

Departmental Seminars

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

Organised by Simon Schaffer.

- 23 October **Zuzana Parusnikova (Institute of Philosophy, Czech Academy of Sciences)**
Rationality without foundations: Popper's alternative to the postmodern subversion of reason
- 30 October **Maurice Finochiaro (University of Nevada, Las Vegas)**
Retrying Galileo, 1633-1992
- 6 November **Robert Bud (Science Museum, London)**
Smashing science's boundaries in World War II? Teamwork, technoscience, public engagement and penicillin
- 13 November **Helen Macdonald (HPS, Cambridge)**
Covert naturalists: ethologists hunting objectivity in the field
- 20 November **Staffan Müller-Wille (Max Planck Institute for the History of Science, Berlin)**
Early Mendelism and the subversion of race: epistemological obstacles as institutions?
- 27 November **Patricia Fara (Clare College, Cambridge)**
Hidden depths: Halley, hell and other people
- 4 December **Neil Gascoigne (University of Surrey, Roehampton)**
Living with scepticism

Seminar Programmes are sent out at the start of every term to the names on our mailing list. Please contact the Department if you would like to be added to or removed from the mailing list, or if you change your address.

Seminar information is also available on the Department of History and Philosophy of Science website at www.hps.cam.ac.uk/seminars.

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

Telephone: 01223 334500 Fax: 01223 334554

Abstracts

23 October **Zuzana Parusnikova (Institute of Philosophy, Czech Academy of Sciences)**

Rationality without foundations: Popper's alternative to the postmodern subversion of reason

Karl Popper introduced a new conception of rationality that eliminates the possibility of justifying knowledge. Popper undermines traditional epistemology and defines the true domain of rationality as mere refutations of conjectural hypotheses. Accepted knowledge is thus totally provisional. We live in an uncertain world where the only rational attitude is constantly to undermine all our beliefs. Popper's original contribution to philosophy consists in unifying two philosophical themes – endorsement of the Enlightenment respect for reason but the discarding of its element of arrogance, based on the link between justification and truth. This model of rationality thus presents an alternative to the postmodern subversion of reason as the legitimate value of Western culture.

30 October **Maurice Finocchiaro (University of Nevada, Las Vegas)**

Retrying Galileo, 1633-1992

In the four centuries since Galileo's condemnation in 1633, the controversy about its facts, causes, issues, and implications has become a cause célèbre whose importance and fascination rival those of the original episode, and yet until recently that subsequent controversy had not been systematically studied. This talk will report on a recently completed project that surveys the sources, facts, and issues of that subsequent controversy. It will also discuss some broader interpretative and critical issues involving comparison and contrast of the original affair and the subsequent cause célèbre, the relationship between science and religion, and the tension between cultural myths and documented facts.

6 November **Robert Bud (Science Museum, London)**

Smashing science's boundaries in World War II? Teamwork, technoscience, public engagement and penicillin

In the 1990s such analysts as Gibbons and Nowotny suggested that the enterprise of science was being transformed. Instead of the product of individuals working within disciplines insulated from the public now it was much more exposed and conducted by multidisciplinary teams linking pure and applied science. Science policy makers were impressed even if historians have taken little interest in this otherwise popular analysis. The few historians who commented poured scorn on the proposition that there had been a recent catastrophic change. Thus Terry Shinn has argued that the qualities identified as new had been present all along. The paper argues that changes proposed by Gibbons et al could be seen as sudden and unexpected, but they occurred at the time around WWII. The case study of the development of penicillin will explore the bewilderment and disorientation experienced by experienced scientists in the US and the UK as evidence that they were encountering a novel phenomenon. Science was actively constructed as magical in order to promote public engagement. The interpretation suggests new ways of understanding events such as the well-known penicillin priority disputes of the 1940s. It also provides questions about the meaning of broader post-war trends and the post-war pure science paradigm.

