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# The Department

## Introduction

The major news for this year has been the completion of the renovation of the Whipple Museum, which included both redecoration to improve the appearance of the public rooms as well as essential repairs to the fabric of the building to ensure the space remains fit for purpose for years to come. The museum reopened in May 2019 after 10 months of closure while this work took place. All the public galleries are now looking much smarter for visitors, and the work in the main gallery means that the objects are now on display in a far better atmosphere for ensuring their preservation. The newly renovated main gallery was used at the end of year party to celebrate Professor Liba Taub's tenure as the Head of Department.

Seminar Room 1 also had a more modest refurbishment, being repainted and having a new hard floor to replace the increasingly ropey carpet tiles.

The department hosted a number of conferences this year, the largest of which was the British Society for the History of Science Postgraduate Conference in April. This was one of the largest conferences the Department has hosted, with 87 panel sessions across three days, a keynote lecture by HPS alumni Dr Sujit Sivasundaram (University of Cambridge), and over 100 attendees. The conference passed without any issues, a testament to the work of the organisers, HPS PhD students Emilie Skulberg, Laura Brassington, and Jules Skotness-Brown, and their help from department administration.

This year, the Wellcome Trust-funded, HPS-based 'Generation to Reproduction' research project oversaw the publication of *Reproduction: Antiquity to the Present Day*, a major milestone in the project as well as in the history and sociology of reproduction, with a book launch in the old library of Pembroke College. It was another industrious year for publications by department members more broadly, with the Whipple Library stepping in to host launch events while the Museum was closed. Joe Martin's *Solid State Insurrection: How the Science of Substance Made American Physics Matter*, a history of the institutional changes in the American physics community during the 20<sup>th</sup> century, was released in November 2018. January 2019 saw the publication of the *Cambridge History of Science vol. 1: Ancient Science*, co-edited by Liba Taub with Alexander Jones of NYU, a comprehensive overview of the ancient histories of the sciences in Mesopotamia, Egypt, Greece, Rome, China, and India. Finally in March, *Worlds of Natural History*, the followup to the venerable *Cultures of Natural History*, was published, co-edited by Helen Curry, Nick Jardine, Jim Secord, and Emma Spary, it offers a look at Natural History around the world.

In keeping with tradition, to mark her promotion to professor in the last academic year, Lauren Kassell gave her inaugural lecture on the 28<sup>th</sup> of June. Titled 'You Me and The Moon: Magic, Medicine and the History of Science', Lauren gave us an overview of the themes and subjects of her research into the entwined history of astrology and medicine, as well as her own story as an academic. After the lecture, guests retired to the Peterhouse Deer Park for a garden party.

This year also saw the official release of the *Casebooks Digital Edition*, a major output of the Casebooks Project, the research group who have been working in the HPS Department for the past 10 years. This digitised version of the casebooks of early 17<sup>th</sup>-century astrologist-physicians Simon Forman and Richard Napier has been created to make the full corpus accessible in new ways to researchers, and gives a virtually unprecedented look into the lives and concerns of people in the early modern period. This year also saw the release of *Astrologaster*, a videogame that takes a humorous look at the life and work of Simon Foreman and his patients, for which the Casebooks Project acted as historical consultants.

A major new hire was announced this year; Dr Staffan Müller-Wille will be joining the Department as University Lecturer in History of Life, Human and Earth Sciences, starting in January 2020. Finally it was formally decided this year that the next Head of Department will be Tim Lewens, who will take up the mantle at the start of the Academic Year 2019-2020.

# Congratulations

**Lauren Kassell** was promoted to a Professorship, and **Anna Alexandrova** was promoted to a Readership.

**Jenny Bangam** was awarded a Wellcome University Award at Queen Mary University of London for her project *Encountering genes: Postwar genetic counselling in the UK and Ireland*. She will finish her maternity leave and current research fellowship in HPS before taking up the post, so we will have the pleasure of her company until March 2020.

**Andrew Buskell** has been offered a Levehulme Early Career Fellowship starting in May 2019; this will enable him to stay in the Department until 2022.

**Agnes Bolinska** and **Joe Martin** were the joint winners of the the 2019 Essay Prize in HPS offered by the International Union of History and Philosophy of Science and Technology.

Finally, congratulations from all of us to **Dawn Kingham**, who went on maternity leave in November 2018 and gave birth to a healthy baby boy, Sam, the following month.



# Staff and Affiliates

## Administrative Staff

Tamara Hug  
Agnieszka Lanucha  
Louisa Russell  
David Thompson  
Toby Bryant  
James Livesey  
Lukasz Hernik

## Computing Staff

Mark Rogers

## Library Staff

Jack Dixon  
Agnieszka Lanucha  
James Livesey

## Museum Staff

Rosanna Evans  
Steven Kruse  
Joshua Nall  
Alison Smith  
Claire Wallace

## Teaching Officers

Anna Alexandrova  
Mary Brazelton  
Hasok Chang  
Helen Curry  
Marta Halina  
Nick Hopwood  
Stephen John  
Lauren Kassell  
Tim Lewens  
Dániel Margócsy  
Simon Schaffer

Jim Secord  
Richard Staley  
Jacob Stegenga  
Liba Taub

## Teaching Associates

Salim Al-Gailani  
Riana Betzler  
Agnes Bolinska  
Matt Farr  
Joe Martin

## Research Fellows

Leah Astbury  
Sarah Bull  
Andrew Buskell  
Jean-Baptiste Grodwohl  
Adrian Currie  
Jessica Hamel-Akre  
Remco Heesen  
Boris Jardine  
Natalie Kaoukji  
Richard McKay  
Rune Nystrup  
Henry Shevlin  
Carolyn Schmitz

## Affiliated Lecturers & CTOs

Patricia Fara  
Marina Frasca-Spada  
Sachiko Kusukawa  
Deborah Thom

## College Fellows

Jeremy Butterfield  
Seb Falk  
Peter Jones

Melanie Keene  
Simon Mitton  
Charu Singh

## Emeritus Professors

German Berrios  
Andrew Cunningham  
Nick Jardine  
Geoffrey Lloyd  
Michael Redhead

## Other UoC People who do HPS

Shahar Avin  
Debby Banham  
Michael Bravo  
Angela Breitenbach  
Gabriele Badano  
Adam Caulton  
Chris Clarke  
Shinjini Das  
Robbie Duschinsky  
Gabriele Ferrario  
Rebecca Flemming  
Sarah Franklin  
Sietske Fransen  
Richard Holton  
Shelley Innes  
Joel Isaac  
Martin Johnson  
Tony Lawson  
Kathy Liddell  
Scott Mandelbrote  
Peter Mandler  
Alexander Marr  
Jianjun Mei  
Francis Neary  
Alison Pearn  
Brian Pitts



Huw Price  
Katherine Reinhart  
Sally Riordan  
Richard Serjeantson  
Sujit Sivasundaram  
Jeff Skopek  
David Sloan  
Richard Smith  
Emma Spary  
Simon Szreter  
Daniel Wilson  
Louise Wilson

### **Affiliated Scholars**

Siva Arumugam  
Robert Bud  
Soraya de Chadarevian  
Silvia De Renzi  
Roger Gaskell  
Sonia Horn  
Milena Ivanova  
Gerald Kutcher  
Sarah Marks  
Jim Moore  
Bence Nanay  
Jaume Navarro  
Emma Perkins  
Jennifer Rampling  
Martin Rudwick  
Anne Secord  
Mark Tonelli  
Paul White

### **Friends**

Robert Anderson  
Peter Bowler  
Ole Grell  
Richard Jennings  
Chris Lewis  
Bence Nanay  
Christopher Preston

Christine Salazar  
Rick Welch



# Visitors and Students

## Visitors

Dominik Berrens  
Mark Fischer  
Magdalena Luszczynska  
Aron Hanlon  
Tinong Wei  
Chang-Hoon Nam  
Joseph Bassi  
Susann Holmberg  
Charlotte Bigg  
Helena Franzen  
Carola ossmer  
Christoffer Basse Eriksen  
Lynette Reid

## PhD students

Claudia Baisini  
Lukas Beck  
Olesya Bondarenko  
Laura Brassington  
Gregory Bridgman  
Jules Brown  
Tyler Brunet  
Jenny Bulstrode  
Eoin Carter  
Rebecca Charbonneau  
Azita Chellappoo  
Charlotte Connelly  
Caitlin Doherty  
Katherine Duncan  
Rhianna Elliott  
Adrian Erasmus  
Angela Gui  
Sebastian De Haro  
Leore Joanne Green  
Meira Gold  
Henrique Gomes  
Arthur Harris  
Celine Henne

Yijie Huang  
Sebastian Kroupa  
Katrina Maydom  
Zinhle Mncube  
Claire Oliver  
Erlend Owesen  
Daniel Ott  
Victor Parchment  
Jonathan Penn  
Karoliina Pulkkinen  
Peter Rees  
Edwin Rose  
Hardy Schilgen  
Raphael Scholl  
Susanne Schmidt  
Guy Sechrist  
Elizabeth Seger  
Reuben Shiels  
Emilie Skulberg  
Hamed Tabatabaei Ghomei  
Hannah Tomczyk  
Michael Thornton  
Ann-Sophie Thwaite  
Elina Vessonen  
Bob Vos  
Elise Williams  
William Wong  
Jack Wright  
Jack Wright  
Joseph Wu  
Jia Yu  
Pascal Zambito

## MPhil in HPSM students

Fiona Amery  
Okko Antilla  
Ramathi Bandaranayake  
Noah Betz-Richman  
Katharina Bick  
Juliana Broad

Andrea Ceccon  
Leib Celnik  
Theresa Clark  
Alice Deane  
Miles Eades  
Benjamin Eastwood  
Lydia Federico  
Grace Field  
Michael Gibson  
Gianamar Giovannetti-Singh  
Halley Goldberg  
Joseph Gough  
Justin Grenet  
Jacques Guyot  
Olivia Hawkes  
Rory Kent  
Lauren Killingsworth  
Calvin Kraft  
Thimothé Langlois-Thérien  
Joanna Luc  
Sharad Pandian  
Alexander Raubo  
Tyler Rhinesmith  
Thomas Riley  
Harry Sanders-Joliffe  
Corbin Stinnett  
Muhammad Tayara  
Keren Turton  
Bryce Wedig  
Amy Weissenbach  
Oscar Westerblad

## Part III students

Annabel Arnold  
Anna Barkemeyer  
MacGregor Cox  
Gabriel Cradden  
Michael Davin  
Grace Eapen  
Nicola Elliott

Hamish Evans  
 Tudor Evans  
 Beth Greenwood  
 Ruth Harvey  
 Alice Hayler  
 Nadya Kelly  
 Gaelan Komen  
 Felicity Parker  
 Sara Rasul  
 Kieran Reed  
 Alexandra Ridley  
 Tara Slade  
 Will Smart  
 Victoria Tavernor

#### **MPhil in HMS Students**

Lily Cohen  
 Michael Denham  
 Lihani Du Plessis  
 Adrien Gau  
 Annika Gompers  
 Nancy Karreman  
 Eleanor Kashouris  
 Sophia Kaufman  
 Hassan Maimouni  
 Neha Malhotra  
 Sula Ndousse-Fetter  
 Ekiomoado Olumese  
 Lara Vecchi

#### **Part II Students**

James Andrews  
 Laura Bleehen  
 Freya Casson  
 Bethany Durham  
 Ilias Epanomeritakis  
 David Grounds  
 Robin Hedley  
 Chet Johal  
 Georgina Lithgow  
 Sean McMahon  
 Andrew Preston

Jessica Sharpe  
 Rebecca van Pelt  
 Olivia Vanstone  
 Kadya Wittenberg

#### **BBS Early Medicine**

#### **BBS Modern Medicine**

Catherine Graham  
 Matthew Morrison  
 Sameeullah Shahabi  
 Sara Shaida  
 Matthew Watson

#### **BBS PEM**

Marina Awadalla  
 Salima Begum  
 Natalie Cotton  
 Anyanna Harker  
 Andrew Howard  
 Mohanja Ketheeswaran  
 Lanxin Li  
 Benjamin Robinson  
 Rosemary Thistlethwayte

#### **PBS taking IB HoS**

Jade McCarthy  
 Elinor Gibbs  
 Edmund Chun Yin Lam  
 Rebecca Stoklund  
 Jasmine Dixie Evan Wells

#### **HSPS taking IB HoS**

#### **PBS taking IB PoS**

Dea Begaj  
 Hussain Bismallah  
 Hui Xian Chong  
 Elinor Alice Gibbs  
 Francis James Madden

Jiping Mo  
 Ellen Abigail Taylor-Browne

#### **HSPS taking IB PoS**

Anne Monk  
 Nishi Vijaykumar Shah

#### **PBS taking BBS 114**

Frank Levermore

#### **PBS taking Part II Paper 5**

Josephina Weinerova

#### **HSPS taking Part II Paper 5**

#### **HSPS Taking Part II Paper 6**

#### **History Students taking BBS Early Medicine**

Ben Adams  
 Delilah Cairns Haylor  
 Olivia Carmody  
 Eleanor Curzon Green  
 Milly Hodgson  
 Lara Levene  
 Anna Maloney  
 Ella Nixon  
 Tamsin Sandiford  
 Abigail Watson





Staff and students of the Department of History and Philosophy of Science, 2018-2019

# Comings and Goings

**Leah Astbury**, a returning postdoc and former PhD student, started as a Wellcome Trust Research Fellowship working on 'Marriage, Health and Compatibility in Early Modern England', in September 2018

**Riana Betzler**, another returning PhD student came in mid-October 2018 as a Teaching Associate. Her research focuses on issues in philosophy of psychology, biology, and the social sciences and she is especially interested in empathy and other forms of social cognition.

**Sarah Bull** left in December 2018 as her Wellcome Trust funded project, 'Medical Publishers, Obscenity Law, and the Business of Sexual Knowledge in Victorian Britain' ended.

