science* 30 (1997).

Review of Theodore W. Pietsch (ed.), *Fishes, Crayfishes, and Crabs: Louis Renard's Natural History of the Rarest Curiosities of the Seas of the Indies* in *British Journal of the History of Science* 30 (1997).

Lectures, Conferences and Other Presentations

June 1997

'Interconnecting Networks: Correspondence and the Management of Specimens in Eighteenth Century French Natural History', Enlightenment workshop, Magdalene College, Oxford.

November 1997

'Natural Authorities? The Invention of 'The Public' at the Republican Museum, History of Science Society Annual Meeting, San Diego, California.

'A Taste for Learning: Gastronomy and the Sciences in Post-Revolutionary France', Institute for Historical Research, London.

Liba Taub

Publications

'Scientific Books, Libraries and Collectors; The Background: Ancient Science', commissioned chapter for a new edition of Thornton and Tully's *Scientific Books, Libraries and Collectors*, (ed.) Andrew Hunter (Scolar Press, 1997).

'The Rehabilitation of Wretched Subjects', *Early Science and Medicine* 2,1 (1997) 74-87.

'Aristarchus of Samos'; 'Astronomy in Ancient Worth'; 'Astronomy of Plato'; 'Astronomy of Pythagoras of Samos'; 'Hipparchus of Rhodes' and 'Ptolemy of Alexandria', in John Lankford (ed.), *History of Astronomy: An Encyclopedia* (New York & London: Garland, 1997).

'Cometarium'; 'Orrery' and 'Planetarium', in Robert Bud and Deborah Warner (eds), *Instruments of Science: An Historical Encyclopedia* (New York & London: Garland, 1997).

'Instruments of Alexandrian Astronomy: The Uses of the Equinoctial Rings' in Christopher Tuplin (ed.), *Science in Ancient Greece* (Oxford: Oxford University Press, 1997).

Lectures, Conferences and Other Presentations

April 1997

'Some Truly Rare Books: Science Textbooks', Commemoration Address, Newnham College.

June 1997

'On Some of the Uses of Astronomy in the Hellenistic Period', Seminar on 'Scholars, Intellectuals and Beyond: Themes in the Intellectual History of the Hellenistic Period', All Souls College, Oxford.

September 1997

'Museums and the History of Science as Public Culture', session organizer, chair, and speaker, 'History of Science as Public Culture: The case of Museums', Fiftieth Anniversary conference, British Society for the History of Science, Leeds.

November 1997

'Ancient Uses of Astronomy', Royal Institution, London.

In press

'Learning by Seeing: Planetaria and Public Astronomy Education', *The Sciences and their Publics (1789-1968)*, Proceedings of a conference on 'History of Popularization at Exhibitions and Museums' (La Villette, Paris, May 1995), edited by Brigitte Schroeder-Gudehus, forthcoming.

'Meteorology in the Ancient World' in Gregory A. Good (ed.), *Sciences of the Earth: An Historical Encyclopedia* (New York & London: Garland, forthcoming).

'Eudoxus', in Edward Craig (ed.), *Routledge Encyclopedia of Philosophy*.

'Long, Roger'; 'Shepherd, Anthony' in *New Dictionary of National Biography*.

Deborah Thom

Lectures, Conferences and Other Presentations

June 1997

Organised conference, 'The Family, Civil Society and the State in Twentieth Century Europe', Institute for the Study of Sociology and the Law, Oñati, Spain.

July 1997

'Britain from 1930–1950: the Social History of Medicine', conference on 'Race and Science', Southampton University.

In Press

Nice Girls and Rude Girls: Women Workers and the First World War (London: I.B. Tauris 1998).

Jon Topham

Publications

Frederick H. Burkhardt, Duncan M. Porter, Joy Harvey, and Jonathan R. Topham (eds.), *The Correspondence of Charles Darwin*, vol. 10 (Cambridge: Cambridge University Press, 1997).

'The archives of the British Society for the History of Science' in *British Journal for the History of science* 30 (1997), 75–76.

'Charles Darwin of Woking? Emma Darwin's Recollections of House-Hunting' in *Darwin College Magazine* 12 (1997), 50–54.

Review of Nicolaas Rupke, *Richard Owen: Victorian naturalist* in *Social History of Medicine* 10 (1997), 176–7.

Lectures, Conferences and Other Presentations

February 1997

'"As much a newspaper subject as an horrid murder": William Buckland's *Bridgewater Treatise*', History of Geology Group day-conference, Geological Society of London.

April 1997

'Beyond the "common context": the production and reading of the *Bridgewater Treatises*', Cambridge Historiography Group.

May 1997

'Charles Darwin's Papers: Some History', Cambridge Libraries Group.

July 1997

'The Scientific Book-Trade in Early Nineteenth Century Britain', Society for the History of Authorship, Readership, and Publishing annual conference, University of Cambridge.

In press

Frederick H. Burkhardt, Duncan M. Porter, Jonathan R. Topham, Sheila Dean, and Sarah Wilmot (eds.) *The Correspondence of Charles Darwin*, vol. 11 (Cambridge: Cambridge University Press, 1998).

'Evangelicals, Science, and Natural Theology in Early Nineteenth Century Britain: Thomas Chalmers and the *Evidence* Controversy' in Daryl Hart, David Livingstone and Mark Noll (eds.), *Evangelicals and science* (New York: Oxford University Press, 1998).

'Beyond the "Common Context": the Production and Reading of the *Bridgewater Treatises*' in *Isis*. Forthcoming 1998.

Guest editor, special number of the *British Journal for the History of Science* entitled 'New perspectives in Book History'. Forthcoming, 1998.

'Cambridge Publishing and Bookselling, 1778–1998: the History of Deighton, Bell' in *Transactions of the Cambridge Bibliographical Society*. Forthcoming 1998.

Essay review of Willem B. Drees, *Religion, Science and Naturalism*, (Minerva).

Gerard Turner

Publications

The Practice of Science in the Nineteenth Century: Teaching and Research Apparatus in Teyler's Museum (Haarlem: Teyler's Museum, 1996).

With D.J. Bryden, *A Classified Bibliography on the History of Scientific Instruments* (Oxford: Scientific Instrument Commission, 1997).

'Late Medieval and Renaissance Instruments' in Christopher Walker (ed.) *Astronomy before the Telescope* (London: British Museum Press, 1996) 231–244.

'The Craftmanship of the 'Carolignian' Astrolabe, IC 3042' in W.M. Stevens, G. Beaujouan and A.J. Turner (eds) *The Oldest Latin Astrolabe*, fasciolo speciale, *Physis: Rivista Internazionale di Storia della Scienza* 32 fasc 2–3 (1996) 421–432.

With A.D. Morrison-Low, 'Zinner's Ghosts and a Curious Date: 1576' in *Bulletin of the Scientific Instrument Society* 50 (1996), 6–10.

'An English Ivory Diptych Sundial, c. 1600' in *Sphæra: The Newsletter of the Museum of the History of Science, Oxford* 4 (1996), 2–4.

With Elly Decker, 'An Unusual Elizabethan Silver Globe by Charles Whitwell' in *The Antiquaries Journal* 77 (1997), 23–31.

'An Astrolabe Belonging to Galileo?' in *Nuncius Annali di Storia della Scienza* 12 (1997), 87–92.

Review of Raymond D'Hollander, *L'Astrolabe: les Astrolabes de Musée Paul Dupuy* in *Archives Internationales d'Histoire des Sciences* 46 (1997).

Review of Hemming Andersen, *Historic Scientific Instruments in Denmark* in *Centaurus* 39 (1997), 95–96.

Review of Edward G. Ruestow, *The Microscope in the Dutch Republic: The Shaping of Discovery in Nature* 386 (1997), 141.

Lectures, Conferences and Other Presentations

February 1997

'Standardisation of Measurement in Microscopy, 1665–1865', Centre de Recherche en Histoire et des Techniques, Cité des Sciences et de l'Industrie, Paris.

June 1997

'The Past and Future of the History of Microscopy', Joint Meeting of the British Society for the History of Science and the Royal Microscopical Society, London.

July 1997

'Some Objectives in the Study of Instruments', Scientific Instrument Symposium, XXth International Congress of the History of Science, Liège.

September 1997

'Queen Elizabeth's Instrument Makers', The Cambridge Thomas Harriot Seminar.

In Press

'William Bourne' and 'Joseph Jackson Lister' in *Dictionary of National Biography* (Oxford, forthcoming).

Frances Willmoth

Publications

Edited with Eric G. Forbes and Lesley Murdin, *The Correspondence of John Flamsteed, the First Astronomer Royal, vol. 2, 1682–1703* (Bristol and Philadelphia: Institute of Physics Publishing, 1997).

With Rob Iliffe, 'Astronomy and the Domestic Sphere: Margaret Flamsteed and Caroline Herschel as Assistant Astronomers', in Lynette Hunter and Sarah Hutton (eds), *Women, Science and Medicine, 1500–1700* (Stroud: Sutton Publishing, 1997).

Lectures, Conferences and Other Presentations

May 1997

'Flamsteed and Halley', National Maritime Museum, Greenwich.

Elie Zahar

Publications

Review of C.W. Kilmister, Eddington's Search for a Fundamental Theory: a Key to the Universe in *British Journal for the Philosophy of Science* 48 (1997), 132–139.

'Poincaré's Philosophy of Geometry: on Does Geometric Conventionalism Deserve its Name?' in *SHPMP* 2 (1997), 183–218.

DOCTORATES GRANTED
(SUPERVISOR IN BRACKETS)

Graham Burnett

'El Dorado on Paper: Traverse Surveys and the Geographical Construction of British Guiana 1803–1844' (Jim Secord).

Louis Caruana

'Holism and Our Understanding of Science' (Nick Jardine).

Cristina Chimisso

'Science and Morality: the Philosophy of Gaston Bachelard' (Nick Jardine).

John Lambie

'Emotional Experience and Consciousness' (Tony Marcel).

H. Ray

'The French Jesuit Mission to China' (Simon Schaffer).

Kate Whitaker

'Curiosi and Virtuosi' (Andrew Cunningham).

M.PHIL ESSAY AND THESIS TITLES
(THESIS SUPERVISOR IN BRACKETS)

Anjan Chakravartty

The Epistemological Status of Unobservable Entities.
Correlations, Causation, and Robustness in Nonlocality.
Gender-centric Histories of Early Hominids and the Construction of
Evolutionary Hypotheses.
Thesis: Semirealisms (Peter Lipton).

Lucy Frith

Bayesian Probability and Medical Decision Making.
Dr Simmons, Dr Slop and the Manchester Caesarean Dispute.
Clinical Trials.
Thesis: The Standardization of Medical Practice: Issues in Contemporary
Practice. (John Forrester).

Aileen Fyfe

Natural Theology Transformed: A Century of William Paley's Natural
Theology.
Identifying and Explaining Acts of God in Elizabethan England.
The Creation of 'Richard Dawkins': Images of a Scientist in the Media.
Thesis: Evenings at Home: John Aikin, Anna Letitia Barbauld, and Science
Books for Children (Jim Secord).

Christopher Haley

Making Waves: A History of the Wave Machine.
A Commentary on Ghirardi (1996).
Science Fiction and Post-War Technology: A Case Study.
Thesis: On the Relativistic Spreading of Wave Packets (Michael Redhead).

Robin Koerner

Commitment to Cognitive Claims in Scientific and Religious Paradigms.
The Laws of Nature as Inviolable Facts.
Popularity, Proselytising and Prose: a Comparative Study of Dawkins' Books.
Thesis: Minimising Metaphysics and the Force of Law. Aspects of the Philosophy

of Science - Explanation and Causation - Based on the Inviolability of the Laws of Nature (Peter Lipton).

Tristan Lumley

The Making of Failure: the Atlantic Telegraph of 1857–1858 and the Joint Committee Report into Submarine Telegraphy.

The Displaced Person: Lewis Mumford's Sociology and Technology.

Explanation: Models and Metaphysics.

Thesis: Realism and Social Constructivism Combined: an Impossible Union? (Peter Lipton).

Jeffrey Mackiowak

The Gentleman and the Gorilla.

Another Fine Mess: Realism, its Antitheses, and Other Such 'Very Big Questions'.

Are Malament-Hogarth Supertasks Beyond the (Philosophical) Pale?

Thesis: Science in Literature; Science as Literature: Thermodynamics and Geometry in Late Victorian England (Jim Secord).

Michael Rich

Truth, Anti-Realism and the Miracle Argument.

Representing Euclid in the Eighteenth Century.

The Historical Turn: How Should the Philosophy of Science Draw on the History of Science.

Thesis: Constructing Mathematics: Models, Knowledge and Learning in the Eighteenth Century (Liba Taub).

David Rose

The Ghost in the Nerve Cell: Labelled Lines and Location Perception.

Qualifying Qualia: Dennett's Attack on Phenomenology.

Models and Explanation. A Paradox of the Mental and the Logical.

Thesis: Explaining Creativity and the Conscious/Unconscious Distinction: a Neural Theory (Peter Lipton).

Stephen Snobelen

'An Exacter Model': William Whitson, the Millennium and the Science of the Temple.

Isaac Newton and Socinianism: Associations with a Greater Heresy.

Alternative Origin: the Competing Myth of Isabella Duncan's Pre- Adamite Man (1860).

Thesis: Newton as Heretic: the Strategies of a Nicodemite (Simon Schaffer).

Mindy Sobota

Images of Improvement: the Frontispieces of The Universal Magazine of Knowledge and Pleasure.

The Mismeasure of Woman.

Reproductive Technologies and the Ethics of Choice.

Thesis: Taking the Measure of Women in Postwar Britain (Jim Secord).

Lisa Treweeke

Popularisation and Admiration of Cosmology in the Cosmological Poems of Ronsard and Du Bartas.

Buffon's Mathematical Stand Against Gambling in the 'Essai d'Arithmétique Morale'.

Structuralist Notions of Mathematical Objects and their Applicability.

Thesis: 'Moral' Mathematics and Gambling at Court in 18th Century France (Marina Frasca-Spada).

Fabian Wagner

Gauge Theories of Gravitation.

'No Man is an Island, Entire of Itself': Writing off the Heroic Failure.

Does Incommensurability Refute Realism?

Thesis: Vacuum Correlations in Quantum Theory (Michael Redhead).

Wen-Ji Wang

The Machinery of Moral Discipline: Phrenology and William Alexander Francis Browne's Superintendency of Insane Asylums.

Freedom or/and Mastery; The Patient-Doctor Relationship from Sigmund Freud's Use of Hypnotic Suggestion to that of Psychoanalytic Suggestion.

A Reading of Michel Foucault's 'What is Enlightenment'.

Thesis: Training in Psycho-Analysis (John Forrester).

Surekha Weeraratne

Truth, Character and Moral Authority in Victorian Definitions of the 'Man of Science': A Study of Francis Galton's English Men of Science.

Mapping the World in the 16th Century: The Case of Diego Ribero.

Interpreting Anthropological Encounters.

Thesis: Cartography and Exploration in the Fifteenth and Sixteenth Centuries (Liba Taub).

Lucian Wischik

A Generalisation of the Halting Problem to Non-Finite Computation.

Unconscious Cartesian Daemon.

The Shape of Deduction in Spinoza's Ethics.

Thesis: A Formalisation of Non-Finite Computation (Mark Hogarth).

PART II DISSERTATION TITLES (SUPERVISOR IN BRACKETS)

- James Anderson** 'The Psychology of Causation' (Peter Lipton).
- Bethan Chatters** 'T.C. Morgan and the Problem of Life' (Jim Secord).
- Vincent Chuilon** 'The Bohr-Einstein Debate (Michael Redhead).
- Sibaéle Collins** 'A Brief Overview of Veterinary Medicine in Ancient Greece and the Roman Empire' (Christine Salazaar).
- Tim Darach** 'Vitruvius: Historian of Science?' (Liba Taub)
- Claire Davis** 'The Question of Abortion in Revolutionary Russia 1905-1920 (Harmke Kamminga).
- Kemal De Soysa** 'Circles of Heaven' (Liba Taub)
- Guy Dowman** 'Reductionism and the Mind-Body Problem (Peter Lipton).
- Bill Eden** 'An Evaluation of the Role of Scientists in Shaping Military Weapons Systems' (Simon Schaffer).
- Daniel Ezra** 'Class and Medicine in Industrialising England' (Andrew Cunningham).
- James Goldwater** 'Digital Matter: Nanotechnology and the Recombinant DNA Debate' (Simon Schaffer).
- Claire Hewitt** 'The Royal Botanic Garden, Edinburgh, from 1763 until 1786: an ideal enlightenment site?' (Simon Schaffer).
- Alexandra Jaffe** 'An Analysis of Freud's Writings on Infant Sexuality' (John Forrester).
- Andrew Kocen** 'Galen's Natural Philosophy' (Roger French).
- Chloe Maunsell** 'Gasman and Harrington: A Historiographical Critique' (Nick Jardine).
- Jessica Nash** 'Freaks of Nature: Images of Barbara McClintock' (Jim Secord).
- Elaine Ng** 'Death in the Desert - The Relata of Causation: Facts or Events?' (Peter Lipton).
- Kathryn Piper** 'Veterinary Treatment of the Horse in the First World War' (Jim Secord).
- Daniel Radov** 'War of the Worldviews - John Mack, Alien Abduction, and the Search for Scientific Legitimacy' (Simon Schaffer).
- Adrian Riches** 'Causation and Conditionals' (Peter Lipton).
- Sujit Sivasundaram** 'Getting the Picture Right: a Path Between Reductionism and Dualism' (Frasier Watts).
- Odette Valentine** 'The Preston Institute for the Diffusion of Knowledge: Forerunner of the Modern Technological University, Philanthropic Gesture or Weapon of Social Control?' (Jim Secord).

Alice Wrangham 'Berkeley's Immaterialism in his Time and Our Own' (Marina Frasca-Spada).

Carol Yip 'Vygotsky's "The Problem of the Cultural Development of the Child" and its Reception by Developmental Psychologists in the West' (Deborah Thom).

DOCTORAL RESEARCH IN PROGRESS DURING THE YEAR (SUPERVISOR IN BRACKETS)

- Henry Atmore** (Jim Secord) 'Utopianism and Technology in mid-19th Century Britain'.
- Daniella Bailer-Jones** (Michael Redhead) 'Metaphor and Scientific Understanding'.
- Graham Burnett** (Jim Secord) 'El Dorado on Paper: Traverse Surveys and the Geographical Construction of British Guiana 1803-1844'.
- Louis Caruana** (Nick Jardine) 'Convergent Realism'.
- Anjan Chakravartty** (Peter Lipton) 'Semirealisms'.
- David Chart** (Peter Lipton) 'A Teleological Theory of Explanation'.
- Christina Chimisso** (Nick Jardine) 'The Concept of Progress in the Historiography of the Sciences'.
- Rachel Cooper** (John Forrester) 'Philosophical Issues in the Classification of Mental Diseases'.
- Lucia Dacome** (Marina Frasca-Spada) 'Pictures of the Self in the 18th Century: Locke and his Critics'.
- Dan Fleischer-Brown** (John Forrester) 'Forensic Medicine in an Age of Reform'.
- Kate Fletcher** (Nick Jardine) 'Liberal Philosophy and South African Education, 1902-1924'.
- Palmira Fontes da Costa** (Nick Jardine) 'The Understanding of the Monstrous in 18th Century Britain'.
- Lucio Fregonese** (Simon Schaffer) 'Alessandro Volta'.
- Aileen Fyfe** (Jim Secord) 'Religious Societies and the Development of Popular Science Publishing'.
- Paula Gould** (Jim Secord) 'The Influence of Science on Women's Intellectual and Physical Activities 1870-1914'.
- Lyubov Gurjeva** (Jim Secord) 'Scientific Parenthood in Late 19th Century and Early 20th Century Britain'.
- Graham Hart** (Geoffrey Lloyd and Liba Taub) 'The Cosmology of Claudius Ptolemy'.
- Katherine Hawley** (Peter Lipton) 'Quantum Mechanics and the Philosophy of Language'.
- Christopher Haley** (Liba Taub) 'Nineteenth Century Ether Theories'.
- Sam Inglis** (Peter Lipton) 'Foundationalism and Justification in Naturalized Epistemology'.
- Chiye Izumi** (Geoffrey Lloyd) 'Stereometry in Ancient Greece'.
- Emily James** (Simon Schaffer) 'Science Documentary Films and Scientific Knowledge'.

- Joel Katzav** (Peter Lipton) 'Laws of Nature'.
- Adrian Lane** (Simon Schaffer) 'The Politics of Mid-Nineteenth Century Astronomy and Geodesy'.
- Ghislaine Le Marchant du Planty** (Deborah Thom) 'Modelling violence'.
- Timothy Lewens** (Nick Jardine) 'The Concept of Biological Function'.
- Anna-Katherina Mayer** (Simon Schaffer) 'Moral Education, Intellectuals, and the Public Image of Science: History of Science in Britain, 1916–1959'.
- Adam Mosley** (Liba Taub and Nick Jardine) 'Communication of Natural Knowledge in the Early Modern Period'.
- Richard Noakes** (Simon Schaffer) 'Physicists and ethers in late nineteenth century Britain'.
- Matthew Ratcliffe** (Peter Lipton) 'Purpose and Agency'.
- Greg Radick** (Simon Schaffer) 'History of Investigation into the Evolutionary Origins of Language'.
- Hillary Ray** (Simon Schaffer) 'French Jesuit astronomy and cartography, 1615–1762'.
- Amanda Rees** (John Forrester) 'Western science and medicine in the Colonies'.
- Michael Rich** (Peter Lipton) 'The Miracle Argument in the Case for Scientific Realism'.
- Katinka Ridderbos** (Michael Redhead) 'Foundations of statistical mechanics'.
- Craig Rodine** (Simon Schaffer) 'Mathematics and modernity'.
- Jan Hendrik Schmidt** (Jeremy Butterfield) 'Philosophy of Spacetime Theories'.
- Charlotte Sleight** (John Forrester) 'The Biological Imagination: Science, Fiction and Meaning in the early 20th Century'.
- Stephen Snobelen** (Jim Secord) 'Popularisation of Science in 18th Century Britain'.
- Klaus Staubermann** (Simon Schaffer) 'The photometry of K. F. Zoellner'.
- John Tresch** (Simon Schaffer) 'Edgar Allan Poe, Natural Philosopher'.
- Joerg Tuske** (John Forrester) 'Philosophy of Psychoanalysis, Psychology'.
- Karin Tybjerg** (Geoffrey Lloyd) 'The Rhetoric of Hero of Alexandria in relation to Contemporary Philosophical Debate'.
- Wen-Ji Wang** (John Forrester) 'Epistemological Status of Psychoanalysis'.
- Simon Werrett** (Simon Schaffer) 'Science and the City: the St Petersburg Academy of Science in the 18th Century'.

WHIPPLE MUSEUM OF THE HISTORY OF SCIENCE REPORT



Designated as a museum with an
outstanding collection

Introduction

During 1997, many people contributed to the work of the Whipple. In March, Catriona West joined the Whipple as the Museum Assistant, having completed the M.A. in Museum Studies at the University of Leicester. Tacye Phillipson continued to help, on a casual basis, with many museum projects.

Funding for the inventory/documentation project enabled us to hire a Documentation Specialist, Dr Hester Higton, and a Documentation Assistant, Kemal de Soysa. Both are graduates of the Department.

A grant from the Pilgrim Trust is funding a project to catalogue the Francis Hookam Hand Held Pocket Electronic Calculators; Dr Constantine Pagonis designed the database and Mike Rich catalogued approximately 400 objects.

Several students from the Department contributed time on a volunteer basis to a variety of projects: David Chart, Aileen Fife, Chris Haley, Graham Hart, Adrian Lane, Adam Mosley and Steve Snobelen. From outside the Department, Lindsey Manning spent a week in the Museum gaining work experience and Beth Hogben helped with exhibit preparation.

The Collection

In June, the Secretary of State for Culture, Media and Sport (formerly National Heritage) announced that the Whipple Museum had been Designated as a pre-eminent non-national collection. Only 26 museums in the country, out of approximately 2500, were so designated.

The Whipple has successfully met the standards imposed by the Museums and Galleries Commission for Phase Two Registration.

The Museum is continuing the project, begun in 1996, to complete a full collections inventory and to centralise and reconcile all available collections data, including images of each object. The Museum is grateful to the University for allocating a non-recurrent grant to hire the temporary Document Specialist and Documentation Assistant. The South Eastern Museums Service has awarded the Whipple a matching grant for the project, which is also supported by a private donor. Over 3000 objects have been inventoried, of these approximately 1500 have full computerised catalogue card entries. In addition, Aileen Fife catalogued over 200 botanical teaching diagrams.

The Cambridgeshire County Council awarded the Whipple a grant for conservation work, which has been completed by Celia Honeycombe, the

County Antiquities Conservator. Ms Honeycombe provided a one-day training session for staff and volunteers in a range of conservation techniques. Working as a team we were able to conserve many of the Whipple objects that are now part of the new exhibition in the upper gallery.

Teaching and Exhibitions

The Curator offers lecture-demonstration classes on instruments, models, and collections for Papers I, II and III. Several other lecturers utilise the Museum displays and the collection to illustrate their own lectures.

Case Studies, a series of changing displays which bring the work of the Department into the Museum gallery, continues. Four new studies were installed, all by students within the Department. Graham Hart contributed a wave motion machine display, based on his M.Phil. essay. David Chart broke new ground, by developing a philosophically-oriented case study on models and understanding, which not only utilises models from the Collection, but which offers visitors the opportunity to use a hands-on interactive model of a lung. Aileen Fyfe and Mike Rich presented a case study to celebrate the 50th anniversary of the British Society for the History of Science, examining the history of the history of science within the University. Chris Haley, intrigued by object long on display without a label, provided interpretative material for visitors interested in Piazzzi Smith's unit of measure.

A special afternoon conference, Case Studies at the Whipple Museum, provided the opportunity for four students working on objects in the collection to present their work to a wider audience. The conference was well-attended and students and staff from the Museum of the History of Science at the University of Oxford were particularly welcome.

The need to upgrade fire safety standards provided an opportunity to improve the visitor space in the upper gallery of the Museum. The space has been newly refurbished, with new carpeting and greatly improved lighting. It is here that the new gallery *An University Within Ourselves: Sciences in Cambridge in the Eighteenth Century* has been installed. Support for the new gallery was provided in a number of ways by a variety of individuals and institutions. Trinity College provided funding to develop the exhibition; St John's College and Gonville and Caius College helped pay for conservation work to be done on their instruments.

Outreach

Once again, the Whipple contributed to the University's participation in National Science Week by sponsoring a special Saturday opening for families; several student volunteers helped invigilate.

The Curator, Adam Mosley, and Tacye Phillipson participated a workshop on museum education held at the Fitzwilliam. Adrian Lane, Adam Mosley, Tacye Phillipson and Catriona West attended in a training course on exhibitions in small museums. Hester Higton, Tacye Phillipson and Catriona West developed

teaching materials on Victorian Science to offer to visiting school groups; the programme was tested on enthusiastic students and teachers from St. Paul's School. Catriona West has now completed a special training course on museum education, as part of the Museum's participation in the MAGIC (Museums and Galleries in Cambridge) project.

As part of the Electron Centenary Exhibition at the Science Museum, London, the Whipple loaned a set of electrical Mah-Jong Cards (Wh 4553). An anatomical head (Wh 3276) and an anatomical teaching dummy (Wh 2295) were loaned for a special exhibition at the Sainsbury Centre, designed by post-graduate students in the University of East Anglia Museology programme; the head was featured in the exhibition publicity material. These objects were chosen by a UEA student who had visited the Whipple's Teaching Gallery. A painting of radio telescope by Nan Youngman (Wh 3471) was loaned for a special exhibition of the artist's work held at the Morley Gallery. An orrery made by Benjamin Martin (Wh 3798) continued to be displayed on loan to the National Maritime Museum. Dees from a cyclotron (Wh 3370) remained on display on loan in the Nuclear Physics Gallery at the Science Museum, London.

