UNIVERSITY OF CAMBRIDGE DEPARTMENT OF HISTORY AND PHILOSOPHY OF SCIENCE

Seminar Programme

EASTER TERM 2002

Departmental Seminars

Gender and Science **Reading Group** Psychoanalysis and the Humanities **Psy Studies** Cabinet of Natural History **EPACTS Epistemology Reading Group** Philosophy of Mathematics **Reading Group** History of Science Workshop **Philosophy Workshop** Science and Literature **Reading Group** Latin Therapy Group Medieval Science & Philosophy Reading Group Philosophy of Language **Reading Group**

Science and the Visual Reading Group

Special Events this term

Seventh Annual Hans Rausing Lecture Gerd Buchdahl – in memoriam Lecture by Paul Rabinow John Forrester's Inaugural Lecture

Gerd Buchdahl – in memoriam

Thursday 25 April

Gerd Buchdahl, one of the architects of History and Philosophy of Science as an independent discipline, first Head of the Department of History and Philosophy of Science, fellow of Darwin College, founder of *Studies in History and Philosophy of Science*, and internationally distinguished Kant scholar, died aged 86 on 17 May 2001.

- 3.30 Tea in Seminar Room 1
- 4.00 Nick Jardine: Memorial Address
- 4.30 Mary Hesse, Michael Hoskin, Martin Rudwick, John Forrester, Simon Schaffer: Memories
- 5.30 **Peter Lipton**: History of Science and Philosophy of Science

Inaugural Lecture

Professor John Forrester

Freud in Cambridge

Thursday 9 May at 5pm Mill Lane Lecture Room 3

Tea served before the lecture at 4.30pm in Seminar Room 1, Department of HPS Drinks served afterwards at 6pm in King's College Fellows' Garden, Queens' Road

Seventh Annual Hans Rausing Lecture

Professor Harry Collins (University of Cardiff)

When is science? The logic and sociology of seeing nothing

Thursday 30 May at 4.30pm The Old Labs, Newnham College

Drinks served after the lecture at 6pm in the Principal's Lodge, Newnham College

Professor Paul Rabinow (University of Berkeley, California) Only motion: reflections on the idea of progress

In light of recent ethnographic work on bio-technology and forms of life, this lecture will address the anthropological question of whether there is progress in history (and culture). Or whether this is still a question.

Thursday 2 May at 4.30pm McCrum Lecture Theatre, Beldam Building, Bene't Street, Cambridge

Tea served before the lecture at 4pm in Seminar Room 1, Department of HPS Drinks served afterwards at 6pm in Room G2, Department of Social Anthropology

Presented jointly with the Department of Social Anthropology

Departmental Seminars

Seminars meet at 4.30pm on Thursdays in Seminar Room 2, Department of History and Philosophy of Science, Free School Lane. Tea is served beforehand in Seminar Room 1 at 4pm. Times and venues vary for the special events: see opposite for full details.

Organised by Simon Schaffer

| 25 April | Gerd Buchdahl – in memoriam |
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| 2 May | <i>Joint Lecture with the Department of Social Anthropology</i> Paul Rabinow (University of California, Berkeley) Only motion: reflections on the idea of progress |
| 9 May | <i>Inaugural Lecture</i> John Forrester (HPS, University of Cambridge) Freud in Cambridge |
| 16 May | Nancy Hunt (University of Michigan) An infertility scare in Colonial Africa |
| 23 May | Nicholas Jardine (HPS, University of Cambridge) Whigs and stories: Herbert Butterfield and the historiography of science |
| 30 May | <i>Seventh Annual Hans Rausing Lecture</i> Harry Collins (University of Cardiff) When is science? The logic and sociology of seeing nothing |
| 6 June | David Corfield (HPS, University of Cambridge) Higher dimensional algebra: an escape route for the philosophy of mathematics? |
| 13 June | Kristine Haugen (Warburg Institute, University of London) Imagining things: theories and practices in early modern psychological inquiry |

Seminar programmes are sent out at the start of each 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

16 May Nancy Hunt (University of Michigan) An infertility scare in Colonial Africa

Years ago, I stumbled across a file of letters between a private francophone Belgian planter and a distinguished Flemish scholar and priest about this colonial planter's campaign to reinspire fertility among a 'dying race' of Congolese subjects in the Belgian Congo. The planter was a bit of an eccentric named Charles Lodewyckx. Not at all reluctant to investigate Congolese women's sexual hygiene habits, he began a crusade in 1946 to alter their enema and douching practices. The priest was squeamish about the planter's coarse tongue, but found his campaign appropriately inspirational for a people who seemed to have lost the will to procreate.