13 November **Helen Macdonald (HPS, Cambridge)**

Covert naturalists: ethologists hunting objectivity in the field

Recent work on the laboratory-field distinction in the sciences has described how the ‘placelessness’ of laboratories is commonly assumed to be a diagnostic of their universality and objectivity. Ethologists, however, do not routinely seek to exclude the exigencies of place by investigating animal behaviour in laboratory conditions. Rather, they tend to rely on experiments that, to paraphrase Niko Tinbergen, nature itself carries out in front of one. Ethological field practice involves an appeal to objectivity through a variety of forms of effacement of the scientist, both literal and psychological. Objectivity is sought through removing the observer from the experimental stage. Hides, blinds, and tents are used to create a disembodied observer who seeks to have no effect on the behaviour of the animals observed. I explore how this simultaneous absenting of the body and privileging of the observing eye relates to another form of objectivity assumed in ethological fieldwork: one founded on strategies of visual perception. Ethologists make a sharp distinction between ‘observing’ animals and ‘watching’ them; while the latter is the province of amateurs, the former is construed as a rigorous and scientific activity. Yet according to some, successful field observations require as a precondition a strong emotional tie with the observed animal – lacking this form of ‘irrational’ obsession, the demands, challenges and frustrations of sustained field observation would be impossible. Indeed, a strong identification with and empathy for the species studied are implicitly presented as necessary to the ethologist: contemporary textbooks even maintain that valuable observation skills may be gained through exercises which involve the ethologist imaginatively ‘becoming’ the observed object. I conclude by exploring the radical subversion of the notion that objectivity may be gained by ‘letting nature speak for itself’ that occurs when a scientist can ‘become’ the animal and in so doing, speak for it.

20 November **Staffan Müller-Wille (Max Planck Institute for the History of Science, Berlin)**

Early Mendelism and the subversion of race: epistemological obstacles as institutions?

The paper will present and discuss a series of Mendelian experiments carried out by Nils Herman Nilsson-Ehle between 1900 and 1907 at the plant breeding station in Svalöv (Sweden). A comparison of these experiments as documented in the breeding records and as represented in print reveals strong discrepancies. This can be explained by the fact that the recording and breeding procedures institutionalised at Svalöv left only little room for Mendelian hybridisation experiments. I will analyse the twists and turns that the experiments accordingly took in terms of Bachelardian philosophy of science. In contrast to Bachelard, however, I will characterise the ‘epistemological obstacles’ that Mendelism met – to which, as I will argue, the concept of ‘race’ prominently belonged – as institutional realities rather than mental habits.

27 November **Patricia Fara (Clare College, Cambridge)**

Hidden depths: Halley, hell and other people

Boundaries between theology and natural philosophy, between imaginary and factual travel narratives, between fiction and social commentary, used to be far more fluid than they are today. To explore these relationships, this paper links Mary Shelley’s *Frankenstein* – a book often hailed as the first science fiction novel – to two earlier works which are now less well-known: Edmond Halley’s article about terrestrial magnetism, in which he suggested that God had created inhabited illuminated cavities inside the earth; and a satirical fantasy voyage written by the Danish author Ludvig Holberg, but published anonymously as *Niels Klim’s Journey to the Underground* and immediately translated into many

languages. Attention is focussed on how the ambiguous presentation of these and other texts blurs any straightforward classification of genres. The aim of examining these writers together is not to search for direct mappings from one project to another, but instead to introduce Holberg's unfamiliar yet important book and also to cast new light on *Frankenstein*, one of England's most famous works of literature.

4 December **Neil Gascoigne (University of Surrey, Roehampton)**

Living with scepticism

At the inaugural meeting of the reformed Aristotelian Society in the year of JSTOR 2 it was suggested that my task for the years ahead should be to join the phalanx of those nobly researching the vast and newly discovered archive of so-called 'philosophical' material, and to report on a consideration that appears to have vexed many of its long-deceased authors; namely, the problem of 'external-world scepticism'. Since this will be unknown to the majority of colloquists, my intention is to present an 'Interim Report' on my work, much of which will be taken over with trying to make sense of this 'problem'; though my modest desire is that this will have the consequential benefit of helping to illuminate at least one facet of the alluring if alien thought of our distant ancestors.

Research Methods Seminars

Seminars on research methods and topics in history and philosophy of the sciences, for all new graduate students, are held on the first two weeks of term, on **Thursdays at 4pm in Seminar Room 2**. Tea is available from 3.45pm in Seminar Room 1.

Each seminar will consist of short informal talks presenting research methodologies and areas, and introducing the Research Methods Guide on the HPS website at www.hps.cam.ac.uk/research.