Acquisitions to the Whipple Collection in 1997

Mathematical model representing a cubic ellipse - Wh 4569

Mathematical model - Wh 4570

Electrical equipment - Wh 4571.1 - Wh 4571.10

Ivory Plaque depicting three astronomers - Wh 4572

A child's educational pamphlet 'The Little Book of Silhouettes' - Wh 4573

A child's educational pamphlet 'How the Union Jack is Made' - Wh 4574

A child's educational pamphlet 'Proverb Guessing Game' - Wh 4575

23 glass crystal models - Wh 4576

A collection of British Mosses presented in a book format - Wh 4577

Radio Valves approximately 270 assorted makers and sizes- 4578

Spectroscope - Wh 4579

3 pairs 'Speera' binocular magnifiers - Wh 4580

8 light bulbs - 4581

Recorder chart - Wh 4582

Wire wound resistor and stand - Wh 4583

6 'Micro dosers' - Wh 4584

D.C Voltmeter - Wh 4585

3 Tuning condensers - Wh 4586

Portable Electrocardiograph - Wh 4587

Variable Condenser - Wh 4588

Direct Reading Ohmmeter - Wh 4589
 Microphone amplifier - Wh 4590
 pH Meter - Wh 4591
 Wheatstone Bridge - Wh 4592
 Metre rule - Wh 4593
 Heat filter - Wh 4594
 Two Stage Universal Colourimeter - Wh 4595
 2 Metal Rectifiers - Wh 4596
 Hygrometer - Wh 4597
 Print titled 'The Comet' - Wh 4598
 Print titled 'Political Astronomy' - Wh 4599
 7 Lecture Advertisements - Wh 4600
 Print showing a table of astronomy - Wh 4601
 Conversion rule - Wh 4602
 22 Magic Lantern Slides - Wh 4603
 Modem - Wh 4604
 Slide rule - Wh 4609
 Booklet illustrating an atlas of the female body - Wh 4610
 7 Jigsaw maps of the world - Wh 4611
 Helmholtz resonators - Wh 4612
 Pocket book of electrical rules and tables - Wh 4613
 Calculator - Wh 4617
 Phrenology Head - Wh 4618
 Framed water-colour of La Comtesse de Genlis - Wh 4619
 Copper voltmeter - Wh 4620
 Key Switch - Wh 4621
 Weston Standard Cell - Wh 4622
 Galvanometer - Wh 4623
 Modem - Wh 4624
 Optical set - Wh 4625
 Lodestone - Wh 4626
 Educational demonstration Transformer - Wh 4627
 Semi Conductor - Wh 4628
 Electrometer - Wh 4629
 Frequency Meter - Wh 4630

Millimeter - Wh 4631
Voltmeter - Wh 4632
Balance - Wh 4633
Flame Photometer - Wh 4634
Electric meter - Wh 4635
Recording Voltmeter - Wh 4636
Galvanometer - Wh 4637
Assorted circuit boards - Wh 4638
Assorted circuit boards - Wh 4639
Polarimeter - Wh 4950
Microscope - Wh 4951
Microtome - Wh 4952
Botanical Growth Lamp - Wh 4953
Melting Pot Apparatus - Wh 4954
Microscope - Wh 4955
Microscope - Wh 4956
Spectrophotometer - Wh 4957
Balance - Wh 4958
Galvanometer - Wh 4959
Galvanometer - Wh 4960
Galvanometer - Wh 4961
Shunts - Wh 4962
Universal adapter - Wh 4963
Power supply unit - Wh 4964
Lucas Contact Breaker - Wh 4965
Oscilloscope Recording Camera - Wh 4966
Lucas Pendulum - Wh 5000
Planisphere - Wh 5172
Sunshine Recorder - Wh 5173
Drawing Instruments - Wh 5174
Mathematical Model - Wh 5175
Crova's disk and Terquem's slide - Wh 5176
Hounsfield Tensometer - Wh 5177
Calorimeter - Wh 5179
Celestial Globe, Indian, 19th Century - Wh 5180

Mayfly Beetle paper mache model - Wh 5181

19 Plates of Natural Phenomena - Wh 5182

Thermometer - Wh 5184

Dynamometer - Wh 5185

Vasculum - Wh 5186

Leech Stick - Wh 5187

Nasal Irrigator - Wh 5188

Thermometer - Wh 5189

Syringe - Wh 5190

Medical Bottle and case - Wh 5191

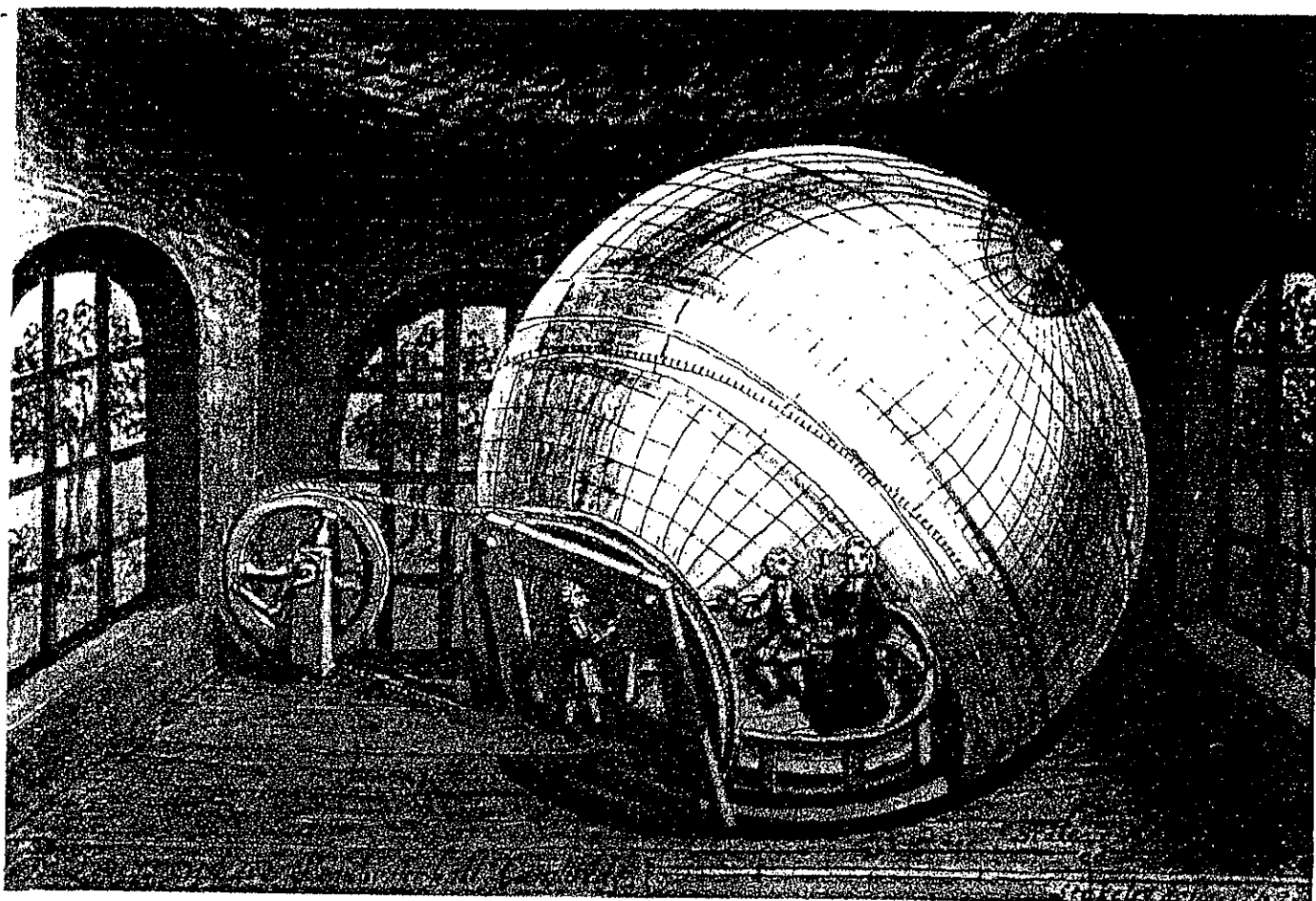


Image courtesy of the Bodleian Library, Oxford: Gough Maps 230, fol.12

An University Within Ourselves

A Special Exhibition of
Sciences in Cambridge in the Eighteenth Century

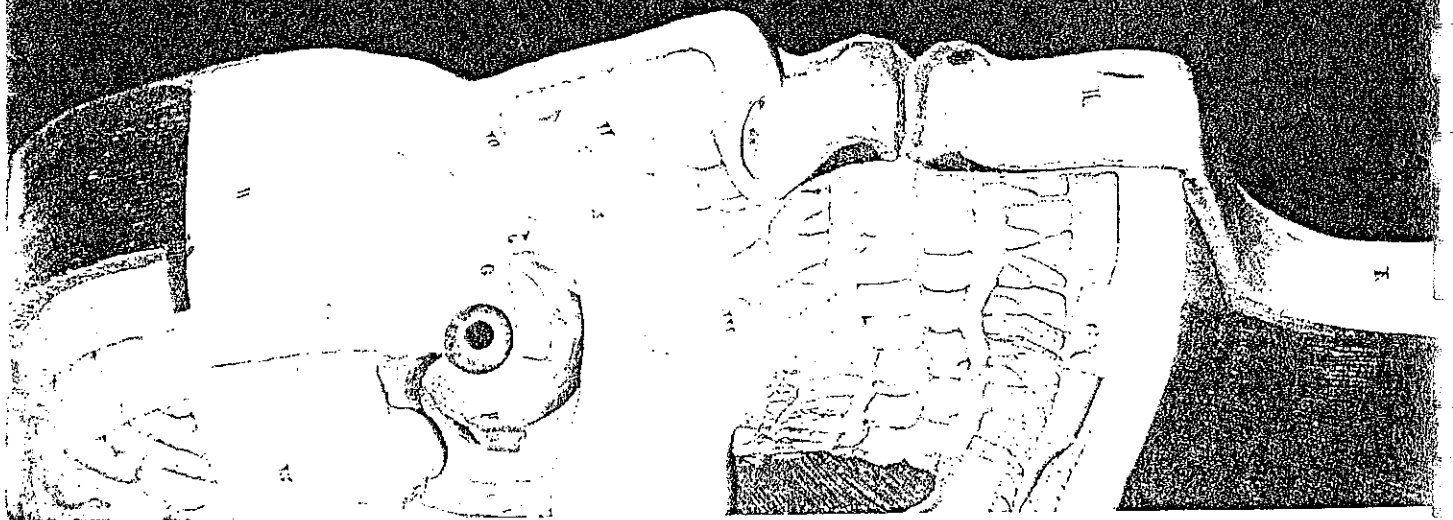
The Whipple Museum of the History of Science
Free School Lane
Cambridge

Monday to Friday 1.30–4.30pm

The Museum is not always open during the University vacations and visitors are advised to check beforehand. 01223 334500

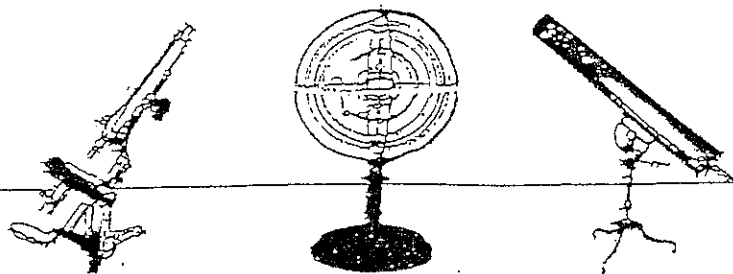
disembodied

Exploring the Human Form



CASE STUDIES

at the Whipple Museum



AN AFTERNOON CONFERENCE

A series of short talks:

Kemal de Soysa on a sixteenth century celestial planisphere
Mike Rich on George Adams's set of geometrical solids
Adam Mosley on an early armillary sphere
Chris Hayley on wave machines

Bringing the work of the
Department of the History & Philosophy of Science
into the Museum Gallery

6 June 1997, 2 - 5 pm
light refreshments will be served

City museums win top awards

CAMBRIDGE: Three Cambridge University museums have been judged among the best in the country, picking up top awards this week.

The Whipple Museum of the History of Science, the Museum of Archaeology and Anthropology and the Fitzwilliam Museum were among 26 English and Welsh institutions to be singled out from 2,500.

James Joll, the chairman of the Museums and Galleries Commission, awarded the three designations for "their outstanding pre-eminent collections and the potential to meet the highest standards of care."

In a short ceremony, Prof Alec Broers, Vice-Chancellor of the university, and representatives of the museums were presented with certificates.

Prof Broers said: "It's excellent that this award recognises the quality of our collections and the dedication of the people who look after them."

"The museums are primarily about research and teaching, but Cambridge University plays a major part in sharing its expertise with schools and the public through its museums and they in turn play an enormously important role in the local and national community."

Mr Joll said: "The Designation Scheme offers a welcome and valuable opportunity to demonstrate the wealth of pre-eminent collections within this country."

"The criteria against which we measured a museum's eligibility for designation were extremely rigorous and only those museums that met the very highest standards were awarded designation."

Dr Liba Taub, curator of the Whipple Museum, said she was thrilled at the honour and paid tribute to the efforts of a number of students in helping staff gain designation.

Cambridge Evening News, 23/10/97

HPS SEMINAR NOTICES

LENT 1997

DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

DEPARTMENTAL SEMINARS

LENT TERM 1997

Seminars meet at 4.30 pm in Seminar Room 2, Free School Lane, on Thursdays.
There is tea beforehand in Seminar Room 1 at 4 pm. To add your name to the mailing list, contact the Departmental office or phone 01223 334540.

January 16	Ana Isabel Simoes (Lisbon)	<i>Different legacies and common aims: Robert Mulliken, Linus Pauling and the origins of Quantum Chemistry</i>
January 23	Marilyn Strathern (Cambridge)	<i>Environments within: an ethnographic comment on scale</i>
January 30	Richard Staley (Berlin)	<i>On the histories of relativity : participant histories and changing interpretations of relativity 1905-1911</i>
February 6	Sarah Hutton (Hertfordshire)	<i>Reflections on gender and early modern science</i>
February 13	Neil Gascoigne (Anglia)	<i>The metaphilosophical significance of scepticism</i>
February 20	Michael John Gorman (Warburg Institute)	<i>The truth of masks: experimental authorship in the Society of Jesus</i>
February 27	Sheila Jasanoff (Cornell)	<i>Here Be Monsters : Biotechnology and the Politics of Safety in Europe and the U.S.</i>
March 6	Paul Thagard (Waterloo)	<i>Scientific change: the roles of instruments, experiments and social interactions in the development and acceptance of the bacterial theory of ulcers</i>

DEPARTMENTAL SEMINARS

LENT TERM 1997

ABSTRACTS

January 16 Ana Isabel Simoes
Different legacies and common aims: Robert Mulliken, Linus Pauling and the origins of Quantum Chemistry

In this talk I discuss a number of issues associated with the theoretical outlook shared by Pauling and Mulliken. Firstly, Pauling's valence bond and Mulliken's molecular orbital methods were part of two different conceptual schemata, which can be explicated in terms of two different legacies—that of physics in the case of Mulliken, and that of chemistry in the case of Pauling. Secondly, their theories, and especially Pauling's, raised questions as to the ontological status of theoretical entities very similar to the problematique associated with discussions about scientific realism.

January 23 Richard Staley
On the Histories of Relativity: participant histories and changing interpretations of relativity, 1905–1911

This paper explores the way physicists used historical accounts in the early development of relativity. In a context where the Lorentz–Fitzgerald transformation equations were understood in a number of different ways, I argue that proto-histories presented by physicists such as Einstein, Minkowski, and Planck, constituted an important means of shaping interpretations of the new electrodynamics. Analysis of these participant accounts will lead me to question some of the assumptions of our own historical understanding, and to offer a new interpretation of the relations between Einstein and Minkowski's contributions to relativity.

February 6 Sarah Hutton
Reflections on gender and early modern science

In this paper I review Evelyn Fox Keller's analysis of early modern science in her ground breaking book, *Reflections on Gender and Science* where she exposes the gender bias of the language employed by the 'fathers' of modern science. It was no accident that she focused on Bacon and the century of the 'Scientific Revolution', for in doing so she struck at the very foundations whence modern science traces its rise. Her work has been seized on to support the view that science is a characteristically masculine enterprise. By proposing a broader context, I want to challenge the basis of Fox Keller's argument, particularly her discussion of metaphor, and the model of the history of science which she employs. The main focus of my discussion will be Francis Bacon, but the larger end in view is the question of how to re-integrate women into the early history of modern science.

February 13 Neil Gascoigne
The metaphilosophical significance of scepticism

In this paper I shall offer a metaphilosophical defence of a version of non-reductive naturalism against both reductive versions and the anti-naturalism of Barry Stroud,

Thomas Nagel *et al.* In doing so I shall either identify reflexive limits on any attempt to characterise the nature of philosophical inquiry by aiming to prescribe when a philosophical problem is real or not; earn our right to dismiss the sceptic by offering a competitor standpoint from which the sceptical problematic does not arise; defend verificationism; and offer a definitive reading of the so-called 'private language argument' ... or not!

February 20

Michael John Gorman

The Truth of Masks: Experimental authorship in the Society of Jesus

The sixteenth century saw an explosion of new techniques for the transmission of belief through word and image. The institutions comprising the Catholic church reacted to the new technology in two principal ways. The first reaction might be broadly characterised as a negative programme, and consisted in the foundation of such regulatory bodies as the Congregation of the Index and the Holy Office, established with the aims of combating the spread of heresy. The second reaction, the positive programme, has received comparatively less attention from historians. Its principal proponents were the Jesuits, who immersed themselves more than any other religious order in the literary culture of sixteenth and seventeenth century Europe. Popular literary genres such as the emblem-book were sacralised by the Jesuits, with the aid of skilled engravers in the principal printing houses of Catholic Europe, and transformed into spiritual manuals, according to the image-led Ignatian meditative tradition. The monster-pamphlets that had been so decisive in the manipulation of public opinion by Luther and Melanchthon in the early sixteenth century were later reworked by Jesuit authors, and their portentous messages were disarmed, to be reinterpreted as expressions of divine bounty.

My paper will attempt to investigate the way in which the engagement of Jesuit authors with a proliferation of literary genres affected their scientific production. In attempting to establish their credibility, Jesuit scientific authors drew on various resources, depending on their intended audience. One of the most problematic of these resources was institutional affiliation itself, and, in particular, the conditions that led a given author to lay special emphasis on his membership of the Jesuit order, or, conversely, to hide his personal and institutional identities behind a pseudonym, and thereby avoid the order's internal system of censorship. In my discussion of the many faces of the Jesuit scientific author I will focus on the particular problems of incorporating experimentally-produced knowledge into natural philosophy.

February 27

Sheila Jasanoff

Here Be Monsters : Biotechnology and the Politics of Safety in Europe and the U.S.

The politics of biotechnology centres on the interplay of the 'natural' and the 'unnatural'. Monsters—creations that disturb our sense of order—lurk outside the perimeters of the regulated world. National authorities responsible for biotechnology policy have been forced to develop languages that divide the ordered world from the monstrous one. This paper is about the resulting discourses of law, risk assessment, and bioethics, and about their different deployment in Britain, Germany, and the United States.

March 6

Paul Thagard

Scientific change: the roles of instruments, experiments and social interactions in the development and acceptance of the bacterial theory of ulcers

Within the past 10 years, the new theory that stomach ulcers are caused by bacteria has increasingly supplanted previous views that explained ulcers in terms of excess acidity and stress. This talk describes the important role of physical interaction with the world by means of instruments and experiments, and the equally important role of social interactions among the medical researchers who developed the theory. The main questions I address are the following:

- 1 What instruments contributed to the development and acceptance of the new theory?
- 2 What kinds of experiments contributed to the development and acceptance of the new theory?
- 3 How did theorizing and experimentation interact in the development of new experiments and hypotheses?
- 4 How did social processes such as collaboration, communication, and consensus contribute to the development and widespread acceptance of the bacterial theory of ulcers?

I conclude with a sketch of science as a complex system of interacting psychological, physical, and social processes.

Cabinet of Natural History



The Cambridge Group for the History of Natural History and the Environmental Sciences
University of Cambridge, Department of History and Philosophy of Science, Free School Lane, Cambridge, CB2 3RH
Telephone (0223) 334540
Facsimile (0223) 334554

LENT 1997

Meetings are held on Mondays at 1 pm in Seminar Room 1. Bring lunch if you wish.

- 20 January Roger French, Wellcome Unit, Cambridge
"Pliny invents natural history"
- 27 January No meeting
- 3 February Mike Morse, University of Chicago
"Celtic ethnology and the roots of prehistoric archaeology in Britain"
- 10 February Aileen Fyfe, HPS Department, Cambridge
"Paley's *Natural Theology*: the Cambridge experience"
- 17 February Judith Hawley, English Department, Royal Holloway
"Sports of nature: freakish anatomy in *The Memoirs of Martinus Scriblerus*"
- 24 February Greg Radick, HPS Department, Cambridge
"The question of ape speech and why it mattered, 1880-1920"
- 3 March Palmira Fontes da Costa, HPS Department, Cambridge
"'Mas, Mulier, Maurus, Mundi Mirabile Monstrum': an eighteenth-century hermaphrodite through the looking-glass"
- 10 March Kim Pelis, Wellcome Institute, London
"Transfusion, with teeth: reanimation and the reintroduction of human blood transfusion in British medical practice"

Committee: Charlotte Sleight (Organizing Secretary), Andrew Cunningham, Nick Jardine, Jim Secord.

THE Σ CLUB

CAMBRIDGE—LONDON—OXFORD

The Sigma Club is a society based in Cambridge, London and Oxford, concerned with the philosophical aspects of the natural sciences and mathematics. Non-members are welcome to attend and join in the discussions.

LENT 1997

CAMBRIDGE

Meetings will be held on the following Tuesdays in Seminar Room 2, Department of History and Philosophy of Science, at 4.30 pm. Tea will be provided before the meetings at 4.00 in Room 10.

21 January	Dr David Corfield, King's College London	<i>Towards a Philosophy of Real Mathematics</i>
4 February	Dr Tim Spiller, Hewlett Packard	<i>Quantum Computation</i>
18 February	Sir Michael Atiyah OM FRS, Trinity College	<i>Topology and Quantum Physics</i>
4 March	Dr Chris Dolan, Cavendish Laboratory	<i>The Inevitability of Spin-Torsion Interactions</i>
11 March	Professor Abner Shimony, Boston University	<i>TBA</i>

UNIVERSITY OF CAMBRIDGE

**HISTORY OF PSYCHIATRY,
PSYCHOANALYSIS AND ALLIED SCIENCES**

SEMINARS

LENT TERM 1997

22 January	Mr Sonu Shamdasani Wellcome Institute for the History of Medicine	"La Folie du Jour": Jung and his Cases
5 February	Mr Philip Hill	Metaphysics in the Clinic: Klein and Lacan
19 February	Mr Richard Skues University of North London	Reading Freud Backwards: Freud's Psychology Before Psychoanalysis
5 March	Dr Lesley Hall Wellcome Institute for the History of Medicine	"Having It All" versus Radical Critique: Feminist Attempts to Reconstruct Heterosexuality in the 1920s

All seminars start at 5.00 in Seminar Room 1, Dept of History and Philosophy of Science, Free School Lane, Cambridge CB2 3RH

Those who wish to be placed on the seminar mailing list should contact Dr John Forrester, HPS (334548) or Dr Deborah Thom, HPS (330466) and Robinson (339165).

Department of History and Philosophy of Science

- CAMBRIDGE HISTORIOGRAPHY GROUP

LENT 1997

Secretary: M. Frasca-Spada, (3)30466 (HPS), 845634 (home), email
<mfs10@cam.ac.uk>

Wedn 21 January - William Clark, Institut für
Wissenschaftsgeschichte, Göttingen

Discussion of his 'Narratology and the history of science',
Studies in HPS 26 (1995): 1-71.

Wedn 5 February - Paula Gould, HPS and Queen's College

Discussion of her 'Visible electricians and invisible
technicians: an experiment in feminizing the history of
physics' (a draft portion of her Ph. D. thesis).

Wedn 19 February - Peter Lipton, HPS and King's College

Discussion of his 'The senses of testimony' (draft,
forthcoming in Studies in HPS).

Wedn 5 March - Cristina Chimisso, HPS and Darwin College

Discussion of her 'Painting an icon: Bachelard and the
philosophical beard' (draft, forthcoming in M. Kusch, ed.,
Sociology of Philosophical Knowledge, Kluwer).

We shall be meeting the speakers in the Eagle at 6, then
going on to Pizza Express (Jesus Lane). The meetings proper
will be held at 8:0 p.m. in Sachiko Kusakawa's office in
Christ's College, V5c (map of the college at the main gate,
outside the porter's lodge).

Copies of all the documents are in Box File 87a in the
Whipple Library. (Please don't take them out of the
Library!)

Beverages or some delicious food VERY welcome

Committee: Nick Jardine, Marina Frasca-Spada, Nick Hopwood, Sachiko
Kusakawa, Anne Secord

RATIONALITY ACROSS THE DIVIDE

LENT 1997

This is a continuation of the new reading group organised by the Cambridge Centre for Hermeneutic and Analytical Philosophy, which is a joint enterprise of the Philosophy Division of Anglia Polytechnic University and the Department of History and Philosophy of Science, Cambridge University. It is intended to encourage contacts between the various continental traditions of philosophy and mainstream Anglo-American philosophy. In 1995 it sponsored a highly successful conference 'Crossing the Divide: New Perspectives on Continental and Analytical Philosophy'. A second conference on 'Rationality Across the Divide' is planned.

Wedn 29th January -- Andrew Bowie, Philosophy Division, Anglia Polytechnic University

Discussion of Chapter 9 'The Culture of Truth' of his From Romanticism to Critical Theory. The Philosophy of German Literary Theory, Routledge 1997 pp. 238--280.

Wedn 12th February -- Tim Thornton, Department of Philosophy, University of Warwick

Discussion of a paper to be announced, which will be held in the file detailed below in the Whipple Library.

Wedn 26th February -- Jay Bernstein, Department of Philosophy, University of Essex

Discussion of Chapter 4 'Moral Norms and Ethical Identities' of his Recovering Ethical Life. Jürgen Habermas and the Future of Critical Theory, Routledge 1995, pp. 88--135.

We shall meet the speakers in the Eagle at 6, and will then go to eat. The meetings proper will be held at 8pm in Seminar Room 1 HPS Department. Please turn up promptly, because we have to shut the doors of the Department for security reasons during the meetings.

Copies of all the papers are in Box File 87b in the Whipple Library. (Please do not take them out of the library!)

Committee: Alison Ainley, Andrew Bowie, Marina Frasca-Spada, Neil Gascoigne, Nick Jardine, Peter Lipton

For further information contact:

Marina Frasca-Spada, HPS Department., 330466, e-mail: mfs10@cam.ac.uk
Neil Gascoigne, Philosophy Division (E.P.L.), Anglia Polytechnic University, 363271 ext. 2314, e-mail: ngascoigne@bridge.anglia.ac.uk

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

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FREE SCHOOL LANE
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TEL: (01223) 334540
FAX: (01223) 334554

Epistemology Reading Group
Lent Term 1997

We will be reading articles from *Immanuel Kant's Prolegomena to Any Future Metaphysics In Focus*, edited by Beryl Logan (Routledge, 1996). The book includes a translation of the *Prolegomena* itself, in addition to the articles we will be discussing, in case you don't have a copy handy. It is available in paperback at Dillons, and two copies are on reserve in the Whipple Library. Each meeting of the Group will focus on one article, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings will take place on **Thursdays at 2.00 pm** in Seminar Room One of the HPS Department and are open to all.

- | | |
|-------------|--|
| 16 January | Beryl Logan, 'Introduction' |
| 23 January | Lewis White Beck, 'A Prussian Hume and a Scottish Kant' |
| 30 January | Special Departmental Seminar |
| 6 February | Manfred Kuehn, 'Kant's Conception of "Hume's Problem"' |
| 13 February | Patricia Kitcher, 'Changing the Name of the Game' |
| 20 February | Daniel Anderson, 'A Note on the Syntheticity of Mathematical Propositions in Kant's <i>Prolegomena</i> ' |
| 27 February | Theodore Uehling Jr., ' <i>Wahrnehmungsurteile</i> and <i>Erfahrungsurteile</i> Reconsidered' |
| 6 March | Jerry Gill, 'Kant, Analogy, and Natural Theology' |

Evolution Reading Group

Lent Term 1997

We will be reading selections from *Evolutionary Progress*, ed. M.H. Nitecki (Chicago, 1988) along with more recent work on the theme by two of the book's contributors. Copies will be on reserve in the Whipple Library, Free School Lane. Each meeting will focus on two or three readings, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings are open to all, and will take place **every other Monday at 8.00 pm** in the Seminar Room of Darwin College, beginning 20 January. For more information, contact Greg Radick (T: 01223 367946; e-mail: gmr22@hermes.cam.ac.uk).