When and why did infertility scares emerge in colonial Africa? And what kinds of science and knowledge did infertility scares produce? In this case, there were multiple actors and epidemiologies at play, and degenerationist language was profuse. In this paper, I will focus on the theories and practices of the doctors who entered the Mongo scene from the 1930s. Theirs was a biomedical, rather than a psychological or a historical epidemiology in the making. They hypothesized about degeneration and endocrinology, tracked venereal disease, set up a special infertility clinic, performed pelvic exams and salpingectomies, and experimented with psychological tests designed to diagnose a desire for modernity. Somehow Lodewyckx received a state-funded motor car for his work in the 1950s, but not without a battle that pitted the humanitarian professionals of late colonialism against a meddlesome, charismatic planter whose work generated more popular favour than did the practices of colonial gynecology.

23 May **Nicholas Jardine (HPS, University of Cambridge)** Whigs and stories: Herbert Butterfield and the historiography of science

In *The Whig Interpretation of History* (1931) Herbert Butterfield inveighed against 'the study of the past with reference to the present'; and since the 1960s historians of science have routinely denounced as Whiggish the application of present-day categories to the activities of past persons who lacked those categories. In this talk I shall argue that much of the concern about conceptual presentism has been misguided. Butterfield himself barely touched on it, while he wrote at length about the impacts of presentism on the stories historians tell. The practical issues he highlighted – the relation of monographic to general history, the treatment of processes of historical transition, and the finality of historical narratives – remain crucial to historians of the sciences.

6 June **David Corfield (HPS, University of Cambridge)** Higher dimensional algebra: an escape route for the philosophy of mathematics?

In comparison to its glorious past, the philosophy of mathematics has today fallen on hard times. Sporadic efforts have been made to take a historical or sociological turn, but these attempts to bring to bear on mathematics analysis matching the richness of contemporary studies of science seem to fizzle out. What is needed is a better co-ordinated effort that focuses on striking episodes in recent mathematics. In this paper I outline my hopes that an investigation of the ongoing programme of research whose names include 'Higher Dimensional Algebra' and 'Postmodern algebra' may play this role.

13 June Kristine Haugen (Warburg Institute, University of London)

Imagining things: theories and practices in early modern psychological inquiry

Early modern accounts of epistemology and mental activity have been eagerly studied in recent decades, especially for their relationship to actual habits of inquiry and argument in early modern natural philosophy. But early modern scholars also took the operations of the soul to be themselves an object for natural philosophy, an assumption that enabled a copious literature on psychology while generating profound methodological difficulties: it was by no means clear how one might translate the customs and the polemics of (say) astronomers or natural historians to the more nebulous, not to say quicksand-like, field of psychology. Through a double case study of Hume's Treatise of Human Nature (1739-40) and J H S Formey's Mélanges philosophiques (1754), this paper explores the consequences of one particular attempt at such a translation: the project of constructing a psychology 'without hypotheses.' In both Hume's and Formey's arguments, the crucial role of the empirically given was filled alternately by 'experiment' derived from autobiography and from earlier texts, and by a dense bricolage of terms and entities taken from the psychological writings of classical antiquity and the sixteenth and seventeenth centuries. Despite their radically contrasting tendencies - Formey trumpeted his theological orthodoxy, while Hume remained resoundingly silent about metaphysics - these texts converged in their strategies for negotiating a field where practice itself was a form of theory.

Gender and Science Reading Group

The Gender and Science Reading Group is a discussion forum devoted to exploring the role of gender as a category of analysis within the history and philosophy of science. In addition to reading published work, the group also serves as a workshop space for work-in-progress, as and when the opportunity arises.

