UNIVERSITY OF CAMBRIDGE DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

Seminar Programme

MICHAELMAS TERM 2001

Research Methods Seminars Departmental Seminars History of Modern Medicine and Biology Early Medicine and Natural Philosophy Psychoanalysis and the Humanities Psy Studies Cabinet of Natural History **Epistemology Reading Group**

Philosophy Workshop

EPACTS

Medieval Science & Philosophy Reading Group

History of Science Workshop

Philosophy of Mathematics Reading Group

Research Methods Seminars

These two seminars on Research Methods and Topics in History and Philosophy of the Sciences are for all new Graduate Students. Each seminar will consist of short informal talks presenting research methodologies and areas and introducing the *Guides to Research Resources in HPS 2001/02*, which is available on the HPS website at www.hps.cam.ac.uk/students

The seminars take place on **Thursday 4 October and Thursday 11 October at 4pm in Seminar Room 2**. Tea is served at 3.45pm in Seminar Room 1.

4 October	1. Methods Chaired by Nick Jardine
	Peter Lipton, <i>Resources in philosophy</i> Jim Secord, <i>Writing history</i> Jill Whitelock, <i>Libraries</i> Soraya de Chadarevian, <i>Interviews</i> Patricia Fara, <i>Illustrations</i>
	John Forrester, <i>The temptations of the academic researcher</i>
11 October	2. Topics Chaired by Jim Secord
	Lauren Kassell, <i>Medicine and magic</i> Cathy Gere, <i>Gender and science</i> Anjan Chakravartty and Tim Lewens, <i>Philosophy of the sciences</i> Jim Endersby, <i>History of natural history</i> Nick Jardine, <i>Historiography</i> Marina Frasca-Spada, <i>History of philosophy</i>

Liba Taub, *Instruments*

Organised by Marina Frasca-Spada and Nick Jardine

Departmental Seminars

Seminars meet at 4.30pm on Thursdays in Seminar Room 2, Department of History and Philosophy of Science, Free School Lane. There is tea beforehand in Seminar Room 1 at 4pm.

18 October	Stephen Mumford (University of Nottingham) Filled in Space
25 October	Alan Morton (Science Museum, London) Museums of the Future and the Future of Museums
1 November	Jimena Canales (Harvard University) Spectacular Psychology: Early Experimental Psychology in France
8 November	Jim Endersby (HPS, University of Cambridge) Broad species, bottled ale and a good botanical horse: how to make yourself into a philosophical botanist
15 November	Deep Kanta Lahiri Choudhury (Faculty of History, University of Cambridge) The technology of telegraphy and the telegraphy of technology: the Indian Empire, 1860-1900
22 November	A Flamsteed Celebration (from 3.30pm)

29 November Nancy Cartwright (London School of Economics) How not to get causes from probabilities

The Department of History and Philosophy of Science sends out seminar programmes at the start of each Michaelmas, Lent and Easter term to the people on our mailing list. Please contact us if you would like to be added to or removed from the mailing list, or if you change your address.

This seminar programme is also available on our website at www.hps.cam.ac.uk

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

Telephone: 01223 334500 Fax: 01223 334554 E-mail: hps-admin@lists.cam.ac.uk

Abstracts

18 October Stephen Mumford (University of Nottingham) Filled in Space

Philosophers have considered the question of the dispositional properties of basic particulars, such as the sub-atomic particles of physical theory. Given that such dispositional properties are supposed to be ungrounded and unstructured, the question arises of what kind of Being such dispositions have when unmanifested. I will argue that they have none and that when such basic particles are manifesting no disposition - when they cease to act - they cease to exist. Peter Simons allows objects with gappy existences but I argue that, in this case, such a view does not apply. Basic particles can be seen as foci of occurrences, out of which can be built the metaphysical notion of substance.

1 November Jimena Canales (Harvard University)

Spectacular Psychology: Early Experimental Psychology in France

This paper is about early experimental psychology in France. While historians have usually traced the birth of experimental psychology to Germany, and particularly to the work of Wilhelm Wundt, this paper instead focuses on certain key experiments performed in France, starting in the 1850's, that would later become foundational for experimental psychology worldwide. The focus on Germany and Wundt as the birthplace of experimental psychology can in fact be traced back to Théodule Ribot's influential La Psychologie Allemande Contemporaine (École Expérimentale) (1879). At the time, however, Ribot was accused of 'inventing Wundt' and of obscuring the work of French authors. Indeed, the reaction-time experiments described by Ribot were already central to many investigations in France. From the human sciences, these ranged from Charles Brown-Séquard's studies on nerve transmission to heated controversies between the medical faculty in Nancy and that of Paris on the seat of sensation and perception. We also have physiologists learning from the work of physicists and astronomers. For example, Jules Etienne Marey in 1868 turned to the Observatoire de Paris to learn about the astronomers' instruments for measuring the personal equation, and other physiologists were forced to learn about physicists' investigations on the duration of retinal impressions. By focusing on the controversies surrounding reaction-time experiments, this paper unearths a substantial amount of experimental work performed in France regarding questions of sensation, perception and volition in both healthy and pathological subjects.