- 20 Jan. Stephen Jay Gould, "On Replacing the Idea of Progress with an Operational Notion of Directionality"
(his latest) "The Modal Bacter: Why Progress Does Not Rule the History of Life," Part IV in *Life's Grandeur* (Jonathan Cape, 1996)
- 3 Feb. David L. Hull, "Progress in Ideas of Progress"
Francisco J. Ayala, "Can 'Progress' be Defined as a Biological Concept?"
Michael Ruse, "Molecules to Men: Evolutionary Biology and Thoughts of Progress"
- 17 Feb. Robert J. Richards, "The Moral Foundations of the Idea of Evolutionary Progress: Darwin, Spencer, and the Neo-Darwinians"
(his latest) "Darwin's Embryological Theory of Progressive Evolution," chapter 5 in *The Meaning of Evolution* (Chicago, 1992)
Robert C. Dunnell, "The Concept of Progress in Cultural Evolution"
- 3 Mar. John Maynard Smith, "Evolutionary Progress and Levels of Selection"
William C. Wimsatt and Jeffrey C. Schank, "Two Constraints on the Evolution of Complex Adaptations and the Means for their Avoidance"
E.O. Wiley, "Entropy, Evolution, and Progress"

Geniuses and Heroes in Science

An Informal Day Meeting
Friday 24 January 1997
Sidgwick Dining Hall, Newnham College

Sponsored by the Department of the History and Philosophy of Science, University of Cambridge

- 9:30 Coffee (Newnham College Buttery)
- 10:00 Hélène Mialet Opening Remarks
- 10:15 Simon Schaffer Saints and Scholars
Bill Clark Dr Faust and the Mad Scientist
- 11:45 Patricia Fara Putting Newton on the Mantelpiece
*Steve Snoblen Newton as Religious Hero: Sectarian Desires and the Polemical Value of
Sir Isaac Newton
- 12:45 Lunch (available in the Newnham College Buttery, cost about £3.00)
- 1:45 *Anne Secord Whose Life is it Anyway? Or, the unLocal Hero
*John Forrester The Problem of Freud
- 2:15 Henry Atmore The (ir)rationality of Railway Accidents
- 3:00 *Paul White Domesticating Genius
*Greg Radick Heroes, Experts and Losers
- 3:30 Tea
- 4:00 Soraya de Chadaverian Model Hero
*Jessica Nash Freaks of Nature: Images of Barbara McClintock
- 5:00 General Discussion

*To encourage presentation of a wide range of perspectives, the papers marked above with an asterisk will be 5 minute "shorties" introducing work in progress. The other talks will be limited to 20-25 minutes, thereby leaving ample time for discussion of all the papers.

This meeting is intended to facilitate discussion of ongoing work in the HPS Department; anyone interested in the subject is welcome to attend.

Hélène Mialet (e-mail hn202@cus.cam.ac.uk)
Jim Secord (e-mail jas1010@cam.ac.uk; tel. 01223-334544)

Please return this slip to the HPS department office by Tuesday, 21 January.

Name:

- ☐ I plan to attend the Heroes and Geniuses meeting on 24 January 1997
☐ I will probably arrive in time for coffee (£1.05)
☐ I plan to eat in the Newnham College Buttery for lunch.
☐ I will need reviving with tea (90p)

Three Special Seminars

All in Seminar Room 2, Department of
History and Philosophy of Science
Free School Lane

**Wednesday 18th December - Professor
Geoffrey Hellman** (University of Minnesota):
*'Some Ins and Outs of Indispensability: A Modal -
Structural Perspective'*
Seminar at 2:00 pm.

Wednesday 29th January - Dr Peter Lipton
(HPS Cambridge):
'The Epistemology of Testimony'
Seminar at 2:00 pm. Tea at 3:30 pm.

**Thursday 30th January - Professor Alexander
Rosenberg** (Department of Philosophy,
University of Georgia):
'Will the Real Naturalist Please Stand Up?'
Seminar at 2:00 pm. Tea at 3:30 pm.

Friday 31st January - Dr Huw Price (School of
Philosophy, University of Sydney):
'The Role of History in Microphysics'.
Tea at 4:00 pm. Seminar at 4:30 pm.

Two Lectures by Dr H. Otto Sibum (Max-Planck-Institut, Berlin):

'Working Experiments and Gestural Knowledge'

Monday March 3rd and 10th 1997, 3 pm, Department of History and
Philosophy of Science.

Abstract:

The subject of these lectures is experiment and the eloquence of the silent representatives, i.e. the instruments and body techniques which make experiments work. For historians of science, both instruments and the body (humans' first technique) have become of great interest. However, most studies only indicate the existence of hidden dimensions by means of either identifying previously neglected skilled laboratory assistants, or admitting the existence of tacit knowledge involved in scientific change. Historians' research on the changing role of the human senses stresses the scientific construction and representation of the body, but we hardly find studies which emphasise the productive power of the body and its effects on the formation of knowledge. The historical examples which I will present result from a material-aesthetic approach to the understanding of past practices which includes the performance of these experiments with replicas. This approach makes explicit even those competencies which were impossible to put into words and to transmit through literary means. In order to account for these tacit dimensions of knowledge production I have called this evanescent working knowledge of past experiments gestural knowledge.

In the lectures I will concentrate on some frictional moments in the history of the physical sciences in the 18th and 19th century. The first example focuses on Charles Augustin Coulomb's torsion balance experiment which he had performed in 1785, a period of major cultural transformations in France. In the second lecture I will focus on the early Victorian period and James Joule's experiment to determine the mechanical equivalent of heat in particular.

EASTER 1997

DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

DEPARTMENTAL SEMINARS

EASTER TERM 1997

Seminars meet at 4.30 pm in Seminar Room 2 Free School Lane, on Thursdays, unless otherwise stated. There is tea beforehand in Seminar Room 1 at 4 pm. To add your name to the mailing list, contact the Departmental office on 01223 334500.

April 24 (The Third Annual Delta Lecture)	David Edgerton (Imperial College, London)	<i>From Innovation to Use: Ten (Eclectic) Theses on the Historiography of Technique</i> (The Delta Lecture is jointly sponsored by the Whipple Museum; the Museum for the History of Science, Oxford; and the South Kensington Institute for the History of Technology).
May 1	Nicholas Jardine (Cambridge)	<i>Splendours and Miseries of the Science Wars</i>
May 8 (The Rausing Lecture)	Francesca Bray (UC Santa Barbara)	<i>Machines for Living: Domestic Architecture and the Engineering of the Social Order in Late Imperial China</i> (NB. This will be held in the McCrum lecture theatre, Corpus Christi College).
May 15	Kapil Raj (CRHST La Villette, Paris)	<i>Constructing Geography's Empire: the Indo- British Mapping of Central Asia in the 19th Century</i>
May 22	John Dupre (Exeter)	<i>Scientism and the Explanation of Human Behaviour</i>
May 29	Judith Zinsser (Miami University)	<i>Risking Ridicule: Doing Science with the 18th Century Marquise du Chatelet</i>
June 5	Sybilla Nikolow (Bielefeld and Cambridge)	<i>August Friedrich Wilhelm Crome's Statistical Maps Around 1800</i>
June 12	Andrew Barry (Goldsmith's College, London)	<i>Interactive Devices and Active Consumers: Reconfiguring the Social Body of the Museum of Science</i>

DEPARTMENTAL SEMINARS

EASTER TERM 1997

ABSTRACTS

May 1 Nick Jardine
 Splendours and Miseries of the Science Wars

Gross and Levitt's *Higher Superstition* (1994) and Sokal's spoof 'Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity' (1996) have sparked off extensive and sharp exchanges concerning the credentials of Science Studies. Where others have bewailed these 'Science Wars' I shall, from a moderate pragmatist standpoint, celebrate the dialogue with scientists that they have provoked and the publicity they have given to issues of outstanding concern for the future of our culture.

(Sokal's spoof, together with excerpts from the recent polemical newspaper, periodical and internet literature are in Box File 87C in the Whipple Library).

May 8 Francesca Bray
 Machines for Living: Domestic Architecture and the Engineering of the Social Order in Late Imperial China

In my recent work on pre-modern China I explore the role of technology in shaping and transmitting ideological traditions, focusing on its contribution to the construction of gender. I have taken a set of technologies that one might call a gynotechnics: a technical system that produces ideas about women, and thus about men and about the social order. Three technological domains were particularly important in giving shape and meaning to the lives of women in late imperial China: the building of houses, the weaving of cloth, and the producing of children. The talk will discuss how the building of houses and the complex structuring of domestic space embodied in microcosm the hierarchies of gender, generation and rank inherent to the Chinese social order, tying all its occupants into the macrocosm of the polity. Although women did not actually build the houses in which they lived in the sense of assembling bricks and mortar, they played an active role in the production of domestic space, which they experienced in ways very different from their menfolk.

May 15 Kapil Raj
 Constructing Geography's Empire: the Indo-British Mapping of Central Asia in the 19th Century

Based on a description of the British survey of Trans-Himalayan Central Asia, this talk attempts to understand the way the seemingly strange and outmoded techniques used in this operation were made to produce reliable and reproducible knowledge (in keeping with contemporary exigencies) and simultaneously to help create a new "Indian" identity.

May 22

John Dupre

Scientism and the Explanation of Human Behaviour

Despite widespread philosophical concerns about reductionistic conceptions of scientific knowledge, scientific approaches to understanding human behaviour are still, perhaps increasingly, dominated by attempts to develop monocausal, reductive explanations for ever larger domains of behaviour. I shall discuss this phenomenon with reference to the two major contemporary examples of such imperialist scientific projects, evolutionary psychology and neoclassical economics. I shall also briefly consider the possibility of a more plausible and pluralistic approach to understanding human behaviour.

May 29

Judith Zinsser

*Risking Ridicule: Doing Science with the 18th Century
Marquise du Chatelet*

Emilie du Chatelet is well known to historians of science for her *Institutions de physique* and her translation of Newton's *Principia*. Initially, she seems to have studied purely for her own satisfaction. Subsequently, she wrote and published, a daring choice in the context of early eighteenth century France. This paper will explore reasons for this choice and what they reveal about the gendering of out concepts of the scientist and the philosopher.

June 5

Sybilla Nikolow

*August Friedrich Wilhelm Crome's Statistical Maps Around
1800*

The maps of August Crome, who eventually became a professor for cameralism and statistics at the University of Giessen (1786), constitute a hitherto neglected source for the history of graphical representations and thematic mapping in the German-speaking countries of the late Enlightenment. Prior to this academic appointment, Crome taught history and geography at a high school in Anhalt-Dessau, the *Philanthropin*, which was founded as a didactical experiment by an enlightened group of teachers who called themselves the *Philanthropen* ["philanthropists"]. I argue that the statistical maps Crome produced between 1783 and 1820 are rooted in then prevalent pedagogical doctrines which recommended *Versinnlichung* ["rendering sensible"] as a didactical tool that facilitated insight by involving the senses and, in particular, by deploying visual images to stimulate associations. As a result, courses in geography for high school students were introduced in the *Philanthropin*, and so was the production and reading of maps and statistical tables.

June 12

Andrew Barry

*Interactive Devices and Active Consumers: Reconfiguring
the Social Body of the Museum of Science*

The older science museums were sometimes accused of ignoring their publics. Their curators were 'dinosaurs', trapped in a subsidy mentality, overconcerned with the preservation and display of artefacts at the expense of communicating with their visitors. Museums were, according to some, both unexciting and insufficiently competitive in the rapidly growing market in leisure. They continued to treat visitors as passive observers, rather than as active subjects, eager to experiment, to improve themselves and to consume. Many technical solutions have been found to this set of problems, ranging from a growing emphasis on visitor research, internal audit and marketing, to the development of new sources of private and public finance. In this paper, however, I explore how interactive devices have come to be seen as having a central role in the changing the culture of the science museum and its relations with its visitors. The paper compares the function that interactivity has been expected to perform in the San Francisco Exploratorium, at La Villette in Paris and in the Science Museum in London, and asks to what extent a concern with interactivity has come to displace other ways of seeing the future of the contemporary museum of science.

THE Σ CLUB

CAMBRIDGE—LONDON—OXFORD

The Sigma Club is a society based in Cambridge, London and Oxford, concerned with the philosophical aspects of the natural sciences and mathematics. Non-members are welcome to attend and join in the discussions.

EASTER 1997

CAMBRIDGE

Meetings will be held on the following Tuesdays in Seminar Room 2, Department of History and Philosophy of Science, at 4.30 pm. Tea will be provided before the meetings at 4.00 in Room 10.

29 April	Dr Hasok Chang, University College, London	<i>The Quantum Counter-Revolution: Internal Conflicts in Scientific Change</i>
13 May	Dr Craig Callender, London School of Economics	<i>Rethinking the Foundational Problems of Statistical Mechanics</i>

Cabinet of Natural History



The Cambridge Group for the History of Natural History and the Environmental Sciences
University of Cambridge, Department of History and Philosophy of Science, Free School Lane, Cambridge, CB2 3RH
Telephone (0223) 334540
Facsimile (0223) 334554

EASTER 1997

Meetings are held on Mondays at 1 pm in Seminar Room 1. Bring lunch if you wish.

- 28 April Nicola Bown, University of North London
"A few fragments of fairyology shewing its connection with natural history"
- 5 May John Clark, University of Kent
"'A little people but exceedingly wise': insects and humanity in nineteenth-century England"
- 12 May Bronwyn Parry, Department of Geography, Cambridge
"Exploration and exploitation: revealing the social and spatial dynamics of collecting within natural history"
- 19 May Michael Dettelbach, Smith College
"Nature as landscape: vividness and visibility in Humboldtian science"
- 26 May CABINET TRIP to Wicken Fen. Leaving from HPS department 10.00 am.
With talk by Laura Cameron:
"Relations of trust and histories of disturbance: Wicken Fen and Cambridge University in the 1920s and '30s".
A sign-up list will be posted shortly before the trip.
- 9 June GARDEN PARTY in King's College Fellows Garden, 12 - 3:30
Try to arrive as close to noon as possible. Garden talk by Sally Horrocks, University of Leicester:
"'The era of readjustable foods': scientists and food manufacturing in Britain, c. 1880-1940"

Committee: Charlotte Sleight (Organizing Secretary), Andrew Cunningham, Nick Jardine, Jim Secord.

CAMBRIDGE HISTORIOGRAPHY GROUP

EASTER 1997

Organising Secretary Marina Frasca-Spada, HPS (3)30466, home 845634,
email: <mfs10@cam.ac.uk>

**This term we are starting a series of discussions on
"History of the Book/History of the Sciences".**

Wed 30 April -- Jon Topham, Darwin College

Discussion of his "Beyond the 'common context': the readership of the Bridgewater Treatises", and R. Darnton's "What is the history of books?" (in The Kiss of Lamourette: Reflections on Cultural History)

Wed 14 May -- Jim Secord, HPS

Discussion of R. Darnton, "Readers respond to Rousseau", and A. Grafton, "Renaissance readers and ancient texts" (in Defenders of the Text)

Wed 28 May -- Silvia De Renzi, HPS

Discussion of Bakhtin, "The Speaking Person in the Novel" (in The Dialogic Imagination -- Four Essays).

We shall be meeting the speakers in the Eagle at 6, then going on to Pizza Express (Jesus Lane). The meetings proper will be held at 8:0 p.m. in Sachiko Kusakawa's office in Christ's College, V5c (map of the college at the main gate, outside the porter's lodge).

Copies of all the documents are in Box File 87a in the Whipple Library. (Please don't take them out of the Library!)

Beverages or some delicious food welcome

Committee: Nick Jardine, Silvia De Renzi, Marina Frasca-Spada, Nick Hopwood, Sachiko Kusakawa, Jim Secord, Jon Topham

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE
HISTORY OF PSYCHIATRY,
PSYCHOANALYSIS AND ALLIED SCIENCES
SEMINARS

EASTER TERM 1997

23 April	Dr Waltraud Ernst University of Southampton	European Madness and Gender in Nineteenth Century British India
7 May	Andreas Mayer University of Bielefeld	Spoken Places - Rotten Institutions Michel de Certeau's contribution to the history of the psychoanalytic movement
21 May	Professor Ruth Leys Johns Hopkins University	'Imitation Magic': Sandor Ferenczi's Concepts of Psychic Trauma
4 June	Prof Joel Eigen Institute of Criminology	Title to be announced

All seminars start at 5.00 in Seminar Room 1, Dept of History and Philosophy of Science, Free School Lane, Cambridge CB2 3RH

Those who wish to be placed on the mailing list should contact Dr John Forrester, HPS (334548) or Dr Deborah Thom, HPS (30466) and Robinson (39165).

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

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Epistemology Reading Group
Easter Term 1997

We will be reading articles from *Moral Knowledge?*, edited by Walter Sinnott-Armstrong and Mark Timmons (OUP, 1996). The book is available in paperback at Dillons, and two copies are on reserve in the Whipple Library. Each meeting of the Group will focus on one or two articles, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings will take place on **Thursdays at 2.00 pm** in Seminar Room One of the HPS Department and are open to all.

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|----------|---|
| 24 April | Walter Sinnott-Armstrong, 'Moral Skepticism and Justification' |
| 1 May | Peter Railton, 'Moral Realism: Prospects and Problems' |
| 8 May | Simon Blackburn, 'Securing the Nots: Moral Epistemology for the Quasi-Realist' |
| 15 May | Robert Audi, 'Intuitionism, Pluralism, and the Foundations of Ethics' |
| 22 May | Geoffrey Sayre-McCord, 'Coherentist Epistemology and Moral Theory' |
| 29 May | Richard Hare, 'Foundationalism and Coherentism in Ethics',
Richard Brandt, 'Science as a Basis for Moral Theory' |
| 5 June | Christopher Morris, 'A Contractarian Account of Moral Justification',
David Copp, 'Moral Knowledge in Society-Centered Moral Theory' |
| 12 June | Margaret Walker, 'Feminist Skepticism, Authority, and Transparency',
Mark Timmons, 'Outline of a Contextualist Moral Epistemology' |

Evolution Reading Group

Easter Term 1997

We will be reading four works by Darwin alongside the recent biography by Adrian Desmond and James Moore (*Darwin*, Penguin, 1992). The books are available at many of the Cambridge bookshops, and copies will be on reserve in the Whipple Library, Free School Lane. Each meeting will focus on one work and the relevant parts of the biography, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings are open to all, and will take place **every other Monday at 8.00 pm** in the Seminar Room of Darwin College, beginning 5 May. For more information, contact Greg Radick (T: 01223 367946; e-mail: gmr22@hermes.cam.ac.uk).

- | | |
|---------|---|
| 5 May | <i>The Voyage of the Beagle</i> (1839)
<i>Darwin</i> , Parts I & II |
| 19 May | <i>The Origin of Species</i> (1859)
<i>Darwin</i> , Parts III, IV, & V |
| 2 June | <i>The Descent of Man, and Selection in Relation to Sex</i> (1871)
<i>Darwin</i> , Part VI |
| 16 June | <i>The Expression of the Emotions in Man and Animals</i> (1872)
<i>Darwin</i> , Part VII |

Any edition of the above will do; but recommended are the Penguin Classics *Voyage* (ed. J. Browne & M. Neve, 1989); the [Oxford] World Classics *Origin* (ed. G. Beer, 1996); the Princeton *Descent* (intr. by J.T. Bonner & R.M. May, 1981); and the Chicago *Expression* (intr. by K. Lorenz, 1965).

Medieval Science Reading Group Easter Term 1997

We will be reading the section on Physics in Schoedinger's *Readings in Medieval Philosophy* (OUP, 1996). The group will meet in Seminar Room 2 in the Department of History and Philosophy of Science, on Free School Lane, at 3pm on Fridays, and each session will consist of a short presentation by a member of the group, followed by discussion. There should be at least one copy of the text on reserve in the Whipple Library before the first session. The Schoedinger collection is a collection of English translations, so knowledge of Latin is not required. Everyone is welcome: further information is available from David Chart (dc132@cam.ac.uk).

9 May	Robert Grosseteste, <i>On Light</i>
16 May	Peter Peregrinus of Maricourt, <i>On the Magnet</i>
23 May	Roger Bacon, <i>Opus Maius</i> , Part IV: Distinction I, II & III
30 May	No session (Postgraduate Philosophy Conference)
6 June	Jean Buridan, <i>Selections</i>
13 June	Nicholas of Cusa, <i>Concerning Experiments in Weight</i>

Department of History and Philosophy of Science
University of Cambridge

Conference in Honour of Michael Redhead

20–21 June, 1997

Friday 20 June		
10.00–11.00	Dr John Watkins LSE	Determinism and Human Intervention
11.00–11.30	Coffee	
11.30–12.30	Prof. Moshe Machover King's College London	A Case of Theory Biased Observation in Social Choice
12.30–2.00	Lunch	
2.00–3.00	Mr John Lucas Oxford	Intimations of Reality
3.00–3.15	Break	
3.15–4.15	Dr Eli Zahar Cambridge	Realism in Mathematics and Physics
4.15–4.45	Tea	
4.45–5.45	Prof. Paul Teller UC, Davis	Is All Else Always Equal?

Saturday 21 June		
10.00–11.00	Dr Simon Saunders Oxford	TBA
11.00–11.30	Coffee	
11.30–12.30	Prof. Gordon Fleming Pennsylvania State	Realistic Relativistic Localization
12.30–2.00	Lunch	
2.00–3.00	Prof. Robert Clifton Pittsburgh	Beable Interpretations for Algebraic Quantum Mechanics
3.00–4.00	Dr Steven French Leeds	Models and Mathematics in Physics: the Role of Group Theory
4.00–4.30	Tea	
4.30–5.30	Dr Harvey Brown Oxford	Galilean Covariance: a Poorly Understood Corner of Quantum Mechanics
5.30–6.30	Dr Peter Lipton Cambridge	All Else Being Equal

All Welcome

Free School Lane
Cambridge CB2 3RH

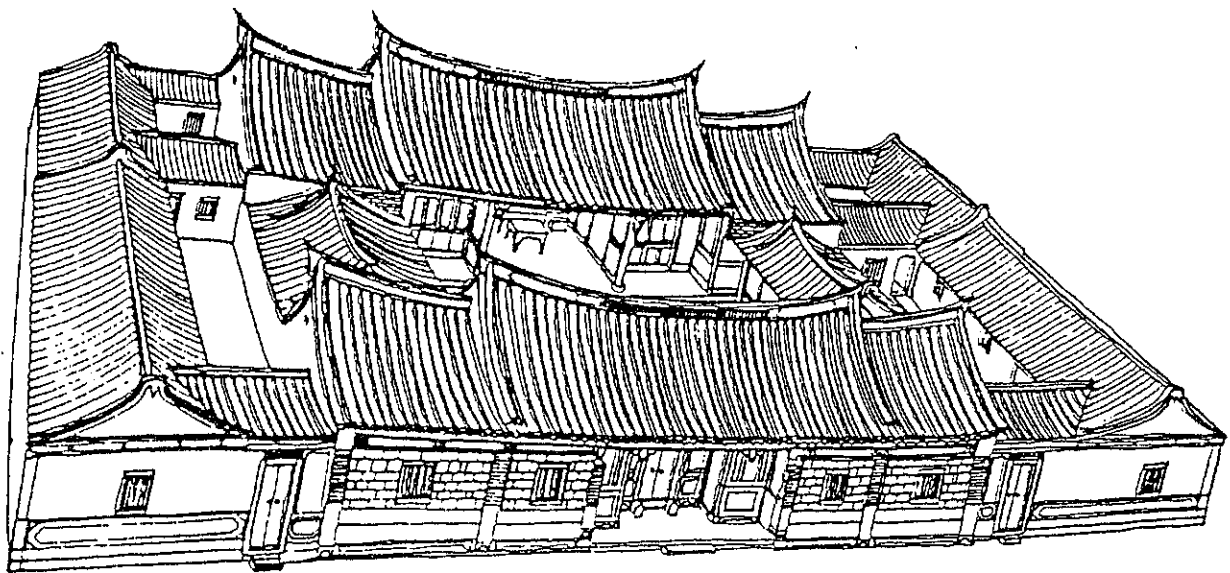
With the generous support of The Mind Association, the British Society for the Philosophy of Science and
the HPS Dept, Cambridge

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

SECOND ANNUAL
HANS RAUSING LECTURE
IN THE HISTORY OF TECHNOLOGY AND
INDUSTRY

MACHINES FOR LIVING:
DOMESTIC ARCHITECTURE AND ENGINEERING OF
THE SOCIAL ORDER IN LATE IMPERIAL CHINA

PROFESSOR FRANCESCA BRAY
UNIVERSITY OF CALIFORNIA, SANTA BARBARA



THURSDAY 8 MAY 1997
4:30 PM
MCCRUM LECTURE THEATRE, BENE'T STREET
NEXT TO THE EAGLE

DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE
UNIVERSITY OF CAMBRIDGE

The Third Annual Delta Lecture:

From Innovation to Use: Ten (Eclectic) Theses on the Historiography of Technique

David Edgerton
(Imperial College, London)

Tea at 4:00 pm, Lecture at 4.30 pm

Thursday April 24, 1997

Department of History and Philosophy of Science
Free School Lane, Cambridge

The Delta Lecture is jointly sponsored by the Whipple Museum; the
Museum for the History of Science, Oxford; and the South Kensington
Institute for the History of Technology.

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DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

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CAMBRIDGE POST-GRADUATE PHILOSOPHY CONFERENCE
Friday 30 May 1997

- 9.30 Katherine Hawley, **Criteria of Identity**
- 10.30 COFFEE
- 11.00 Joel Katzav, **Scientific Pragmatism as Authoritarian**
- 12.00 Rachel Cooper, **Taxonomic Realism and the
Classification of Mental Disorders**
- 1.00 LUNCH
- 2.30 David Chart, **Modeling What is Not: Counterfactuals
and Mental Models**
- 3.30 Sam Inglis, **Conceptual Analysis**
- 4.30 TEA
- 5.00 Greg Radick, **Two Views of Evolutionary Progress**

The Conference will take place in the Department of History and Philosophy of Science, on Free School Lane. Everyone is welcome and advance registration is not required. For further information, contact Peter Lipton.

Cabinet of Natural History

GARDEN PARTY

on Monday 9 June at noon in King's College Fellows' Garden

Talk by Sally Horrocks

"The Era of Readjustable Foods: Scientists and Food Manufacturing in Britain c. 1880–1940"



Garden of Eden

The front gate to the fellows' garden from Queen's road will be open at noon for a short time. Otherwise, use the rear entrance to the garden, by King's Garden Hotel, first right off West Road

Everyone in HPS Welcome

Please bring some food and drink

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

**SPECIAL SEMINARS IN
PHILOSOPHY OF SCIENCE**

Tuesday 6th May 1997

Prof. Michael Dickson
Department of History and Philosophy of Science,
Indiana University

**Logic and Physical Theory:
Why Putnam should have read Philodemus**

2.30 p.m., Seminar Room 2

**TEA
4.00 P.M., SEMINAR ROOM 1**

Dr Martin Kusch
Science Studies Unit,
University of Edinburgh

The Rational and the Social

4.30 p.m. Seminar Room 2

ALL ARE WELCOME

MICHAELMAS 1997

DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

DEPARTMENTAL SEMINARS

MICHAELMAS TERM 1997

Seminars meet at 4.30 pm in Seminar Room 2 Free School Lane, on Thursdays, unless otherwise stated. There is tea beforehand in Seminar Room 1 at 4 pm. To add your name to the mailing list, contact the Departmental office on 01223 334500.

October 9	Staff and Associates of HPS	Research Methods Seminar for all postgraduates and Part II students in HPS
October 16	Staff and Associates of HPS	Research Methods Seminar for all postgraduates and Part II students in HPS
October 23	Elizabeth Green (Indiana)	<i>Aberrant Bodies and Ideal Observers in Mid- Nineteenth Century Britain</i>
October 30	Bruce Moran (Nevada-Reno)	<i>Medicine, Alchemy, and Religion in the War of Words of Andreas Libavius</i>
November 6	Chandak Sengoopta (Wellcome Institute, London)	<i>The Uses of Anomaly: Experimental Biology, Medical Research and the Demands of Culture</i>
November 13	Jennifer Platt (Sussex)	<i>Theory, Practice and Reputations in Sociological Research Methods</i>
November 20	Helga Nowotny (ETH Zurich)	<i>Dreams, Collusions of Interests and Other Ingredients of Success: the Case of High Temperature Superconductivity</i>
November 27	Robert Marc Friedman (Oslo)	<i>The Politics of Excellence: A History of Awarding the Nobel Physics and Chemistry Prizes</i>
December 4	Katherine Hawley (Newnham College, Cambridge)	<i>Fading Away—Must Things Have a Definite End?</i>

DEPARTMENTAL SEMINARS

MICHAELMAS TERM 1997

ABSTRACTS

October 23

Elizabeth Green

Aberrant Bodies and Ideal Observers in Mid-Nineteenth Century Britain.

In his 1864 autobiography, Charles Babbage expressed his admiration for the late Prince Albert: "Rarely indeed can some deep-searching mind, after long comparison, perceive the real colours of those translucent shells which encompass kindred spirits; and thus at length enable him to achromatize the medium which surrounds his own. To one who has thus rectified the 'colour-blindness' of his intellectual vision, how deep the sympathy he feels for those still involved in that hopeless obscurity from which he has himself escaped." In the rest of this passage, Babbage updates Plato's familiar cave allegory with a striking 19th century twist. The discovery and subsequent conquering of vision problems by many of Britain's finest natural philosophers had become the cipher for intellectual transcendence over the body. John Dalton's publication of an experimental study on his own colour-blindness (1794) was the beginning of this concerted attention to explaining visual abnormalities through experiment, especially in natural philosophers themselves. In this paper I will examine the vigorous, pre-psychophysical investigations into visual abnormality in the mid-19th century, with particular attention to three prominent natural philosophers who studied their own vision problems: John Herschel, George Airy, and David Brewster. In these three cases and in many others, experimental philosophers struggled to transcend their flawed bodies and assume the mantle of the ideal observer. Through the use of precise instruments, repeated experiments, and physical exertion, each of these men ultimately believed he had "achromatize[d] the medium which surrounds his own" spirit. This period therefore marks an important transition between the 18th century culture of intellectual hyper-sensibility and the late 19th century culture of athletic, instrumentalized experimentation in human psychology and physiology.