Meetings are fortnightly at 1pm on Thursdays in Seminar Room 2, Department of History and Philosophy of Science, Free School Lane. Please feel free to bring your lunch. Copies of the readings are available on reserve in the Whipple Library. For more information contact Sarah Hodges.

| 2 May | Judith Butler, 'Contingent Foundations: Feminism and the Question of Postmodernism' in Judith Butler and Joan Scott, <i>Feminists Theorize the Political</i> . New York and London: Routledge, 1992. |
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| 16 May | Sally Haslanger, 'Feminism in Metaphysics: Negotiating the Natural' in Miranda Fricker and Jennifer Hornsby, <i>Feminism in Philosophy</i> . Cambridge: Cambridge University Press, 2000. |
| 30 May | Preface, Acknowledgements, 'Historical Introduction' and 'Marital Status and Sexual Outlet' (pp. v-34; 263-296) in Alfred Kinsey et al, <i>Sexual Behavior in the Human Male</i> . Philadelphia and London: WB Saunders Company, 1948. |
| 13 June | Foreword, Table of Contents, Acknowledgements, 'Scope of the Study', 'Extra- Marital Coitus' (pp. vii-21; 409-445) in Alfred Kinsey et al, <i>Sexual Behavior in the</i> <i>Human Female</i> . Philadelphia and London: WB Saunders Company, 1953. |

Psychoanalysis and the Humanities

Seminars take place 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.

Please note that this term's seminars run on **selected Wednesdays**; they are not held fortnightly.

Organised by Mary Jacobus and David Hillman

 May Sarah Wilson (Reader in Art History, Courtauld Institute) Freud according to Cézanne: Lyotard, art, and psychoanalysis
May Susan Budd (British Psychoanalytical Society) Psychoanalysis, reading and misreading
May Daniel Pick (Department of History, Queen Mary College, University of London; British Psychoanalytical Society) 'Rome or Death': General Garibaldi, nationalism and the problems of psychobiography

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

 8 May
8 May
9 Joel Eigen (Charles A. Dana Professor of Sociology, Franklin and Marshall College)
Missing persons: consciousness and criminality in the Victorian court
15 May
9 Peter Brooks (Sterling Prof. of Comparative Literature & French, Yale; currently Eastman Visiting Professor, University of Oxford)

Inevitable discovery

Cabinet of Natural History

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

| 29 April | Emma Reisz (Faculty of History, University of Cambridge) Manning the frontier: botany in Singapore, 1859-1912 |
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| 6 May | Vicky Carroll (HPS, University of Cambridge) Crocodiles, Catholics and country houses: visiting Charles Waterton (1782- 1865) |
| Tuesday 7 May: Cabinet outing to the Natural History Museum | |

Sign-up sheet on HPS Departmental noticeboard

| 13 May | Paul Greenhalgh (Nova Scotia College of Art and Design) Modernity and display: competing hierarchies and the visual arts in the Fin de Siècle |
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| 20 May | Gillian Beer (Faculty of English, University of Cambridge) Darwin in South America: geology and the imagination |
| 27 May | Sara Pennell Curs and cures; or, how (and why) to treat the bite of a mad dog in the early modern era |
| 3 June | Cathy Gere (HPS, University of Cambridge) Pots, vats and buckets of ice: a history of brain archiving |
| 10 June | <i>Cabinet Garden Party</i> Richard Drayton (Faculty of History, University of Cambridge) The nature of Afghanistan |

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.

Epistemology Reading Group

We will continue to read articles from *New Essays on the A Priori*, edited by Paul Boghossian and Christopher Peacocke (OUP, 2000). Two copies of the book 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

| 25 April | Tyler Burge, 'Frege on Apriority' |
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| 2 May | Penelope Maddy, 'Naturalism and the A Priori' |
| 9 May | Hartry Field, 'Apriority as an Evaluative Notion' |
| 16 May | Paul Horwich, 'Stipulation, Meaning, and Apriority' |
| 23 May | Stephen Yablo, 'Apriority and Existence' |
| 30 May | Bob Hale & Crispin Wright, 'Implicit Definition and the A Priori' |
| 6 June | Stewart Shapiro, 'The Status of Logic' |
| 13 June | Bill Brewer, 'Externalism and A Priori Knowledge of Empirical Facts' |

Philosophy of Mathematics Reading Group

The Philosophy of Mathematics Reading Group meets fortnightly on **Fridays at 2pm** in Seminar Room 1. Copies of the readings are available at the desk in the Whipple Library.