At the end of Tim Lewens' Templeton project, 'Putting the Extended Evolutionary Synthesis to the Test' **Andrew Buskell**, one of the project's Research Associates, was awarded a Leverhulme Early Career Fellowship hosted by the Department starting in May 2019 so he will continue with us until 2022

**Sarah Dry** joined us in September 2019; she is one of the Researchers on Richard Staley's new project, 'Making Climate History'

**Jean-Baptiste Grodwohl**, the second Research Associate on Tim's project joined the Department of Genetics in March 2019 when the project came to an end.

**Jessica Hamel-Akré** who is funded by a two-year Postdoctoral Fellowship from the Canadian Social Sciences and Humanities Research Council joined us in October 2018

**Francesco Mannu** started in November 2018 as Library Assistant for the year, while Dawn is on maternity leave

**Joe Martin** left at the end of August 2019 to go to the Department of History at Durham University

At the beginning of May 2019, we interviewed for the position of University Lecturer in the History of Life, Human and Earth Sciences. **Staffan Muller-Wille** was appointed and will start in the coming academic year as a University Lecturer. Dr Müller-Wille will replace Professor Jim Secord, who will retire in 2020.

**Jesse Olszynko-Gryn**, another Wellcome Trust Research Fellow, left in December 2018 following the end of his project. He is now based at the University of Strathclyde as a Chancellor's Fellow

**Rob Ralley** left in November 2018 after a number of years working on Lauren Kassell's Casebooks project

**Carolyn Schmitz** a Wellcome Fellow working on a project titled *From Cures to Courts of Justice: Medical Encounters and the Social Order in Early Modern Spain* joined us in October 2018

**Lynette Reid** joined us in June 2018 and was with us for six months on a British Academy Visiting Fellowship, working on a project titled *Cancer screening and the new paradoxes of preventive medicine*

# Roles and Responsibilities

## Departmental Positions

**Head of Department:** Liba Taub

**Departmental Administrator:** Tamara Hug

**Director of Graduate Students:** Nick Hopwood

**HPSM MPhil Managers:** Anna Alexandrova and Joe Martin

**HMS MPhil Manager:** Tim Lewens

**Part III Manager:** Agnes Bolinska

**Part II Manager:** Dániel Margócsy

**Part IB Manager:** Simon Schaffer (Michaelmas and Lent) and Nick Hopwood (Easter)

**Staff Development Officers:** Liba Taub (academic staff) and Tamara Hug (support staff)

**Dignity Officers:** Liba Taub and Richard Staley

**College Liason Officer:** Dániel Margócsy

**Chair of the Monitoring Committee:** Daniel Margócsy

**Graduate Training Officer:** Joe Martin

## HPS Board and Degree Committee

**Chair of the HPS Board Committee:** Simon Schaffer (Michaelmas and Lent) and Nick Hopwood (Easter)

**Chair of the HPS Degree Committee:** Nick Hopwood

**Professors and Readers:** Professors Hasok Chang, Lauren Kassell, Tim Lewens, Simon Schaffer (Chair), Jim Secord, Liba Taub and Dr Anna Alexandrova

**Curator and Director of the Whipple Museum:** Liba Taub

**Secretary of the Board and Secretary of the Degree Committee:** Tamara Hug

**Librarian:** Jack Dixon

**General Board Members:** Drs Emma Spary and Paulina Sliwa

**Co-options:** Drs Mary Brazelton, Stephen John, Dániel Margócsy, Richard Staley and Jacob Stegenga

**Elected Senior Members:** Drs Jenny Bangham and Rune Nyrupe

**Elected Junior Members:**

**Philosophy Faculty Representative:** Tim Lewens

# Examiners

## **NST Part IB History and Philosophy of Science**

**Senior Examiner:** Matt Farr

**Examiners:** Salim Al-Gailani, Riana Betzler, Andrew Buskell, Emma Perkins, Nick Hopwood

## **NST Part II History of Science including BBS Philosophy and Ethics of Medicine**

**Senior Examiners:** Richard Staley and Anna Alexandrova (Lent)

**Examiners:** Agnes Bolinska, Nick Jardine, Dániel Margócsy, Salim Al-Gailani, Joe Martin,

**External Examiner:** Dr Rachel Cooper (Lancaster University)

## **HPSM MPhil/HPS Part III Examiners**

**Senior Examiner:** Tim Lewens

**Examiners:** Agnes Bolinska, Matt Farr, Nick Hopwood, Joe Martin

**External Examiner:** Staffan Müller-Wille

## **MPhil in Health, Medicine and Society**

**Senior Examiner:** Anna Alexandrova

**Examiners:** Darin Weinberg (Medical Sociology), Ignacia Arteaga (Medical Anthropology), Natalie Kaoukji (History of Medicine), Tim Lewens

**External Examiner:** Dr Andrew Webster (University of York)

# Prizes, Projects and Honours

## Student Prizes

### **Bronowski Prize (Part II) – Best Performance on the HPS Part II Exams**

Chet Johal (Emmanuel)

### **Willmoth Prize – Best Dissertation Performance in HPS Part II**

Freya Casson (St John's)

### **Bronowski Prize (Part III) – Best Performance on the First Half of the HPS Part III Course**

Nadya Kelly (Gonville and Caius) & Hamish Evans (Girton)

### **Rausing Prize – Best Dissertation Performance in the MPhil in History and Philosophy of Science and Medicine**

Grace Field (Newnham) & Thomas Riley (Emmanuel)

### **Jennifer Redhead Prize – Best Overall Performance in the Essay Component of the MPhil in History and Philosophy of Science and Medicine**

Theresa Clark (Trinity)

### **Benyamin Habib Prize – Best Overall Performance in the Essay Component of the MPhil in Health Medicine and Society**

Michael Denham (Churchill)

### **Forrester Prize – Best Dissertation Performance in the MPhil in Health Medicine and Society**

Michael Denham (Churchill)

### **Anita McConnell Prize – Outstanding Performance on an Essay or Dissertation Based on an Object in the Whipple Collection**

Lauren Killingsworth (Kings) for her MPhil essay “‘Going fast because the moon is in the news today’: moon globes, imaginings of space, and visions of the future during the Space Race”

# Seminars and Special Lectures

## Wellcome Lecture

The 14<sup>th</sup> Annual Wellcome Lecture in the History of Medicine was given by **Marta Hanson (John Hopkins University)** on the 17<sup>th</sup> of January 2019 in the HPS Department, with the title 'Heaven and Earth are within one's grasp: the healer's body-as-technology in classical Chinese medicine'.

## Rausing Lecture

The 24<sup>th</sup> Annual Hans Rausing Lecture was given by **Professor Ruth Oldenziel (Eindhoven University of Technology)** on the 16<sup>th</sup> of May 2019 in the McCrum Lecture Theatre, Bene't Street, with the title 'Whose history of technology? Path dependences, contested modernities, and pockets of persistence'.

## Seminars, Reading Groups, Graduate Workshops and Language Groups

### Research Seminars

**Departmental Seminars** organised by Agnes Bolinska

**Twentieth Century Think Tank** organised by Mary Brazelton, Joe Martin and Richard Staley

**Coffee With Scientists** organised by Hasok Chang

**Cabinet of Natural History** organised by Laura Brassington

**AD HOC** organised by Karoliina Pulkkinen

**Early Science and Medicine** organised by Dániel Margócsy

**History of Modern Medicine and Biology** organised by Mary Brazelton and Nick Hopwood

**Generation to Reproduction** organised by Nick Hopwood and Dániel Margócsy

**CamPOS** organised by Matt Farr

### Graduate Workshops

**HPS Workshop** organised by Jules Skotnes-Brown, Eóin Carter, Peter Rees and Emilie

Skulberg (History); Katy Duncan, Céline Henne and Bobby Vos (Philosophy)

### Graduate Seminars

**Aims and Methods of Histories of Sciences** organised by Nick Jardine with Geoffrey Lloyd, Hasok Chang, Raphael Scholl and Jeffrey Skopek

**Images of Science** organised by Sachiko Kusukawa with Dániel Margócsy, Nick Jardine, Nick Hopwood and Boris Jardine

**Ideologies of Science** organised by Nick Jardine with Anna Alexandrova, Mary Brazelton, Stephen John and Richard Staley

### Reading Groups

**Kinds of Intelligence** organised by Marta Halina

**Twentieth Century Reading Group** organised by Mary Brazelton, Joe Martin, Charu Singh and Richard Staley

**Philosophy and Psychiatry** organised by Riana Betzler and Joe Gough

**The Intersection of Gender, Race and Disability with Philosophy of Science** organised by Azita Chellappoo



**Science and Literature** organised by Kanta Dihal and Melanie Keene

**Philosophy of Medicine** organised by Tim Lewens, Stephen John, Jacob Stegenga and Anna Alexandrova

**Philosophy and History of Physics** organised by Joe Martin and Matt Farr

**Early Science and Medicine Work-in-Progress** organised by Justin Rivest and Carolin Schmitz

**Casebooks Therapy** organised by Lauren Kassell

## **Language Groups**

**Latin Therapy** organised by Arthur Harris

**Manchu Therapy** organised by Mary Brazelton

**Greek Therapy** organised by Liz Smith

**German Therapy** led by Carolin Schmitz, organised by Hasok Chang



# Students

## Student Statistics

### Student Numbers

|                |                                                |    |
|----------------|------------------------------------------------|----|
| Undergraduates | Part IB                                        | 46 |
|                | Part II                                        | 14 |
|                | Part II BBS: Philosophy and Ethics of Medicine | 9  |
|                | Part II BBS: Modern Medicine                   | 5  |
|                | Part III                                       | 21 |
| Graduates      | HPSM MPhil                                     | 37 |
|                | HMS MPhil                                      | 13 |
|                | PhD                                            | 55 |

### Examination Results

|                                               |              |       |
|-----------------------------------------------|--------------|-------|
| Part IB                                       | Average mark | 63.75 |
| Part II                                       | I            | 7     |
|                                               | IIi          | 7     |
|                                               | IIii         | 0     |
|                                               | III          | 0     |
|                                               | Fail         | 0     |
| Part II BBS Philosophy and Ethics of Medicine | I            | 2     |
|                                               | II.i         | 8     |
|                                               | II.ii        | 1     |
|                                               | III          | 0     |
|                                               | Fail         | 0     |
| Part III                                      | I            | 6     |
|                                               | II.i         | 15    |
|                                               | II.ii        | 0     |

|      |   |
|------|---|
| III  | 0 |
| Fail | 0 |

### **Graduate Degrees Awarded**

|                            |    |
|----------------------------|----|
| HPSM MPhil degrees awarded | 36 |
| HMS MPhil degrees awarded  | 12 |
| Part III degrees awarded   | 21 |
| PhD degrees awarded        | 9  |

## Part II Essay and Dissertation Titles

### Primary Source Essays

#### **Discovery and Visual Culture: The *Nova Reperta* of Johannes Stradanus**

What was the role of humanism in the shaping of Stradanus' *Nova Reperta*?

Invention in the *Nova Reperta*: decoupling technical innovation from cultural foundation

The perception of time within the *Nova Reperta*

What role do women play in the *Nova Reperta*?

#### **Boas, *The Mind of Primitive Man***

*The Mind of Primitive Man* and the lessons of cultural transformation

Racial debates and the Howard Circle: rewriting *The Mind of Primitive Man*

Possible positions of an antiracist: a comparison of Boas and Du Bois's emotive empiricism

Finding method in *The Mind of Primitive Man*

#### **The Stanford School**

Given that Cartwright believes that capacities can be carried from situation to situation, should we abandon laws?

Is Hacking's theory-free entity realism really 'theory-free'?

To what extent should epistemic virtues provide a normative standard for science?

The case for a pragmatic postulation of universalism—a response to Cartwright's *The Dappled World*

#### **Cancer Drugs Fund**

Why is there a cancer drugs fund and not a cancer prevention fund, and is this justifiable?

Justifying a Cancer Drugs Fund: arguing 'cancer' into 'cancers'

Can real world data resolve clinical uncertainty within the Cancer Drugs Fund?

NICE and social values: an evaluation of those non-epistemic values pertinent to NICE's 'PMG9 Addendum A'

Dreaded diseases: would the Cancer Drugs Fund make more sense if we put dread weightings on QALYs generally?

How NICE is being nicer to the pharmaceutical industry and why it matters: the 2016 addendum to PMG9

Is the Cancer Drugs Fund ethically justifiable?

The Cancer Drugs Fund and incorporating social values into healthcare

Accountability and the impact of patient advocacy groups on the Cancer Drugs Fund PMG9

Is the Cancer Drugs Fund in keeping with NICE's utilitarian ideals?

#### **The Superconducting Supercollider: Congressional Hearings**

Defining US leadership in science: how tensions emerged between US policy makers and high energy physicists during the lifetime of the Superconducting Super Collider

Does a comparison of the Superconducting Supercollider site selection process to that of Fermilab reveal increasing savviness among the scientific and political communities of the USA?

Social or scientific: how did disciplinary backgrounds affect notions of fairness in the Congressional Hearings concerning the SSC?

The education crisis and the SSC

Heroes, hegemony and rugged frontiersmen: an analysis of masculinity in the Superconducting Supercollider Congressional Hearings

Rationality and gender in the Superconducting Super Collider Congressional Hearings

## Dissertations

Sleep: its manipulation in the early modern period

Eugenic discourses in medical officer health reports in interwar England

Women working in genetics in Cambridge around 1900

The ethics of moral bioenhancement

How British childrens' conceptions of science changed throughout the 19<sup>th</sup> century, examined through a comparative analysis of early and late century periodicals

Tensions in prevention: a history of PReP in the United States

'A disease called the suffocation of the mother'

Hooker and the Himalayas

Reparative therapy for 'ego-dystonic homosexuality' in the late 20<sup>th</sup> century

Neo-Aristotelian approaches to normativity

The philosophical uncertainty of the quantum vacuum: are quantum vacuum fluctuations '*creatio ex nihilo*'?

Dementia: how changing perspectives affect clinical decision making

Should the MMR vaccine be mandatory?