October 30

Bruce Moran

Medicine, Alchemy, and Religion in the War of Words of Andreas Libavius

The paper concentrates on those parts of Libavius's polemical writings aimed at two controversial alchemists, Nicolas Guibert and Pierre Le Paulmier, as well as one well-known Catholic theologian, the Jesuit Jacob Gretser. These texts are especially useful in demonstrating that Libavius was not only interested in epistemological problems of how one should know, but considered as well the political problem of what one should know, and the moral problem of how what one knew might affect individual character. Ultimately, these writings were part of a struggle over the use of specific types of language in chemistry and medicine, and as a defence of certain institutional and cultural authorities (academies and universities versus courts and workshops) that might legitimize their use. In this regard the paper will also examine Libavius's love-hate relationship with the Faculty of Medicine at the University of Paris, his arguments against the creation of "monstrous" names like "Galenochymia," and his response to having been himself labelled a "Paracelsian."

November 6

Chandak Sengoopta

The Uses of Anomaly: Experimental Biology, Medical Research and the Demands of Culture

In the late nineteenth century, the German embryologist Wilhelm Roux called for a fundamental reorientation of biological research. Criticising what he believed to be an excessive reliance on description and comparison, Roux urged biologists to discover the causes of biological phenomena by repeated and varied laboratory experimentation. Such experiments, which Roux designated as "analytic", would infer biological norms from experimentally produced anomalies. Scholars have tended to neglect the impact of Roux's methodological precepts on areas other than embryology. This paper will show how Roux's ideas animated the early twentieth-century Viennese physiologist Eugen Steinach's research on the role of sex glands in development and senescence. Steinach was one of the most famous medical scientists of his era, albeit a controversial one. Today, he is remembered, if at all, as a colourful charlatan who, by transplanting ovaries into male experimental animals and testes into females, created monstrosities in the laboratory and, later, claimed that human male senility could be reversed by a simple vasectomy and human male homosexuality cured by a testicular transplant from a heterosexual. Steinach's research, sensational as it was, had biological credentials by the standards of his era. He

conceived of sex as a developmental phenomenon under constant control of the sex-glands and, inspired by Roux, attempted to identify those controlling processes by distorting them in the laboratory. His clinical misadventures with rejuvenation and homosexuality, the paper will demonstrate, were induced by a complex interaction of his biological convictions with cultural ideas on ageing and sexual orientation that were, in many ways, unique to early-twentieth-century Central Europe. The conclusion will analyse how the study of Steinach's research helps us in clarifying the complicated ways in which laboratory, clinic, and culture interact with and influence one another.

November 13

Jennifer Platt

Theory, Practice and Reputations in Sociological Research Methods

The talk will start by considering methodological writing in sociology as a genre, and its relation to research practice. The processes by which it has been generated mean that its emphases do not necessarily correspond to those of practice. It categorises, but the categories used have changed over time, and their meaning depends on the other members of the sets current. The example of 'case study' will be considered. A continuing theme in such writing has been 'science', though the meanings given to that have also changed. There has been a sense that 'science' has become increasingly dominant, but this was to some extent due to the work of a group of evangelists, including an astrophysicist whose interests turned to social physics, whose influence on practice - even their own - was more limited. The fame of this group is partly due to an extreme stance, particularly convenient as a boundary marker in teaching and polemic. This exemplifies a more general process in the creation of reputations. A different example is that of the Chicago department, widely used as a legitimating origin myth. Thus reception needs to be considered as much as influence in the process of canon formation.

November 20

Helga Nowotny

Dreams, Collusions of Interests and Other Ingredients of Success: the Case of High Temperature Superconductivity

The enthusiastic reception following the discovery of High Temperature Superconductivity is remarkable in a number of ways. It appeared as vindication of Little Science, it revived old hopes and dreams, and it came to relative outsiders, thus reinforcing the belief in individual scientific creativity. The contextualization of the discovery and the analysis of subsequent developments reveal the intricate interweaving of a strategic collusion of interests between scientists and policy-makers, the media and the public. It also provides insights into how individual creativity and the innovation machinery of science interact at a time when basic science can no longer escape its public representation as being useful.

November 27

Robert Marc Freidman

The Politics of Excellence: A History of Awarding the Nobel Physics and Chemistry Prizes

As a symbol for excellence and a short-hand indicator for genius, the Nobel prize has long occupied a prominent niche in popular and scientific cultures. As icon, myth, and ritual the Nobel prize is of course well secured; yet the realities of nominating, evaluating, selecting, and celebrating are hardly known. Based on archival research and contextual study, this history explores why and how individuals and groups attempted, with varying degrees of success, to use the Nobel prize for furthering disciplinary and cultural agendas. Both awarding and celebrating the prizes have entailed an evolving politics of excellence. Neither disciplinary hierarchies nor conceptions of achievement occur naturally: the Nobel prizes should in part be appreciated as part of the history of practising science in a century marked increasingly by intense competition for authority and resources as well as indecorous commercialism and hype.

December 4

Katherine Hawley

Fading Away—Must Things Have a Definite End?

Is identity all or nothing? Is there always a fact about whether something from the past still exists? When an object is renovated, can it be interest-relative whether it has been repaired or replaced? Borderline cases seem to arise everywhere, from entangled quantum particles through fixed-up bicycles to traumatised people, yet whether or not the notion of a 'borderline case' even makes sense depends upon which underlying metaphysics we adopt. I will discuss the two established views of persistence, and present my own view. I will focus throughout on the different consequences of these views for the question of whether identity over time can be either interest-relative or a matter of degree.

Cabinet of Natural History



The Cambridge Group for the History of Natural History and the Environmental Sciences

University of Cambridge, Department of History and Philosophy of Science, Free School Lane, Cambridge, CB2 3RH

Telephone (0223) 334540

Committee: Eugenia Roldán and Palmira Fontes da Costa (Secretaries), Andrew
Cunningham, Nick Jardine, Anne Secord, Charlotte Sleigh, Jon Topham

Facsimile (0223) 334554

Michaelmas Term: 1997

Meetings are on **Mondays at 1 pm** in Seminar Room 1. Bring lunch if you wish.

- 20 October** Fungus hunt (if there has been no frost), guided by Prof. Nick Jardine. Meet at 1 pm sharp in Free School Lane outside the Department; return around 5 or 6. Bring a car if possible. Please sign up on the HPS Departmental notice board. If numbers exceed car space, places will go to first signatories.
- 27 October** Françoise Barbira Freedman (Dept of Anthropology, Cambridge) :
"Approaches to Amazonian shamanic plant knowledge".
- 3 November** Silvia De Renzi (Dept of History and Philosophy of Science, Cambridge):
"Herodotus and the microscope: investigating dragons in 17th century Rome".
- 10 November** Tess Cosslett (English Department, University of Lancaster):
"Child's place in nature: talking animals in Victorian children's fiction".
- 17 November** John Thackray (Natural History Museum, London):
"To see the fellows fight": discussions at the early meetings of the Geological Society".
- 24 November** Fritz Rehbock (Dept of History, University of Hawaii at Manoa):
"Victorian natural history observed: the letters of 'Jenny Malvern'".
- 1 December** Katey Anderson (Dept of Science and Technology Studies, York University, Canada):
"Instincts and instruments: using animal instinct in the nineteenth century".

DEPARTMENT OF HISTORY AND PHILOSOPHY OF
SCIENCE

PHILOSOPHY OF PHYSICS GROUP

Programme of Meetings

- | | |
|--------------------|--|
| 10 October | Introductions and people's interests. |
| 17 October | To be announced. |
| 24 October | Mark Hogarth (HPS, University of Cambridge). |
| 31 October | Jeff Bub (The Hebrew University, Jerusalem). |
| 7 November | Orly Shenker (Department of Philosophy, University of Maryland). |
| 14 November | Katinka Ridderbos (HPS, University of Cambridge). |
| 21 November | Talal Debs (HPS, University of Cambridge). |
| 28 November | No seminar (Imperial College mini-meeting). |

Meetings are every Friday at 2.00 pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane. Meet at the Eraina, Free School Lane for lunch at 1.00 pm before the first meeting.

UNIVERSITY OF CAMBRIDGE
DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

PSY STUDIES

**HISTORY OF PSYCHIATRY, PSYCHOLOGY,
PSYCHOANALYSIS AND ALLIED SCIENCES**

**SEMINARS
MICHAELMAS TERM 1997**

15 October	Dr Martin Kusch HPS	Social and Experimental Order in Turn of the Century German Psychological Institutes
29 October	Mr Jonathan Burt Cambridge	Zootherapies and Freud's Animals around World War One
12 November	Ms Cheryce Kramer Wellcome Institute, London	German Psychiatry Before Freud, Or the Lost Art of Composing a Culture
26 November	Prof Jacqueline Rose Queen Mary Westfield College, London	At the Limits of Education: The Institution of Analysis

Those who wish to be placed on the mailing list should contact Tamara Hug
(HPS Departmental Office, 334540; E-mail: <th10001@hermes.cam.ac.uk>).

This is the second term of discussion of themes in
"HISTORY OF THE BOOK/HISTORY OF THE SCIENCES".

* Wedn 22 October -- Lisa Jardine, St Mary and Westfield
College, London

Discussion of "The triumph of the book", from her
Worldly Goods: A New History of the Renaissance,
Macmillan 1996 (now in pb), chapter 3, pp. 133-180

* Wedn 5 November -- Nick Jardine, Department of History and
Philosophy of Science and Darwin College

Discussion of his "Original meanings" (English version
of his "Significati originari", in A. La Vergata and A.
Pagnini, eds, *Storia della filosofia, storia della
scienza: saggi in onore di Paolo Rossi*, Firenze 1995)

* Wedn 19 November -- Eugenia Roldán Vera, Department of
History and Philosophy of Science and Darwin College

Discussion of her "Making textbooks: translation and
culture in Ackermann's catechisms of natural sciences"

* Wedn 3 December -- Adam Mosley, Department of History and
Philosophy of Science and Trinity College

Discussion of his "Bearing the heavens: books and the
communication of astronomy"

We shall be meeting the speakers in the Eagle at 6 p.m.

The meetings proper will be held at 8
in Darwin College, the Old Library.

Copies of all the documents will be placed in Box File 87a
in the Whipple Library. (Please don't take them out of the
Library!)

Beverages or some delicious food welcome

Committee: Nick Jardine, Silvia De Renzi, Nick Hopwood, Sachiko
Kusukawa, Elisabeth Leedham-Green, Jon Topham

Organising Secretary: Marina Frasca-Spada, HPS (3)30466, home 845634,
email: <mfs10@cam.ac.uk>

UNIVERSITY OF CAMBRIDGE
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Epistemology Reading Group
Michaelmas Term 1997

We will be reading articles from *The Philosophy of Mathematics*, edited by W.D. Hart (OUP, 1996). The book is available in paperback at Dillons, and two copies are on reserve in the Whipple Library. Each meeting of the Group will focus on one or two articles, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings will take place on **Thursdays at 2.00 pm** in Seminar Room One of the HPS Department and are open to all.

- | | |
|-------------|---|
| 9 October | Paul Benacerraf, 'Mathematical Truth' |
| 16 October | No Meeting: Whipple Museum Designation Day |
| 23 October | W.D. Hart, 'Access and Inference' |
| 30 October | Michael Dummett, 'The Philosophical Basis of Intuitionistic Logic' |
| 6 November | Charles Parsons, 'Mathematical Intuition' |
| 13 November | Penelope Maddy, 'Perception and Mathematical Intuition' |
| 20 November | Stewart Shapiro, 'Conservativeness and Incompleteness'
Hartry Field, 'Is Mathematical Knowledge Just Logical Knowledge?' |
| 27 November | Charles Parsons, 'The Structuralist View of Mathematical Objects' |

Evolution Reading Group
Michaelmas Term 1997

We will be reading Elliot Sober's *Philosophy of Biology* (Oxford, 1993). The book is available in local bookshops, and a copy will be on reserve in the Whipple Library, Free School Lane. Each meeting will focus on two chapters, with a member of the group offering a preliminary evaluation, followed by a general discussion. Meetings are open to all, and will take place **every other Monday at 8.00 pm** in the Seminar Room of Darwin College, beginning 20 October. For more information, contact Greg Radick (T: 01223 367946; e-mail: gmr22@hermes.cam.ac.uk).

20 October	Chap. 1, "What is Evolutionary Theory?" Chap. 2, "Creationism"
3 November	Chap. 3, "Fitness" Chap. 4, "The Units of Selection Problem"
17 November	Chap. 5, "Adaptationism" Chap. 6, "Systematics"
1 December	Chap. 7, "Sociobiology and the Extension of Evolutionary Theory" <i>TBA</i>

Medieval Science Reading Group

Michaelmas Term 1997

We will be reading the section on 'Knowledge and Sensation' in Schoedinger's *Readings in Medieval Philosophy* (OUP, 1996). The group will meet in **Seminar Room 1** in the Department of History and Philosophy of Science, on Free School Lane, at **1pm on Tuesdays**, and each session will consist of a short presentation by a member of the group, followed by discussion. There is a copy of the text on reserve in the Whipple Library. The Schoedinger collection is a collection of English translations, so knowledge of Latin is not required. Everyone is welcome, and welcome to bring their lunch: further information is available from David Chart (dc132@cam.ac.uk).

14 October	St Augustine, The Trinity , Selections on Knowledge
21 October	St Thomas Aquinas, S u m m a Theologica (selections)
28 October	Matthew of Aquasparta, Disputed Questions on Faith and Knowledge , Question 1.
4 November	Nicolaus of Autrecourt, Two Letters to Bernard of Arezzo
11 November	Jean Buridan, Commentary on Aristotle's <i>De anima</i> , Book II, Questions 9-11
18 November	Nicole Oresme, "On the Causes of Marvels Involving Vision"
25 November	<i>TBA</i>
2 December	<i>TBA</i>

DEPARTMENT OF HISTORY AND
PHILOSOPHY OF SCIENCE

THE DELTA LECTURE

Otto Sibum

(Max-Planck Institute for the History of Science, Berlin)

‘Shifting Scales’

Wednesday 19 November in the Seminar Room, Science Museum,
Exhibition Road, London SW7. Tea is at 3.45, and the talk starts at
4 pm.

The Delta Lecture series is jointly organised by the Museum of the
History of Science, Oxford, the Whipple Museum of the History of
Science, Cambridge, and the South Kensington Institute.

UNIVERSITY OF CAMBRIDGE
HISTORY AND PHILOSOPHY OF SCIENCE

All HPS Part II students, please note the following
lecture series:

3 Lectures for Paper 3, Monday 27th, Friday 31st October and
Monday 3rd November,
3 pm

Otto Sibum

WORKING EXPERIMENTS: MACHINES AND GESTURAL KNOWLEDGE IN 18TH- AND 19TH- CENTURY PHYSICAL SCIENCES

The subject of these lectures is experiment and the eloquence of the silent representatives, i.e. the instruments and techniques of the body which made the experiment work. The historical examples presented result partly from a material-aesthetic approach to understanding past experiments which includes the performance of past experiments with replicas. This approach allows one to reconstitute the productive role of the body in the formation of scientific knowledge and brings to light tacit dimensions of past experimental performances. Experimentalists themselves often describe these silent but crucial dimensions of scientific practice as their "Fingerspitzengefühl" or their experience. Such portrayals indicate a commonly shared insight that human competence is difficult to put into words and to communicate fully through literary means. In order to account for these silent dimensions of historical scientific practice I call this embodied knowledge of the experimenter gestural knowledge and will concentrate on some frictional moments in the 18th and 19th century to elucidate the forms and meanings of this peculiar knowledge for the development of the physical sciences.

**Two seminars on
RESEARCH METHODS IN HISTORY AND PHILOSOPHY OF SCIENCE
FOR ALL PART 2 AND GRADUATE STUDENTS**



Each seminar will consist
of short informal
presentations introducing the
Guides to Research Resources
in *HPS*, 4th edition, 1997/98.
This will be distributed
at the meetings.

**Thursday 9th October, at 4:30
Seminar Room 2**

Nick Jardine -- Introduction

Peter Lipton -- Writing philosophy

Serafina Cuomo -- Ancient science and culture

Sachiko Kusukawa -- Early-modern natural philosophy

Patricia Fara -- 18th-century natural philosophy

Liba Taub -- History through instruments

**Thursday 16 October, at 4:30
Seminar Room 2**

Paula Gould -- Gender and science

Emma Spary -- History of natural history

Silvia De Renzi -- History of the book: two case studies

Nick Jardine -- Historiography of the sciences

John Forrester -- History and philosophy of psychoanalysis

Martin Kusch -- Sociology of scientific knowledge

MF-S, NJ

PRESS CUTTINGS



Liba Taub

A passion for stuff

Feeling conspicuously Town rather than Gown, I headed up the narrow stairs dodging past eager students of the Department of History and Philosophy of Science. As a bona fide member of the public I was exercising my layman's right to visit the University's Whipple Museum of the History of Science, one of the country's foremost collections of scientific instruments.

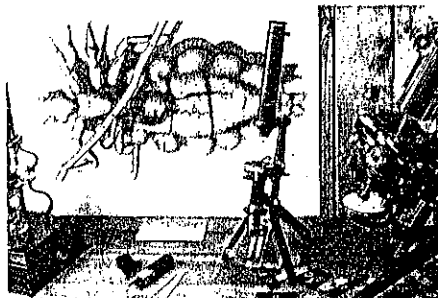
Tucked away in Free School Lane, the Whipple is one of Cambridge's less trumpeted treasure houses. The core of the remarkable collection of telescopes, instruments, models and books ranging from 16th century ivory sundials to 1970s lasers was given to the University by the eponymous Mr Whipple of the Cambridge Scientific Instrument Company. Primarily intended for use by students of the history and philosophy of science, the public are nonetheless welcome to browse freely on weekday afternoons.

I had arranged to meet Dr Liba Taub, the Whipple's American-born curator. As I edged open the door to the voluminous 17th century hall, which once housed the Perse School, I was stopped dead in my tracks. My preconceptions of fusty museum curators peering fiercely at mere mortals over their half-glasses melted instantly. Here, darting out from behind a glass case was a native of Chicago with sparkling, friendly eyes and a towering presence which belies her small stature. Within seconds, I was steered over to see one of her favourite objects, a beautifully-crafted 19th century model of a dissected earthworm. I could already sense Liba Taub's passion for her subject fizzing around her like a chemical reaction.

Liba came to the Whipple from Chicago in 1994, having been in charge of the historical collection at the Adler Planetarium, one of the most prestigious science museums in the States. An enthusiastic teacher of the history of science as well as ardent museum buff, she has already introduced some radical new ideas into this august Cambridge institution.

"We all too often feel that going to a museum is like entering a temple and we must maintain a respectful and sombre mood," said Liba, giving the first clues as to her mission. At first sight the Whipple seems like a conventional museum of the old school with lots of finely crafted scientific objects clustered in glass cases. Yet as we began our tour it became clear that Liba's greatest innovation has been to turn the concept of the all-powerful curator figure on its

*MARTIN THOMPSON interviews
Liba Taub, curator of the Whipple
Museum of the History of Science*



"Brass and glass" is a just part of the Whipple Museum collection

head. "People tend to think that objects get into glass cases by divine choice. In fact it is the curator who jealously guards the great privilege of selection. With over 10,000 objects to choose from in order to create the displays, it would be all too easy for me to play God but I was determined from the start that the Whipple was not going to become the Liba Taub collection."

In this spirit, she has taken the highly unusual step of opening up the curator function to university students and teaching staff. All those interested can, under Liba's guidance, delve into the vast reserve collection to present their choice of objects, pictures and text on their chosen theme. These so-called Case Studies have included presentations on subjects as varied as European perceptions of Australia in the 19th century and palaeontology. Palaeontology? "Why not?" she replied. "This is a history of science museum not a display case for what happens to be sitting in storage. It's a university museum and everyone in the university, regardless of their discipline, should be able to find a voice here. It is a question of giving as many people as possible an opportunity and space to communicate their vision."

Liba believes that, as a university museum, the Whipple

should not just be a dumping ground for redundant scientific material but a living part of the educational process. She finds it fun to admit that a student's guess about the origins of an object may often be better than her own. She is delighted that the word about the new opportunities she has created is spreading and that more and more lecturers are using the collection for teaching.

The fact that the Whipple Museum lies at the heart of a university department was the key attraction for her in moving here from Chicago. "Back in the States, it always puzzled me that there was not more study of scientific stuff and the activities associated with it," she reflected. The word "stuff" crops up again and again in her vocabulary, part of Liba Taub's disarming directness.

Her sadness is that the Whipple only has space to show 10 percent of the stuff in its collection. "When I came here there was a preponderance of what we in the museum business call brass and glass on display, lots of splendidly decorated telescopes and measuring instruments. As well as giving others a chance to curate, I have tried to broaden out the permanent display moving it from a largely astronomical collection to show everything from forceps to jigsaw maps. I like having bits of lab stuff such as test tubes as well as beautiful drawing room globes."

Like all university museums throughout the country, the Whipple is chronically under-funded and much of Liba's time is taken up in raising sponsorship. Her long-term aim is to have the reserve collection more readily accessible and work has started on a computerised catalogue of every object in her care. Such is the Whipple's ineptness that it still lacks a computer terminal for visitors. Perhaps her great achievement has been to keep up the momentum for change. As if in recognition of this, the Whipple has just received a high accolade. The Museums and Galleries Commission has designated it as one of a handful of small museums which contain a nationally pre-eminent collection and which demonstrate a high standard of collection care and management. "I discovered I am a born-again collections manager. I am really proud to be continuing the work of professionalising the collection," was Liba's reaction to this award.

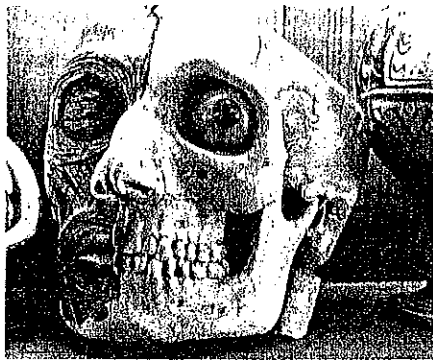
Students, it appears, have been delighted with the opportunities to move away from text-based studies and work on Liba Taub's scientific stuff. She keeps her defini-

tions of comparative values within the collection deliberately broad. To Liba, both the microscope used by Darwin and the monogrammed silk handkerchief which served as its dustcover are of equal historical importance. "We have a collection of 400 electronic calculators. One day people will study these as we do Darwin's microscope," she argued.

I was curious to know how she came to be in the museum business. For someone who clearly drives in the fast lane, isn't all this rather low key? "If my parents had their way, I would have gone into the family advertising business," she confessed. "In fact I was hooked on science from an early age and started collecting historical objects at 16. My younger sister was always jealous that I wouldn't let her play with my experiments." I could sense the schoolgirl scientist's sense of wonder undiluted in the Dr Taub of today.

As a layman with zero scientific aptitude, is it, I asked, acceptable to view the Whipple collection purely as beautiful or interesting objects? "Fine," replied Liba, "It can work at any level, be it that of a ten year old child or a graduate student writing a thesis on an instrument for measuring the Pyramids." Putting myself intellectually somewhere between the two categories, I pressed further. Why study the history of science at all? Surely science is about progress? Liba paused before delivering her verdict: "I would argue strongly that there has never been an age when so much blind faith has been placed in science. If we are going to give scientists and their work this degree of prominence, it is essential that we understand how we have reached our current level of knowledge. The physical objects we care for here offer vital clues."

As we moved into a side room which Liba has set aside



Does science deserve our blind faith? What would he say?

for teaching, Liba pointed out the 19th century "thunder house" resembling a pint-size tin model of the Psycho mansion. Simply add gunpowder and an electric charge and it collapses on cue to demonstrate a lightning strike. The one frustrating thing about the Whipple is that you can look but you cannot touch. Rest assured, Liba is working on that one, busily raising the money to create a collection of working replicas.

As far as one can tell her challenging ideas have been well received in her department and the University as a whole. There is a sense that she has achieved great things with precious few resources. Until recently, she was the Whipple's sole member of staff.

Liba Taub's New Deal for the Whipple has reached the parts that many other traditional museums have yet to reach. As we said our farewells back in her office, she pointed out her favourite entry in the visitors book from a primary-age school child. "I like the old compasses best because John Smith in *Pocahontas* had a compass," the small girl writes. "That really gets to me," Liba commented with a grin; "The fact that a child could relate what she had seen in a video directly to our stuff." There's that word again, summing up the refreshing wind of change blowing into Free School Lane from Chicago. ☸

The Whipple Museum is situated in the Department of History and Philosophy of Science, Free School Lane, Cambridge.

Opening hours 1.30 - 4.30pm, Monday - Friday Admission free.

Martin Thompson writes for the Sunday Telegraph.

Bachelors and masters degrees signify a period of disqualification when women were not allowed to achieve at high levels. No matter how deeply the diachronic origins of these titles are contested, it is evident that they were initiated in a patriarchal manner, and, because they did not change in line with the practise of allowing women to access qualifications at degree level, they refer to the male gender of the then intended achiever.

The most frequent reaction that I encounter, is that these issues are so trivial and ridiculous as not to be worthy of discussion... "It's just a tradition! She's being a bit pedantic don't you think? I find these reactions interesting. It seems to me that ridicule, trivia and anger are qualities that attach themselves to many sites of gender difference: female facial hair, the male persona of "God", the control of language etc., and while these may not seem to be issues of

Mistress of her destiny

Postgraduate student **Sue Wilks** claims she faces discrimination over the title of her degree

resounding consequence for humanity, their combined cultural affiliations help to construct the insidious and seemingly insignificant makings of patriarchy that remain secured to the language and practise of people internationally.

Higher education does seem to be dragging its heels — fire men have become fire fighters, police men altered to police officers, the



Title fight: Sue Wilks

male equivalent of ward sisters are charge nurses, head masters are now head teachers etc.

I am studying for an MA in feminist theory, history and criticism at Leeds University, and had hoped that by insisting that I be awarded a Mistress of Arts that I might be able to establish a legal challenge for a review of titles, using the Sex Discrimination Act 1975.

A legal adviser has explained that while I had a moral case, find that the university was not providing an equitable service to women and men) I did not have a legal case, because the Sex Discrimination Act was designed to deal with issues of practicality, I had somebody prejudiced me on account of a given title, and could they there-

fore be sued? As I have neither BA nor MA at the moment, I cannot satisfy this criteria.

To me, this demonstrates a weakness in the law as it does not provide a defence for the affront to the identity of women. The failure of the authorities to provide qualification titles that recognise the abilities of all people in society, is evidence of their failure to recognise equity.

Current national debates focus upon the Government's decision to incorporate into domestic law the European Convention on Human Rights and the possible ways of implementing this. It, as Ian Byrnes co-author of the forthcoming report on a proposed Human Rights Commission says, "Legislation will soon bring into

force the provisions of the Convention, with its guarantees of basic rights, such as liberty, freedom of expression, privacy and family life" then maybe there will be a legal challenge to amend in the future.

I would like to see the levels of debate being raised, and the emphasis shifting towards searching for possible alternative titles that embody the philosophy of education, and the achievements of people.

Higher educational establishments have emphasised their commitments to 'customer satisfaction' (an emphasis made even more poignant recently with the introduction of tuition fees). I am appealing to students to use their status as customers, to show dissatisfaction with the 'product titles' currently available. A petition destined for Harriet Harman (Minister for Women) will be sent to students union officers in higher educational institutions around the country.

Invisible minds, visible bodies

"Learned women attract little attention as long as they limit their studies to music and arts, but when a woman dares to attend a university — when she qualifies for and receives a doctorate — she attracts a great deal of attention and the legality of such an undertaking must be investigated." Johann Junker, 1754.

In June 1897, male undergraduates at the University of Cambridge hung an effigy of a bloomer-clad lady cyclist across from the Senate House to celebrate the rejection of degrees for women. In June 1997, hundreds of proud parents will be standing at the very same spot to congratulate their daughters on graduation day. Today female students are integral to university life. Questions may be raised about the proportion of women collecting firsts or the paucity of women professors, but their right to study for a degree is indisputable. Learned woman is now an establishment figure.

Cambridge is by no means the only site where battles between the sexes have been fought over the right to higher education. Nonetheless its hallowed reputation as an elite academic institution and its historic male-only traditions make it an ideal place in which to examine contributions made by women to intellectual life.