Organised by Marina Frasca-Spada and Nick Jardine.

9 October **Chaired by Nick Jardine**

Martin Kusch: Writing philosophy

Nick Hopwood: Writing history

Jill Whitelock: Libraries

Patricia Fara: Illustrations

Nick Jardine: Historiography of the sciences

John Forrester: The temptations of the academic researcher

16 October **Chaired by John Forrester**

Tim Lewens: Philosophy of the life sciences

Helen Macdonald: Environmental history

Soraya de Chadarevian: Interviews

Liba Taub: Instruments

Andrew Cunningham: Writing discipline history in the history of medicine

Richard Noakes: History of physics and the occult

History of Medicine Seminars

History of Medicine seminars are held on **Tuesdays at 5pm in Seminar Room 1**. Tea is available from 4.40pm. All welcome.

Early Medicine and Natural Philosophy

Organised by Andrew Cunningham.

14 October **Peter Jones (King's College, Cambridge)**

Picturing medicine in the age of Petrarch

28 October **Glenn Hardingham (Emmanuel College, Cambridge)**

The *regimen sanitatis* in late medieval England

25 November **Efraim Lev (University of Haifa, Israel)**

Levantine use of natural medicinal substances from medieval to present day

History of Modern Medicine and Biology

Organised by Nick Hopwood.

21 October **Elizabeth Hurren (University College, Northampton)**

A late-Victorian Alder Hey? The Poor Law and the expansion of the Cambridge anatomy school

4 November **Kiheung Kim (University College, London)**

How controversy ends: research on the scrapie agent in the 1960s

18 November **Staffan Müller-Wille (Max Planck Institute for the History of Science, Berlin)**

The UNESCO Statement on Race (1951) and the structural turn in twentieth-century anthropology and biology

2 December **Laura Otis (Hofstra University & MPI, Berlin)**

Must you kill your supervisor to do good science? The students of physiologist Johannes Müller

Wittgenstein Reading Group

We will be reading chapters from Martin Kusch's book manuscript *A Sceptical Guide to Rule-Following: A Defence of Kripke's Wittgenstein*. Participation is normally restricted to current PhD students in the Department of History and Philosophy of Science. Meetings will take place fortnightly on **Tuesdays at 2pm in the Museum Reserve Gallery**. The first meeting is in week 2. If you are interested in participating, please contact Martin Kusch. The book manuscript is available in electronic form, and a hard copy is on reserve in the Whipple Library.

Psychoanalysis and the Humanities

Seminars are held fortnightly on **Wednesdays at 5pm in Seminar Room 1**. Tea is available from 4.40pm. All welcome. Organised by Mary Jacobus.

15 October **Meira Likierman (Tavistock Clinic)**

Klein, Winnicott and the controversial status of Freud's instinct theory

12 November **Laura Mulvey (Birkbeck College, London)**

The pensive spectator: time and its passing in the still and moving image

26 November **Renate Salecl (University of Ljubljana; Churchill College, Cambridge)**

Anxiety in times of hypercapitalism

Psy Studies

History of Psychiatry, Psychology, Psychoanalysis and Allied Sciences

Seminars are held fortnightly on **Wednesdays at 5pm in Seminar Room 1**. Tea is available from 4.40pm. All welcome. Organised by John Forrester and Deborah Thom.

5 November **Shruti Kapila (Wellcome Unit for the History of Medicine, Oxford)**

All in the mind? W.H.R. Rivers, Freud and India

19 November **Stefan Schwarzkopf (Department of History, Birkbeck College, London)**

Hidden persuaders? Early twentieth-century advertising psychology from a business history point of view

3 December **Stephen Grosz (Psychoanalyst, London)**

Experience and its theory

Latin Therapy Group

The Latin Therapy Group meets on **Fridays at 4pm in Seminar Room 1**, starting on 17 October, in order to practise the art of translation, improve our Latin grammar, and determine who deserves the most sympathy on account of the difficulty of their sources – all in a mutually supportive environment! Well-known (usually classical) texts of relevance to the history of science are studied, as well as texts on which members of the group are working. All are welcome to attend.

For more information, and to be added to the mailing list, please contact the organisers, Adam Mosley and Katie Eagleton.