Organised by David Corfield

| 3 May | Andrew Pickering (1997) 'Concepts and the Mangle of Practice: Constructing Quaternions' in Herrnstein Smith B. and Plotnitsky A. (eds.) (1997), <i>Mathematics, Science, and Postclassical Theory</i> . Durham: Duke University Press, 40-82. |
|---------|---|
| 17 May | TBA |
| 31 May | Benis-Sinaceur H. (2000) 'The Nature of Progress in Mathematics: The Significance of Analogy' in Grosholz E. and Breger H. (eds.), <i>The Growth of Mathematical Knowledge</i> , Kluwer, 281-293. |
| 14 June | McLarty C. (2000) 'Voire-Dire in the Case of Mathematical Progress.' in Grosholz E. and Breger H. (eds.) <i>The Growth of Mathematical Knowledge</i> , Kluwer, 260-279. |

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. The last three speakers' titles are to be finalised; please contact Jenny Downes for up to date information.

| 8 May | Michael Bresalier (HPS, University of Cambridge) Membranes as media: culturing flu virus on the developing chick egg, 1936- 1942 |
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| 22 May | Katrina Dean (HPS, University of Cambridge) The Melbourne physics laboratory: governing nation, empire and science |
| 5 June | Jenny Downes (HPS, University of Cambridge) 'Celestial America': Hevelius, 17th-century celestial mapping, and the rhetoric of discovery |
| 19 June | Janet Vertesi (HPS, University of Cambridge) Images in science |

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 1 May 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, please contact Anjan Chakravartty or Tim Lewens.

Science and Literature Reading Group

The group will meet fortnightly, on Tuesday evenings at 8pm, in the Godwin Room at Clare College. After the meetings we usually go for a drink in the college bar. Everyone is welcome.

Organised by Jim Endersby.

Imagining scientists

This term we will be looking at the images of scientists (and their precursors) in literature – a topic that we will be continuing through the late nineteenth and early twentieth centuries in Michaelmas term next year.

| 30 April | Christopher Marlowe 'Dr Faustus' (1604) Marlowe's play is available in several cheap paperback editions. The WW Norton/New Mermaids edition, edited by Roma Gill (£5.99) is especially recommended and should be available from Heffers and Amazon. The play is also in the UL (1985.8.3271) and many college and departmental libraries. |
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| 14 May | Thomas Shadwell 'The Virtuoso' (1676) Shadwell's play is available in a cheap paperback series called Regents Restoration Drama (University of Nebraska Press), edited by Marjorie Hope Nicolson and David Stuart Rodes. However, you will need to order it from a bookshop or on-line. It is also in the UL (723:22.c.95.60) and may be in some college and departmental libraries. |
| 28 May | Robert Browning 'Paracelsus' (1835) Browning's poem is in most of the larger collections of his work, which include several paperback editions. There are several editions in the UL (e.g. 721:26.c.95.1) and in most college and departmental libraries. |
| 11 June | Mary Shelley 'Frankenstein' (1818) The original 1818 text is available as a cheap paperback (£2.99) from Oxford World's Classics, edited by Marilyn Butler. We will be concentrating on the 1818 text, so if you buy a different edition, check which text it uses. The third edition (1831) is also available in the same series at the same price, edited by M.K. Joseph, and those who are really fascinated may want to read and compare the two. The 1818 text is available in several editions in the UL (e.g. 2001.8.8296) and will be found in most college and departmental libraries. |

Latin Therapy Group

This is a new group designed for postgraduate students who have to read Latin sources as part of their research. The aim is to provide translation practice and mutual help by members taking turns to bring short passages from the texts they are working on to the whole group. These passages are circulated several days before the meeting so that we can all have a shot at translating them and compare our results.

We will meet 3 - 4.30 pm every Friday starting on 19 April, in Seminar Room 1. Tea and biscuits included. No text is too bizarre for us, whether classical, medieval or neo-Latin!

Please contact Jenny Downes if you are interested in joining.

Medieval Science & Philosophy Reading Group

We will be reading *De Esse Dei* (On the Existence of God) by Duns Scotus, in the translation and edition on pages 34–81 of Duns Scotus, *Philosophical Writings*, edited and translated by Allan Wolter and published by Hackett. The group will meet in **L1 Great Court, Trinity College** at **1pm on Thursdays**, and each session will consist of a discussion of a section of the text, introduced by one member of the group. The text is available in the medieval authors section of Heffers. Everyone is welcome, and welcome to bring their lunch.