# MPhil in HPSM and Part III Essay and Dissertation Titles

## MPhil Essay and Dissertation Titles

### **Fiona Amery**

Scientific virtue in the early 20<sup>th</sup> century  
'auroral green line' debate

Thomas Baldwin and the creation of the hot air  
balloon as a scientific and aesthetic site of  
knowledge in the late 18<sup>th</sup> century

Encountering traditional Tibetan medicine at  
the two conferences of the 1980s: rhetorical  
strategies and Western responses

#### *Dissertation*

'An attempt to trace illusions to their physical  
causes': atmospheric mirages and the  
performance of their demystification in the  
1830s

### **Elias Anttila**

Representations of value-laden social science:  
the case of early political compasses

How think tanks have changed social science  
in Finland

Restructuring normatively inappropriate  
dissent from science: a virtue-based approach

#### *Dissertation*

Epistemic egalitarianism and the epistemically  
just role of experts in democracy

### **Ramathi Bandaranayake**

Assessing autonomous thought as a  
requirement for artificial intelligence

Calibrating reality: the dominance of the 5-  
sigma standard in physics

Vaccines for Disease X: better ways to take  
precautions

#### *Dissertation*

'Soul-crushing wrong choice': moral injury and  
the ethics of war

### **Noah Betz-Richman**

Functionalism, conscious availability and the  
extended mind

Breaking the silence: scientific realism and  
ontological quietism

New approaches to cognitive evolution:  
evaluating evolutionary psychometrics

#### *Dissertation*

Standing states, natural kinds, and the  
extended mind

### **Katharina Bick**

The Roman agronomists' take on farmers'  
calendars: astronomy and calendar technology  
in agricultural practice

Popular moons: material representations of  
the lunar surface in Great Britain and Germany  
in the second half of the 19<sup>th</sup> century

The odd one out: the methodological diversity  
of astrophysics

#### *Dissertation*

Abandoned cases: the end of solar eclipse  
expeditions from the University of Cambridge  
and other British institutions

### **Juliana Broad**

H. Rider Haggard's novel *Dr Thorne* in the  
vaccination debate around 1900

A feminist defense of the demarcation problem

Psychiatric care workers at the First Pan-  
African Psychiatric Conference (1961)



*Dissertation*

Working in cases: British psychiatric social workers and a history of psychoanalysis from the mid, c. 1930-1960

**Andrea Ceccon**

Natural history meets cognitive anthropology: a critical analysis of Scott Atran's project of an anthropology of science

'Dermatoglyphics': a diagnostic tool without diagnoses?

Clippings and conservatism: the Alfred Newton papers

*Dissertation*

Darwin's flowers and Wallace's butterflies in the history of polymorphism

**Leib Celnik**

Books consuming readers: Lesesucht, Romanensucht and the social framing of disease in early 19<sup>th</sup>-century German medicine

Translating objects, images and history with early modern drawing instruments

Visual materials in Bran Harland's geological expeditions of Svalbard

*Dissertation*

Red is the new blue: synthetic dyes in Yoshitoshi's prints

**Theresa Clark**

Beliefs and understanding: a response to Potochnik

Value-laden science and public justice: towards a novel rationale for lay involvement in risky research

The end of diseases? A response to Lange

*Dissertation*

Whats in the box? Understanding as a novel

desideratum from black-box machine-learning algorithms

**Alice Deane**

'Great trial and hazards': causes of miscarriage in 17<sup>th</sup>-century England

Long exposure: uptake of X-rays into clinical practice for the diagnosis of twin and breach pregnancies, 1896 to 1939

'A great storm of indignation': the reception of George John Romane's 'Mental Differences Between Men and Women', 1887

*Dissertation*

Screening for syphilis: how blood syphilis tests became routine in antenatal care, 1906-1960

**Miles Eades**

Democratising death and damage: an argument for mandatory ethics settings in autonomous vehicles

A Frankfurt School inspired interpretation of anthropogenic climate change denial ideology in the United States

Discerning the function of the social imaginary in the dynamics of expectations: the 'new Soviet man' as cosmonaut case study

*Dissertation*

Adorno, Horkheimer, Marcuse and the 'America First Energy Plan'

**Benjamin Eastwood**

Post empirical theory assessment in theories of quantum gravity

Is theoretical physics necessarily speculative? 1870-1915: a case study in mathematical physics

How relationist should we be about time?

*Dissertation*

The necessity of understanding to the

philosophy of physics: a critique of the  
objectivist facticity view of physics

### **Lydia Federico**

'A condition born of strife': American military  
influence on the psychiatric classification of  
trauma in the era of the War on Terror

Taken for granted: adaptive preferences to  
perceived moral obligations in informal family  
caregiving

Enduring war: genealogy of cancer-related  
post-traumatic stress disorder

#### *Dissertation*

'Stop Googling this disease': digital age  
challenges and empathic solutions for the  
physician-patient relationship

### **Grace Field**

The other face of causation

Empirical evidence or an amusing feat of  
engineering? The problem with analogue  
simulation

Music of the spheres or music for the heart?  
The relationship between Einstein's music and  
science

#### *Dissertation*

Putting theory in its place: the relationship  
between universality arguments and empirical  
constraints

### **Michael Gibson**

Assessing the Health Impact Fund proposals  
as a solution to the problem of neglected  
tropical diseases

Context-sensitivity in social science policy and  
practice

Objectivity in medical science: how can we  
mitigate the effects of problematic values?

#### *Dissertation*

Are global health inequalities unjust?

### **Gianamar Giovannetti-Singh**

Retracing the associations between depictions  
of astrologers, 1523-1565

Pas si candide, M. Voltaire: an examination of  
l'Ezourvedam's role in shaping theories of  
human genesis, 1760-1799

Galenising the New World: examining Joseph-  
François Lafitau's 'Galenisation' of Iroquois  
material medica, c. 1716-1724

#### *Dissertation*

Writers of the lost ark: reconstructing the fight  
for primacy in the Jesuit China mission from  
the Acta Pekinensia, 1658-1707

### **Halley Goldberg**

Occam's Razor does not justify Solomonoff  
Induction

Reasons to believe in the computational  
metaphor

Genetic information as Shannon information

#### *Dissertation*

A pluralistic concept of computation for  
cognitive science

### **Joseph Gough**

Mental disorder is not (yet) a myth: the case  
for transitional kinds

The logical problem in animal mindreading  
research and human exceptionalism in animal  
psychology

Defending naturalism: a dilemma for Boorse's  
biostatistical theory of health and disease

#### *Dissertation:*

Homeric eliminativism

### **Justin Grenet**

American burnout: from fringe beginnings to medical mainstream

Literature and science of *The Second Sex*: second wave feminism, gender theory, psychology

Benjamin Rush and the cult of Shakespeare within mid-19<sup>th</sup> century American psychiatry

#### *Dissertation*

Literature and medicine: Sinclair Lewis's *Arrowsmith* (1925) as mirror, spotlight and beacon

### **Jacques Gruyot**

Cyrano de Bergerac's science fiction as colonial ethnography

An argument against models as fictions

Neurasthenia and language as negotiations of authority in Weir Mitchell and Charlotte Perkins Gilman

#### *Dissertation*

'This formidable foe now has a conqueror': patent health advertising in British Guiana, 1880-1920

### **Olivia Hawkes**

'The end of an era?' Re-thinking the decline of sanatorium treatment for tuberculosis in Britain through the survival of Papworth Village Settlement, 1948-1960

'This almost universal malady': parasitic worms and the construction of disease in early modern Europe, c. 1700

Does the 'magic bullet' dent the 'golden standard'? Finding a place for randomised control trials in the era of molecularly targeted treatments for cancer

#### *Dissertation*

Reconstituting difference: the National Association for the Prevention of Tuberculosis

and the campaign to eradicate Tuberculosis in Britain, 1950-1965

### **Rory Kent**

Metaphysical underdetermination and the principle of proliferation: a Feyerabendian alternative to monistic realisms

Experiential injustice in scientific practice

Scientific perspectivism and feminist standpoint theory: a critical comparison of two philosophies of compromise

#### *Dissertation*

Scrutinising notions of public knowledge: epistemological, normative and genealogical

### **Lauren Killingsworth**

'With maps illustrative of the disease': cholera maps, visions of uniformity, and insecurities in colonial India around 1870

'Going fast because the moon is in the news today': moon globes, imaginings of space, and visions of the future during the Space Race

'Contention hereabout is great': menstrual blood, contagion and sex in 17<sup>th</sup>-century England

#### *Dissertation*

'With maps illustrative of the disease': medical cartography in late 19<sup>th</sup>-century colonial India

### **Calvin Kraft**

Thinking like a robot: the use of critical anthropomorphism with artificial systems

Finding ourselves in nature: the subject as an ethnological theory of the individual

On 'fixing' deaf children: reconsidering the ethicality of cochlear implantation

#### *Dissertation*

Two theories of mind: defending plurality in accounts of mentalisation

### **Timothé Langlois-Thérien**

Engel's biopsychosocial model: a metaparadigm for explanations in psychiatry

Predictions in clinical medicine: challenging evidence-based medicine epistemology with machine learning

Breaking out of the cranium: extended cognition and the case study of split-brain patients

#### *Dissertation*

Degrees of freedom in carving psychiatric nature at the joints

### **Joanna Luc**

What does spacetime do?

What does it mean for a spacetime to be physically reasonable?

Symmetry and the equivalence of models

#### *Dissertation*

A physicalist perspective on higher-level laws

### **Sharad Pandian**

The Strange Observatory at Lambeth

Whose fire? Whose facts?

'Suring' up knowledge: break the justificatory regress in the climate wars

#### *Dissertation*

Storied maps: narratives of progress in the surveys of Colin Mackenzie, Francis Buchanan and William Lambton in early 19<sup>th</sup>-century Mysore

### **Alexander Raubo**

Taking stock of evolutionary epistemology

Lakatos' rational reconstruction: why 'rational'? Why 'reconstructive'?

The metaphysical status of human kinds

#### *Dissertation*

Evolution, moral realism and vindication

### **Tyler Rhinesmith**

Computational modelling of biological systems: context, mosaicism and simplicity

Major shifts in electrophoresis methods in the 20<sup>th</sup> century

Biogerontology: normal and successful?

#### *Dissertation*

Overlapping peaks: the making of analytical chromatography

### **Thomas Riley**

Arguing through the past: disciplinary histories of carcinogenesis in the 1990s

From 'undesirable' to serving the public interest: patenting at John Hopkins University before the Bayh-Dole Act

From protection to promotion: the influence of drug lag on the FDA

#### *Dissertation*

Pills, patents and policy: the politics of early prescription drug price control in the United States

### **Cobin Stinnett**

Pellagra in print: public perceptions of pellagra in American newspapers

An issue of utility: the Aschheim-Zondek reaction and Friedman pregnancy test in differential diagnosis of ectopic pregnancy

Medical cases and medical thought: milk as a medicinal entity in George Cheyne's *An Essay on the True Nature and Due Method of Treating Gout*

*Dissertation*

The language of artificial insemination in Britain, 1930-1959

**Yusuf Tayara**

Ibn al-Shatir's *Observation*: a case study in the historiography of Islamic astronomy

Does the 'explaining explanatory success' criterion render selective scientific realism untenable?

Thinkers, things and theories: towards a philosophical definition of broken instruments

*Dissertation*

From Maragha to the Mamluks: Ibn al-Shatir as a case study in the historiography of Islamicate astronomy

**Keren Turton**

Classifying a calculator of cranial categorisation: investigating knowledge claims embedded in Professor Arthur Thomson's trigonometer

Practice, periodicals and politics: medical journalism and the construction of white South African medical authority in the 1920s

Assembling military medical material in Britain's Army Medical Department Museum

*Dissertation*

Films and blood donation publicity in mid-20<sup>th</sup> century Britain

**Bryce Wedig**

Theoretical virtues in Everettian quantum mechanics

Locality in the 1935 EPR-Bohr conversation

Assessing the quantum liar paradox

*Dissertation*

Wavefunction ontology and Koopman-von Neumann theory

**Amy Weissenbach**

The 'Gene Drive Files': a battle of networks and narratives

The Hilger and Watts personality

The rhetoric of 'freedom' in Nature at the end of the Second World War

*Dissertation*

The network ethic in synthetic biology

**Oscar Westerblad**

Formulating a pragmatist account of scientific understanding

Breaking down instruments: how materiality matters to the identity and performance of instruments

Classificatory concepts, natural kinds, and messy semantic externalism: revising Putnam in light of Dupré

*Dissertation*

The network ethic in synthetic biology

## Part III Essay and Dissertation Titles

### **Annabel Arnold**

The case of premenstrual dysphoric disorder: why we need an explicit process for specifying the boundary between normal and diseased

Framing a dangerous drug: how isotretinoin became controversial

#### *Dissertation*

Understanding the objectivity of methodologically sound research sponsored by the pharmaceutical industry

### **Anna Barkemeyer**

'There's a fine, fine line'—examining the relationship between portrayal and practice in the medical television drama Grey's Anatomy

'The fun of ancestral barbarism'—Andrew Lang's 'Princess Nobody' and the science of Victorian fairy tales

#### *Dissertation*

Clothes make people, the stool makes the leader: the story of a Kom throne and its journey to Germany

### **MacGregor Cox**

An investigation of the debate surrounding genetic engineering in food production

The external validity of viral gain of function studies: how useful are they, really?

#### *Dissertation:*

Divergence of opinion in the risk policy discourse; cognitive errors and cultural value differences

### **Gabriel Cradden**

Basic science, politics and Europe: the Kendrew report and its fallout

Existentially dangerous AI and the 'pro-cautionary' principle

#### *Dissertation*

Beyond the standard debate: how blogs and social media changed the argument over future colliders

### **Michael Davin**

Truth, pragmatic aims and social values in Hasok Chang's operational coherentism

'Being read': the DSM-5, pathologising transness and epistemic injustice in trans healthcare

#### *Dissertation*

Pluralism and practice in the metaphysics of gender

### **Grace Eapen**

Thomas Wijck's Ham House alchemical paintings: art and alchemy intersecting in Restoration England

'Science and culture' and its promotion of Meghnad Saha's vision for scientific practice in India

#### *Dissertation*

Between colonial and national science: the formative years of the Indian Science Congress

### **Nicola Elliott**

Diet for women during childbearing in the early modern period in England

How did the suffragist press use medical discourse to report on the forcible feeding of the hunger-striking suffragettes in Britain, 1909-1913?