8 November **Jim Endersby (HPS, University of Cambridge)** Broad species, bottled ale and a good botanical horse: how to make yourself into a philosophical botanist

In 1843, Joseph Dalton Hooker returned from his four-year voyage to the Antarctic and started looking for a full-time paid position as a botanist. Yet, despite being the son of William Hooker, director of the Royal Botanic Gardens at Kew, it would take Joseph more than twenty years before he achieved his ambition and succeeded his father. His main difficulty was the low status of botany in Britain, which partly resulted from botanists' failure to tackle philosophical questions, such as plant distribution. Hooker assembled his botanical friends, bottles of ale and 'a good botanical horse' into a collecting network that allowed him to assemble the materials from which he published his major Floras. His wish to be paid to be philosophical shaped these networks, but examining them reveals that the apparently mundane practices of field collecting shaped Hooker's definition of philosophical.

15 November **Deep Kanta Lahiri Choudhury (Faculty of History, University of Cambridge)**

The technology of telegraphy and the telegraphy of technology: the Indian Empire, 1860-1900

The paper is on the economy and imagination of the telegraph in the Indian Empire, c.1860-1900. India in the larger sense became a crucial area in the geo-political set up of the British Empire, especially with the formation of the first global telecommunication system. The paper will argue towards a method with which to understand both the imagination, economy and society created by communication technology as much as this technology itself existed within a particular imagination, structure of time and society.

22 November A Flamsteed Celebration (from 3.30pm)

To mark publication of the final volume of *The correspondence of John Flamsteed, the first Astronomer Royal (1646-1719)*, a group of speakers will discuss Flamsteed's place in the history of astronomy and the context in which his work was carried out. Consideration of the general problems of editing letters and relating them to other source material will be complemented by examining the testimony of letters as evidence for the nature and context of particular aspects of Flamsteed's work.

Contributors will include: Jim Bennet, Jenny Downes, Michael Hunter, Rob Iliffe, Frances Willmoth

There will be two sessions, with a break between them to allow viewing of a Flamsteed exhibition in the Whipple Museum.

History of Modern Medicine and Biology

Seminars take place on alternate Tuesdays from 5.00-6.30pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane, Cambridge. Tea is served from 4.30pm. All welcome.

Organised by Soraya de Chadarevian

9 October	Volker Hess (Max-Planck Institut, Berlin) Body techniques and fever charts: introducing the thermometer in the hospital
23 October	Andrew Cunningham (HPS, University of Cambridge) Pathology before and after the French Revolution
6 November	Jutta Schickore (HPS, University of Cambridge) Insurmountable limits, disturbances, peculiarities: exploring the means of microscopy
20 November	Robert Olby (University of Pittsburgh) Molecularizing the neurosciences: the case of Holger Hydén on memory

Early Medicine and Natural Philosophy Medicine and Magic

Seminars take place on alternate Tuesdays at 5pm in Seminar Room 1, Department of History and Philosophy of Science. Tea is served from 4.30pm.

Organised by Lauren Kassell and Sophie Page

16 October	Cornelius O'Boyle (Wellcome Institute, London) Astrological Almanacs in Fifteenth-Century English Medicine
30 October	Jonathan Hughes (University of East Anglia) The World of the Late Medieval Alchemist
13 November	Charles Burnett (Warburg Institute) Diseases and Planets
27 November	Penny Bayer (University of Warwick) Lady Margaret Clifford (1560-1616), Christopher Taylour (fl.1580-c.1598), and Alchemical Notions of Health

Psychoanalysis and the Humanities

Seminars take place on alternate Wednesdays from 5.00 to 6.30pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane. Tea is served from 4.40pm. All welcome.