Further information is available from David Chart

| 25 April | The Triple Primacy: Efficient Causation (pages 38–47) |
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| 2 May | The Triple Primacy: Final Causation and Pre-eminence (pages 47–49) |
| 9 May | The Interrelation of the Three Primacies and the Unity of the Divine Nature |
| | (pages 49–52) |
| 16 May | Intellect and Will: First and Second Conclusions (pages 52–58) |
| 23 May | Intellect and Will: Third and Fourth Conclusions (pages 58–61) |
| 30 May | The Infinity of the First Being: First Proof (pages 62–68) |
| 6 June | The Infinity of the First Being: Further Proofs (pages 68–75) |
| 13 June | Solution of the Question and Replies to initial arguments (pages 75–81) |

Philosophy of Language Reading Group

This is to announce a new reading group for anyone interested in philosophy of language. We propose to start the group by getting back to basics with readings on sense and reference. We will be reading articles from the *Oxford Readings on Meaning and Reference*, edited by A. W. Moore (OUP, 1993). The book should be available in paperback in the Philosophy section at Heffers, and a copy has been placed on reserve in the Whipple Library. Each meeting of the group will focus on one article, with a member of the group offering an informal presentation, followed by a general discussion.

Meetings will take place on **Tuesdays 1-2pm in Seminar Room 1** of the HPS Department. All are welcome, and please feel free to bring your lunch.

Organised by Mark Sprevak, Axel Gelfert and Christina McLeish

| 30 April | Frege, 'On Sense and Reference' |
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| 7 May | Dummett, 'Frege's Distinction Between Sense and Reference' |
| 14 May | Strawson, 'On Referring' |
| 21 May | Quine, 'Mind and Verbal Dispositions' |
| 28 May | Davidson, 'Truth and Meaning' |
| 4 June | McDowell, 'On the Sense and Reference of a Proper Name' |
| 11 June | Dummett, 'What Does Appeal to Use Do for the Theory of Meaning' |
| 18 June | Evans, 'The Causal Theory of Names' |

Science and the Visual Reading Group

Science and the Visual Reading Group is a forum for discussing the relationship between science and visual representations. This term we will be reading about the transformation of media across time and the role it played in the production and communication of scientific knowledge. Meetings are fortnightly at 1pm on Fridays in Seminar Room 1. Feel free to bring your lunch. For more information, contact Michael Bresalier or Ayako Sakurai

26 April Introduction: The Media and the Visual

E. Eisenstein, *The Printing Press as an Agent of Change*, Cambridge, 1979. 'The unacknowledged revolution' and 'Defining the initial shift' (Whipple E.357 A,B)
Adrian Johns, *The Nature of the Book*. Introduction. (Whipple E.792 A,B)

10 May The Visual at the time of Scientific Revolution

 Martin Kemp, 'Vision and Visualisation in the Illustration of Anatomy and Astronomy from Leonardo to Galileo' in Gay Freeland, Anthony Corones (eds.), *1543 And All That*, 2000, pp.17-52. (Whipple B455)
James Franklin, 'Diagrammatic Reasoning and Modelling in the Imagination: The Secret Weapons of the Scientific Revolution' in Gay Freeland, Anthony Corones (eds.), *1543 And All That*, 2000, pp.53-116. (Whipple B455)

24 May Visual Representation in the Age of the Steam Press

1. Bernard Lightman, 'The Visual Theology of Victorian Popularizers of Science: From Reverent Eye to Chemical Retina', *Isis*, vol.91, no.4, 2000, pp.651-680. (In the Whipple)

2. Simon Schaffer, 'On Astronomical Drawing' in Caroline A. Jones, Peter Galison, *Picturing Science, Producing Art.* New York-London, Routledge, 1998. (Whipple, E.781 A,B)

7 June Photography

Nancy Leys Stephan, *Picturing Tropical Nature*, London, 2001. Chapter 3 'Racial Degenerations', pp.85-119 and Chapter 4 'Racial Transformations', pp. 120-148. (Whipple W.828)

21 June **The Visual in Cyber Space**

 M. Lynch, S. Edgerton, 'Abstract Painting and Astronomical Image Processing' in A. I. Farber (ed.), *The Elusive Synthesis, Aesthetics and Science*, Netherlands, 1996, pp.103-124. (Copy in the Box 31 in the Whipple Library)
Bruno Latour, *Iconoclash* (http://www.ensmp.fr/~latour/IKONOK/IKONOK-presentation.html)
Martin Kemp, Marina Wallace. *Spectacular bodies*, London, Hayward Gallery, 2000. Chapter 1 and 3. (Whipple V.677)
Catherine Waldby, 'The body and the digital archive: the Visible Human Project and the computerisation of medicine', *Health: an Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, vol. 1, no. 2, 1997. (Copy in the Box 31 in the Whipple Library)