Let us take the history of the Cavendish Laboratory as an example. This building is most commonly remembered for its association with famous names such as James Clerk Maxwell, Lord Rayleigh, J. J. Thomson and Ernest Rutherford. Doubtless 1997 will spawn many events celebrating the centenary of the electrons "discovery" and by implication the "man who discovered" its existence. This description of scientific research as the work of a lone genius who had a great idea and single-handedly developed a new ground-breaking theory is neither accurate nor particularly instructive. As anyone who has ever attempted a scientific experiment will testify, investigative science is by no means a solitary activity. Attribution of credit to one professorial figure ignores contributions made by assistants, instrument makers, technicians and research students. This is particularly relevant when we consider that women often assumed these lower status roles.

Heroine-worship of Marie Curie-esque mortals does point the finger towards women scientists, but it does not get to grips with the assumption that scientific excellence requires a male mind. "It is useless to cite instances of women who have gained eminence," observed the author H. J. Moray in *The Women in Science*. His caution should be heeded. Individuals can always be dismissed by stereotypes as exceptions, curiosities but not fitting examples. An alternative, and more appropriate, strategy

Paula Gould won this year's Minerva Prize, sponsored by *The THES*, for an essay describing the sexism suffered by Victorian women. (This is an extract)

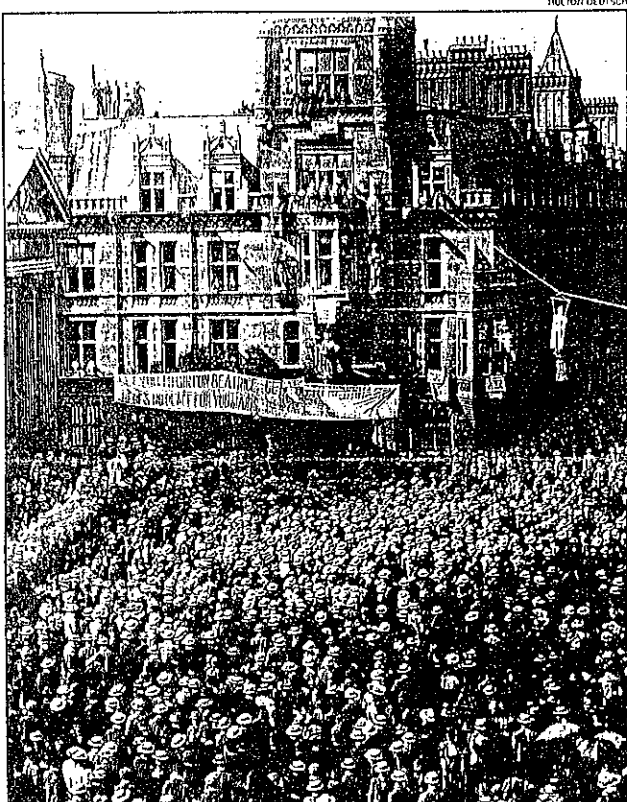
is to assess women's contributions to science on a day-to-day basis. By reconstructing a normal working environment, the relevance of a female presence to intellectual activity can be better understood. Professor J. J. Thomson was not working alone when he published results of experiments suggesting the electron's existence. As director of experimental physics at an expanding teaching and research establishment, his revered mind had to grapple with lecture timetables, equipment shortages and supervision of numerous experimental projects in addition to his own. For him, intellectual life included discussion with friends, family and colleagues, both male and female, as well as solitary contemplation.

Once we accept the essentially collaborative nature of science, it is less of an ideological problem to find that the first women at the Cavendish worked together with men and not on their own. In mixed-sex partnerships the boundaries between intellectual and emotional support were sometimes blurred. Rose Paget's investigations into soap films came to an abrupt halt in December 1889 on her engagement to Thomson. They were married in January 1890 and she adopted the new position of laboratory hostess. Sarah Harland also met her future husband William Shaw, laboratory demonstrator and then lecturer in experimental physics, at the workbench. For Victorian society this was an ideal arrangement, the perfect union of hearts and minds. "Women's remarkable incapacity for independent mental labour," commented Philip Hamerton in his treatise *The Intellectual Life*, "is accompanied by an equally remarkable capacity for labour under an accepted masculine guidance." In the context of science his words should be read as a comment on accepted practice rather than a slur on ladies who were only fit to follow their master's lead. Public credit for a piece of research depended on presentation of results at scientific societies. Traditionally male gatherings, the work of female researchers was read for them by proxy. Women were consequently dependent on men of science to promote their cause.

While attachment to a male mentor was critical to intellectual recognition, the requirement for a spokesman makes it difficult to gauge exactly who took the lead in each project. Eleanor Sidgwick was recognised as co-author with her brother-in-law Lord Rayleigh on three papers presented to the Royal Society, the subjects ranging from the specific resistance of mercury to the absolute determination of the ohm.

Ileen Klaassen took the sole credit as author for her research on electric resistance curves. The results were communicated by Thomson to the Royal Society and he was acknowledged for suggesting the topic. Similarly Philippa Fawcett and Florence Martin appeared as lone names at the top of their electrochemistry papers presented to the Cambridge Philosophical Society. Again, Thomson took the letters on their behalf, acknowledged in print for his suggestions and directions. Single authors, co-authors, assistants, acknowledged helpers... the politics of recognition were by no means simple.

Today scientific etiquettes have changed but it is no easier to match the names at the top of



Cambridge University men rally against the proposal for degrees for women in 1897. The banner reads: 'Get you to Girton Boatslice, get you to Newnham. Here's no place for you maids.'

a research paper with the actual labour involved in the knowledge production.

Returning to the 19th century, the intellectual life of the Cavendish Laboratory was not exclusively confined to time spent performing experiments. Indeed one of the most significant collaborations was the founding of the Cavendish Physical Society, a fortnightly seminar session chaired by Professor Thomson. During term time research students and lecturers met together to discuss either recently published scientific papers, or to present their own results to a relatively friendly audience.

Rose Thomson was responsible for providing refreshments at the start of each meeting, sometimes enlisting other female researchers to help her. Once serious debate began cups and saucers were put away, and the women took their places in the audience. Despite the heterogeneity of the audience for Cavendish Physical Society, a fortnightly seminar session chaired by Professor Thomson.

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lecturers met together to discuss either recently published scientific papers, or to present their own results to a relatively friendly audience. Rose Thomson was responsible for providing refreshments at the start of each meeting, sometimes enlisting other female researchers to help her. Once serious debate began cups and saucers were put away, and the women took their places in the audience.

Despite the heterogeneity of the audience for Cavendish Physical Society meetings, and its value as a practice speaking platform, female students were not expected to discuss their own work. Women certainly took an active interest in proceedings once the tea had been finished, but they were seldom invited to take the stage. The importance of this gathering should not be underestimated: tea-drinking and open discussion remain key components in present day laboratory life. The question of who makes the tea and who dominates the conversation are just as relevant to the 1990s as they were to the 1890s.

September 1997

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A special issue

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BARBARA K. STEPANSKY

B S H S

THE BRITISH
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THE HISTORY
OF SCIENCE

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When I left Oxford in 1979 and made the short trip east to Cambridge I carried with me a distinctive philosophical baggage: skills in linguistic analysis and a youthful confidence in being able to pinpoint flaws in arguments and the confusions of ordinary communication. In short, I had been trained as an Oxford philosopher, a world view that ended at Cowley, although I did not know it at the time.

At Cambridge, in the department of history and philosophy of science, I began, rather painfully, to realise that my tools of the trade were inadequate. I came to learn that epistemology and problems of knowledge could not so easily be wrestled from their historical context and that, in the case of natural science, the distinction between the logic and the context of discovery was increasingly difficult to make. This was not the path to sociological reductionism but that of careful historical imaging.

MICHAEL POWER SPEAKING VOLUMES

on Gerd Buchdahl's

Metaphysics and the Philosophy of Science

nation, hermeneutic engagement with the classical period of philosophical systems-building. At the heart of my apprenticeship lay Gerd Buchdahl's unsung *four de force*, *Metaphysics and the Philosophy of Science*, a book whose unremarkable title belies its dazzling mixture of analytical and historical insight.

I learnt that the history of ideas is not to be understood as a disconnected roll-call of great minds but as the uncertain trajectory of conceptual systems emerging from practical preoccupations. From Descartes to Kant philosophy is no longer readable as the hermetically sealed search for abstract foundations.



that over-used parody of classical philosophy, but emerges as a reflective engagement with concrete problems and the need for, albeit tentative, conceptualisations of a developing empirical science. Starting from specific preoccupations with understanding the concept of "matter", or Newton's law of gravitational attraction, Buchdahl shows how reflections on the fundamental structure of orderly experience arise naturally rather than as a form of wild transcendentalism. This is not tired old "history of ideas 101" but a sustained attempt to explicate systems of thinking which were never certain of calling themselves philosophy.

of "deduction"; Berkeley's and Hume's "ideas"; and Locke's concept of "object" were used in different ways, often inconsistently, not because they were stupid or were suffering from some grotesque linguistic mistake which an Oxford undergraduate could demolish. Rather, arguments which seemed at first just silly, such as Descartes' famous ontological argument for the existence of God, slowly began to make sense against a background of prevalent rationalist beliefs and ideas. Each classical thinker in turn grapples with the issues of the day, issues which require a metalanguage to be made up as one goes along, a language in which there can be no clean distinction between metaphysics and empiricism. In this book I recognised for the first time what was at stake in this constructive process. Metaphysics is a project with heart and excitement, an adventure in ideas in which connections between mundane practices of measurement and the

search for foundations of self-knowledge shock the reader while providing a firm reminder of the situated nature of philosophical reasoning. It is also a tough and long book which, in today's environment of research evaluation, might well have been split into its constitutive parts to give the appearance of productivity. Yet the sweep of the whole is vitally important: one must experience the twists and conceptual turns of a form of inquiry which always lived uneasily with the linguistic resources available to it. To understand the continuity of problems which preoccupied these thinkers and the overlaps between their respective conceptual frameworks is to grasp the essential tension for a rationalist tradition struggling to accommodate the growing importance of empirical knowledge.

Perhaps all of this was, and is, obvious to others, but one should also imagine the impact of this explosion of historical sensitivity on a rather naive and narrowly skilled student of Oxford philosophy. The experience was to reawaken some of the original motivations for doing philosophy in the first place and, as a pupil of Buchdahl himself, I was exposed to the most intense intellectual engagement with a series of problems that I have ever experienced.

Although I no longer work in the field of philosophy I would like to think that *Metaphysics and the Philosophy of Science* has had a lasting effect on the way I conceive of problems. I would like to think that I have developed a little of the constructivist imagination which neither accepts concepts at face value nor dismisses them as incoherent, but which locates them as part of self-supporting assemblies of ideas which are in a constant process of change and development.

Michael Power is professor of accounting, London School of Economics and Political Science.

TIMES HIGHER EDUCATION SUPPLEMENT 18/7/97

An old-fashioned expedition explores the fascination of fungi

Sorting out the deadly from the delicious

PROF Nick Jardine stared at the little mushroom held between his fingers.

"Hmm, if it's what I think it is, this is a really high-grade killer, right up with the Death Cap," he explained.

We shuffled uneasily, staring at the innocuous object that one of us had unwittingly picked a few minutes earlier.

As we embarked on the Great Fungus Hunt, the Cambridge academic had warned us we did so at our own risk and mentioned a student who had been hospitalised after a similar outing, having eaten what he thought was wild angelica - it turned out to be hemlock.

Even so, it was a little chilling when Prof Jardine pointed out a Death Cap to us and speculated there was probably enough poison in it to kill half of us.

The Great Fungus Hunt is an annual event organised by the Cabinet of Natural History, part of Cambridge University's Department of the History and Philosophy of Science.

"This is a perfectly serious research seminar which studies the history of field sciences," Prof Jardine said.

Such expeditions were popular among naturalists in years gone by but they are rare today and hence only a handful of



Every year, a group of Cambridge University academics and students spend an afternoon searching Thetford Forest for mushrooms. Some of these remarkable fungi are deadly. Others are delicious. Science Reporter STEVE FARRAR joined the Great Fungus Hunt with an eye to picking up a free meal.

people get to appreciate the astounding variety of colours, shapes and sizes that the humble mushroom can be.

Prof Jardine, who has been fascinated by fungi for some 40 years, guided us through a couple of carefully chosen sites in Thetford Forest, patiently identifying everything we brought before him.

"I prefer mushrooms to people," he said, somewhat sarcastically.

"I can't remember my students' names but I can remember the names of 2,000 mushrooms."

He would sniff one, rattle out some Latin and exclaim "very, very dangerous indeed", gaze at another, pronounce more Latin and mutter "almost certain death".

He pointed to one of my first haul and declared it to be a False Chanterelle, adding: "The true one is delicious - this one is utterly disgusting and quite poisonous."

Occasionally, however, he smiled and informed us that someone had stumbled upon a delicacy.

One mushroom was, he said, eaten pickled as a bar snack in eastern Europe, another with a strong peppery flavour was used to make curry powder in Scandinavia.

A handful were very tasty when fried or stewed.

Separating the deadly from the delicacies was a task only for the expert and even Prof Jardine seemed reluctant to give an absolute judgement without the aid of a microscope or chemicals.

"You have to be very careful," he said.

But taking his guarded recommendation a few evenings later, in the name of science, a handful of pine cepes, clitocybes, wood mushrooms and puffballs were fried and eaten with pasta.

They were delicious.

MUSIC LISTINGS IN WEEKENDER - IN YOUR No 1 NEWS TOMORROW

Cambridge Evening News 31 October 1997

Amusing theme

■ CAMBRIDGE: The second in a series of Cambridge University lectures on "The History of the Book/History of the Sciences" will take place at 8pm tonight in the Old Library, Darwin College.

Aileen Fyfe will discuss "Reading Children's Books in Liberal, Dissenting Families: An Instructive and Amusing Example." Members of the public are welcome.

CAMBRIDGE EVENING NEWS 4/2/97



ANNUAL REPORT

1997

Cambridge Wellcome Unit
for the
History of Medicine

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Cambridge Wellcome Unit for the History of Medicine**ANNUAL REPORT 1997****GENERAL****Unit Events and Developments**

A year is a long time in the history of a history of medicine Unit. At the end of 1996 the future of the Cambridge Unit looked very good, with the recent award of a 'five star A' rating (the highest grade) in the Research Assessment Exercise, and with negotiations continuing between the University and the Wellcome Trust for a restructuring of the Unit and providing it with a high-level Director. However, a year later the Unit is in the position of being due to be closed in a few months, at the end of September 1998. After several months of uncertainty, the decision of the Governors of the Wellcome Trust was conveyed to the University in July. The grounds for this decision have not been made public. This plan supersedes the new arrangements for the future of the Unit announced in the last report.

Naturally enough in this situation, 1997 was a year of uncertainty, dejection and retrenchment, and the Unit was unsuccessful in its applications to the Trust for new Fellowships. However, the level of scholarly energy in the Unit remained high, and the Unit's output of scholarly work, its programmes of seminars, and exhibitions, have all continued unaffected. The customary level of scholarly activity will be maintained until the closure of the Unit.

The futures of the two members of 'core staff' of the Unit, Drs Cunningham and Kamminga, are unresolved at the time of writing. They have both been invited to apply for Wellcome Trust funding to work at the new Wellcome Unit in the University of East Anglia in Norwich, or elsewhere. Dr Cunningham continued as Acting Director of the Unit for a fifth successive year.

As usual, Unit members presented papers across the world: they could be heard speaking in Britain in Aberdeen, Cambridge, Glasgow, Leeds, London, Oxford and Reading; in Europe in Belgium (Louvain), Denmark (Copenhagen), France (Paris, Marseille, Lyons), Germany (the Saarland), Italy (Florence, Bologna); and in the Americas in Kalamazoo, Mexico City, Seattle and Williamsburg (Virginia).

Unit Associates have been very active in the course of the year. In particular, Peter Jones has established the 'Electronic Thorndike and Kibre' project to put onto CD rom an updated version of Thorndike and Kibre's famous book of incipits (opening words) of medieval scientific and medical manuscripts. This will be based in the Unit until the Unit closes. Unit Associate Debby Banham, scholar of Anglo-Saxon medicine, achieved very

wide press, radio and t.v. coverage for her discovery of the earliest English recipes.

The Unit's newsletter, *Phys...*, reached its fifth and (it turns out) final issue, and was mailed to several hundred institutions and individuals in Britain, Europe, America and Japan. *Phys ...* has made the work of the Cambridge Unit known to the history of medicine and history of science community world-wide.

Links with the History Faculty continued, with several members of the Unit offering lectures on themes related to the history of medicine, with Drs Andrew Cunningham and Ole Grell teaching on disease, famine and war in Reformation Europe, and Dr John Henderson with Unit Associate Peter Jones again teaching on disease and society in pre-industrial Europe.

In addition to the three regular seminar series, a Special Seminar, of wider appeal, was given in June by Dr Terrie Romano from Queen's University, Ontario, one of the Visiting Scholars of the Unit in 1997, on the theme of 'Constructing Germs: The Laboratory in Imperial Britain'.

A new exhibition was mounted by the Unit in the University's Clinical School. On the theme of 'The History of Dentistry: Technique and Demand', it was curated and set up by Roger King, under the supervision of Andrew Cunningham. It was opened in July by the Regius Professor of Medicine, Sir Keith Peters. The exhibition is built on the Ph.D. research work of Roger King, who has explored the origins of the role of the *dentiste* in seventeenth century France.

The successful completion of Ph.D. theses is a source of joy to the supervisor as much as to the candidate. Russell Viner and Desirée Cox-Maksimov, both doctors who started in the Unit in the M.Phil. programme in 1992-3, successfully submitted their theses during the year. Dr Viner was supervised by Dr Cunningham, and Dr Cox-Maksimov by Dr Kamminga.

Andrew Cunningham
Acting Director

Members of the Cambridge Wellcome Unit - 1997

Staff

Andrew Cunningham, Acting Director. Wellcome Trust Lecturer in History of Medicine. Director of Graduate Studies. Oversees the Unit's programme in Early Modern Medicine. Chiefly responsible for the Unit's teaching programmes. Main research interest: medicine and anatomy, from the 13th to the 19th century.

Harmke Kamminga, Senior Research Officer. Oversees the Unit's programme in Modern Biomedicine. Responsible for the Unit's teaching and exhibition programme at the Clinical School. Main research interest: the modern biomedical sciences.

Roger French, University Lecturer in History of Medicine. Oversees the Unit's programme in Medieval and Renaissance Medicine. Main research interest: medieval academic medicine.

Unit Administrator. Responsible for finance, records, and general administrative support for Unit staff:-

Tamara Hug, January - July

Fiona Broadhurst, September - October

Howarth Penny, from January, 1998

Lan Wang, Senior Accounts Clerk, from November, 1997

Research Fellows

Silvia Frenk, Wellcome Research Fellow, working on 'The genesis of molecular medicine: the creation of a conceptual framework for medical genetics, 1945-1970'.

Ole Grell, Wellcome Research Fellow, working on 'The growth of medicine and health care provision and the emergence of absolutism in post-Reformation Europe'.

John Henderson, Senior Wellcome Research Fellow, working on 'The hospitals of late-medieval and Renaissance Florence'.

Michael Stolberg, Heisenberg Fellow, working on 'A new medicine for the Lutheran orthodoxy: Daniel Sennert and the Wittenberg school, 1590-1640'.

Helen Valls, Wellcome Research Fellow, working on 'The *Chirurgia* of Roger Frugardi and the making of vernacular medicine in Europe, 1150-1450'.

Associates

Debby Banham, working on Anglo-Saxon medicine and botany.

Helen Brock, working on William Hunter and 18th-century medicine, and North American colonial medicine.

Soraya de Chadarevian, working on the history of molecular biology, particularly in Cambridge.

Silvia de Renzi, working on medicine in Rome in the first half of the 17th century.

Peter Jones, working on medieval medical and scientific manuscripts.

Roger King, working on the history of dentistry.

Christine Salazar, working on Graeco-Roman medicine, especially medicine in armies, on classical surgery, and on Paul of Aegina.

Anne Secord, working on working-class botany in the nineteenth century.

Mark Weatherall, working on biochemistry in Cambridge and Paris, 1914-1950.

Ph.D. Students

Desirée Cox-Maksimov, completed work on The making of the clinical trial, 1900-1950.

Mary Jennings, working on The history of human genetics in Britain, 1945-1975.

Rina Knoeff, working on Herman Boerhaave and chemical medicine.

Kim Taylor, working on The history of the barefoot doctors in China.

Russell Viner, completed work on The creation of pediatrics in America.

History of Medicine M.Phil. Students**1996-97**

Victoria Cline (U.K.)
Suzanne Dieter (U.S.A.)
Aaron Logan (U.S.A.)
Akhil Mehra (U.S.A.)
Laurence Weets (Belgium)

1997-98

Michael Eamon (Canada)
Keith Kocher (U.S.A.)

Visiting Students

Carmel Ferragud, Valencia (Oct-Dec)

Christine Sendra-Mocholi, Valencia (Oct-Dec)

Alfons Zarzosa, Barcelona (Oct-Dec)

Visiting Scholars

Dr. Jon Arrizabalaga, Barcelona (July).

Prof. Don Bates, McGill, one year's visit to Unit (Oct 96 to Sept 97).

Dr. Monserrat Cabré, Barcelona (July-Oct).

Guido Giglioni, University of Macerata (April).

Prof. Bruce Moran, University of Nevada (From Oct 97).

Dr. Mariko Ogawa, Mie University, Tokyo (July).

Dr. Terri Romano, Queen's University, Kingston, Ontario (Jan to June 97).

Dr. Fernando Salmon, University of Cantabria, Santander.

Teaching

Undergraduate Teaching

As in previous years, the Unit continued to teach two history of medicine courses, which form part of the full-time final year undergraduate programme in History and Philosophy of Science, and also part of the final pre-clinical programme for medical and veterinary students. Several Medical and Veterinary Studies students chose to do their obligatory dissertation in the area of history of medicine.

In Lent term the modular course 'Topics in the history of medicine' (36 lectures) was taught jointly by Drs Cunningham, Kamminga, Henderson and Jones. The survey course (Michaelmas term, 24 lectures) was taught jointly by Drs Cunningham and French.

The lecture prospectus is attached to this report.

Clinical School Teaching

The course presented to Phase I clinical students was taught this year by Dr French.

Graduate Teaching: M.Phil.

The Unit's M.Phil. course was again run by Drs Cunningham and Kamminga, and was taken by five students, three from America, one from Belgium and one Briton. They were all self-funding. They all passed successfully. Work produced in previous years of the M.Phil. course continued to appear in print in refereed journals.

Victoria Cline (Darwin)

Essays:

Thomas Willis (1621-75) and his Circle. (Supervisor: Andrew Cunningham)
John Howard, Lazarettos and the Dissenting Social Reform Movement of the Eighteenth Century. (Supervisor: Andrew Cunningham)
Edward Schäfer and Hormone Research: Promoting the "New Physiology" (Supervisor: Harmke Kamminga)

Dissertation:

Glutathione and Interwar Biochemistry in Cambridge (Supervisor: Harmke Kamminga)

Suzanne Dieter (Clare)

Essays:

Noah Biggs and Medical Reform in Mid-Seventeenth Century London (Supervisor: Andrew Cunningham)
The Genealogy of Antiseptic Midwifery: Semmelweis and the Obstetrical Society of London (Supervisor: Andrew Cunningham)
X-rays and Pregnancy: Sights Unseen in Antenatal Care in Interwar Britain (Supervisor: Nick Hopwood)

Dissertation:

Women and the Sanitary Movement: Discourses and Actions (Supervisor: Andrew Cunningham)

Cambridge Wellcome Unit Annual Report 1997

Aaron Logan (Wolfson)Essays:

Medical Etiquette in Ancient Greece (Supervisor: Christine Salazar)

Surgeons and Wound Management in France and Italy, 1200-1400 (Supervisor: Andrew Cunningham)

Thomas Percival and the American Medical Association (Supervisor: Andrew Cunningham)

Dissertation:

Cardiac Transplantation, 1967-1987: Public Opinion, the Media, and the Development of a Clinical Therapy (Supervisor: Harmke Kamminga)

Akhil Mehra (Trinity Hall)Essays:

Ambroise Paré, the Royal Surgeon and the Monster (Supervisor: Andrew Cunningham)

Professional Threat or Rhetorical Opportunity? The Medical Profession and the Discourse of the Mesmerist Debate, 1820-1838 (Supervisor: Andrew Cunningham)

The Johns Hopkins Medical School and German Laboratory Science: William H. Welch and the Bacteriological Marketing of Public Health (Supervisor: Harmke Kamminga)

Dissertation:

The Bombay Plague of 1897 and the Indian Liminal Classes (Supervisor: Andrew Cunningham)

Laurence Weets (Wolfson)Essays:

Descartes and Medicine (Supervisor: Andrew Cunningham)

Three Histories of *Anorexia Nervosa* (Supervisor: Andrew Cunningham)

Charcot and the Nerves (Supervisor: Harmke Kamminga)

Dissertation:

The Origin of the Asylum (Supervisor: Andrew Cunningham)

Graduate Teaching: Ph.D.**Desirée Cox-Maksimov** (Wolfson College)

Completed and successfully defended her thesis 'The Making of the Clinical Trial in Britain, 1910-1945: Expertise, the State and the Public'. (Supervisor Harmke Kamminga; examiners Dr Gillian Sutherland and Professor John Pickstone)

Russell Viner (Clare College)

Completed and successfully defended his thesis 'Abraham Jacoby and the Making of American Pediatrics'. (Supervisor Andrew Cunningham; examiners Professor John Pickstone and Dr Dorothy Porter)

Rina Knoeff (Darwin College)

Continued work on Herman Boerhaave and chemistry for medicine. (Supervisor Andrew Cunningham)

Kim Taylor (Wolfson College)

Took the year out in China.

Seminars

The seminar programme of the Unit continued to have four strands. Each of the three research programmes had its own seminar series over two terms, and in addition there was one 'special seminar' aimed at a wider audience: Dr Terrie Romano from Queen's University, Kingston, Ontario spoke on "Constructing Germs: the Laboratory in Imperial Britain.

Medieval and Renaissance Medicine Seminar Series

This series was organised by John Henderson and Roger French, in association with Richard Smith and Phillipp Schofield of the Cambridge Group for the History of Population and Social Structure. In Lent Term the theme of the previous term was continued, 'Death, Diet and Disease'. Nancy Siraisi spoke on 'Signs and Evidence: Aspects of Autopsy in Sixteenth Century Italy', Miri Rubin on 'The Peculiar Body of the Medieval Jew', Tony Waldron on 'Nutritional Evidence from Human Skeletal Remains', and Sam Cohn on 'Florence and its Hinterland: Plague, Protest and Welfare from the Black Death to the Return of the Medici'.

In Michaelmas Term the seminar returned to more general themes. Joseph Ziegler spoke on "'Ut Dicunt Medici": Medical Knowledge and Scholastic Debate in the Second Half of the Thirteenth Century', Debbie Banham spoke on 'The Earliest English Culinary Recipes?', Phillip Lindley spoke on 'The Black Death in England: the Effect on the Arts', and Carole Rawcliffe on ' "Leaves on the Tree of Charity": The Hospital Nurse in the Later Middle Ages'.

Early Modern Medicine Seminar Series

Andrew Cunningham and Ole Grell continued as organisers of this series, on the general theme of Medicine and Society in Early Modern Europe. In Lent Term Howard Hotson spoke on 'Alchemical Logic: Johan Heinrich Alsted's "Encyclopedia" as "panaceaphilosophica"', Sandra Cavallo spoke on 'Who Provides Care? Health Care in the Family and the Community in Early Modern Italy', Hugh Trevor-Roper (Lord Dacre) spoke on 'Sir Theodore de Mayerne: Paracelsian and Royal Physician to the Early Stuarts', and Michael Stolberg spoke on 'The Patient's View: The Experience and Interpretation of Disease and the Body in Eighteenth Century Epistolary Consultations'.

In the Michaelmas Term Alfons Zarzoso spoke on 'Was There Public Health in Eighteenth Century Barcelona?', Maria Unkovskaya spoke on 'What Foreign Medicine Did in Seventeenth Century Muscovy', Edward Cheney spoke on 'English Perceptions of the English Hospital, 1250-1800', and Andrea Carlino spoke on 'Nothing To Do With Practice: A Sociological Approach to Anatomical Knowledge in the Renaissance'.

Modern Biomedicine Seminar Series

Harmke Kamminga organised seminars in this series in the Lent term to mark the new link with the Institute for the History of Science, University of Utrecht. Two speakers from the Utrecht Institute and two from the Cambridge Unit spoke under the heading "Utrecht/Cambridge United".

Harmke Kamminga spoke on 'The Unification of Science and Interwar Biochemistry', Patricia Faasse spoke on 'The Origins of Brain Research in the Netherlands', Silvia Frenk spoke on 'Defining the Normality of Difference: The Genetic Syndrome as United Entity', and Bert Theunissen spoke on 'F.C. Donders (1818-1889) on Science, Medicine and Society'.