Organised by Mary Jacobus and David Hillman

10 October	Anita Sokolsky (Williams College) Melancholy, Stoppard's Arcadia, and Complexity Theory
24 October	Cathy Gere (HPS, University of Cambridge) The Psyche Element: Archeology, Psychoanalysis, and Dionysian Modernity
7 November	David Hillman (Faculty of English, University of Cambridge) Insides and Outsides: Belief, Scepticism, and Shakespeare
21 November	Malcolm Pines (British Psychoanalytical Society) Mirroring in Human Development, with a Glance at Ovid

Psy Studies

History of Psychiatry, Psychology, Psychoanalysis and Allied Sciences

All seminars start at 5.00pm in Seminar Room 1, Department of History and Philosophy of Science, Free School Lane. Tea is served before each seminar at 4.40pm.

Organised by John Forrester and Deborah Thom

17 October	Michael Molnar (Research Director, Freud Museum, London) Electricity and the Organ of the Soul: Freud and Fleischl-Marxow, 1883- 1895
31 October	Philip Kuhn (Poet and Historian) Testing narratives and persecuted speech: readings of the newspaper reports concerning Dr Ernest Jones's 1906 trial for indecent child assault
14 November	Greg Fried (HPS, University of Cambridge) Freud and the Perils of Humour
28 November	Sally Alexander (Goldsmith's College, University of London) The Psychopathology of Everyday Life: British Culture between the Wars

Cabinet of Natural History

Unless otherwise stated, meetings take place at **1pm on Mondays in Seminar Room 1**, Department of History and Philosophy of Science, Free School Lane. Feel free to bring lunch with you.

Organised by Vicky Carroll and Sadiah Qureshi

8 October	Sam Alberti (University of Manchester) Chapels of science: provincial Natural History collections in nineteenth- century England
15 October	Jim Moore (Open University) Space-invaders: Darwin and Wallace on biogeography
22 October	Cabinet Fungus Hunt
29 October	Paul White (HPS, University of Cambridge) The experimental animal in Victorian Britain
5 November	Rainer Broemer (University of Aberdeen) Natural History and the Italian Nation after 1861
12 November	Michael Bravo (Scott Polar Research Institute, University of Cambridge) The Moravian experiment: colonial natural history, missionary artisans, and religious conversion (1730-1830)
19 November	Steve Baker (University of Central Lancashire) Art after ethics? Debating the place of the living animal in contemporary works of art
26 November	Jim Secord (HPS, University of Cambridge) The naturalist of parts: composite caricatures in nineteenth-century England

Epistemology Reading Group

We will be reading articles from *The Social Construction of What?* by Ian Hacking. The book is available in paperback in the philosophy section at Heffers, 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 2.00pm** in Seminar Room 1 of the HPS Department and are open to all.

Organised by Peter Lipton

4 October	'Why Ask What?'
11 October	'Too Many Metaphors'
18 October	'What about the Natural Sciences?'
25 October	'Madness: Biological or Constructed?'
1 November	'Kind-making: The Case of Child Abuse'
8 November	'Weapons Research'
15 November	'Rocks'
22 November	'The End of Captain Cook'

Philosophy Workshop

The PW is a fortnightly peer group seminar devoted to the discussion of on-going work by researchers in philosophy. Short papers will normally be circulated by e-mail one week in advance of each meeting, where the author will give a brief synopsis. The aim of the seminar is to provide a forum for informal, constructive interaction amongst those currently engaged in philosophical research.

Meetings take place **every other Wednesday from 10 October at 1pm in Seminar Room 1** of the HPS Department, and are open to all researchers.

For more information or to add your name to the list of e-mail recipients, contact Anjan Chakravartty or Tim Lewens.

EPACTS

Early Physics, Astronomy, Cosmology and Technology Seminar

Meetings take place fortnightly on **Wednesdays in M4 New Court, Trinity College, at 6pm**. All are welcome. For further information, contact Adam Mosley.

17 October	 G. L'E. Turner, Appendix, 'The Attribution of Unsigned Instruments', in his <i>Elizabethan Instrument Makers</i> (WL K.239) S. Lubar, 'Learning from Technological Things', and J. Corn, 'Object Lessons/Object Myths? What Historians of Technology Learn from Things' in W. D. Kingery (ed), <i>Learning from Things</i> (Copies in box file 31)
31 October	 M. Shank, 'Galileo's Day in Court', <i>Journal of the History of Astronomy</i> 25 (1995), 236-243 M. Biagioli, 'Playing with the Evidence', <i>Early Science and Medicine</i> 1 (1996), 75-105 M. Shank, 'How shall we practise history? The Case of Mario Biagioli's Galileo Courtier', <i>Early Science and Medicine</i> 1 (1996), 106-150
14 November	Seneca, <i>Natural Questions</i> , Book 1, 'Lights in the Sky' (Copies in box file 31)
28 November	Plutarch, <i>Concerning the Face Which Appears in the Orb of the Moon</i> (WL B.180)