#### *Dissertation*

'Presibd to her and prayd with her': the care



and experiences of sick children in the 18<sup>th</sup> century

### **Hamish Evans**

Low-income consumers, nutritional science and the school meal in 1980s Britain

Western immunity, Eastern susceptibility: the 'fifth' disease and its control in treaty-port China

#### *Dissertation*

Building a new consensus of care before birth: addressing perinatal mortality and handicap crisis in Thatcher's Britain

### **Tudor Evans**

Is the passage of time anything more than the temporal spread of events?

Refining entity realism

#### *Dissertation*

Pragmatic Realism and quantum mechanics

### **Beth Greenwood**

Is the Stern Review justified in not including pure time preference when calculating the social discount rate? The place for ethical judgement in economics

Dr Martha Annie Whiteley: both an exceptional and at the same time typical case study of women in chemistry at the turn of the 20<sup>th</sup> century

#### *Dissertation*

Rethinking the future: a new development in the history of IPCC climate change scenarios

### **Ruth Harvey**

Scientific Russian: Russian language textbooks for English-speaking scientists, 1950s-60s

Cross-cultural technological hybridisation: the case of the 19<sup>th</sup> and 20<sup>th</sup>-century snow goggles in the poles

#### *Dissertation*

Polar visuality: the expedition art of Captain John Ross

### **Alice Hayler**

The medicalisation of pain: discrepancies between perception and treatment of depression between different mental illnesses

Narcissism: a case study on the value-laden nature of medical truth and practice

#### *Dissertation*

How can we gauge how painful someone's pains are and what are the clinical implications?

### **Nadya Kelly**

QALYs, DALYs and O'NEILLYs: what can effective altruism learn from measurement debates in public health ethics? Toward a more effective measurement of altruism

Two universes of thermodynamics and theology: Camille Flammarion's *La Fin du Monde* (1894)

#### *Dissertation*

Just health, just justice, or neither? Motivating a feminist approach to end of life care

### **Gaelan Komen**

Peter Kapitza's interstate science: a scientific internationalism and personal international networks in interwar Soviet physics

The power of patenting: how nuclear power patents shaped transatlantic collaboration on nuclear research in the Second World War

#### *Dissertation*

The diplomatic-scientific structure of the

Pugwash conferences on science and world affairs in the period 1978-1985

### **Felicity Parker**

'The Storehouse of Industrious Devices': a book of drawings of mathematical instruments and its context in 17<sup>th</sup>-century London

The *Liber Medicinalis* of Quntus Serenus: a Latin medical treatise in verse from Late Antiquity

#### *Dissertation*

English manuscripts on shipbuilding, 1570-1640

### **Sara Rasul**

Choosing the 'gatekeepers' of science: a code of conduct for the journal editor selection process

Robert Brady, Doctor in Physick: collecting, correspondence, critical historiography and historical method in 17<sup>th</sup>-century England

#### *Dissertation*

An improbable tale? The development of Owens College from upstart institution to world-class research university, 1851-1910

### **Kieran Reed**

Diseases of disease: bacteriophage therapy in the American press from 1921 to the early 1930s

Nuclear fusion: a history of the future

#### *Dissertation*

Wind turbines in conceptual disrepair

### **Alex Ridley**

Knowledge, power and sex: anatomical images and pornography in 18<sup>th</sup>-century Britain

The morning-after pill, abortion and embryo research in early 1980s Britain

#### *Dissertation*

Immoral sex and irresponsible contraception: emergency hormonal contraception in Britain and its contested transition to an over-the-counter drug

### **Tara Slade**

Why fund the emergency services rather than preventative measures?

Between hysteria and nervosa: attributing the credit for the discovery of anorexia nervosa

#### *Dissertation*

New additions to the DSM and what these say about the body-mind problem in the philosophy of psychiatry

### **Will Smart**

Nicholas Shackleton, foraminifera, and the contribution of paleoclimatology to climate change discourse in the 20<sup>th</sup> century

Adam Sedgwick: slavery, race, empire and evolution

#### *Dissertation*

The Anthropocene: multiple meanings of the newest geological epoch

### **Vicky Tavernor**

'Converting mentally agonised persons into more ordinary ones': William Sargant and the promotion of leucotomy as a treatment of medical disorders between the 1940s and 1960s

'Making a beast of this little fellow': the display of Ota Benga in the Monkey House of the Bronx Zoo in September 1906

#### *Dissertation*

'In the most severe forms of this strange malady he is, in fact, morally an animal': moral

insanity at the York Retreat between 1835 and 1890

## HMS MPhil Essay and Dissertation Titles

### **Lily Cohen**

Is medical paternalism always problematic?  
The case for mandatory vaccinations

Examining the links between health and racism: black maternal morbidity and mortality in the US

Exploring notions of maternal responsibility in Brazil's 2015-16 Zika epidemic

#### *Dissertation*

Fearing the "Other": How journalistic practices and constructions of "self" shaped the narrative of the 2014 West African Ebola outbreak in the British Media

### **Michael Denham**

Should we seek to reduce health inequalities?

Reading *The Economist* on the United Kingdom's National Health Service: Origins and Commemoration

Should the biomedical sector be nationalised?

#### *Dissertation*

Bloodlust: a case study of *Theranos* and the embodiment of a brand's values in a Chief Executive

### **Lihani Du Plessis**

Health inequalities with respect to race in the United States

Should we seek to reduce health inequalities?  
Restorative colonial justice and healthcare

The influence and legacy of colonialism in the WHO smallpox eradication campaign (1960s-70s)

#### *Dissertation*

"He is But Part of a Man": Disability Pensions and Rehabilitation for British West Indian Servicemen During and After the First World War

### **Adrien Gau**

"Is 'thought collective' a useful concept for writing history of medical science?" – using the development of AZT to examine the ideas of 'thought collectives' and 'thought styles'

How biotechnologies (especially assisted reproductive technology) enable alternative forms of kinship ('queer kinships') and on the tension between subversion and conformity to heteronormative family structures

Intersex individuals as Nonbinary Knowers: collaborative knowledge production is alleviating epistemic injustice

#### *Dissertation*

(Un)Natural bodies, (in)visible identities: a critique of trans(feminist) scholarship

### **Annika Gompers**

Discuss selected anthropological literature that suggests how the social is inscribed in our biologies

Critically evaluate the link between health and social inequality with respect to gender

Experience of and decision making about donor conception with regards to financial compensation vs. gift giving of egg donation

*Dissertation*

“Sex differences are easy and they’re complicated”: Scientists’ view of sex as a biological variable in preclinical research

**Nancy Karreman**

Autonomy and “authentic” selves

Patient involvement in drug development in the 29<sup>th</sup> century in tissue banking

How are pre-natal testing and intervention configured within surrogacy arrangements?

*Dissertation*

Folic acid and the case against genetic exceptionalism in prenatal interventions

**Eleanor Kashouris**

Autonomy, decision making, and the family

Family planning in post-Franco Spain

Surrogacy

*Dissertation*

Models of childbirth and how they ‘count’ personhood

**Sophia Kaufman**

Looking at the case of ‘forced sterilisation’ and written informed consent – does this reveal informed consent is not important at all? Or was this not a case of informed consent?

‘What counts as a real illness is a matter of politics.’ Discuss.

‘Global health interventions are nothing other than biopolitics at large’

*Dissertation*

‘A mouse fleeing a snapping trap’: An anthropological examination of addiction, withdrawal, relapse, and recovery

**Hassan Maimouni**

Assess the claim that the hospitals of post-revolutionary Paris represent ‘the birth of the clinic’

How would you characterise the relationship between colonial medicine and global health?

Aequanimitas and Empathy

*Dissertation*

“The tonsils, all the tonsils, and nothing but the tonsils”: exploring the tonsillectomy controversy in twentieth-century Britain. Evidence from correspondence in two leading British medical journals

**Neha Malhotra**

When is an inequality between different demographic groups unjust?

History of indigenous midwifery practice in Canada

A critical outline of ‘cultural competence’

*Dissertation*

Epistemic injustice in medical education: the case to indigenise and decolonise medical education in Canada

**Eki Olumese**

Is the distinction between biomedicine and alternative medicine necessary?

Detachment in biomedicine is both necessary and problematic. Discuss.

Assess the claim ‘the obesity epidemic is caused by the abundance of cheap, processed, energy-dense foods’.

*Dissertation*

The persistence emphasis on curative care in Malaria control in 20<sup>th</sup> century Sierra Leone

**Lara Vecchi**

Critically evaluate the role that social movements have played in legitimating or delegitimizing medical diagnosis

What is the relationship between ethics of care and paternalism?

'Cancer is something that happens between people.' Discuss what this means and how it

illuminates an anthropological understanding of biomedicine

*Dissertation*

Disability self-identification in Fibromyalgia sufferers in England: an exploratory interview study

# PhD Theses

## Awarded

**James Hall** was awarded a PhD for his thesis 'Serpents of the Empire: Moral Encounters in Natural History c. 1780-1870'.

**Michelle Wallis** was awarded a PhD for her thesis 'Print and the Public Practice of Medicine'.

**Christopher Wagner** was awarded a PhD for his thesis 'Of books and fire: approaching the alchemy of Carl Gustav Jung'.

**Katrina Maydom** was awarded a PhD for her thesis 'New World Drugs in England's Early Empire'.

**Elna Vessonon** was awarded a PhD for her thesis 'Representing and constructing: Psychometrics from the perspectives of measurement theory and concept formation.'

**Jack Wright** was awarded a PhD for his thesis 'Pluralism & Social Epistemology in Economics'.

**Caitlin Doherty** was awarded a PhD for her thesis 'Leonardo's Tomb: Exhibitions of Early Flight Technology at the Deutsches Museum, Science Museum and Smithsonian'.

**Karoliina Pulkkinen** was awarded a PhD for her thesis 'Values in Action: Simplicity, Completeness and Carefulness in the Development of the Systematisations of Chemical'.

**Hardy Shilgen** was awarded a PhD for his thesis 'Integration, pluralism and the nature of interdisciplinary collaboration'.

## Submitted

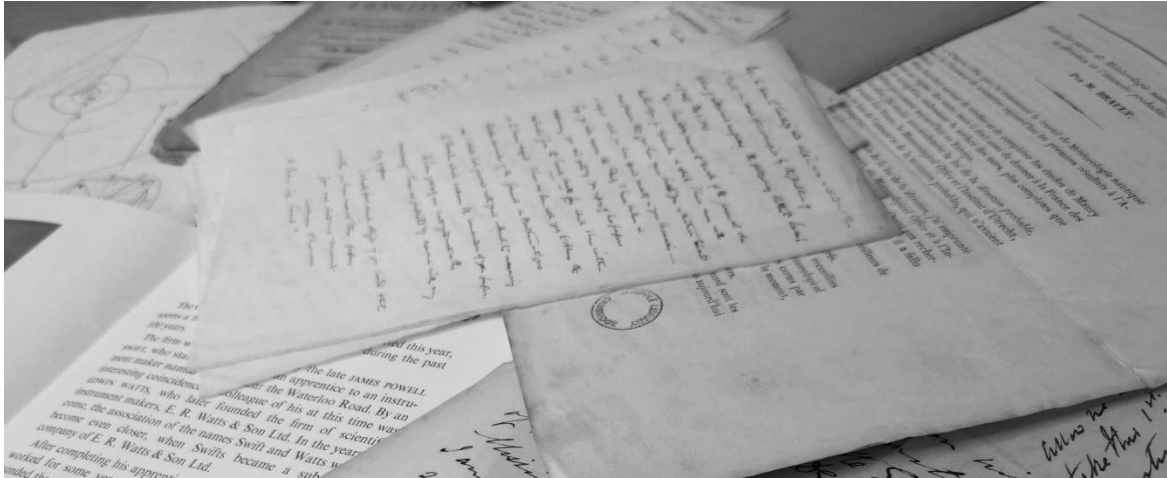
**Sebastian Kroupa** submitted his PhD thesis titled 'Georg Joseph Kamel (1661-1706): A Jesuit Pharmacist at the Frontiers of Colonial Empires'.

**John Michael Thornton** submitted his PhD thesis titled 'Cyberhealth and Informational Wellbeing'.

**Pascal Zambito** submitted his thesis titled 'Logic is a geometry of thinking: Space and Spatial Frameworks in Wittgenstein's Writings in the Makings of Modern Magnetism'.



# The Library



## Overview:

The year of 2018-19 has been full of happenings, some anticipated, some of a more surprising nature. Dawn Kingham left us in November on maternity leave, and we were delighted to hear of the arrival of Sam Glenn Kingham in the early hours of 10/12/2019. Sam and the rest of the family are doing well, and we look forward to welcoming Dawn back to the team later this year.

To assist during Dawn's absence we were happy to welcome Francesco Mannu to the Whipple Library team, on a year-long Secondment from his regular role at the University Library. Francesco comes to us via the Engineering Faculty Library, and has a wealth of experience working in Rare Books and Manuscripts at the UL.