Cabinet of Natural History

Seminars are held on **Mondays at 1pm in Seminar Room 1**. You are welcome to bring your lunch. Organised by Anne Secord.

- 13 October **John Parker (Director, Cambridge University Botanic Garden)**
The connection of collections: botanical resources in Cambridge
- 20 October **Roger Gaskell (Roger Gaskell Rare Books)**
The technology of illustration: unexplored bibliographical issues
- 27 October **Peter Whan (University of Queensland)**
Sinecure or curate's egg? Palliative care at the threshold
- 3 November **David Sturdy (School of History and International Affairs, University of Ulster)**
Science in the service of the French state: the Enquete du Regent, 1716-1718
- 10 November **Emma Spary (HPS, University of Cambridge)**
Astronomers, atheists and arachnophages; or, how to swallow the French Enlightenment
- 17 November **Henrietta McBurney (Editor, Cassiano dal Pozzo's Paper Museum)**
Animal, vegetable, mineral or artefact in early modern Rome: Cassiano dal Pozzo and his museum on paper
- 24 November **Kees Rookmaaker (Department of Zoology, University of Cambridge)**
From Aldrovandi to Camper: the discovery of the African rhinoceros
- 1 December **Jim Endersby (Darwin College, Cambridge)**
The vagaries of a Rafinesque: classifying naturalists in early nineteenth-century America

Reading Kant

We are starting an informal Kant reading group. This term we shall be reading the *Prolegomena to Any Future Metaphysics*.

The meetings will be held on **Tuesdays at 11am in the Museum Reserve Gallery**. Organised by Marina Frasca-Spada and Steve John.

- 14 October **Steve John** will introduce discussion of the Preface and the Preamble
- 21 October **Marina Frasca-Spada** will introduce discussion of the First Part
- 28 October Second Part, §§1–26
- 4 November Second Part, §§27–end
- 11 November Third Part
- 18 November Conclusion
- 25 November 'Solution of the General Question of the Prolegomena' and 'Appendix'

Epistemology Reading Group

We will be reading *Thomas Kuhn*, edited by Thomas Nickles (CUP, 2003). The book is available in paperback from the CUP bookshop, 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 2pm in Seminar Room 1** and are open to all. Organised by Peter Lipton.

- 9 October Michael Friedman, 'Kuhn and Logical Empiricism'
- 16 October John Worrall, 'Normal Science and Dogmatism, Paradigms and Progress: Kuhn "versus" Popper and Lakatos'
- 23 October Joseph Rouse, 'Kuhn's Philosophy of Scientific Practice'
- 30 October Barry Barnes, 'Thomas Kuhn and the Problem of Social Order in Science'
- 6 November Thomas Nickles, 'Normal Science: From Logic to Case-Based and Model-Based Reasoning'
- 13 November Nancy Nersessian, 'Kuhn, Conceptual Change, and Cognitive Science'
- 20 November Peter Barker, Xiang Chen, and Hanne Andersen, 'Kuhn on Concepts and Categories'
- 27 November Richard Grandy, 'Kuhn's World Changes'

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, articles intended for publication, or conference papers. The seminar aims to provide an informal arena for the exchange of ideas among students of the history of science in HPS and elsewhere.

We meet on **alternate Wednesdays at 1pm in Seminar Room 1**. Papers are circulated by e-mail before each meeting, and a copy is left in Box File 30 in the Whipple Library. Please contact Katherine Angel if you are interested in giving a paper (new PhD students welcome) or adding your name to the e-mail list.

- 29 October **Jenny Downes:** Cosmography and chorography: the geographical tradition and the telescope
- 12 November **Helen Blackman:** 'A skilled and trained eye with a brain behind it': teaching in the Cambridge School of Zoology
- 26 November **Katherine Angel:** The critique of medicalisation: the last forty years

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 at 1pm in Seminar Room 1**, and are open to all researchers. For more information, or to add your name to the list of e-mail recipients, contact Tim Lewens.

22 October **Stephen John:** Externalism and political philosophy

5 November **Tim Lewens:** The problem of biological design

19 November **Arash Pessian:** Kripke and Leibniz, friends for now

3 December **Neil Manson:** Trust and information

EFACTS

The Early Physics, Astronomy, Cosmology, and Technology Seminar meets at **6pm on alternate Wednesdays, at M4 New Court, Trinity College**. Meetings consist of a short presentation on the assigned reading by a member of the group, followed by discussion. All are welcome to attend. Organised by Adam Mosley.