Medieval Science & Philosophy Reading Group

We will be reading the *Dragmaticon Philosophiae* by William of Conches, in the translation entitled *A Dialogue on Natural Philosophy*, translated by Italo Ronca and Matthew Curr. The group will meet in **L1 Great Court, Trinity College**, at **1pm on Thursdays**, and each session will consist of a discussion of a portion of the text, introduced by one member of the group. The text should be available on reserve in the Whipple Library of the Department of History and Philosophy of Science, and in the medieval authors section of Heffers, although it is quite expensive. Everyone is welcome, and welcome to bring their lunch.

Further information is available from David Chart.

4 October	Book One (The Nature of the World)
11 October	Book Two (The Elements)
18 October	Book Three (The Heavens)
25 October	Book Four (Astronomy)
1 November	Book Five (Meteorology)
8 November	Book Six, Part One (The Earth)
15 November	Book Six, Part Two, Chapters 7 – 17 (Human Physiology)
22 November	Book Six, Part Two, Chapters 18 – 27 (Senses and Thought)

History of Science Workshop

The History of Science Workshop is a seminar group devoted to peer discussion of 'work in progress' on the history and historiography of science, for example PhD chapters, dissertations, or articles intended for publication.

The seminar aims to provide an informal arena for the exchange of ideas among students of the history of science in HPS and elsewhere. Papers are deposited in Box File 30 in the Whipple Library one week in advance of each meeting and are also circulated by e-mail. Meetings take place on **alternate Wednesdays at 1pm in Seminar Room 1**, Department of History and Philosophy of Science. You are welcome to bring lunch with you.

Please contact Kemal de Soysa to receive papers by e-mail.

17 October	Nicholas Dew (St. Catherine's College, Cambridge) Atlantic triangulation: the French expedition to Goree and the Antilles, 1682-83
31 October	Michael Michael (HPS, University of Cambridge) The relationship between W. K. Clifford's mathematics and his scientific naturalism
14 November	Kemal de Soysa (HPS, University of Cambridge) Cor Caroli: The Construction of a Constellation
28 November	Sadiah Qureshi (HPS, University of Cambridge) Displaying Sara Baartman, the 'Hottentot Venus'

Science and Literature Reading Group

The Science and Literature Reading Group will not be meeting during the Michaelmas Term. It will meet again in Lent Term.

Philosophy of Mathematics Reading Group

The Philosophy of Mathematics Reading Group meets fortnightly on Fridays at 2pm in Seminar Room 1.

Organised by David Corfield

During this term the readings address the question 'What should philosophers of mathematics be doing?' You can find copies of the texts in a folder in the Whipple Library. Please contact me if you wish to attend.

12 October	Jeremy Gray (1992) 'The nineteenth-century revolution in mathematical ontology' in Gillies D. (ed.) <i>Revolutions in Mathematics</i> , OUP.
	Gray argues that changes in the philosophical conceptions of the nature of mathematics during the nineteenth-century were driven by the practical needs of mathematicians. We shall arrange a date to meet up with him to discuss our reading of his article.
26 October	Jamie Tappenden (1995) 'Extending Knowledge and "Fruitful Concepts": Fregean Themes in the Foundations of Mathematics', <i>Nous</i> 29 (4): 427-467.
	Here the foundational aims of Frege as conceived by contemporary philosophers of mathematics are severely questioned. Frege is shown to be closely involved with, and influenced by, late nineteenth-century mathematicians.
9 November	Penelope Maddy (1998 <i>a</i>) 'How to be a naturalist about mathematics' in G. Dales and G. Oliveri (eds.) <i>Truth in Mathematics</i> , 161-180; and (1998 <i>b</i>) 'Naturalizing Mathematical Methodology' in M. Schirn (ed.) <i>Philosophy of Mathematics Today</i> , 175-193.
	A philosopher argues that philosophy of mathematics should engage in the rational reconstruction of theoretical developments within mathematics, taking axiom choice in set theory as a case study. Internal mathematical reasons are to be found, while metaphysical arguments are to be ignored.
23 November	Saunders Mac Lane (1986) 'The Mathematical Network', Chap. 12 of <i>Mathematics: Form and Function</i> .
	A mathematician argues that philosophy of mathematics should not ask about the truth of a piece of mathematics, but rather whether it is correct, responsive, illuminating, promising and relevant.