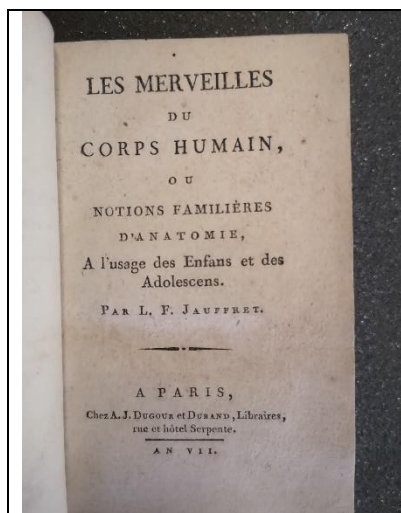
We also welcomed some new faces to our invigilation team, and Rebecca Charbonneau and Victor Parchment joined returning invigilators Meira Gold and Annie Thwaite, providing staffing during late opening hours in Term time throughout the year. In August we said goodbye to Meira, as she left to take up a Max Weber Postdoctoral Fellowship in the Department of History and Civilization at the European University Institute in Florence. During this one-year postdoc Meira will finish her dissertation and write an article on 'long-distance archaeology.'

During its second year the Library Management System (known as Alma) has bedded in well, benefiting from numerous behind the scenes and under the hood improvements in workflows and processes. Perhaps the change that most library users will notice is that, from August 2019, books borrowed from all Affiliated Libraries will auto-renew. In practice, what this means is that users should monitor their library accounts carefully and pay particular attention to recall notices.

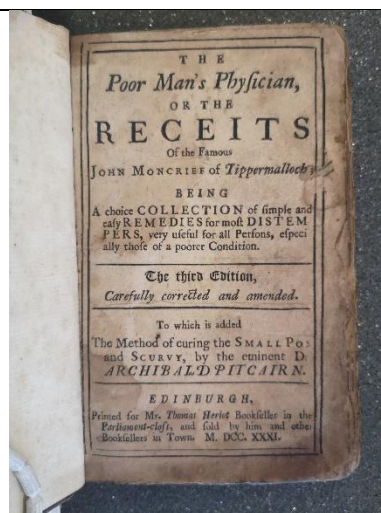
We suffered from two water ingress events this year, one major, one minor. During a flash downpour, the drainage of the Old Library's flat roof was overwhelmed and water began to enter through a skylight at an alarming rate. Thanks to the swift and prompt action of readers in alerting staff to the issue, and everyone pitching in to assist with removing book stock from the affected area, we are very pleased to report that only one book was water damaged enough that it had to be removed from stock and replaced. The other slight leak occurred in the roof of the Haycock Wing and has been contained and rectified. We will have the paint and plaster stripped off an area of the Haycock Wing for the entire of 2019-2020 to enable it to fully dry before it is re-plastered and repainted.

## Collections

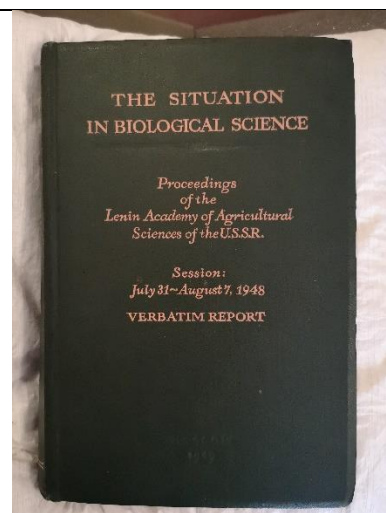
The collection has continued to expand this year as we have continued to ensure necessary reading list materials arrive on time, and to satisfy the vast majority of requests for research materials too. 431 physical items and 22 ebooks added to the working collection. We have also acquired through donation and purchase several new items for the Special Collection over the course of the year. Though not all catalogued yet, they are:



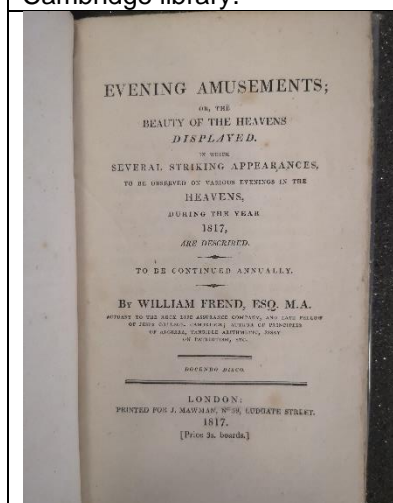
Les Merveilles du Corps Humain, ou Notions Familieres d'anatomie, A l'usage des Enfans et des Adolescents. L.F. Jaufferet. Paris, An VII (1799). No other copy held in a Cambridge library.



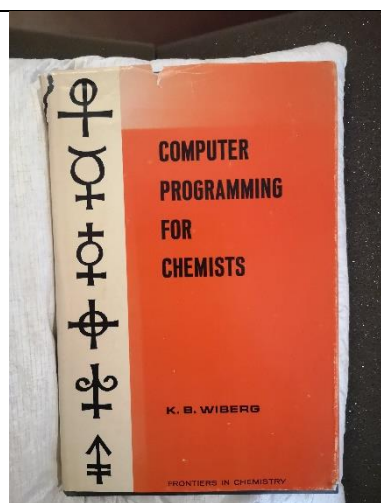
The Poor Man's Physician or the Receipts of the Famous John Moncrief of Tippermalloch... London, 1731. Only copy held in a Cambridge library



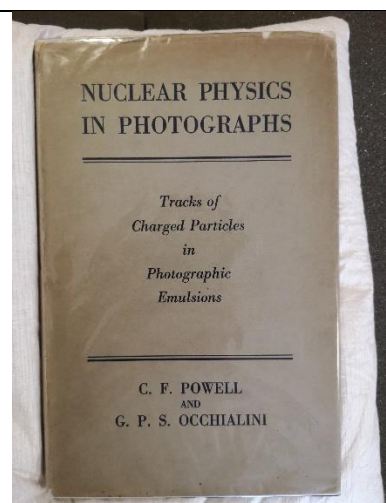
The Situation in Biological Science: Proceedings of the Lenin Academy of Agricultural Sciences of the U.S.S.R. Session: July 31 – August 7, 1948. Donation



Evening Amusements; or, The Beauty of the Heavens Displayed... William Friend, London 1817. Supplementing our 1805 copy.



Computer Programming for Chemists. K. B. Wiberg. W.A. Benjamin, Inc. New York. 1965. Only copy held in a Cambridge library. Donation.



Nuclear Physics in Photographs. Tracks of Charged Particles in Photographic Emulsions. C.F. powell and G.P.S. Occhialini.

## Staffing

Library staff:

Whipple Librarian: Jack Dixon

Library Assistants: Dawn Kingham, James Livesey, Francesco Mannu.

Invigilators: Rebecca Charbonneau, Meira Gold, Aga Launcha, Victor Parchment, Annie Thwaite.

### ***Training & professional development***

All staff have undergone continuing training and professional development throughout the year. Both James and Francesco undertook a three-day Cataloguing course at the University Library, which has enhanced and expanded their abilities in cataloguing both monographs and periodicals in MARC 21 using the RDA language to conform to the Cambridge Cataloguing Standard. This is a very intensive course and definitely not for the faint-hearted. Francesco also took a course in English Sign Language, while James took courses in mental health first aid, the future of Falcon (our website Content Management System) and minute taking. He also proved his skills with an extinguisher and some hi-vis by becoming a Fire Marshal. Jack qualified as a First Aider in December, joined the newly formed University Libraries Staff engagement Group, attended training on GDPR for librarians, and attended staff development and review training. He attended a two-day 'Book Historians Toolkit' course at the UL, which has proven very useful while cataloguing older material, particularly when deciphering armorial bookplates.

### **User Education**

#### ***Induction Tours***

This year we offered induction tours on a drop in basis throughout the first two weeks of Michaelmas term, and these were attended well. Jack was also very kindly permitted to gate-crash the end of the very first Part 1b lecture of term in order to persuade (with cake) the Part 1b students to come and register at the library, and to raise awareness of the term time late opening. Visiting Scholars were all offered one to one tours if they had not visited the department before.



*There was occasional morale boosting cake on offer throughout Exam term (and whenever else we felt like it).*

### **Outreach and Public Events.**





PhD candidates Karollina Pulkkinen and Meira Gold put the finishing touches to their respective displays on installation day.

## Displays

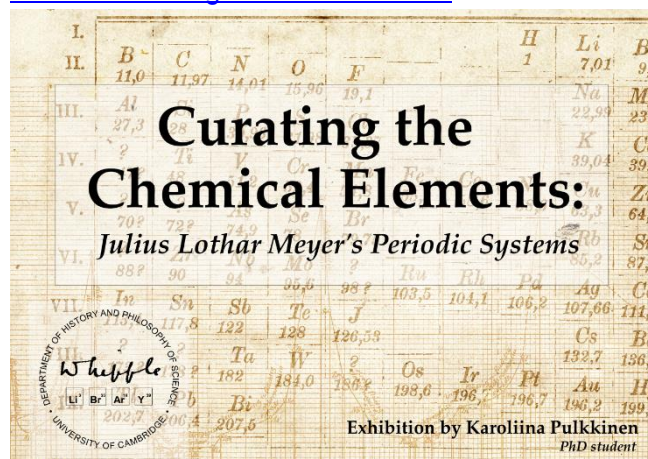
Two displays were curated throughout the academic year, both by current PhD students. In Michaelmas Term, Karollina Pulkkinen kick started the Year of the Periodic Table by putting together a fascinating display entitled **Curating the Chemical Elements Julius Lothar Meyer's Periodic Systems**.

The year 2019 marks 150 years from Dmitrii Ivanovich Mendeleev's discovery of the periodic system of chemical elements. However, Mendeleev was not alone in discovering the system. In 1862-1870, seven chemists created systems that historians recognise as the "precursors" for the periodic table we have today. One of them was Julius Lothar Meyer (1830-1895). Both Meyer and Mendeleev were awarded the Davy Medal for their discovery of the "periodic relations of the atomic weights" by the Royal Society of London awarded in 1882.

Meyer is known for his textbook *Die modernen Theorien der Chemie*. In the book, Meyer argued that theories and hypotheses were helpful aids in chemical investigations. Such an argument was quite bold, as chemistry was marked by its empiricism in the 19th century. Apart from the textbook, Meyer is also known for his graphic curve that shows the periodic relationship between atomic volumes and atomic weights. The curve is perhaps the most vivid early illustrations of the periodicity of the chemical elements.

The Virtual Exhibition can be seen below:

<https://www.whipplelib.hps.cam.ac.uk/special/exhibitions-and-displays/curating-chemical-elements/curating-chemical-elements>

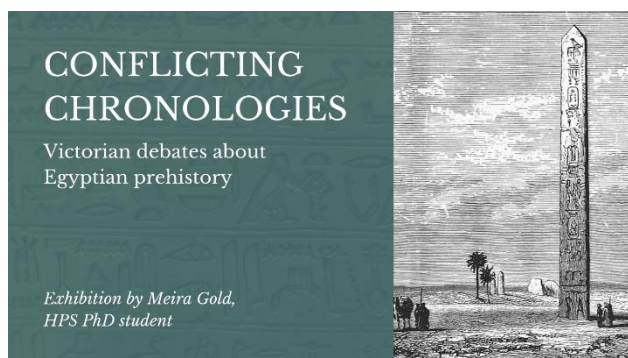


We would particularly like to extend our thanks to colleagues in the Chemistry Library for the loan of the very scarce F. Wöhler, J. Liebig, & H. Kopp (Eds.), *Annalen der Chemie und Pharmacie*, VII. *Supplementband*, and also to colleagues in Conservation at the UL who carried out conservation and repair work on this volume, and also constructed a beautiful custom display stand, allowing us to exhibit a very fragile fold out opening.

Our second exhibition of the year was curated by Meira Gold, and was titled **Conflicting Chronologies: Victorian debates about Egyptian prehistory**.

*The deep human past was a key arena for Victorian intellectual controversy. Were humans older than the biblical tradition of 6,000 years? Where had we come from? Were we one or many species? Above all, who had the expertise to provide authoritative chronologies? The term 'prehistory' first appeared in English in 1851. Ancient Egypt soon emerged as a critical juncture between prehistoric and historic time and became a symbolic place of debate. Egypt was believed*

*to be the source of ancient wisdom and precise measurement, a critical region for linguistic development, and the origin of agriculture and metalworking. For Victorians, the Nile Valley was 'the cradle of western civilisation.' Amid British control of semi-colonial Egypt, the period saw enormous changes to studies of human antiquity. British geologists, philologists, ethnologists, anthropologists, archaeologists and astronomers identified traces of the remote human past in the region. All attempted to answer the question: who lived in Egypt before the pharaohs? This exhibit showcased some of the texts that debated the age, origin and development of early Egyptian civilisation. It illuminates how Egyptian materials and labour informed these cross-disciplinary disputes.*



Again, the Virtual Exhibition can be seen below:

<https://www.whipplelib.hps.cam.ac.uk/special/exhibitions-and-displays/conflicting-chronologies/Introduction>

Several other outreach and public engagement events took place throughout the year. In September we put on a pop up display of library treasures for attendees at the CILIP Rare Books Conference, held in Downing College and, in conjunction with the Museum, ran a successful event for Open Cambridge based on the collections phrenology related holdings. In Michaelmas Term we also hosted two book launches in the Old Library, one for Joseph D. Martin's *Solid State Insurrection: How the Science of Substance made American physics matter*, and Daniel Margocsy, Mark Somos and Stephen N. Joffe's *The Fabrica of Andreas Versalius: A Worldwide Descriptive Cencus, Ownership, and Annotations of the 1543 and 1555 Editions*. In January, James took some of our Darwin related special collection material on the road to Impington Village College with the Whipple museums' learning co-ordinator, to deliver a session on Darwinism. This went down very well and we received lots of complimentary feedback, and James blogged about the experience here:

<https://whipplelib.wordpress.com/2019/06/11/out-and-about-with-darwin-special-collections-on-tour/>.

In March we again took some of our Special Collections on the road for an event hosted at Churchill College highlighting Science Archives and Special Collections in Cambridge as part of the Cambridge Science Festival. These experiments in roving with parts of the collection have been very successful and we hope to do more in future. This has been made much easier by the purchase of a sturdy and secure Peli-case to ease transport. We have also been busy hosting visits from a variety of libraries and archives both from within and without Cambridge.