The Research Programmes

Research in the Unit continued to be organised under three programmes, each overseen by a core member of staff. This arrangement, which was introduced under the Action Plan of 1992, works very effectively to give a shared focus to the work of the core staff and Research Fellows of the Unit. Each programme has its own seminar series.

Medieval and Renaissance programme

Dr Henderson and Dr French constituted the core of this programme. The year began with the high-profile appearance of *The Great Pox*, written by Jon Arrizabalaga, John Henderson and Roger French. It received exceptional attention in the press. The interest in epidemics and disease identity in this period continues with Dr French



now collaborating with Dr Arrizabalaga of the CSIC in Barcelona, on a paper on Gentile de Forligno and the plague.

The medieval and Renaissance history of hospitals has been the other major area of interest in this programme, with Dr Henderson being involved in organising several conferences and workshops. In January he ran 'Patient Records in the European Past' at Wolfson College, Cambridge. In November he jointly organised a one-day conference at the Courtauld Institute in London on 'Hospitals in Medieval and Early Modern Europe: Form and Function'. With the International Network for the History of Hospitals, of which he is a founder, Dr Henderson is involved in organising a conference in November 1999 at Norwich, to celebrate the history of the Great Hospital there.

At the turn of the year dual conferences took place, in which the unit was involved, one on the Articella, organised by former Unit member Dr Cornelius O'Boyle with Dr French, and the other on the electronic version of Thorndike and Kibre's list of incipits, organised by Unit Associate Peter Jones, both of which took place in Cambridge.

Early Modern Medicine

Dr Cunningham and Dr Grell continued to constitute the core of this programme. Dr Grell received a one-year extension of his Wellcome Fellowship, continuing it until the end of 1998.

One of their central interests is health care in the early modern period. The volume from the conference they organised in 1996 with Dr Arrizabalaga of the CSIC in Barcelona, went to press with Routledge under the title *Health Care and Poor Relief in Counter-Reformation Europe* and will appear in 1998. It will be a companion volume to *Health Care and Poor Relief in Protestant Europe, 1500-1700*, edited by Drs Grell and Cunningham, which appeared in 1997. Plans are well advanced for the next conference in the series, planned for Stuttgart in collaboration with Professor Jütte.

Other volumes appearing from the Early Modern programme in the year were Dr Cunningham's monograph, *The Anatomical Renaissance*, and *Western Medicine as Contested Knowledge*, which Dr Cunningham edited with Dr Bridie Andrews.

The exhibition presented at the Clinical School was on an early modern theme - the early history of dentistry - and Dr Cunningham supervised Dr King's work on this.

Drs Cunningham and Grell have been appointed as general editors of a new series in the history of medicine, 'History of Medicine in Context', which will appear with Ashgate. The first volumes will come out in 1998. Meanwhile they continue their joint work on war, famine and disease in Reformation Europe, while also continuing with their own independent researches.



Modern Biomedicine

Research in this programme, overseen by Dr Harmke Kamminga, has continued to focus on the history of biochemistry, nutrition science, and molecular biology. The final editorial work was done on *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s-1970s*, edited by



Soraya de Chadarevian and Harmke Kamminga, which is due to appear from Harwood Academic early in 1998.

The group's link with the Institute for History of Science in Utrecht, formalised in 1996, was celebrated with a Unit seminar programme in the Lent term, with speakers from both groups. In the Easter vacation Dr Kamminga visited Utrecht for research and discussions.

Over the summer, Dr Kamminga helped Annette Faux of the Biochemistry Library select and prepare displays about the history of the Cambridge Department of Biochemistry, for the official opening of its new building in November. The exhibits will be kept permanently in the central concourse of the building.

Material from the Unit exhibition 'Representations of the Double Helix', which was taken down in July after a successful run of more than two years in the University School of Clinical Medicine, was loaned to the Wellcome Institute for the History of Medicine in London, for its displays on 'Genetic Cultures' that were on view in September and October.

In October, Unit Associate Dr Soraya de Chadarevian was awarded a three-year MRC Senior Research Fellowship for a major extension of her research on the history of molecular biology in Cambridge, which began as a Unit Project in 1992. She holds the fellowship in the Cambridge Department of History and Philosophy of Science.

In December, Dr Mark Weatherall added the letters M.B. Ch.B. to his Ph.D. in the history of medicine, passing his finals at the University of Cambridge Clinical School with a distinction in medicine. Despite a high-pressure clinical programme, he made time to work on his forthcoming book on the history of medical education in Cambridge.

Consolidated List of Publications

In order to reflect the work of Unit members accurately, where authorship or editorship of a work has involved more than one member of the Unit, it is mentioned under each name.

Publications that appeared in print in 1997

- Andrews, B., ed. (with A. Cunningham) *Western Medicine as Contested Knowledge*. Manchester: Manchester University Press. (With editors' Introduction.)
- Chadarevian, S. de. Internationale Wissenschaft und die Ökonomie wissenschaftlicher Kommunikation - Überlegungen im Anschluss an Marey's "La Méthode Graphique" (1878) und Bernal's "The Social Function of Science" (1939). In C. Meinel, ed. *Fachschrifttum, Bibliothek und Naturwissenschaft im 19. und 20. Jahrhundert*. Wiesbaden: Harrassowitz, pp. 125-135.
- Chadarevian, S. de. Secuencias, conformación, información: bioquímicos y biólogos moleculares en los años 50. *Arbor*, 156, 15-44.
- Chadarevian, S. de. Examining, categorizing, predicting: diagnostic practices and the making of medical knowledge. Conference report. *Wellcome History*, no. 6, 6.
- Cunningham, A. *The Anatomical Renaissance: The Resurrection of the Anatomical Projects of the Ancients*. Aldershot: Scolar.
- Cunningham, A., ed. (with B. Andrews) *Western Medicine as Contested Knowledge*. Manchester: Manchester University Press. (With editors' Introduction.)
- Cunningham, A., ed. (with O. Grell) *Health Care and Poor Relief in Protestant Europe, 1500-1700*. London: Routledge. (With editors' Introduction.)
- French, R. (with J. Arrizabalaga and J. Henderson). *The Great Pox. The French Disease in Renaissance Europe*. Yale University Press.
- French, R. The use of Alfred of Shareshill's commentary on the *de Plantis* in university teaching in the thirteenth century. *Viator*, 28, 223-251.
- Grell, O., ed. (with A. Cunningham) *Health Care and Poor Relief in Protestant Europe, 1500-1700*. London: Routledge. (With editors' Introduction.)
- Grell, O. 'The protestant imperative of Christian care and neighbourly love'. In O. Grell and A. Cunningham, eds. *Health Care and Poor Relief in Protestant Europe, 1500-1700*. London: Routledge.
- Henderson, J. *Piety and Charity in Late Medieval Florence* (paperback edition). Chicago University Press.
- Henderson, J. (with J. Arrizabalaga and R. French). *The Great Pox. The French Disease in Renaissance Europe*. Yale University Press.
- Henderson, J. "Splendide case di cura". Spedali, medicina ed assistenza a Firenze nel Trecento. In A. Grieco and L. Sandri, eds. *Ospedali e Città'. L'Italia del Centro-Nord, XIII-XVI Secolo*. Florence.

- Jones, P. Medicine. In F.A. Mantello and A.G. Rigg, eds. *Medieval Latin: An Introduction and Bibliographical Guide*. Washington, DC: Catholic University of America, pp. 49-68.
- Jones, P. *Materia Medica: Miniature Medievali*. Milan: British Library/Centro Tibaldi.
- Kamminga, H. De waagstukken van Louis Pasteur. In B. Theunissen and C. Hakfoort, eds. *Newton's God en Mendel's Bastaarden: Nieuwe Visies op de 'Helden van de Wetenschap'*. Amsterdam: Meulenhoff, pp. 123-151.
- Kamminga, H. Biochemistry, molecules and macromolecules. In J. Krige and D. Pestre, eds. *Science in the Twentieth Century*. Amsterdam: Harwood Academic Publishers, pp. 525-546.
- Kamminga, H. Frederick Gowland Hopkins and the unification of biochemistry. *Trends in Biochemical Sciences*, 22, 184-187.
- Kamminga, H. The double helix as a cultural icon. *MRC News*, no. 76, 8-9.
- King, R. *The History of Dentistry: Technique and Demand* (Unit Exhibition series). Cambridge Wellcome Unit Publications.
- Knoeff, R. Jonathan Goddard (1617-1675), chemie, geneeskunde en de Royal Society. *Gewina*, 20, 1-13.
- Renzi, S. De. I draghi di Aldrovandi e le vipere di Redi: a proposito di musei e storia naturale nell'Italia del tardo Rinascimento. *Intersezioni*, 17, 123-130.
- Romano, T. Gentlemanly versus scientific ideals: John Burdon Sanderson, medical education, and the failure of the Oxford School of Physiology. *Bulletin of the History of Medicine*, 71, 224-248.
- Romano, T. The cattle plague of 1865 and the reception of 'the Germ Theory' in mid-Victorian Britain. *Journal of the History of Medicine and Allied Sciences*, 52, 51-80.
- Salazar, C.F. Fragments of lost Hippocratic writings in Galen's Glossary. *Classical Quarterly*, 47 (ii).
- Secord, A. Les pubs du Lancashire: la botanique, fierte des artisans. *La Recherche*, no. 300, 58-62.
- Stolberg, M. Stadtluft macht krank. *Rheinischer Merkur*, 2, 6.
- Stolberg, M. Die Homöopathie im Königreich Bayern. *Medizin, Gesellschaft und Geschichte*, 14, 9-29. [1995 volume, appeared in 1997]
- Stolberg, M. *Wolken über der Serenissima. Eine kleine Geschichte der Luftverschmutzung in Venedig* (Centro tedesco di studi veneziani, quaderni 51). Venice/Sigmaringen: Thorbecke.
- Stolberg, M. Entry on 'Morwitz, Eduard'. *Neue Deutsche Biographie*. Munich: Bayerische Akademie der Wissenschaften.
- Valls, H. Review of year's work in French, Anglo-Norman and German medicine. *Society for Ancient Medicine Review*, 24, 220-221.

Unit In-house Publications

Articella Studies

A new series of 'Texts and Interpretations in Medieval and Renaissance Medical Teaching', published jointly by the Cambridge Wellcome Unit for the History of Medicine and the Department of History of Science, CSIC, Barcelona. The series is produced in the Cambridge Unit.

O'Boyle, C. *Thirteenth- and Fourteenth-Century Copies of the Ars Medicine: A Checklist and Contents Description of the Manuscripts* (Articella Studies, number 1, 1998). Cambridge Wellcome Unit/CSIC, Barcelona.

Arrizabalaga, J. *The Articella in the Early Press, c. 1476-1534* (Articella Studies, number 2, 1998). Cambridge Wellcome Unit/CSIC, Barcelona.

Papers of the Articella Project Meeting, Cambridge, December 1995 (Articella Studies, number 3, 1998). Cambridge Wellcome Unit/CSIB, Barcelona.

Exhibition Series

King, R. *The History of Dentistry: Technique and Demand*. Cambridge Wellcome Unit, 1997.

**Publications in press at 31 December 1997
with publication expected in 1998**

- Banham, D. Entries on 'Food and drink in Anglo-Saxon England' and 'Monasteriales indicia'. In M. Lapidge *et al.*, eds. *Blackwell's Companion to Anglo-Saxon England*. Oxford: Blackwell.
- Banham, D. Herbs in Anglo-Saxon medicine. *Herbs*.
- Bates, D. Closing the circle: how William Harvey and his contemporaries played the game of truth. I. Rationality revisited. *History of Science*.
- Bates, D. Closing the circle: how William Harvey and his contemporaries played the game of truth. II. Conventionalizing coherences. *History of Science*.
- Brock, H., ed. New edition, with commentary and bibliography, of James Douglas. *A Description of the Guernsey Lilly* (1729).
- Brock, H. *An Iconography of William Hunter*. Glasgow: Hunterian Art Gallery.
- Brock, H. Entries on 'John Clephane' and 'Samuel Foart Simmons'. In C. Matthew, ed. *New Dictionary of National Biography*. Oxford University Press.
- Chadarevian, S. de, ed. (with H. Kamminga) *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s-1970s*. Reading: Harwood Academic Publishers. (With editors' Introduction.)
- Chadarevian, S. de. Following molecules: hemoglobin between the clinic and the laboratory. In S. de Chadarevian and H. Kamminga, eds. *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s-1970s*. Reading: Harwood Academic Publishers, pp. 171-201.
- Chadarevian, S. de. Of worms and programmes. *Caenorhabditis elegans* and the study of development. *Studies in History and Philosophy of Science*.
- Chadarevian, S. de. Entries on 'DNA' and 'Molecular biology'. In A. Hessenbruch, ed. *Reader's Guide to the History of Science*. London: Fitzroy Dearborn.
- Cunningham, A., ed. (with R. French, J. Arrizabalaga and L. García Ballester) *Medicine from the Black Death to the French Disease*. Aldershot: Ashgate.
- Cunningham, A., ed. (with O. Grell and J. Arrizabalaga) *Health Care and Poor Relief in Counter-Reformation Europe*. London: Routledge.
- Cunningham, A. Paracelsus fat and thin: thoughts on reputations and realities. In O. Grell, ed. *Paracelsus. The Man and his Reputation, his Ideas and their Transformation* (Studies in Medieval and Reformation Thought series). Leiden: E.J. Brill.
- Cunningham, A. The transformation of Hippocrates in seventeenth century Britain. In David Cantor, ed. *Hippocrates and Modern Medicine*. Aldershot: Ashgate.
- Cunningham, A. Protestant anatomy. In Les Sciences en la Renaissance series. Rome: Ecole française de Rome.
- French, R., ed. (with J. Arrizabalaga, A. Cunningham and L. García Ballester) *Medicine from the Black Death to the French Disease*. Aldershot: Ashgate.
- French, R. Teaching *De Plantis* in the early universities. *Physis*.

- Frenk, S. Entries on 'Heredity' and 'Parthenogenesis'. In E.M. Tansey *et al.*, eds. *The Oxford Companion to the Body*. Oxford University Press.
- Grell, O., ed. *Paracelsus. The Man and his Reputation, his Ideas and their Transformation* (Studies in Medieval and Reformation Thought series). Leiden: E.J. Brill. (With editor's Introduction.)
- Grell, O. The acceptable face of Paracelsianism: the legacy of *Idea Medicinae* and the introduction of Paracelsianism into early modern Denmark. In O. Grell, ed. *Paracelsus. The Man and his Reputation, his Ideas and their Transformation* (Studies in Medieval and Reformation Thought series). Leiden: E.J. Brill.
- Grell, O., ed. (with A. Cunningham and J. Arrizabalaga) *Health Care and Poor Relief in Counter-Reformation Europe*. London: Routledge.
- Grell, O. Entries on 'The reformation in Denmark, Norway and Iceland', 'Intellectual currents' and 'Religious and social regimentation'. In K. Helle *et al.*, eds. *Cambridge History of Scandinavia*. Cambridge University Press.
- Henderson, J. *Pieta e Carita a Firenze nel Basso Medioevo*. Florence: Casa editrice Le Lettere. (Italian edition of *Piety and Charity in Late Medieval Florence*.)
- Henderson, J. The mal francese in sixteenth-century Rome: the Ospedale di San Giacomo in Augusta and the "incurabili". In E. Sonnino, ed. *La Popolazione di Roma dal Medioevo all'Eta' Contemporanea. Fonti, Problemi di Ricerca, Risultati*. Rome.
- Henderson, J. Ospedali a Firenze all' inizio del cinquecento'. In A. Pagnini, ed. *Citta' e Salute. I Luoghi della Salute a Firenze*. Florence.
- Henderson, J. Charity and welfare in sixteenth-century Tuscany. In O. Grell, A. Cunningham and J. Arrizabalaga, eds. *Health Care and Poor Relief in Counter-Reformation Europe*. London: Routledge.
- Kamminga, H., ed. (with S. de Chadarevian) *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s-1970s*. Reading: Harwood Academic Publishers. (With editors' Introduction.)
- Kamminga, H. Vitamins and the dynamics of molecularization: biochemistry, policy and industry in Britain, 1914-1939. In S. de Chadarevian and H. Kamminga, eds. *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s-1970s*. Reading: Harwood Academic Publishers, pp. 83-106.
- Kamminga, H. Credit and resistance: Eijkman and the transformation of beri-beri into a vitamin deficiency disease. In K. Bayertz and R. Porter, eds. *From Physical Theology to Biotechnology: A Festschrift for Mikulás Teich*. Amsterdam: Rodopi.
- King, R. The dash for dentures: the turbulent introduction of National Health Service dentistry. *The British Dental Journal*, special NHS 50th anniversary issue.
- Renzi, S. De. Entries on 'Accademia dei Lincei' and 'Accademia del Cimento'. In A. Hessenbruch, ed. *Reader's Guide to the History of Science*. London: Fitzroy Dearborn.

- Renzi, S. De. A fountain for the thirsty and a bank for the Pope: charity, conflicts and medical careers at the Hospital of Santo Spirito in 17th-century Rome. In O. Grell, A. Cunningham and J. Arrizabalaga, eds. *Health Care and Poor Relief in Counter-Reformation Europe*. London: Routledge.
- Salazar, C.F. (with S. Kusakawa). *Philip Melanchthon: Orations on Philosophy and Education*. Cambridge University Press.
- Salazar, C.F. Getting the point; Paul of Aegina on arrow wounds. *Sudhoffs Archiv*.
- Salazar, C.F. Die Verwundetenfürsorge in Heeren des griechischen Altertums. *Sudhoffs Archiv*.
- Salazar, C.F. Entries on 'Galen', 'Hippocrates' and 'Greek Medicine'. In A. Hessenbruch, ed. *Reader's Guide to the History of Science*. London: Fitzroy Dearborn.
- Stolberg, M. *Die Homöopathie im Königreich Bayern. Aufstieg und Niedergang einer medizinischen Subkultur* (Quellen und Studien zur Geschichte der Homöopathie). Heidelberg: Haug.
- Stolberg, M. Gewerblich-industrielle Luftverschmutzung und Stadthygiene im 19. Jahrhundert. In W. Völk and J. Vögele, eds. *Stadt und Krankheit. Städtische Gesundheitsverhältnisse in der Zeit des epidemiologischen Übergangs*. Düsseldorf.
- Stolberg, M. Probleme einer Geschichte der Volksmedizin. In T. Schnalke and C. Wiesemann, eds. *Die Grenzen des Anderen. Methodenvielfalt und methodische Beschränkung in der Geschichte der Medizin des 18. Jahrhunderts*. Wien: Böhlau.
- Stolberg, M., Körpergeschichte und Medizinhistoriographie. In W.-U. Eckart et al., eds. *Medizinhistoriographie in der Neuzeit*. Heidelberg.
- Stolberg, M. Der gesunde und saubere Körper. In R. van Dülmen, ed. *Die Erfindung des Menschen*. Wien: Böhlau.
- Stolberg, M. Heilkundige: Medikalisierung und Professionalisierung. In N. Paul and T. Schlich, eds. *Medizingeschichte - Methoden, Perspektiven, Aufgaben*. Frankfurt: Campus.
- Valls, H. Review of B. Wallner, ed. *An Interpolated Middle English version of the Anatomy of Guy de Chauliac* (Lund University Press, 1996). *Notes and Queries*.
- Valls, H. Review of B. Wallner, ed. *The Middle English Translation of Guy de Chauliac's Treatise on 'Apostemes'* (Lund University Press, 1989). *Notes and Queries*.
- Viner, R. Hans Selye and the invention of stress. *Social Studies of Science*, 28.
- Weatherall, M.W. *Scientists, Doctors and Gentlemen: Medical Education in Cambridge, 1800-1940* (Studies in the History of the University of Cambridge series). Woodbridge: Boydell and Brewer.

Research Lectures and Papers Presented

January

- Kamminga, H. 'The Unification of Science and Interwar Biochemistry'. Cambridge Wellcome Unit for the History of Medicine.
- Chadarevian, S. de. 'Model Hero'. At the workshop 'Geniuses and Heroes in Science', Newnham College, Cambridge.
- King, R. 'Pierre Fauchard and the making of the dentiste in France, circa 1700'. In series 'History of French Medicine', Wellcome Institute for the History of Medicine, London.
- Secord, A. 'Whose Life is it Anyway? Or, the Unlocal Hero'. At the workshop 'Geniuses and Heroes in Science', Newnham College, Cambridge.
- Weatherall, M.W. 'The Country House, the Factory: Laboratory Cultures in Late Nineteenth Century Britain'. Glasgow Wellcome Unit for the History of Medicine.

February

- Cox-Maksimov, D. 'Clinical Trials, 1900-1959'. At the seminar on 'Bradford Hill', Department of Public Health.
- Frenk, S. 'Defining the Normality of Difference: The Genetic Syndrome as United Entity'. Cambridge Wellcome Unit for the History of Medicine.
- Stolberg, M. 'Der gesunde und saubere Körper'. Arbeitsstelle für historische Kulturforschung, University of the Saarland.

March

- Henderson, J. 'Ospedali e Medicina a Firenze nel Basso Medioevo'. At the conference 'Citta' e salute. I luoghi della salute a Firenze', Istituto degli Innocenti, Florence.
- Henderson, J. 'Plague and Hospitals in Renaissance Italy (I)'. Ecole des Hautes Etudes en Sciences Sociales, Paris.
- Stolberg, M. 'The Patient's View: The Experience and Interpretation of Disease and the Body in 18th-Century Epistolary Consultations'. Cambridge Wellcome Unit for the History of Medicine.
- Bates, D. 'Closing the Circle: How William Harvey and his Contemporaries Played the Game of Truth'. Science Studies Unit, University of Edinburgh.

April

- Frenk, S. 'The Genetics of Difference and Popular Human Genetics'. Newnham College, Cambridge.
- Henderson, J. 'Plague and Hospitals in Renaissance Italy (II)'. Ecole des Hautes Etudes en Sciences Sociales, Paris.
- Viner, R. 'Children and Child Welfare'. At the Sigerist Circle, 'American Association for the History of Medicine Annual Meeting', Williamsburg, VA.
- Bates, D. 'Did Harvey Discover or Invent the Circulation of the Blood?' Clare Hall, Cambridge.

May

- Cox-Maksimov, D. 'Standardisation, the State and Clinical Trials'. London School of Hygiene and Tropical Medicine.
- Stolberg, M. 'University Medicine in 16th-century Wittenberg'. All Souls College/Oxford Wellcome Unit for the History of Medicine.
- Valls, H. 'The Personal Anecdote, the Unknown Word and Other Problems for the Translator'. At the '32nd International Medieval Congress on Medieval Studies', Kalamazoo.
- Brock, H. 'The History of the Hunterian Museum, Glasgow University, from its Foundation to the Present'. University of Glasgow.
- Renzi, S. De. 'Collectors and Conjectures: Identifying Nature in the 17th Century'. Museum of the History of Science, Oxford.
- Renzi, S. De. 'The Speaking Person in the Novel'. Cambridge Historiography Group, Department of History and Philosophy of Science, Cambridge.
- Secord, A. 'Observing Differences: Artisans, Gentlemen, and the Work of Nineteenth-Century Botany'. At the colloquium 'Observation and Locality in the Victorian Field Sciences', Department of History/Center for Cultural Studies of Science, University of California at Los Angeles.

June

- Henderson, J. 'Syphilis in 16th-century Italy'. University of Marseille.
- Romano, T. 'Constructing Germs: The Laboratory in Imperial Britain'. Cambridge Wellcome Unit for the History of Medicine.

July

- Cunningham, A. 'Auto-Icon: Jeremy Bentham's Body and the Ideology of Industrial Capitalism'. At the European Science Foundation conference 'Nature Embodied', Bologna.
- Banham, D. 'Familiar and Exotic Plants in Anglo-Saxon Medical Texts'. At the 'International Medieval Congress', University of Leeds.
- Banham, D. 'The Anglo-Saxon "Monasteriales Indicia" in its Manuscript Context'. At the 'International Medieval Congress', University of Leeds.
- Renzi, S. De. 'What is a Civet? Exotic Animals as Facts and Fictions in 17th-century Rome'. At the SHARP conference, Magdalene College, Cambridge.

August

- Cunningham, A. 'Disease'. At the conference 'Northern Europe 1400 to 1648: Crisis or Transformation?', Royal Danish Academy of Science and Letters, Copenhagen.
- Grell, O. 'Poverty, Vagrancy and Migration'. At the conference 'Northern Europe 1400 to 1648: Crisis or Transformation?', Royal Danish Academy of Science and Letters, Copenhagen.

September

- Chadarevian, S. de. '"Life" as Information. Some Historiographic Remarks'. At the workshop 'Should Society Grant a Privilege on "Life"?', Montpellier.

October

- Cunningham, A. 'The Ritual of Anatomy'. In series 'Medical Rituals in Early Modern Society', Wellcome Institute for the History of Medicine, London.
- Grell, O. 'Post-Reformation Health Care and Poor Relief in Northern Europe'. At the conference 'The North Sea in the Early Modern Age', University of Aberdeen.
- Valls, H. 'The Nature of Medical Discourse in Latin and Vernacular Texts'. At the conference 'Voice, Text and Hypertext @ the Millenium', Seattle.
- Viner, R. 'Abraham Jacobi and the Creation of Medicine for Children in America'. In series 'People and Ideas in Medical History', University College London.
- Banham, D. 'The Earliest English Culinary Recipes?'. Cambridge Wellcome Unit for the History of Medicine.

November

- Kamminga, H. 'Science, Medicine and Disease Causation: Of Germs and Vitamins'.
Faculty of Science, UNAM, Mexico City.
- Kamminga, H. 'Discovery or Construction? The Science and Politics of Vitamins'.
Institute of Philosophical Investigations, UNAM, Mexico City.
- Henderson, J. 'Hospitals and Medicine in Renaissance Florence'. At the conference 'The Hospital in Late Medieval and Early Modern Europe: Form and Function',
Courtauld Institute of Art, London.
- Knoeff, R. 'Jonathan Goddard: "Chemically Given Physician"'. At the conference 'De l'Alchemia de Livabius au Phlogiston du Stahl. Chimie et Chimistes en Quete d'Identité, 1597-1697', Louvain la Neuve.
- Stolberg, M. 'La Négotiation de la Thérapie dans la Pratique médicale du 18me Siècle'.
At the conference 'Les Thérapeutiques: Savoirs et Usages', Centre Pierre Léon,
Lyon/Musée Claude Bernard, St. Julien.
- Valls, H. 'The Art and Practice of Medieval Medicine'. University of Reading.
- Renzi, S. De. 'Herodotus and the Microscope: Investigating Dragons in 17th-century Rome'. Cabinet of Natural History, Department of History and Philosophy of Science, Cambridge.

December

- Renzi, S. De. 'Robert S. Whipple and the Market in Rare Books of Science, 1920-1950'.
At the conference 'Medicine, Mortality and the Book Trade', Birkbeck College,
London.

Conferences Organised and/or Attended

January

'Patient Records in the European Past'. Workshop at Wolfson College, Cambridge.
Attended by J. Henderson.

February

'Examining, Categorizing, Predicting: Diagnostic Practices and the Making of Medical Knowledge', Hamburg. Co-organised, chaired and final commentary by S. de Chadarevian.

March

'Genetic Engineering and Human Self-Understanding', Hamburg. Chaired by S. de Chadarevian.

April

'American Association for the History of Medicine Annual Meeting', Williamsburg, VA.
Attended by A. Cunningham; paper presented by R. Viner.

May

'Gründerzeiten. Universitäts- und Hochschulgründungen vom Mittelalter bis zur Gegenwart'. Gesellschaft für Wissenschaftsgeschichte Symposium, Erfurt.
Attended by M. Stolberg.

June

'Medicine and the Glandular Vision of Life'. Workshop at the Wellcome Institute for the History of Medicine, London. Attended by H. Kamminga.

'Arbeitskreis Alte Medizin'. Mainz. Attended by C.F. Salazar.

July

'Dissolving Boundaries: History Writing Towards the Third Millenium', the Humanities Research Centre, University of Warwick. Attended by A. Secord.

August

'Northern Europe 1400 to 1648: Crisis or Transformation?', Royal Danish Academy of Science and Letters, Copenhagen. Co-organised by O. Grell; papers presented by A. Cunningham and O. Grell.

September

'Cities and Health: The Lessons of History', University of Liverpool. Session on plague organised by J. Henderson.

'Toleration and the Enlightenment', Corpus Christi College, Cambridge. Co-organised by O. Grell.

'Anglo-Dutch History', University of St. Andrews. Attended by O. Grell.

'Instrument - Experiment'. Annual meeting of the Deutsche Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik, Regensburg. Attended by M. Stolberg.

'Consuming Patterns and Patterns of Consumption', McDonald Institute for Archaeological Research/Department of Archaeology, Cambridge. Attended by D. Banham.

'The History of Science as Public Culture'. British Society for the History of Science 50th Anniversary Conference, Leeds. Attended by S. de Chadarevian.

November

'History of Science Society Annual Meeting', San Diego, CA. Attended by H. Kamminga.