This term we shall be focusing on machines and automata. Readings not already available in the Whipple will be placed in the EFACTS box file.

15 October S. Bedini, 'The Role of Automata in the History of Technology', *Technology and Culture* 5 (1964), 22-42.

M. T. Gnudi (transl.), *The Various and Ingenious Machines of Agostino Ramelli*, chs. 1, 60, 97, 113, 140, 154, 168, 184-188, 191. [WL T.131 Oversize]

29 October Geoffrey Chaucer, 'The Squires Tale'; pp. 169-177 in *The Riverside Chaucer*, or online (in parallel middle and modern English) at <http://www.librarius.com/cantran/squitrfs.htm>

M. Osborn, 'The Squire's "Steed of Brass" as Astrolabe: Some Implications of the "Canterbury Tales"', in P. J. Gallacher and H. Damico (eds.), *Hermeneutics and Medieval Culture*, pp. 121-131.

Selections from D. Hill (transl.), *The Book of Ingenious Devices (Kitāb al-Hiyāl)*.

12 November S. Murphy, 'Heron of Alexandria's *On Automaton-Making*', *History of Technology* 17, 1-44.

26 November Vitruvius, *On Architecture*, Bk. X.

A. Sleswyk, 'Vitruvius' waywiser', *Archives internationales d'histoire des sciences* 29 (1979), 11-22.

Medieval Science & Philosophy Reading Group

We shall meet on **Wednesdays, 1–2pm in L1 Great Court, Trinity College**. The texts we shall read will be Boethius, 'The Consolation of Philosophy', Books 4 and 5. Those attending are welcome to bring something to eat; water and wine will be provided. Organised by John Marenbon.

Philosophy of Language Reading Group

We will be reading essays from the Blackwell *Companion to the Philosophy of Language* (Blackwell, 1997) edited by Bob Hale and Crispin Wright. The book is 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 paper, with a member of the group offering an informal presentation, followed by a general discussion.

Meetings will take place on **Mondays at 1pm in Seminar Room 2**. All are welcome, and please feel free to bring your lunch. Organised by Mark Sprevak, Axel Gelfert and Christina McLeish.

13 October Charles Travis, 'Pragmatics'

20 October Edward Craig, 'Meaning and Privacy'

27 October Jane Heal, 'Radical Interpretation'

3 November Paul Boghossian, 'Analyticity'

10 November Crispin Wright, 'The Indeterminacy of Translation'

17 November Bob Hale & Crispin Wright, 'Putnam's Model-Theoretic Argument'

24 November R.M. Sainsbury & Timothy Williamson, 'Sorites'

1 December E.J. Lowe, 'Objects and Criteria of Identity'

Science and Literature Reading Group

This term we will be reading selected entries from a Relativity Reader, currently being compiled by Kate Price. The Reader includes extracts from popular expositions of relativity, newspaper reports about Einstein and his theory, short stories, poetry, criticism and extracts from novels drawing on relativity. We meet on **alternate Wednesdays at 8pm in the upstairs seminar room at Darwin College**. Everybody welcome. **No prior knowledge of physics needed!!**

Organised by Jim Endersby and Kate Price.

15 October Popular physics: extracts from Arthur Eddington, Bertrand Russell and James Jeans. Ever tried falling in love with a Lady on Neptune? Find out how...

29 October Newspapers and Magazines: from the earliest reports in *The Times* and *The New York Times* in November 1919, to poetry and criticism in literary magazines, and popular fiction. Lord Peter Wimsey travels at the speed of light.

12 November A formula for the age? Philosophers, novelists and critics tell stories about relativity and modernity. Includes A.N. Whitehead's influential history of ideas and Lawrence Durrell's novelistic interpretation of the 'Space and Time marriage' as 'the greatest Boy meets Girl story of the age'.

26 November Critical and metaphysical uses of relativity: poets, philosophers and critics engage critically with the new values and perspectives associated with Einstein's theory. Includes I.A. Richards' General Theory of Critical Relativity and William Empson's doomed love affairs in curved space-time.