*The Librarian clearly enjoying being photographed at the Churchill College Science Festival event.*

# The Museum

Whipple Museum's Annual Report to follow.



# Annual Reports of Members of the Department

## Anna Alexandrova

This year I served as a Programme Director for Philosophy and Ethics of AI at the Leverhulme Centre for Future of Intelligence. The CFI colleagues and I completed a comprehensive report surveying the moral landscape of data, algorithms and AI for the Nuffield Foundation's new Ada Lovelace Institute. My other project Expertise Under Pressure was launched at the Centre for Humanities and Social Change at CRASSH Cambridge. In the department I looked after students as the Manager of the MPhil in History and Philosophy of Science, Technology and Medicine. I also welcomed new PhD students Lukas Beck and Olesya Bondarenko with whom I share interests in history and philosophy of economics and other social sciences.

### Publications

#### Report

Whittlestone, J., Nyrup, R., Alexandrova, A., Dihal, K., & Cave, S. (2019). *Ethical and societal implications of algorithms, data, and artificial intelligence: a roadmap for research*. London: Nuffield Foundation.

#### Articles in journals

"Precis of *A Philosophy for the Science of Well-being*" and "Reply to Hawkins, Hassoon, and Arneson" (forthcoming in 2019) *Res Philosophica*.

#### Reviews

Beck, L. and A. Alexandrova (forthcoming in 2019) Review: Measurement of Utility by Ivan Moscatti, *Journal of Economic Methodology*.

Alexandrova A. and R. Singh "Happiness and the Truth" (Review: *Origins of Happiness: Subjective Well-being Through Life Course* by Andrew Clark et al, Princeton UP, 2018.) *Times Literary Supplement*. Nov 23 2018.

### Lectures, seminars and conferences

Oct 2018: "When Well-being Becomes a Number" UCL STS Seminar.

#### February 2019

"Economics and/or Well-being" remarks for the CRASSH Politics of Economics Research Group, February 2019.

Remarks at the launch of Report on Ethical, Political, and Societal Implications of Algorithms, Data, and AI, Nuffield Foundation.

#### July 2019

"Keeping an eye on happiness economics", master class at "Economic Behaviours: Models, Measurements, and Policies" Summer School of the International Network for Economic Methodology (Como, Italy), July 2019.

"Mental Health without Well-being" Institute of Public Health, Cambridge

"Happiness and technocracy" Oxford Internet Institute, Workshop on Well-being and Technology

*August 2019*

“On the definitions of social science and why they matter” Congress for Logic, Methodology, Philosophy of Science and Technology, invited lecture, Prague

*September 2019*

“Pluralism in the science of well-being” (with Polly Mitchell) The International Society for Quality-of-Life Studies (ISQOLS) 17th Conference, Granada, Spain.

## **Salim Al-Gailani**

As a part-time Teaching Associate I have contributed to the department's teaching in the history of modern medicine at MPhil, Part III and Part II levels, including as History of Medicine Subject Manager on the HMS MPhil in Easter Term. In Michaelmas 2018 I was elected to a three-year Bye-Fellowship at St Edmund's College, and was Director of Studies for HPS at St Edmund's and Jesus College.

### **Publications**

#### ***Articles in books***

'Hospital Birth', in Nick Hopwood, Rebecca Flemming and Lauren Kassell eds., *Reproduction: Antiquity to the Present Day* (Cambridge University Press, 2018)

### **Lectures, seminars and conferences**

*November 2018*

'Vitamin Trials: A History of Folic Acid in Pregnancy and Public Health', Centre for Trophoblast Research, University of Cambridge

*December 2018*

'Folic acid' (with Erica Watson), launch event for Strategic Research Initiative in Reproduction, University of Cambridge

*January 2019*

'Folic acid between science, policy and the market: mainstreaming pre-conceptional vitamins in the 1980s and '90s', History of Modern Medicine and Biology Seminar, Department of History and Philosophy of Science, University of Cambridge

*February 2019*

'Vitamins on trial: folic acid, medicine and public health in Britain', Clare College Medical and Veterinary Society, University of Cambridge

## **Riana Betzler**

I joined the department as a Teaching Associate in the HPS Department in October 2018, after having completed a postdoctoral research fellowship at the Konrad Lorenz Institute (KLI) in Austria. Throughout this year, I have participated in the life of the Department through teaching, research, contribution to committees, and by organising reading and working groups.

### **Publications**

#### ***Articles in journals***

Betzler, R. J. (2019). Finding empathy: How neuroscientific measures, evidence, and conceptualizations interact. *International Journal of Philosophical Studies*. doi: 10.1080/09672559.2019.1601384.

Betzler, R. J. (2018). How to clarify the aims of empathy in medicine. *Medicine, Healthcare,*

and *Philosophy*, 21(4), 569-582. doi:  
<https://doi.org/10.1007/s11019-018-9833-2>

### **Online**

Betzler, R. J. (2019). Review of *Empathy: A History*, by Susan Lanzoni. *History of Emotions Blog*:

<<https://emotionsblog.history.qmul.ac.uk/2019/01/review-empathy-a-history-by-susan-lanzoni/>>

### **Reviews**

Betzler, R. J. (2019). Review of *Empathy: Epistemic Problems and Cultural-Historical Perspectives of a Cross Disciplinary Concept*, ed. V. Lux & S. Weigel. *Philosophical Psychology*, 32(3), 428-432. doi:  
10.1080/09515089.2019.1572666.

### **Lectures, seminars and conferences**

#### *January 2019*

MPhil Lecture, 30 January 2019, 'Classifying People'

#### *May 2019*

CamPoS Talk, 8 May 2019, 'Follow the Measures: Conceptualization, Measurement, and Interdisciplinarity in the Science of Empathy'

#### *July 2019*

ISHPSSB 2019, 'Stability and the Looping Effects of Human Kinds'

BSPS 2019, 'Stability and the Looping Effects of Human Kinds'

Cambridge/LMU Partnership Workshop on Moral Psychology, 'Empathy as a Skill'

## **Agnes Bolinska**

This year, I served as Part III manager, MPhil/Part III examiner, Part II examiner, and HPS Departmental Seminar coordinator. I ran several workshops for Part II and MPhil/Part III students, lectured in Paper 5 and PEM, and ran an MPhil/Part III seminar and follow-up discussions. Further, I become a College Research Associate at Clare College, where I supervised students in HPS IB and for the Philosophy Faculty in IB Philosophy of Science and IA Ethics. I'm a member of the Canadian Society for History and Philosophy of Science and the British Society for Philosophy of Science.

### **Publications**

#### **Articles in journals**

Bolinska, A. & Martin, J. D. (2019) 'Negotiating history: contingency, canonicity, and case studies', *Studies in History and Philosophy of Science Part A*.

### **Lectures, seminars and conferences**

#### *August 2019*

'Negotiating history: contingency, canonicity, and case studies' (with Martin, J. D.)

16th International Congress on Logic, Methodology and Philosophy of Science, Czech Technical University

#### *July 2019*

'Negotiating history: contingency, canonicity, and case studies' (with Martin, J. D.)

British Society for Philosophy of Science,  
Durham University

'Understanding function through multiple  
models of protein structure' (with Gandier, J-  
A.)

Summer School in Philosophy of Molecular  
Biology, University of Rijeka

'Determining the structure of biological  
macromolecules: theory, models, and data'

Summer School in Philosophy of Molecular  
Biology, University of Rijeka

*June 2019*

'Negotiating history: contingency, canonicity,  
and case studies' (with Martin, J. D.)

Canadian Society for the History and  
Philosophy of Science, University of British  
Columbia

*March 2019*

'Protein structure, X-ray crystallography, and  
pluralism' (with Chang, H.)

Association for the Discussion of the History of  
Chemistry, University of Cambridge

*January 2019*

'Negotiating history: contingency, canonicity,  
and case studies' (with Martin, J. D.)

Cambridge Philosophy of Science Seminar,  
University of Cambridge

*October 2018*

'Synthetic versus analytic approaches to  
protein and DNA structure determination'

Association for the Discussion of the History of  
Chemistry, University of Cambridge

## Mary Augusta Brazelton

This year, I began a three-year period of  
tenure as a member of the Council of the  
British Association of Chinese Studies, hosting  
the winter term meeting of the Council in  
Cambridge HPS.

In May, I co-organised a workshop with Dániel  
Margócsy, *From Hansa to Lufthansa:  
Transportation Technologies and the Mobility  
of Knowledge in the Germanic lands and  
beyond, 1300-2018*. The workshop was  
generously sponsored by the Cambridge  
DAAD Hub with support from HPS, and  
brought a selection of scholars together from  
Europe, the UK, and North America to discuss  
histories of transportation.

In September, my book, *Mass Vaccination:  
Citizens' Bodies and State Power in Modern  
China* (a Study of the Columbia Weatherhead  
East Asian Institute, published by Cornell  
University Press), will be available on Kindle,  
with the print version following on 15 October  
2019.

### Publications

#### **Books**

*Mass Vaccination: Citizens' Bodies and State  
Power in Modern China*. Ithaca, NY: Cornell  
University Press, 2019.

#### **Articles in books**

"Frontiers of Immunology: Medical Migrations  
to Yunnan, Vaccine Research, and Public  
Health during the War with Japan, 1937-1949."  
In *China and the Globalization of Biomedicine*,  
edited by David Luesink, Zhang Daqing, and  
William Schneider. Rochester, NY: University  
of Rochester Press, 2019.

## Articles in journals

"Engineering Health: Technologies of Immunization in China's Wartime Hinterland, 1937-45." *Technology and Culture* 60 (April 2019): 409-37.

"Coping with Danger in the Air: BCG vaccination in the Republic of China and International Projects of Postwar Tuberculosis Control, 1930-49," *Cross-Currents: East Asian History and Culture Review Cross-Currents: East Asian History and Culture Review* 7, no. 2 (May 2019); e-journal (April 2019), no. 30: 35-54.

## Online

Interviewed by "The Naked Scientists" podcast and radio show:  
<https://www.bbc.co.uk/programmes/p07860d2>

## Reviews

Review of *Public Health and the Modernization of China, 1865-2015* by Bu Liping in *Social History of Medicine*. Published online 1 March 2019. doi: 10.1093/shm/hkz022.

## Lectures, seminars and conferences

October 2018

"Smallpox eradication in China and emerging narratives of global health, 1949-79." Oxford Seminars in the History of Science, Medicine, and Technology, University of Oxford.

November 2018

"Plagues from the Skies: The 1952 Germ Warfare Allegations and Shifting Definitions of Expertise in Chinese Bacteriology." Paper given at invited workshop, "How Maoism Was Made," British Academy, London.

January 2019

"Mass Immunization in Chinese and Global Health." China Research Seminar, Faculty of Asian and Middle Eastern Studies, University of Cambridge.

February 2019

"Mass Vaccination: Citizens' Bodies and State Power in Modern China." Invited lecture, Fitzwilliam College History and Medical/Veterinary Societies.

March 2019

"Local Archives, Global Health: Mass Immunization in Modern China and the Rise of Primary Health Care." Global Health Humanities Workshop 2019, University of Reading Centre for Health Humanities.

"Mass Immunization in Chinese and Global Health, 1949-79." Seminar at Centre for the Social History of Health and Healthcare, University of Strathclyde.

Leader, Workshop on Research Methods for the History of Medicine and Public Health in China, University of Strathclyde.

May 2019

"Warlords of the air: transnational aviation in the Republic of China, 1911-37." *From Hansa to Lufthansa: Transportation Technologies and the Mobility of Knowledge in the Germanic lands and beyond, 1300-2018*, workshop at Cambridge HPS.

July 2019

"Technologies of Civil Aviation and Sino-American Relations, 1930-49." *Uneasy Allies: Sino-American Relations at the Grassroots, 1941-49*, workshop at Duke Kunshan University, Kunshan, China.

## Andrew Buskell

### Departmental Commitments:

- IB examiner
- MPhil examiner
- Supervisor of MPhil essays and dissertations

### Society Membership:

- Philosophy of Science Association
- British Society for Philosophy of Science
- International Society for the History, Philosophy, and Social Studies of Biology

### Activities:

- Organizer of large interdisciplinary conference: *Evolution Evolving* (200 individuals, Churchill College, April 2109)
- Director of Studies for HPS at Christ's College, Cambridge

## Publications

### Articles in journals

'Looking for middle ground in Cultural Attraction Theory' *Evolutionary Anthropology*, 28(1), 14 – 17.

'Causes of Cultural Disparity: Switches, Tuners, and the Cognitive Science of Religion.' *Philosophical Psychology*, 31(8), 1239 -1264.

'Beyond Brain Size: Uncovering the Neural Correlates of Behavioral and Cognitive Specialization' *Comparative Cognition & Behavior Reviews*, 13, 55 – 90. (With Logan, CJ, S Avin, N Boogert, FR Cross, A Currie, S Jelbert, D Lukas, R Mares, AF Navarrete, S Shigeno, and SH Montgomery).

'Ingredients for Understanding Brain and Behavioral Evolution: Ecology, Phylogeny, and Mechanism' *Comparative Cognition & Behavior Reviews*, 13, 99 – 104. (With SH

Montgomery, A Currie, D Lukas, N Boogert, FR Cross, S Jelbert, S Avin, R Mares, AF Navarrete, S Shigeno, and CJ Logan)

### Lectures, seminars and conferences

*November 2018*

'Individuating Cultures' PSA (Seattle).  
November 2018

*January 2019*

*From Memetics to Cultural Attraction Theory* (philosophical and empirical issues in cultural evolution), Biological Anthropology Part IIB Lecture (January 2019)

*March 2019*

Arguing for the Extended Evolutionary Synthesis. *The Extended Evolutionary Synthesis: Philosophical and Historical Dimensions* (Bochum). March 2019

*May 2019*

Individuating Cultures, *Philosophy, Politics, Anthropology & Allied Disciplines Workshop* (Amsterdam). May 2019

*June 2019*

Counting and Contesting 'Culture'. *EXCD Meeting* (Bristol). June 2019

*July 2019*

ISHPSSB Meeting (Oslo)

## Helen Anne Curry

This academic year was the second of my three-year CRASSH Pro Futura Scientia fellowship, which is co-organized by CRASSH (Cambridge) and the Swedish Collegium of Advanced Study (Uppsala) and funded by the Stiftelsen Riksbankens Jubileumsfond. I spent the year in Cambridge, continuing my research on the history of crop diversity and conservation. The main focus of my activities was writing a book manuscript, *Endangered Maize: Indigenous Corn, Industrial Agriculture, and the Crisis of Extinction*, which is under contract with the University of California Press. I also continued my first-hand observation of crop conservation on research trips to Mexico and the United States. Thanks to an invitation to deliver the 2019 Innes Lecture, I was able to share some of this research with a public audience in April 2019 at the John Innes Centre in Norwich. In May 2019 I was elected to the council of the History of Science Society.