'The Hospital in Late Medieval and Early Modern Europe: Form and Function', Courtauld Institute of Art, London. Co-organised and paper presented by J. Henderson; attended by D. Banham.

APPENDIX

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

MEDIEVAL AND RENAISSANCE PROGRAMME



DEATH, DIET AND DISEASE IN MEDIEVAL AND RENAISSANCE EUROPE

LENT TERM SEMINARS 1997

- 28 January **Nancy Siraisi** (Hunter College, City University of New York)
Signs and Evidence: aspects of autopsy in sixteenth century Italy.
- 11 February **Miri Rubin**, (Pembroke College, Oxford)
The peculiar body of the medieval Jew.
- 25 February **Tony Waldron** (Institute of Archaeology, London)
Nutritional evidence from human skeletal remains.
- 11 March **Sam Cohn** (University of Glasgow)
Florence and its Hinterland: plague, protest and welfare from the Black Death to the return of the Medici.
NOTE: this seminar will be held at The Cambridge Group for the History of Population and Social Structure 27 Trumpington St. as usual tea will be at 4.30pm, and the talk at 5.00pm

Seminars will be held on Tuesdays at 5.00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4.30pm in the Department.

Organisers: John Henderson, Phillipp Schofield, Richard Smith and Roger French

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

MEDIEVAL AND RENAISSANCE PROGRAMME



**MEDICINE
AND SOCIETY
IN MEDIEVAL
AND RENAISSANCE
EUROPE**

MICHAELMAS TERM SEMINARS 1997

- 14 October **Joseph Ziegler** (University of Haifa)
"Ut dicunt medici." Medical knowledge and scholastic debate in the second half of the thirteenth century.
- 28 October **Debbie Banham** (Wellcome Unit, Cambridge)
The earliest English culinary recipes?
- 11 November **Phillip Lindley** (University of Leicester)
The Black Death in England: the effect on the arts.
- 25 November **Carole Rawcliffe** (University of East Anglia)
"Leaves on the Tree of Charity": The hospital nurse in the later middle ages.

Seminars will be held on Tuesdays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

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CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

EARLY MODERN PROGRAMME



MEDICINE AND SOCIETY IN EARLY MODERN EUROPE

LENT TERM SEMINARS 1997

- 20 January **Howard Hotson** (University of Aberdeen)
*Alchemical logic: Johann Heinrich Alsted's **Encyclopedia as panaceaphilosophica**.*
- 3 February **Sandra Cavallo** (Royal Holloway, University of London)
Who provides care? Health care in the family and the community in early modern Italy.
- 17 February **Hugh Trevor-Roper** (Lord Dacre of Glanton, Oxford)
Sir Theodore de Mayerne: Paracelsian and royal physician to the early Stuarts.
- 3 March **Michael Stolberg** (Cambridge Wellcome Unit)
The patient's view: The experience and interpretation of disease and the body in 18th century epistolary consultations.

Seminars will be held on Mondays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

Organisers: Andrew Cunningham and Ole Peter Grell

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

EARLY MODERN PROGRAMME



**MEDICINE AND
SOCIETY
IN EARLY MODERN
EUROPE**

MICHAELMAS TERM SEMINARS 1997

- 20 October **Alfons Zarzoso** (Barcelona)
Was there public health in 18th century Barcelona?
- 3 November **Maria Unkovskaya** (Oxford)
What foreign medicine did in 17th century Muscovy
- 17 November **Edward Cheney** (Southampton)
English perceptions of the Italian hospital, 1500 - 1800
- 1 December **Andrea Carlino** (Geneva)
Nothing to do with practice. A sociological approach to anatomical knowledge in the Renaissance

Seminars will be held on Mondays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

Organisers: Andrew Cunningham and Ole Peter Grell

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

MODERN BIOMEDICINE PROGRAMME



UTRECHT/CAMBRIDGE UNITED

LENT TERM SEMINARS 1997

- 27 January **Harmke Kamminga** (Cambridge Wellcome Unit)
The unification of science and interwar biochemistry
- 10 February **Patricia Faasse** (Institute for History of Science, Utrecht)
On the origins of brain research in the Netherlands
- 24 February **Silvia Frenk** (Cambridge Wellcome Unit)
Refining the normality of difference: the genetic syndrome as united entity
- 10 March **Bert Theunissen** (Institute for History of Science, Utrecht)
F.C. Donders (1818 - 1889) on science, medicine and society

Seminars will be held on Mondays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

Organiser: Harmke Kamminga



CAMBRIDGE WELLCOME UNIT FOR
THE HISTORY OF MEDICINE

SPECIAL SEMINAR

Dr Terri Romano

from the Queen's University, Canada



Professor Burdon-Sanderson

Constructing Germs: the Laboratory in Imperial Britain

Tuesday 10th June 1997 at 4:30 pm
in Seminar Room 1, Department of History and Philosophy of Science,
Free School Lane, Cambridge

Tea will be served before the seminar at 4.00 in the Department.

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

MEDIEVAL AND RENAISSANCE PROGRAMME



**MEDICINE
AND SOCIETY
IN MEDIEVAL
AND RENAISSANCE
EUROPE**

LENT TERM SEMINARS 1998

- 21 January **Vivian Nutton** (Wellcome Institute, London)
Galen Goes to Heaven: Renaissance Biographical Accounts of Galen, 1330-1660.
- 3 February **Helen Valls** (Wellcome Unit, Cambridge)
Spot the Difference: Latin and Vernacular Medical Writings
- 17 February **Peter Jones** (King's College, Cambridge)
Happy Endings: Surgical Case Histories in the Fourteenth Century
- 3 March **Andrew Cunningham** (Wellcome Unit, Cambridge)
Epidemic Disease in Europe, 1490-1648: Crisis, Crises or What?

Seminars will be held on Tuesdays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

Organisers: John Henderson, Richard Smith, Roger French

CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

EARLY MODERN PROGRAMME



**MEDICINE AND
SOCIETY
IN EARLY MODERN
EUROPE**

LENT TERM SEMINARS 1998

- 26 January **Bruce Moran** (University of Nevada, Reno)
*Libavius the Paracelsian? Monstrous Novelties, Institutions,
and the Norms of Social Virtue*
- 9 February **Rina Knoeff** (Cambridge Wellcome Unit)
Boerhaave's Theology and the Chemical Elements
- 23 February **Gianna Pommata** (University of Bologna)
*A New Way of 'Saving the Phenomena': From Recipe
to 'Historia' in Early Modern Medicine*
- 9 March **Charles Webster** (All Souls College, Oxford)
A Portrait of Paracelsus

Seminars will be held on Mondays at 5:00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4:30pm in the Department.

Organisers: Andrew Cunningham and Ole Peter Grell

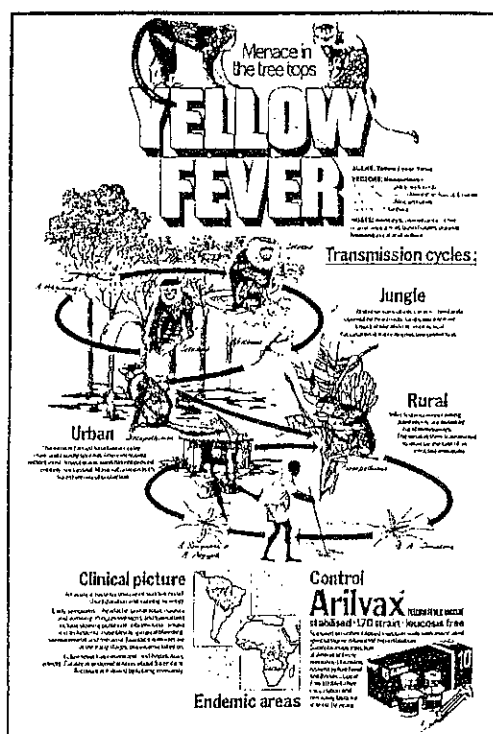
CAMBRIDGE WELLCOME UNIT FOR THE HISTORY OF MEDICINE

MEDIEVAL & RENAISSANCE

EARLY MODERN

MODERN BIOMEDICINE

MODERN BIOMEDICINE PROGRAMME



LENT TERM SEMINARS 1998

- 19 January Terence Kealey (Clinical Biochemistry, Cambridge)
The Medical Research Council was a mistake
- 2 February Ilana Löwy (INSERM U-158, Paris)
Yellow fever - the known and the lesser known aspects of experimentation on humans
- 16 February Toine Pieters (University of Limburg, Maastricht)
Shaping a new field of research: investigating interferon, 1958-1965
- 2 March Doris Zallen (Virginia Polytechnic University, Blacksburg, VA)
The Liverpool school of medical genetics and its influence on medical genetics in the U.K.

Seminars will be held on Mondays at 5.00 pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served before each seminar at 4.30 pm in the Department.

Organiser: Harmke Kamminga



History of Medicine

Paper 7: History of Medicine from Antiquity to Modern Times

Paper 7 will consist of 24 lectures in two parts, given in the Michaelmas Term. At least five supervisions will be offered to accompany this course.

Paper 8: Topics in the History of Medicine

Paper 8 will consist of seven courses on a variety of topics in the history of medicine. A supervision will be offered on each course. All Paper 8 courses are given in the Lent term.

No special medical, biological or historical knowledge is required to follow Paper 7 or any of the Paper 8 courses.

Organiser: Andrew Cunningham

-1-

Wellcome Unit for the History of Medicine
Department of History and Philosophy of Science
University of Cambridge

October 1997

-12-

PAPER 7: History of Medicine from

Part 1: The Philosophical Basis of Medicine

Roger French

12 lectures: *Michaelmas term, starting on Thursday 9 October at 2 pm; following that, Mondays 12 noon; Tuesdays 2pm; Thursdays 2pm.*

Since Greek medicine first came to Rome, Western medicine has characteristically relied for its theory on a philosophy of nature. By its means doctors persuaded patients, students and legislators that only a philosophical medicine was effective and was humanly possible. And although the philosophy of nature changed, sometimes suddenly and radically, it kept its relationship to medicine (approximately the same as science has to modern clinical medicine). This course examines what it was within philosophy that made it necessary for medicine and what external role it played in the doctors' strategies for their profession.



Aristotle, 'The Philosopher', observing the natural world

Supervision:
Edmund French, Christine Salazar

Animal Experimentation

Roger French

4 Lectures: Fridays 13 Feb; 20 Feb; 27 Feb; 6 Mar; all at 12 noon.

The difference between animals and men in Western thought was emphasised in a number of ways. Christian teaching asserted man's right to do as he wished with animals, and taught that they had no immortal souls. Philosophers seemed to agree. An economy that was largely agricultural did not encourage sentimentality to animals.

One of the uses of animals was to do experiments upon them to demonstrate a point in medicine or philosophy. Only rarely were reservations expressed; indeed anatomists of both human and animal bodies built up a stock of knowledge that was much larger than was necessary for medicine and surgery.

This course looks at why such a body of knowledge should have been assembled, and how society began to have qualms about experiments on animals.

Supervision: Roger French

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Antiquity to Modern Times

Part 2: The Making of Modern Medicine

Andrew Cunningham

12 lectures: Michaelmas term starting on Thursday 6 November at 2 pm; following that, Mondays 12 noon; Tuesdays 2pm; Thursdays 2pm.



The aim of the second part of the course is to give an outline of the history of modern medicine, with particular stress on the development of certain distinctive features of modern western medicine. These include the hospital, the provision of universal health care, the relation of doctor and patient, the alignment between experimental science and medicine, and concerns with specific disease causation and therapy.

'Modern' medicine is a product of the modern period, and therefore the course will start with the pivotal event customarily seen as marking the beginning of the modern age: the French Revolution. The French Revolution affected thinking in every sphere of human activity, and its effects on the theory and practice of medicine were momentous. Many of the traditions established in medicine in the aftermath of the French Revolution are still familiar today, and aspects of the story of medical theory and practice will be brought up to the twentieth century, with special attention given to the germ theory of disease and its impacts on diagnosis and therapy, and health care provision.

Supervision: Joanna Norland

-3-

Science, Food and Health, 1890s-1930s

Harmke
Kamminga

4 lectures: Thur 15 Jan, 2
pm; Mon 19, noon; Tue 20,
2 pm; Thurs 22 Jan, 2 pm.

The relationships
between health and
diet came to be
viewed in new ways
with research on
vitamins. This

course will look at the science of vitamins from many different
angles: vitamins and dietary deficiency diseases; vitamins and
food policy during World War I; vitamins and the Medical
Research Council; vitamins and the rise of biochemistry;
vitamins and standardisation; vitamins and industry; vitamins
and the consumer; vitamins and politics during the Depression.

The focus on vitamins will be used to highlight more
generally how 20th-century links were built between science,
medicine, funding agencies, industry, health policy and society at
large, and also how these relationships changed, and why.

Supervision: Rina Knoeff

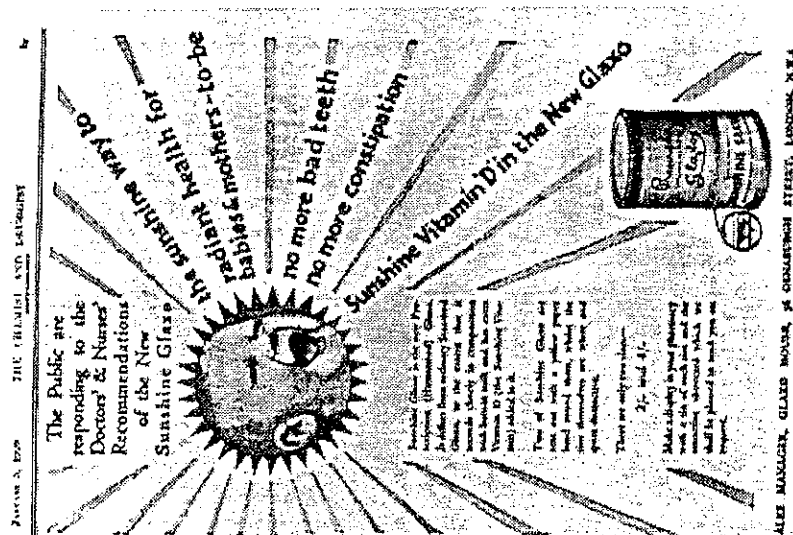
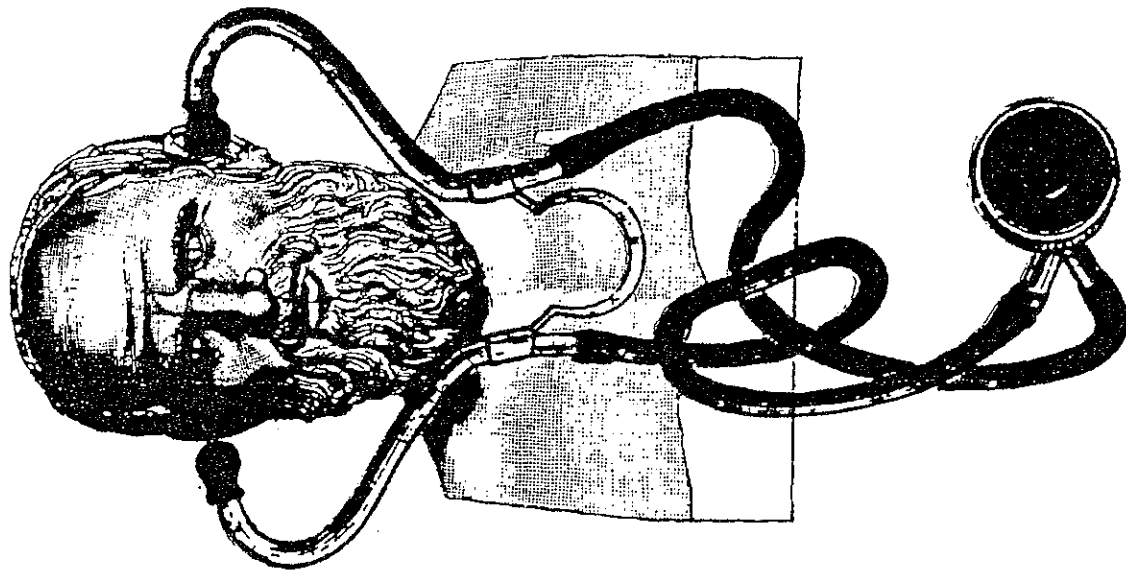
Making History

Andrew Cunningham

4 lectures: Tue 3 Mar, 2 pm; Thu
5 Mar, 2 pm; Mon 9 Mar, 12
noon; Tue 10 Mar, 2 pm.

Why does medical
history have the subjects,
the stories and the heroes
that it does? Four case
histories will be
presented to show how,
and under what kind of
circumstances, medical
men and historians have
built images of the past of
medicine, and peopled it
with heroes making
achievements. They
have made history
retrospectively - and for
their own purposes. The
question will be raised as
to how far we can take
the accounts of medical
history that we have as
legitimate accounts of
what 'really happened'.

Supervision: Sachiko Kusakawa



The Soul and Medicine

Roger French

Mon 23 Feb, 12 noon; Tue 24 Feb, 2 pm; Thur 26 Feb, 2pm; Mon 2 March, 12 noon



The picture, an initial capital from a 13th century manuscript copy of Aristotle's work *On the Soul*, shows a deathbed scene with the patient's wife and doctor. Above, the released soul flies on wings to heaven.

The soul, as the agent of both intellection and immortality, was of great interest to doctors. This course looks at the functions attributed to the soul by the doctors and philosophers of antiquity, and at how their doctrines were received in the Middle Ages at a time when Christian doctrines were very different. Revolutions in natural philosophy, on which the theory of medicine rested, meant drastic change in the way people thought about the soul. Two case studies take the story through the mechanical philosophy of Descartes to Enlightenment Deism.

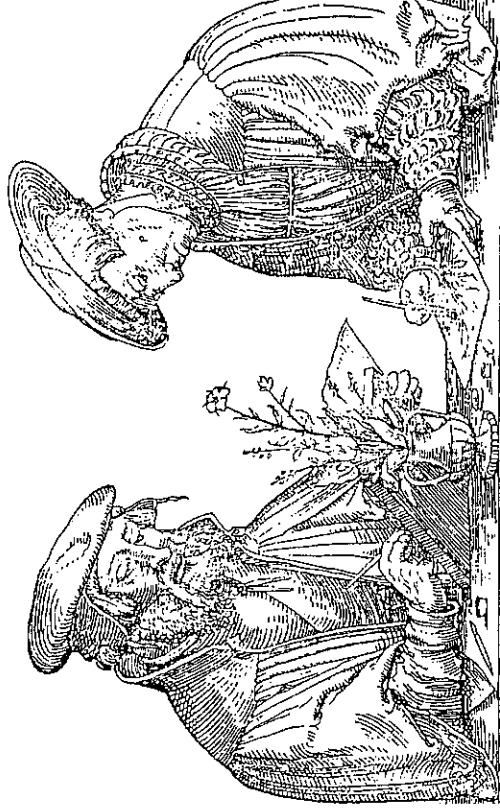
Supervision: Roger French

8

Salut.

Gentilhomme.

Elle est de la même.



Renaissance medical illustration

anatomy, botany and the materia medica

Sachiko Kusakawa

Four lectures: Mon 26 Jan 12 noon; Tue 27 Jan 2 pm; Thu 29 Jan 2 pm; Mon 2 Feb 12 noon.

Between 1450 and 1600 in Western Europe there was an unprecedented revival of classical culture. This Renaissance coincided with the invention of the moveable-type printing press. Many of the medics involved in reviving classical medicine used the printed book to promote their views. Some used illustrations in their books; others refused to do so.

These lectures look at controversies surrounding the uses of pictures in books to do with medicine, and with their functions and status. The lectures will cover the works of Jacopo Berengario da Carpi, Andreas Vesalius, Leonhard Fuchs, Janus Cornarius, Andreas Cesalpino, Conrad Gessner and Pierre Belon.

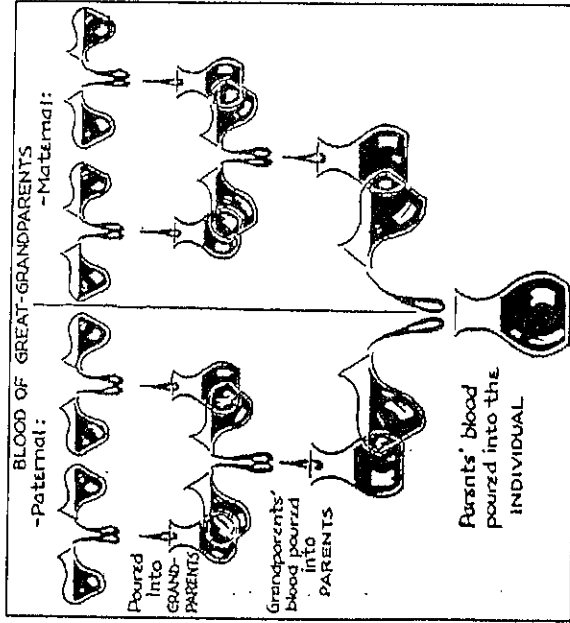
Supervision: Sachiko Kusakawa

5

Hereditry and Medicine in the 20th Century

Harmke Kamminga

4 lectures: Tue 3 Feb, 2 pm;
Thur 5 Feb, 2 pm; Mon 9 Feb,
noon; Tue 10 Feb 2 pm.



Eugenics movements in the early twentieth century propagated measures to change the genetic make-up of human populations with the aim of improving their social worth as well as their health. While eugenics was discredited by its horrendous applications in Nazi Germany, this course will draw attention to the history of widely supported eugenics movements elsewhere, focussing on Britain and the United States. We shall examine links with the science of genetics, the social values incorporated in eugenic programmes, and the introduction of eugenic policies.

We shall then consider how, after World War II, attempts were made to create a medical genetics untainted by eugenic aspirations. Looking at screening programmes for hereditary diseases such as phenylketonuria and sickle cell anaemia, we shall examine whether eugenic principles were in fact excluded successfully.

Supervision: Mary Jennings

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Medicine in the Medieval University

Roger French

4 lectures: Thu 12 Feb, 2 pm; Mon 16 Feb, 12 noon; Tue 17 Feb, 2 pm; Thu 19 Feb, 2 pm.

The universities of Europe at their first appearance were part of a wide scale movement towards 'incorporation', the organising of civil life into guilds and other forms of association. The guild controlled entry into the trade it conducted, established proper rules for the trade and controlled the quality of the product.

Teaching was a trade, and part of what was taught was medicine. Who became doctors, what medicine consisted of and how it should be practised were controlled by the guild of masters. They taught in the schools of the universities and called themselves 'scholastics'. The course looks at the nature and content of scholastic medicine as it was taught.

Supervision: Sachiko Kusakawa, Edmund French
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Phys...

Number 5

December 1997



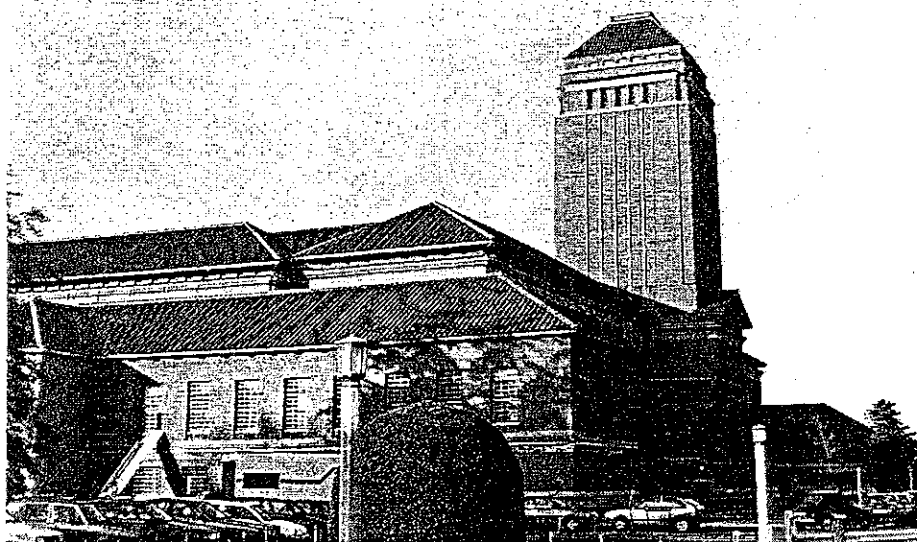
The Newsletter of the Cambridge Wellcome Unit for the History of Medicine

Closure of Cambridge Wellcome Unit

At the end of September 1998 the Cambridge Unit for the History of Medicine is to be closed, after twenty-seven years. The decision was made by the Governors of the Wellcome Trust in July. In accord with the Trust's 'New Framework' for the support of academic Units, introduced in late 1996, host universities have to provide a high-level academic post (Reader or Professor) to head the new-style Units. Earlier this year the University of Cambridge and the University of East Anglia were each invited by the Wellcome Trust to bid

to have a history of medicine Unit for five years from October 1998. While the University of East Anglia could promise to fund a full-time Professorship or equivalent to head the Unit, it seems that Cambridge University could not. When the Unit closes Roger French will continue in Cambridge as University Lecturer in the history of medicine. The 'core staff' of the Unit, Andrew Cunningham and Harmke Kamminga, have been invited to apply for Wellcome Trust funds to work at UEA or elsewhere.

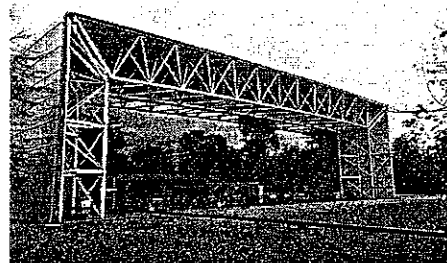
Cambridge University Library



5* A Rating

Last December the Department of History and Philosophy of Science of which the Cambridge Wellcome Unit is an integral part was given the top grading of a 'five star' rating for its research in the nationwide government assessment of the research quality of every department of every university. 'Five star A' means that the work of all the academic staff is assessed, and is considered to be of international standing.

Opening of New Wellcome Unit at UEA



The opening of a Wellcome Unit for the History of Medicine at the University of East Anglia in Norwich was announced in a press release from the Wellcome Trust in October, and it was featured on television news in the Anglia region. The Wellcome Trust will be giving £1.4 million to the UEA Unit over the next five years. Professor Roy Church, Dean of the School of History at UEA, greeted the news as 'a major vote of confidence in the School's ability to become a leading international centre for the history of medicine'.

Making News: Media Exposure of Unit Work

Work produced in the last year by the Cambridge Unit has received wide exposure in the national press and media.

The Great Pox. The French Disease in Renaissance Europe, written by Jon Arrizabala, John Henderson and Roger French, was published by Yale University Press in January 1997. It really hit the mood, and the impact of pox in its time was interpreted by reviewers as an early version of the AIDS crisis. Feature reviews appeared in just about all the broadsheet newspapers and popular science

magazines, including *The Daily Telegraph*, *The Evening Standard*, *The Financial Times*, *The Independent*, *Nature*, *The Literary Review*, *The Observer*, *Scotland on Sunday*, *The Times* and *The Times Literary Supplement*.

Western Medicine as Contested Knowledge, edited by Andrew Cunningham and Bridie Andrews, was published in July by Manchester University Press and was immediately featured on the BBC radio programme *Woman's Hour*, which has an

audience of several millions. Bridie and one of the contributors to the book, Rosalind Harrison-Chirimuuta, were interviewed in a live link-up.

Debbie Banham, an Associate of the Unit, found that her Unit talk in October on *The earliest English culinary recipes?* was taken up by the local and national press, including *The Times*, *The Daily Telegraph*, and *The Daily Mail*, and she appeared on radio talking about her find of early recipes in a manuscript of Bald's Leechbook from the 10th century.

World News

Moving on/Moving up

Soraya de Chadarevian was appointed Senior Research Associate in the HPS Department in October, on funding from the Laboratory of Molecular Biology, in order to continue her research on the history of that institution, a project which began as a Unit initiative. Russell Viner has taken up the post of Consultant in Adolescent Medicine jointly at Great Ormond Street Hospital for Sick Children and University College, London. In July the Unit's Administrator, Tamara Hug, was promoted to Departmental Secretary in our parent Department of History and Philosophy of Science.

Electronic Thorndike and Kibre Unit Associate Peter Jones has received Wellcome Trust funding to direct a project updating Thorndike and Kibre's famous guide to medieval scientific and medical manuscripts. The project starts in January 1998 and will be initially located in the Unit, where the updated guide will be entered on a computerised database and on CD-ROM.

Special seminars

Two special seminars were presented in the Unit in the last year: in October 1996, Dr Michael Hagner from the Max Plank Institute for History of Science in Berlin spoke about *Enlightened Monsters*; and in June 1997, Dr Terri Romano from Queens' University, Ontario, gave a talk entitled *Constructing Germs: The Laboratory in Imperial Britain*.

Births

Four sons were born to Research Fellows in the Unit and their partners in the last year: Jan to Silvia Frenk, Oliver to Ole Grell, Daniel to Michael Stolberg, and Simon to Helen Valls.