## Publications

### Edited books

H. A. Curry, N. Jardine, J. A. Secord, and E. C. Spary, editors. *Worlds of Natural History*. Cambridge: Cambridge University Press, 2018.

### Articles in books

Helen Anne Curry, "Imperiled Crops and Endangered Flowers," 460–475 in H. A. Curry, N. Jardine, J. A. Secord, and E.C. Spary, eds., *Worlds of Natural History* (Cambridge: Cambridge University Press, 2018).

Helen Anne Curry and James A. Secord, "Epilogue: Natural History and Its Histories in the Twenty-First Century," 535–544 in H. A. Curry, N. Jardine, J. A. Secord, and E.C. Spary, eds., *Worlds of Natural History* (Cambridge: Cambridge University Press, 2018).

## Articles in journals

Helen Anne Curry, "Why Save a Seed," *Isis* 110, no. 2 (June 2019): 337–340.

## Lectures, seminars and conferences

### October 2018

"Seed Banks or Seed Morgues: Salvaging Crop Diversity from Long-term Storage," Science, Technology, and Innovation Studies Seminar, University of Edinburgh, 1 October.

### November 2018

"The Races of Maize: Taxonomizing Cultivated Plants and their Cultivators," Philosophy of Science Association Meeting, Seattle, 1–4 November. (Co-organizer of panel, "Dealing with Diversity: Perspectives from the History, Philosophy, and Social Studies of Biology.")

### February 2019

"Endangered Genes and the International Seed Bank: Conserving Crop Diversity after the Green Revolution," Agrarian Studies Seminar, Yale University, 1 February.

"Seed Banks or Seed Morgues: Salvaging Crop Diversity from Long-term Storage," Seminar in the Social Studies of Science and Technology, Universidad Nacional Autónoma de México, Mexico City, 22 February.

### April 2019

"Endangered Genes and the International Seed Bank: Conserving Crop Diversity after the Green Revolution," at the workshop "The Future of Food," The Graduate Institute of International and Development Studies, Geneva, 9–10 April.

"From Farm Field to Seed Bank: A Short History of Seed Keeping," 4<sup>th</sup> Annual Innes Lecture, John Innes Centre, 25 April.

June 2019

"Conserving Mexican Crop Diversity from Rome," Sociology, Philosophy, and Anthropology seminar, University of Exeter, 3 June.

July 2019

"Conserving Mexican Crop Diversity from Rome," History of Science Society Meeting, Utrecht, 23–27 July.

## Matt Farr

This year was my second of a three-year teaching associate position in the HPS department. As part of this, I gave lectures for Part IB and Part II Papers 4 and 5, was the senior examiner for Part IB, an ordinary examiner for Part III/MPhil, and relatedly was an examiner for Part IB and Part II for the Faculty of Philosophy. In addition, I was the internal examiner for a PhD student in the Faculty of Philosophy, an examiner for the PhD registration exercise for one student in the Faculty of Philosophy, the organiser of the CamPoS (Cambridge Philosophy of Science) seminar series, and co-organiser of the Philosophy and History of Physics Reading Group in HPS.

### Publications

#### Articles in books

'Methods in Science and Metaphysics' (co-authored with Milena Ivanova). Forthcoming in *Routledge Handbook of Metametaphysics*.

#### Articles in journals

'Causation and Time Reversal' (published online 2018, forthcoming in print) *British Journal for the Philosophy of Science*.

### Online

'The C Theory of Time: Why time has, and does not have, a direction.' *Aeon Magazine*. Publication date: July 29<sup>th</sup> 2019.

### Lectures, seminars and conferences

November 2018

'The C Theory of Time', presented at the CamPoS seminar series, Department of History and Philosophy of Science, Cambridge.

March 2019

'Does time have a direction? Understanding the C theory of time'. Invited talk at [IOP Topical Research Meeting on Time](#), Institute of Physics, London.

June 2019

'Do we need to explain initial conditions?', [FraMEPhys Project Visiting Speaker Series](#), Department of Philosophy, University of Birmingham.

July 2019

'Indeterminism and the C theory', accepted paper at *British Society for the Philosophy of Science*, University of Durham.

'Why the passage of time is not an illusion', accepted paper at *Joint Session of the Aristotelian Society and Mind Association*, University of Durham.

## Marta Halina

This year has been a productive one on many fronts. In addition to a full Michaelmas Term in



the Department, I began my new role as Study Skills Tutor at Selwyn College, giving lectures on study skills to 120 incoming Freshers. In Lent and Easter Terms, I focused on my role as Director of the Kinds of Intelligence programme at the Leverhulme Centre for the Future of Intelligence (CFI) and advancing the project "Creative Intelligence" (funded by the Templeton World Charity Foundation's Diverse Intelligences Initiative). Our second annual Kinds of Intelligence conference took place in June with a diverse range of speakers from around the world and over one hundred participants. I also co-organised four workshops this year: a joint workshop with the MIT-IBM Watson AI Lab in October, a workshop on the Animal-AI Olympics in March, a workshop on Creative Intelligence Across and Between the Sciences in June, and finally a joint workshop with Australia National University (ANU) in August. I was also selected this year as the Philosophy of Science Association's Highlighted PhilosophHer of Science and accepted an invitation to spend a month at ANU as a Visiting Scholar.

## Publications

### Articles in journals

"The Animal-AI Olympics" (with Matthew Crosby and Benjamin Beyret), *Nature Machine Intelligence*, 1 (2019): 257.

"Apply Rich Psychological Terms in AI with Care" (with Henry Shevlin). *Nature Machine Intelligence*, 1 (2018): 165-167.

"Not Null Enough: Pseudo-Null Hypotheses in Community Ecology and Comparative Psychology" (with William Bausman). *Biology & Philosophy*, 33 (2018): 1-20.

### Online

"Animal-AI Environment Release" (with Matthew Crosby and Lucy Cheke), Animal-AI Olympics development blog  
<<http://animalaiolympics.com/>>

## Lectures, seminars and conferences

### October 2018

"Creative Intelligence in Animals and AI," Generality and Intelligence: from Biology to AI Workshop, MIT-IBM Watson AI Lab, Cambridge, MA, USA (5 October)

Co-organiser, Generality and Intelligence: from Biology to AI Workshop, MIT-IBM Watson AI Lab, Cambridge, MA, USA (5 October)

### November 2018

"Machine Intelligence and the Capacity for Insight," 2018 Wing-Chun Wong Memorial Lecture, Towson University, Baltimore, USA (16 November)

### January 2019

"Machine Intelligence and the Capacity for Insight," Philosophy and Theology Society, Wellington College, UK (24 January)

### February 2019

"Can Machines Be Creative?" Sciences Taster Lecture: Solving the Problems of Tomorrow, University of Cambridge (7 February)

### March 2019

"Animal Cognition and AI: An Introduction" (with Lucy Cheke), Department of History and Philosophy of Science, University of Cambridge (13 March)

Co-organiser, Animal-AI Olympics Workshop, Department of History and Philosophy of Science, University of Cambridge (13 March)

Panelist, "Ground Zero Earth: Rise of the Machines," Cambridge Science Festival, University of Cambridge (14 March)

### May 2019

"Nonhuman animals and Subjective Experience," Remembering From The Inside: A Multidisciplinary Workshop, Emmanuel College, University of Cambridge (14 May)

"Thinking/researching/teaching race, genetics and intelligence in the History and Philosophy of Science and Science and Technology Studies" (with Jenny Bangham and Ernesto Schwartz Marin, organised by Richard Staley), Twentieth Century Think Tank, University of Cambridge (16 May)

"Philosophy Salon: What Makes Us Human?" (with Justin Smith), HowTheLightGetsIn Festival, The Institute of Art and Ideas (26 May)

"Intelligence and Creativity" (Part 1: What is Creativity? Part 2: Animals and Machines), HowTheLightGetsIn Festival, The Institute of Art and Ideas (26 May)

"Debate: Metaphors of the Mind" (with Donald Hoffman and Nigel Shadbolt), HowTheLightGetsIn Festival, The Institute of Art and Ideas (27 May)

### June 2019

Co-organiser, Kinds of Intelligence 2: Machine Minds Conference, University of Cambridge (18-21 June)

"Creative Intelligence," Creative Intelligence Across and Between the Sciences Workshop, Department of History and Philosophy of Science, University of Cambridge (24-25 June)

Co-organiser Creative Intelligence Across and Between the Sciences Workshop, Department of History and Philosophy of Science, University of Cambridge (24-25 June)

### July 2019

"Machine Creativity" Cambridge Open Day Talk, Whipple Museum, University of Cambridge (4 July)

"Animal Insight" Diverse Intelligences Summit, University of St Andrews, Scotland (9 July)

"Creative Intelligence" Diverse Intelligence Summer Institute (DISI) Lectures, University of St Andrews, Scotland (11-12 July)

### August 2019

"Insight in Animals and AI," The ANU Philosophy Society, Australian National University (13 August)

Co-organiser, The ANU-KOI Research Workshop, Australian National University (29-30 August)

## Jessica Hamel-Akré

This year is the first year of my two-year Social Sciences and Humanities of Canada (SSHRC) Postdoctoral fellowship. After defending my thesis at the University of Montreal in August 2018, I took up my position in HPS in October 2018. Since, I have proceeded with my research dissemination plans, which include moving towards a monograph from my thesis. I have also begun supervising and assessing for the department.

### Publications

#### *Articles in journals*

Hamel-Akré, J. "Women's Eighteenth-Century Appetite Loss, an Illness of the Will? Cheyne and Richardson in Dialogue." (Under Consideration at *The Eighteenth Century: Theory and Interpretation*.)

#### *Reviews*

Hamel-Akré, J. (Spring 2019). "Book Review: 'Literature, Electricity and Politics 1740–1840: 'Electrick Communication Every Where'" by Mary Fairclough," *Eighteenth-Century Fiction*.

## Lectures, seminars and conferences

November 2018

"From angel food to vegetable diets: medicalizing the feminine appetite in the British eighteenth-century," Early Science and Medicine for the History of Medicine Seminars, organized Dániel Margócsy, History and Philosophy of Science, University of Cambridge, November, 6, 2018.

January 2019

"The dangers of overreading and underreading: an eighteenth-century perspective on women's appetite control," Food and Body Histories group, Department of History, University of Cambridge, January 29, 2019.

## Nick Hopwood

Nick Hopwood continued as director of graduate studies and chair of the degree committee. At events on 7 December 2018 he helped launch the University's Strategic Research Initiative on Reproduction, of which he is a deputy chair, and *Reproduction: Antiquity to the Present Day*, the large book he co-edited and in which Cambridge colleagues are well represented. He joined the editorial board of the new book series *Emerald Studies in Reproduction, Culture and Society*.

## Publications

### Edited books

Nick Hopwood, Rebecca Flemming and Lauren Kassell (eds), *Reproduction: Antiquity to the Present Day* (Cambridge University Press, 2018). xxxv + 730 pp. + 90 pp. colour plates.

### Chapters in books

(with Rebecca Flemming and Lauren Kassell) "Reproduction in history," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 1–17

"Part III: Inventing reproduction," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 280–5

"The keywords 'generation' and 'reproduction,'" in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 287–304

"Part IV: Modern reproduction," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 390–5

"Part V: Reproduction centre stage," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 498–503

"Artificial fertilization," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 581–96

(with Martin H. Johnson) "Modern law and regulation," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 597–611

"Globalization," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 641–55

(with Rebecca Flemming and Lauren Kassell) "Concluding reflections," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), 656–71

"Images of human embryos," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood,

Flemming and Kassell (Cambridge: Cambridge University Press, 2018), E23

"It's a girl," in *Reproduction: Antiquity to the Present Day*, ed. Hopwood, Flemming and Kassell (Cambridge: Cambridge University Press, 2018), E38

### **Articles in journals**

"Kunstig befrugtning," *Slagmark: Tidsskrift for Idéhistorie* 78 (2019): 109–26

"Inclusion and Exclusion in the History of Developmental Biology," *Development* 146 (2019): dev175448

"The Tragedy of the Emeritus and the Fates of Anatomical Collections: Alfred Benninghoff's Memoir of Ferdinand Count Spee," *BJHS Themes* 4 (2019), in press [to be published this summer]

"Haeckel's Embryos: Images, Evolution and Fraud," *Verhandlungen zur Geschichte und Theorie der Biologie* 21 (2019), in press

### **Reviews**

Review of Ernst Haeckel, *Ausgewählte Briefwechsel*, vol. 1: *Familienkorrespondenz Februar 1839 – April 1854* (Stuttgart, 2017), edited by Roman Göbel, Gerhard Müller, and Claudia Taszus, in *Isis* 109 (2018): 860–1

### **Lectures, seminars and conferences**

#### *October 2018*

"Why Do You Expect Embryos When You're Expecting?" (Keynote lecture, HSTM Network Ireland annual conference, Queen's University Belfast, 26 October 2018)

#### *April 2019*

"Human Embryos: A Visual History" (EHESS seminars, "Gouverner le « progrès » et ses dégâts (1810–2016): Histoire et sciences

sociales" and "Technorep," Centre Koyré, Paris, 2 April 2019)

"Technologies of Conception" ("History of Reproduction," University of Groningen Honours College Winter School, Clare College, Cambridge, 7 April 2019)

#### *May 2019*

"Human Embryos and Fetuses in Public: Visual Transformations of the 1960s," and "Final Commentary" ("The Coming of Age of the Public Fetus" workshop, Uppsala University, 16–17 May 2019)

#### *June 2019*

*Life and Death* (with Janet Browne, Christiane Groeben, Staffan Müller-Wille and Stazione Zoologica Anton Dohrn co-organized the week-long Sixteenth Ischia Summer School on the History of the Life Sciences, Ischia, Italy, with support from the Thyssen Foundation, George Loudon and *History and Philosophy of the Life Sciences*, 23–30 June 2019)

"Life and Death" (introduction to the theme at *Life and Death*, Ischia Summer School, 24 June 2017)

#### *July 2019*

"Human Embryology between 'Monkey Gynaecology' and 'Egg Hunts'" (talk in session "Research on Human Embryos and Fetuses in the Mid-Twentieth Century," co-organized with Solveig Jülich, ISHPSSB, Oslo, 12 July 2019)

"'When I Saw It, I Began to Scream': Wonder, Fear, and Loss in Discovery Accounts of Human Embryos" (talk in session "Emotions of Observation: Affective Investments in Visualized Research Objects," organized at HSS, Utrecht, 25 July 2019)

## **Milena Ivanova**

During this academic year I supervised MPhil student essays, IB students, led the writing support seminars as well as the general philosophy of science MPhil working seminars. I also offered individual student supervisions on writing dissertations and research essays. I continued by activities as a Committee Member of the History of Philosophy of Science Society, editor, and my research commitments. Specifically, I have been working towards the completion of an edited book (forthcoming in early 2020), an edited special issue (forthcoming in 2020) and wrote two new research articles.