Marriages

The Unit's History of Medicine M. Phil acted as a matchmaker in 1994-95 for Mary Hague from Maine, U.S.A., and Stephen Yearl from Shropshire, who were married in August this year in America.

Deaths

The Unit notes with deep regret the recent death of Nobel Laureate Sir John Kendrew, who was a member of the Steering Committee for the Unit's project on the history of molecular biology in Cambridge. From the planning stages onwards, the project benefitted greatly from Sir John's enthusiastic support and advice.

Hospital Network Spreads Out

In last year's *Phys ...* it was reported that the International Network for the History of Hospitals had just been founded by John Henderson of the Unit with Olwen Hufton (now in Oxford) and Guenter Risse (San Francisco). In the course of the last year the Network has formed an Advisory Board, and published a newsletter (no 1, June 1997) and a membership list.

In November a one-day conference, held in association with the Network, took place at the Courtauld Institute in London, organised by Georgia Clarke and John Henderson, and entitled *Hospitals in Medieval and Early Modern Europe: Function and Form*. The conference worked as a truly interdisciplinary occasion by bringing together historians of art and architecture with archaeologists and social, medical and economic historians.

The Network will be holding its own first conference in late autumn 1999 at the University of East Anglia in Norwich.



For further information and to become a member simply write to the Secretariat, whose new address is: Dr Keir Waddington, Centre for Medical and Dental Education, Room 106, Robin Brook Centre, St Bartholomew's School of Medicine and Dentistry, West Smithfield, London EC1A 7BE (fax 0171-601-8956; e-mail K.Waddington@mds.qmw.ac.uk).

Cambridge Medical Education Then and Now

Mark Weatherall's book on the history of medical education in Cambridge will be published next year under the title *Scientists, Doctors and Gentlemen: Medical Education in Cambridge 1800-1940*, and will be the first full-length study of the topic since 1932.

Mark's own training route has given him special insight into the Cambridge experience. After his pre-clinical medical studies he pursued history of medicine in the Cambridge Unit, first as an M.Phil. student, then as a PhD candidate, and then as a post-doctoral Fellow. Then he returned to the clinic, at Adden-

brooke's hospital in Cambridge, to complete his medical education, and is now taking his finals. The book builds on his PhD thesis, and Mark's experience of clinical education only confirms his view formed as a historian. He comments that the similarity between the criticisms raised about the medical curriculum in the 1930s, the 1960s and now in the 1990s indicates that the curriculum itself, its underlying philosophy and its institutional organisation as established at the beginning of the twentieth century have all proved remarkably resistant to repeated pressure for change.

Thoughts on Closure

by an Acting Director

The conditions under which 'closure' occurs in scientific disputes is currently a lively area of discussion in the history of science and medicine. It is when a dispute about Nature reaches a conclusion, when people stop arguing about whether or not something is the case: it is when it becomes a fact. A year ago we were looking forward to closure of the long-standing negotiations between the Wellcome Trust and Cambridge University, and we fully expected the fact of a new senior-level Director of the Cambridge Unit in place by now. I was expecting to write the welcoming piece introducing her or him to our readers and I intended to take a look forward briefly to future developments of the Cambridge Unit and further expansion in its activities. To our astonishment events have moved in a different direction in the course of the year and we are faced instead with closure of negotiations but arriving at a different fact: the fact of the end of the Unit after twenty-seven years. My piece is therefore a farewell and a look backwards briefly to the history of the Unit.

Since its foundation in 1971 the Cambridge Unit has had two Directors, Robert M. Young (1971-4) and Roger French (1975-95). Since Roger French went on research leave in October 1992, and as those negotiations between University and Trust became ever more protracted, I have become perhaps the longest-serving Acting Director of any institution anywhere! But I count myself lucky, since I am pleased to say that the Unit has never been more active nor more productive than in these last five years. Nor has it ever been so large. Including staff, Fellows, M.Phil. and PhD students, academic visitors from abroad, and Associates, the Unit has regularly had an active membership of 20 to 30 scholars junior and senior. I like to think it has also had a sense of common purpose, and I also like to think it has become known for a certain approach, or range of approaches, to the history of medicine and its problems. These increased numbers have meant it has been realistic to have in the Unit three programmes of research into different periods, and to sustain three separate seminar series.

The Unit came into existence at the same time as the Clinical School at Addenbrooke's Hospital, and the Unit has had a continuous presence there in teaching and in presenting historical exhibitions. Medical students who had studied history of medicine with us in their pre-clinical years would be encountered again at the hospital, wearing their stethoscopes and their beepers, being socialised into the life of the hospital, just how we had told them they would be, reliving in their own medical education some of the historic developments we had taught them about.

Within the History and Philosophy of Science Department, the members of the Unit have been integrated into one of the leading and most innovative such departments in the world, and has been able to share in all the recent developments in the historiography of the sciences, and this has been of great mutual benefit.

The wonderful academic resources of Cambridge have helped attract a stream of international scholars to the Unit. So too have the conferences arranged by the Unit with our fellow scholars from all over Europe and the world. In this international circle of scholarship colleagues have become trusted friends. One of the second generation of scholars from the Unit's longest standing overseas link, with the CSIC in Barcelona, writes on this page about the reciprocal value of such links.

Because of the unexpected circumstances, we are taking the opportunity in this the last issue of *Phys.* of looking not just back to the year past but forward to work from the Unit which will be completed in the course of the year to come. I shall be very sad when I have to switch the lights off next September, on what has been an exciting, productive and pro-active Unit.

Andrew Cunningham

Letter from Barcelona

My relationship with the Cambridge Wellcome Unit, ironically, started in Barcelona, at the 1989 conference on Medicine from Salerno to the Black Death, jointly organised by the Unit and the Department of History of Science at the CSIC. I had just started my postgraduate research in history of medicine in the Barcelona Unit a few months earlier, and that occasion gave me the privilege of meeting the leading scholars in the field.

Since then, the link has played a central role in the advancement of my career as a historian of medicine. The Cambridge Wellcome Unit has become a second home. During the two years I spent there as a postgraduate student, it provided me with an opportunity to attend the lectures of its staff, to participate in its active seminar programme, and to enjoy the visual side of history through the exhibitions prepared by the Unit. Its location within the Department of History and Philosophy of Science has offered a most appreciated opportunity for meeting scholars with related interests, giving medicine a historiographical context which provided specific significance to the medical endeavour.

Back in Barcelona it has been a treasure for me and for my colleagues there to be able to regularly visit the Unit and make use of the extraordinary resources Cambridge offers, in easy reach, to historians of medicine. I remember myself saying, on my very first day in Cambridge in 1990: 'The Wellcome Unit is very welcoming'; I can now say that it was not only very welcoming then, but it has steadily supported my work all along, with kindness and professionalism.

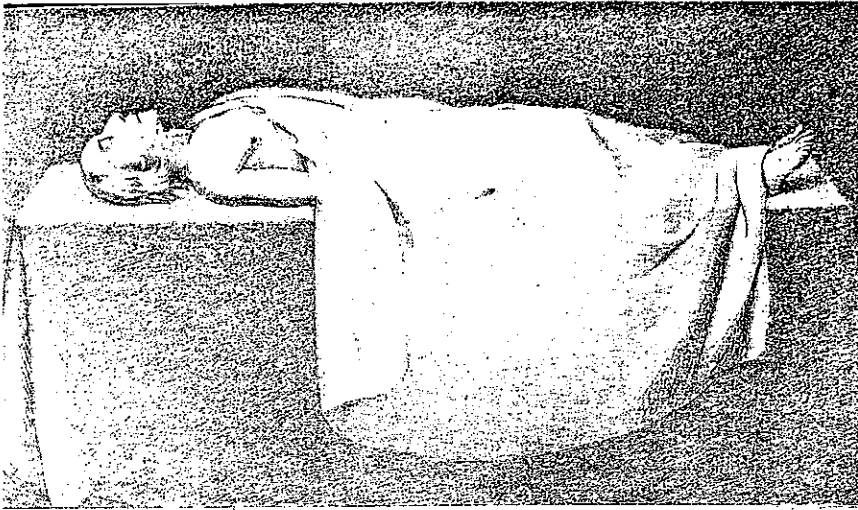
Montserrat Cabré



Lord Dacre of Glanton, still better known as the historian Hugh Trevor-Roper, spoke to the Early Modern seminar of the Unit in February on *Sir Theodore de Mayerne: Paracelsian and Physician to the Early Stuarts*. Members of the Unit dined with him after his talk.

Class of '97

The international flavour of the Unit's M Phil class was maintained in 1996-97, with Suzanne Dieter, Aaron Logan and Akhil Mehra coming from the U.S., Laurence Weets from Belgium, and Vicki Cline from Britain. The students' academic backgrounds included history, medicine and biochemistry.



Andrew Cunningham found himself in the Bentham archive at University College London, seeking information on who actually dissected Jeremy Bentham's body in 1832. Bentham was the first person to leave his body to be publicly dissected. It was his own idea that he should then be reassembled and dressed as an 'Auto-Icon' and be put on public show. He sits on view at the College still (very still, in fact). It turns out that it probably was not, after all, Dr Southwood Smith who did the dissection of his friend and patient, as Bentham had made him promise, but

Jeremy Bentham waiting to be dissected

Mr Grainger, a surgeon. The dissection was something of a publicity stunt to promote the passing of the Anatomy Act of 1832.

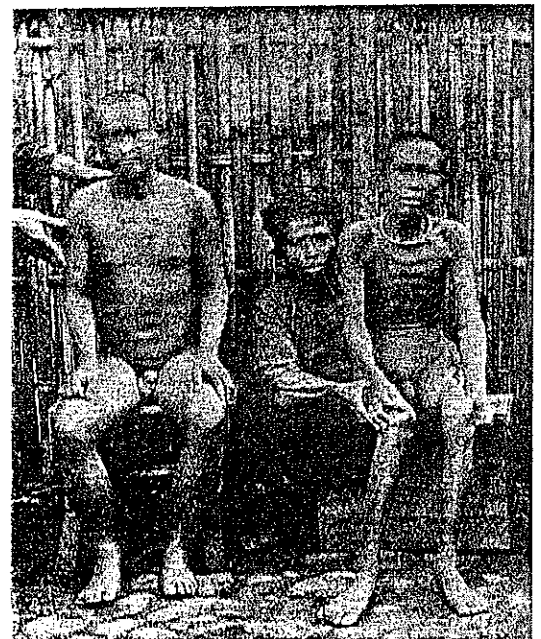
Dow Arc



John Henderson, in pursuit of material for his book on the hospitals of Renaissance Florence, visited the archives of the Ospedale degli Innocenti in Florence, the famous foundling hospital designed by Filippo Brunelleschi. The archives, which are in the process of being totally re-inventoried and are still housed in the original building on Piazza SS. Annunziata, contain a detailed record of the activities of the Innocenti since it opened its doors to the first foundling in 1445.

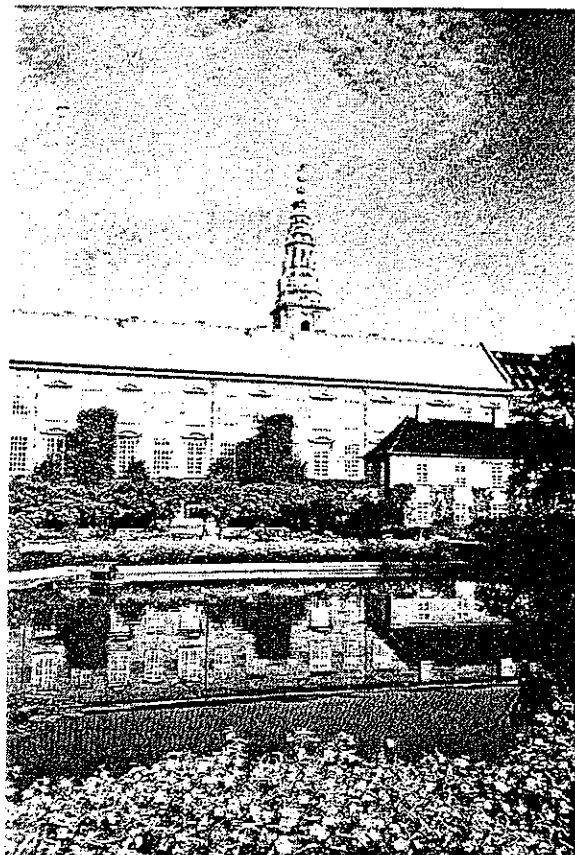
Putto on the Foundling Hospital by della Robbia

Harmke Kamminga returned to the archives at the University of Utrecht, looking into the political background to investigations into the cause of beri-beri in the Dutch East Indies in the 1880s and 1890s. What were the pressures on the Pekelharing Commission, sent by the Dutch authorities to Java for this purpose in 1886? The Commission looked for, and found, a bacterial cause. Harmke is now writing about the transformation of beri-beri from a bacterial disease into a vitamin deficiency.



Beri-beri sufferers in Java

Ole Grell discovered that, as historians, we sometimes have to be grateful to embezzlers and swindlers. Without them, some of the sources we benefit from would never have existed. Working in the Royal Archives in Copenhagen, Ole has discovered detailed accounts for the General Hospital of the city covering the late 1630s, which exist due to accusations against the hospital administrator for alleged maladministration and embezzlement. The details of day-to-day life and expenditure of a hospital come alive from these documents.

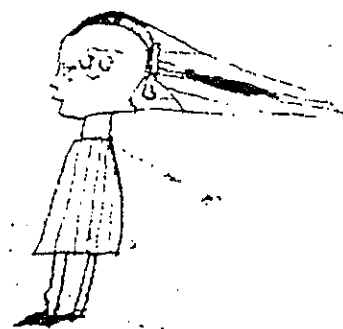


*The Royal Archives
Copenhagen*

in the
ives

Roger French, in pursuit of Articella manuscripts, the medieval set of medical texts, visited the cathedral libraries of Gloucester, Durham and Worcester. The manuscripts now there were brought back to these cathedrals from daughter houses in Oxford, where their students studied. On an earlier visit, to the chained library of Hereford Cathedral, Roger found some hitherto ignored animals on the Mappa Mundi, on which he has just published in *Isis*.

Helen Valls spent the summer consulting medieval manuscripts in France and Spain. Among her discoveries was a portion of the surgical treatise of William of Saliceto and a fragment of Roger's *Chirurgia* and its commentary. New manuscript finds can prove crucial in piecing together the textual history of a work and its European diffusion. While delving into Latin surgical manuscripts, Helen also found a hitherto unnoticed English plant glossary which she has plans to publish.



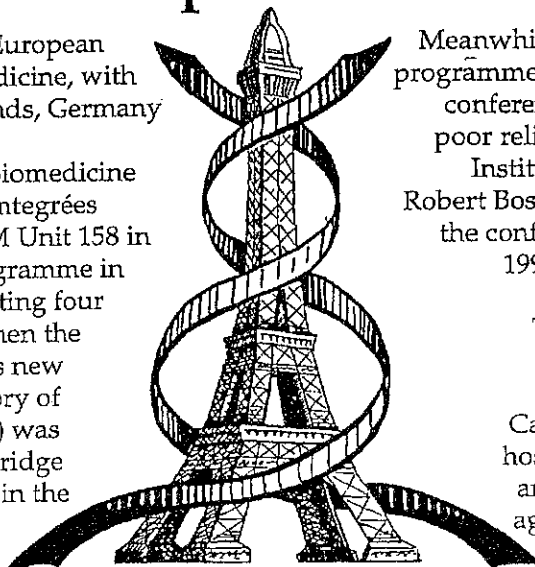
Medieval doodle

Silvia Frenk has been exploring the MRC archives in pursuit of clues about the experimental and clinical development of human genetics in the 1950s and 1960s. The Human Genetics Committee met in the late 1950s to promote the expansion of research in human genetics and to advise the government and the UN on population issues and on the genetic effects of radiation on humans. Other committees, such as the Experimental Genetics Committee, were set up by the MRC in the late 1950s to monitor experimental work. In the same period, the MRC established important centres of research, for instance the Clinical Genetics Research Unit and the Psychiatric Genetics Research Unit, in which genetics was used to formulate new areas of medical knowledge.

The Unit in the European Scholarly Community

The Unit has again been active in European collaborations in the history of medicine, with colleagues in France, the Netherlands, Germany and Spain.

The Unit's History of Modern Biomedicine programme used the last Actions Intégrées funds that it held with the INSERM Unit 158 in Paris for an exchange seminar programme in the fall of 1996, with each Unit hosting four speakers from the partner Unit. Then the Modern Biomedicine programme's new link with the Institute for the History of Science in Utrecht (see *Phys...* 1996) was celebrated with an 'Utrecht/Cambridge United' seminar programme, held in the Unit in the Lent term of 1997, with speakers from the two groups.



Meanwhile, the Unit's Early Modern Medicine programme is organising the third in its series of conferences on the history of health care and poor relief, this time in collaboration with the

Institute for the History of Medicine of the Robert Bosch Stiftung in Stuttgart. The theme of the conference, to be held in Stuttgart in June 1998, will be health care in the period of enlightenment and industrialisation.

The Unit's Medieval and Renaissance programme was involved with the second 'Articella' conference held in Cambridge in 1996, and will be helping host the Articella/ Electronic Thorndike and Kibre conferences in January 1998, again in Cambridge. These conferences have a strong input from the Unit's Spanish colleagues.

The Making of PhDs

The three students from the Unit's M Phil class of 1993 who stayed on for PhD research have all successfully completed their theses in the last year. With their very different topics, they were all on themes of 'making' - perhaps a current trademark of the directing of research in the Cambridge Unit? Roger King wrote on *The Making of the Dentise in France, c. 1650-1780*; Russell Viner on *Abraham Jacoby and the Making of American Pediatrics*; and Desirée Cox-Maksimov on *The Making of the Clinical Trial in Britain, 1910-1945: Expertise, the State and the Public*.

By historic coincidence, Russell Viner has been given a unique opportunity to put his history into action: having investigated the creation of medicine for children as a new speciality, he is now engaged in the task of establishing the very first unit in Britain specialising in medicine for adolescents. Perhaps he will be the subject of some PhD in a hundred years time on the making of adolescent medicine?

Other PhDs in the Unit are still in the making. Rina Knoeff joined the Unit in October 1996 from Maastricht in the Netherlands. Her research concerns Herman Boerhaave's chemical medicine. PhD student Kim Taylor from Zambia is taking time out in Nanjing, China, to develop further her knowledge of Chinese language and culture. On her return to Cambridge in 1998 she will continue her PhD on the history of twentieth century Chinese medicine.

Scholarly Home from Home

As usual, the Unit has been home this year to visiting scholars and students from around the world. From Canada came Professor Don Bates of McGill University, Montreal, and Dr Terri Romano from Queen's University, Kingston, Ontario. Don spent the whole academic year 1996-97 in the Unit work-

ing on the anatomist William Harvey, while Terri was here for the first half of 1997, investigating the physiologist John Burdon Sanderson and his circle. From Japan came Dr Mariko Ogawa of Mie University, to do research on the medicalisation of death. Some of our most regular visitors came from Barcelona, Spain: Dr Jon Arrizabalaga was engaged in work connected with the Articella project, and Dr Montserrat Cabré visited for two months, working on late medieval texts

on women's health. Alfons Zarzoso, PhD student at the CSIC, Barcelona, spent his first spell in the Unit in the fall of 1996, and has returned this year to continue his research on public health in the eighteenth century.

In 1997-98 the Unit hosts as visitors Dr Ilana Löwy from Paris, Paracelsian scholar Professor Bruce Moran from the University of Nevada, and two more Spanish PhD students: Carmel Ferragud and Christina Sendra-Mocholi from Valencia.

History of Dentistry Exhibition

The Unit's latest (and, it turns out, last) exhibition in the University of Cambridge School of Clinical Medicine was opened in July by the Regius Professor of Physic, Professor Sir Keith Peters. Entitled *The History of Dentistry: Technique and Demand*, the exhibition was curated and set up by Roger King, under the supervision of Andrew Cunningham. Formerly a dentist, and now with a doctorate in the history of dentistry, Roger King has taken the opportunity in this exhibition to illustrate the novel historical perspective on dentistry which he developed in his PhD thesis.

Until around 1700, the only persons who dealt with teeth were toothdrawers, charlatans and surgeons. Then, quite suddenly, a new group appeared in France, from within the ranks of respectable surgery, who focused exclusively on treatment of the teeth. Serving an élite clientèle, these *dentistes* applied theoretical knowledge to a new way of treating teeth, via a range of complex and innovative operations and the design of new instruments with which to perform them.



But it was not technique alone which led to the successful rise of the *dentiste*. Simultaneously, there were powerful social pressures, both at the Court of Versailles and in the aristocratic hôtels of Paris, for the public presentation of a fashionable image. A complete set of good teeth was made into an aesthetic imperative in this milieu. Thus, technical innovation went hand in hand with the creation of a social demand, the two being dependent on each other for their success.

The exhibition explores the relationships between technique

and demand in dentistry, from its origins in the surgical world of eighteenth-century France to the complex technological procedures available in present-day Britain. The displays focus on technical innovation in reciprocal relationship to demands created by fashion, entrepreneurial activity, industrialisation, big business, and state health policy.

Among the wide-ranging exhibits (some of which are positively frightening to those who have grown up with postwar dentistry) are beautiful replicas of old dental instruments made by Roger King himself. There is an illustrated booklet to accompany the exhibition, which can be ordered from the Unit.

Professor Sir Keith Peters opening the exhibition



The mounting of this exhibition meant that the highly successful *Representations of the Double Helix* had to be taken down. Material from that exhibition has recently been loaned to the Wellcome Institute for the History of Medicine, London, for its displays on Genetic Cultures, set up to mark the opening in October of The Wellcome Trust Genome Campus at Hinxton, near Cambridge.

New Books by Unit Members 1997-8

Molecular Culture

This picture summarises the central theme of *Molecularizing Biology and Medicine: New Practices and Alliances, 1910s to 1970s*, edited by Soraya de Chadarevian and Harmke Kamminga, which is due to appear from Harwood Academic in January 1998. Dealing with the rise of a molecular culture, the volume illustrates how new alliances between the research laboratory, the clinic, industry, and government bodies were forged through practices centred on molecules of biological and medical interest.

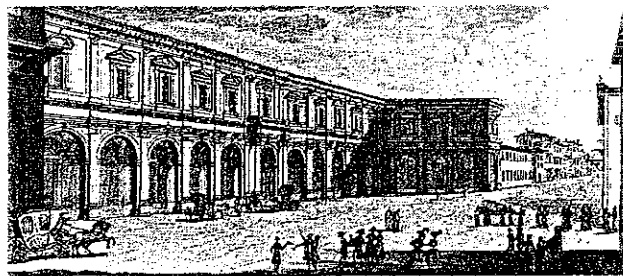
The illustration, from Angela Creager's chapter, celebrates the therapeutic uses of blood plasma fractions, and the Harvard physical chemist who led the wartime project which produced them, Edwin Cohn. Previously engaged in pure research on proteins, Cohn initiated a research effort to identify blood components which, in easily portable form, could be used to treat shock in combat victims. The project enabled him to set up collaborations with the military and industry to mass-produce serum albumin from blood donated through the American Red Cross. This work set the pattern for the isolation of other plasma proteins by Cohn's team, and their industrial production as medical commodities. Cohn returned to fundamental research after the war while maintaining his links with industry through patents and supervision of quality control.

This is one of the cases illustrating how strategies of molecularisation were not only used as a resource in the biomedical mobilisation of World War II, but were reinforced through the war effort. As the book shows, this reinforcement profoundly affected the post-war reorganisation of biomedicine.



Four Horsemen

By September 1998 Andrew Cunningham and Ole Grell expect to have handed over to Cambridge University Press the final text of their jointly-written book *The Four Horsemen of the Apocalypse: War, Famine and Disease in Reformation Europe*. The famous image of the four horsemen by Albrecht Dürer was produced to illustrate a German edition of the Apocalypse or Book of Revelations printed in 1498. The apocalyptic theme was pervasive in Reformation times, and war, famine and disease, whose presence together and separately was very striking in the period, were seen both as punishments for a sinful society and as harbingers of the Second Coming.



Hospitals of Florence

John Henderson is in the process of completing *The Hospitals of Medieval and Renaissance Florence*, to be published by Yale University Press. In this he traces the gradual 'medicalisation' of the activities of the major hospitals of the city in the 14th and 15th centuries. This 18th-century print shows the facade of the Ospedale di S. Maria Nuova, which plays a central role in the book. It was the largest hospital in the city and by c. 1500 treated up to 6,000 male and female in-patients each year.

New Series

Andrew Cunningham and Ole Grell are the editors of a new series in the history of medicine, called *The History of Medicine in Context*. The series is published by Ashgate. The Dürer woodcut of Death and the Physician will be the logo of the series. The first volume will appear in early 1998 and will be *Faith, Medical Alchemy and Natural Philosophy: The Reformed Intelligencer Johann Moriaen and the Hartlib Circle* by Dr John Young of the University of Sheffield.



The Cambridge Wellcome Unit's Publications

The **Cambridge Wellcome Texts and Documents** series. The purpose of the series is to make available texts and documents edited by members of the Unit, which are of academic significance but which have a limited market. Three have already been published and others are in preparation.

1. C. Helen Brock, *Dr William Hunter's papers and drawings in the Hunterian Collection of Glasgow University Library: A Handlist*, 1990; price (inc. postage) £3.50 U.K.; £4.50 elsewhere in Europe; £9.00 elsewhere in the world.
2. Cornelius O'Boyle, *Medieval Prognosis and Astrology: A Working Edition of the Aggregationes de crisi et ceticis diebus: with Introduction and English summary*, 1991; price (inc. postage) £6.00 U.K.; £7.00 elsewhere in Europe; £11.50 elsewhere in the world.
3. Andrew Cunningham, *English manuscripts of Francis Glisson: 1. From Anatomia Hepatis (The Anatomy of the Liver), 1654*; 1993; price (inc. postage) £15.00 U.K.; £16.00 elsewhere in Europe; £18.00 elsewhere in the world.
4. Guido Giglioni, *Latin Manuscripts of Francis Glisson: 1. Philosophical Papers: Materials related to De Natura Substantia Energetica (On the Energetic Nature of Substance), 1672*. 1996; price (inc. postage) £15.00 U.K.; £16.00 elsewhere in Europe; £18.00 elsewhere in the world.
5. C. Helen Brock, *Calendar of the Correspondence of Dr William Hunter, 1740-1783*, 1996; price (inc. postage) £7.00 U.K.; £8.00 elsewhere in Europe; £10.00 elsewhere in the world.

The **Articella Studies** series of 'Texts and Interpretations in Medieval and Renaissance Teaching'. This series is published jointly by the Cambridge Wellcome Unit for the History of Medicine and the Department of History of Science, CSIC, Barcelona.

1. Cornelius O'Boyle, *Thirteenth- and Fourteenth-Century Copies of the Ars Medicine: A Checklist and Contents Descriptions of the Manuscripts* (Articella Studies, number 1, 1998); price (inc. postage) £7.00 U.K.; £8.00 elsewhere in Europe; £12 elsewhere in the world.
2. Jon Arrizabalaga, *The Articella in the Early Press, c. 1476-1534* (Articella Studies, number 2, 1998); price (inc. postage) £5.00 U.K.; £6.00 elsewhere in Europe; £9.00 elsewhere in the world.
3. *Papers of the Articella Project Meeting, Cambridge, December 1995* (Articella Studies, number 3, 1998); price (inc. postage) £2.00 U.K.; £2.75 elsewhere in Europe; £4.50 elsewhere in the world.

The Unit also publishes a series of **Exhibition Booklets** to accompany its exhibitions mounted at the Cambridge University School of Clinical Medicine:

1. Johanna Geyer-Kordesch and Mark Weatherall with Harmke Kamminga, *The History of Medicine in Cambridge: Education, Science, and the Healing Arts*, 1990 (out of print).
2. Mark Weatherall and Harmke Kamminga, *Dynamic Science: Biochemistry in Cambridge 1898-1949*, 1992; price (inc. postage) £4.00 U.K.; £4.50 elsewhere in Europe; £6.00 elsewhere in the world.
3. Andrew Cunningham with Tamara Hug, *Focus on the Fabrica of Vesalius, 1543*, 1994, price (inc. postage) £2.00 U.K.; £2.50 elsewhere in Europe; £3.00 elsewhere in the world.
4. Harmke Kamminga and Soraya de Chadarevian, *Representations of the Double Helix*, 1995; price (inc. postage) £4.75 U.K.; £5.50 elsewhere in Europe; £6.75 elsewhere in the world.
5. Roger King, *The History of Dentistry: Technique and Demand*, 1997; price (inc. postage) £5.00 U.K.; £5.75 elsewhere in Europe; £7.00 elsewhere in the world.

Orders to: Wellcome Unit for the History of Medicine, Free School Lane, Cambridge CB2 3RH
(Please make cheques payable to University of Cambridge)

Alas, poor YORICK





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