### **Publication for 2018-19**

Methods in Science and Metaphysics ,  
*Routledge Handbook of Metametaphysics*,  
Routledge with Matt Farr (accepted)

*Beauty, Truth and Understanding, The Aesthetics of Science: Beauty, Imagination and Understanding*, Routledge (accepted)

### **Lectures, seminars and conferences**

*October 2018*

Paper “Values, Pragmatism and Scientific Rationality” presented at The Lauener Prize for an Outstanding Oeuvre in Analytical Philosophy awarded to Bas van Fraassen, Lauener-Stiftung, Bern (invited speaker)

*March 2019*

Paper “Beauty, Truth and Understanding” presented at Cambridge Philosophy of Science Seminars, University of Cambridge and Departmental Seminars at the University of Edinburgh (invited speaker)

*June 2019*

Paper “Beauty, Truth and Understanding” presented at Integrated History and

Philosophy of Science Conference, University of Exeter

*July 2019*

Paper “How Atomism Became Real” presented at Instrumentalism Conference, University of Durham

Paper “Beauty, Truth and Understanding” presented at the Joint Session of the Aristotelian Society and Mind Association, University of Durham

## **Boris Jardine**

During the academic year 2018–19 Boris Jardine continued to work on his Leverhulme/Isaac Newton Trust project, ‘The Lost Museums of Cambridge Science, 1865–1936’. This project, hosted by HPS and the Whipple Museum, and sponsored by Prof. Liba Taub, recovers the history of the ‘New Museums Site’, and will result in a major new online digital archive relating to the site, and a book on the history and fate of scientific collections in Victorian Cambridge. Owing to a period of parental leave and subsequent arrangements, Jardine’s project will now conclude in January 2020.

### **Publications**

#### ***Edited books***

*How Collections End* [BJHS Themes Vol. 4] (Cambridge University Press), ed. with E. Kowal and J. Bangham

#### ***Articles in books***

‘Science Fiction, Left Science and the Politics of Planning’, in B. Kohlmann and M. Taunton (eds), *A History of 1930s British Literature* (Cambridge University Press, 2019), pp. 299–314

'How Collections End: Objects, Meaning and Loss in Laboratories and Museums', in E. Kowal and J. Bangham, *How Collections End* [BJHS Themes Vol. 4] (Cambridge University Press, 2019), pp. XX–XX

'How Collections End: Objects, Meaning and Loss in Laboratories and Museums', in E. Kowal and J. Bangham, *How Collections End* [BJHS Themes Vol. 4] (Cambridge University Press, 2019), pp. XX–XX, with E. Kowal and J. Bangham

### Articles in journals

'Mass-Observation, Surrealist Sociology, and the Bathos of Paperwork', *History of the Human Sciences* 31 (2018), pp. 52–79

The Total Archive: Data, Subjectivity, Universality' *History of the Human Sciences* 31 (2018), pp. 3–22

'Instruments of Statecraft: Humphrey Cole, Elizabethan Economic Policy and the Rise of Practical Mathematics', *Annals of Science* 75 (2018), pp. 304–329

### Reviews

Review of Lorraine Daston (ed.), *Science in the Archives: Pasts, Presents, Futures* (University of Chicago Press, 2017), *H-Net Reviews* (2018): <https://networks.h-net.org/node/9782/reviews/1665501/jardine-daston-science-archives-pasts-presents-futures>

Review of James Purdon, *Modernist Informatics: Literature, Information, and the State* (Oxford University Press, 2016), *Leonardo* 51 (2018), pp. 543–545

### Lectures, seminars and conferences

January 2019

Participant at the writer's workshop 'Learning by the Book', at the Max Planck Institute for the History of Science, 25–26 January 2019

February 2019

Seminar: 'Paper Instruments', part of the *Images of Science* graduate seminar, 20 February 2019

## Nicholas Jardine

My main contribution to the Department of History and Philosophy of Science this year has been organisation of, and contributions to, seminars and workshops, notably Aims and Methods of Histories of the Sciences, Ideologies of Science, the Cabinet of Natural History, and Greek and Latin Therapy. I have supervised and advised graduate students. My research has been mainly on historiography of the sciences and related philosophical issues. I am on the Botanic Garden Syndicate and devote much time to amateur mycology.

### Publications

#### Edited books

*Worlds of Natural History*, Cambridge, Cambridge University Press, 2019 (with H. A. Curry, J. A. Secord and E. C. Spary).

#### Articles in books

Emotional Engagement in Scientific Biographies, in D. Matravers and A. Waldow, eds, *Philosophical Perspectives on Empathy: Theoretical Approaches and Emerging Challenges*, London, Routledge, 2018, 28–42.

Worlds of History, in H. A. Curry, N. Jardine, J. A. Secord and E. C. Spary, eds, *Worlds of Natural History*, Cambridge, Cambridge University Press, 2019, 3–13 (with E. C. Spary).

#### Articles in journals

Hesse, Mary Brenda, 1924-2016, *Biographical Memoirs of the British Academy*, 17 (2018), 19-28.

Turning to Ontology in Studies of Distant Sciences, *HAU: Journal of Ethnographic Theory*, 9 (2019).

### **Lectures, seminars and conferences**

#### *October 2018*

22, 29 October: Formation and Transformations of History of Science, HPS Graduate Seminar, Aims and Methods of Histories of the Sciences.

#### *November 2018*

5 November: Scientists' Uses of History, HPS Graduate Seminar, Aims and Methods of Histories of the Sciences (with Jeff Skopek).

12 November: Anachronism, HPS Graduate Seminar, Aims and Methods of Histories of the Sciences (with Hasok Chang).

19 November: Philosophers' Uses of History, HPS Graduate Seminar, Aims and Methods of Histories of the Sciences (with Raphael Scholl and Hasok Chang).

26 November: Histories of Cross-Cultural Communication in the Sciences, HPS Graduate Seminar,

#### *February 2019*

4 February: Science and Education: Whewell vs Mill, HPS Graduate Seminar, Ideologies of Science.

6 February: Early-Modern Comely Astronomical Frontispieces, HPS Graduate Seminar, Images of Science.

11 February: Purging Science of Metaphysics: Mach and Duhem, HPS Graduate Seminar, Ideologies of Science.

#### *March 2019*

4 March: The Two Cultures: Huxley vs Arnold and Snow vs Leavis, HPS Graduate Seminar, Ideologies of Science.

#### *June 2019*

5 June: Philosophical Engagements with Distant Sciences, Needham Research Institute Workshop, Science in the Forest, Science in the Past, Mark II.

14 June: Fungi and Feelings, HPS Cabinet of Natural History.

## **Natalie Kaoukji**

I am a teaching associate in the department, acting as history examiner and admissions officer for the HMS MPhil.

### **Publication for 2018-19**

#### **Online**

Natalie Kaoukji and Lauren Kassell, Casebooks: Selected Cases in Full, <https://casebooks.wordpress.com/>.

### **Lectures, seminars and conferences**

#### *June 2019*

N. Kaoukji, Overturning natural limitations: prolonging life in the seventeenth century. (On the theme 'Superhuman' at the 8<sup>th</sup> Robert Boyle Summer School, Waterford)

#### *July 2019*

'Early Modern Longevity and the Poetics of Extended Experience' in the session *Defying Death, Improving the Body, and the Early Modern Quest for Longevity*, HSS, Utrecht.

## Melanie Keene

Melanie continued as Graduate Tutor at Homerton College, and also lectured on the history of education for Part II of the Education Tripos. She is an affiliated member of the Centre for Research in Children's Literature at Cambridge, supervising on the MPhil in Critical Approaches to Children's Literature, and has joined the editorial board of the interdisciplinary journal *Jeunesse: Young People, Texts, Cultures*. In autumn 2018 she managed an interdisciplinary art and archive project on the history of care, health, and education as part of Homerton College's 250<sup>th</sup> anniversary celebrations. She organised the Science and Literature Reading Group in Easter Term 2019.

### Publication for 2018-19

#### Online

'The story of our rocks and minerals', Homerton Library blog, May 2019.

'There's something about Mary', PopPalaeo blog, November 2018.

### Lectures, seminars and conferences

#### October 2018

'CARE: from periphery to centre', art/archive installation, workshop, and symposium, Cambridge Festival of Ideas and Homerton College.

Invited speaker, 'Science and imagination' public event and podcast, the Forum for Philosophy, London School of Economics.

#### November 2018

"How I Made a Noah's Ark": juvenile periodicals and homemade toys in Victorian

Britain', 25th Annual IBBY/NCRCL conference, Roehampton.

#### February 2019

'Noah's ark-æology and nineteenth-century children', 'Children's Literature and Science' workshop, Edinburgh Napier.

#### April 2019

'Tummy troubles: discussing disgusting digestion with nineteenth-century children', annual conference of the British Society for Literature and Science, Royal Holloway.

## Tim Lewens

Tim was nominated by the HPS Board as Head of Department, succeeding Liba Taub in that role from September 2019. He also continued in the role (along with Huw Price) as co-chair of the University's Philosophy REF group. His research project on the 'Extended Evolutionary Synthesis'—featuring Andrew Buskell and Jean-Baptiste Grodwohl as postdoctoral researchers, and drawing on a much larger community of researchers across the world—drew to a close at the end of May.

### Publications

#### Edited books

*Why We Disagree About Human Nature*. Oxford: Oxford University Press (2018). (Edited with Elizabeth Hannon)

#### Articles in books

'The Faces of Human Nature' (2018) in Tim Lewens and Elizabeth Hannon (eds.) *Why We Disagree about Human Nature*. Oxford: Oxford University Press.



'Good Energy: Philosophical Perspectives' in Marc Ozawa et al (eds.) *In Search of Good Energy Policy*. Cambridge: Cambridge University Press.

### **Articles in journals**

'Blurring the Germline' *Bioethics* (in press).

'The Extended Evolutionary Synthesis: What is the debate about, and what might success for the extenders look like?' *Biological Journal of the Linnean Society*  
<https://doi.org/10.1093/biolinnean/blz064>.

'The Division of Advisory Labour: the Case of Mitochondrial "Donation"' (2019) *European Journal for Philosophy of Science* 9: 10.  
<https://doi.org/10.1007/s13194-018-0235-3>.

### **Lectures, seminars and conferences**

*November 2018*

'Integrated History and Philosophy in Biological Practice: The Case of Niche Construction' PhilInBioMed, Bordeaux.

'The Extended Evolutionary Synthesis' Small Group Workshop, IEA Paris.

'Blurring the Germline' University of Strasbourg.

*February 2019*

'Blurring the Germline' EMBL, Heidelberg.

*April 2019*

'Niche Construction: Resolving the Process Debate' Evolution Evolving Conference, Cambridge.

*May 2019*

Panel Discussant, Philosophy of Biology Consortium, Paris

'After Darwin' Panel Discussion, How the Light Gets In Festival, Hay-on-Wye.

*July 2019*

'Selection, Agency and Adaptation' ISHPSSB, Oslo.

## **Joe Martin**

In 2018–19, I served as graduate training officer, MPhil co-manager, paper 3 co-manager, and MPhil and Part II ordinary examiner within the department, as well as lecturing and supervising in Papers 2, 3, and 6, leading a primary source seminar, and supervising MPhil/Part III papers and dissertations. I served as advisor for one PhD student and First Year Review assessor for another. I co-convened the Philosophy and History of Physics Reading Group and the Twentieth Century Think Tank/Working Group and was a member of the Centre for Science and Policy's CSaP Network. In January, I finished my term as editor-in-chief of *Endeavour* and took over the editorship (with Richard Staley) of *Physics in Perspective*. I maintained membership in the: European Society for the History of Science; British Society for the History of Science; American Association for the Advancement of Science; Society for the History of Technology; American Historical Association; American Physical Society; Philosophy of Science Association; and History of Science Society. I was elected to the Chair line of the American Physical Society's Forum on the History of Physics and completed my term (2017–19) on the American Physical Society's Historic Sites Committee. I refereed journal articles for the *European Journal for Philosophy of Science*, *Studies in the History and Philosophy of Science Part A*, and *Journal for General Philosophy of Science* and refereed book manuscripts for Princeton University Press, MIT Press, and Oxford University Press. I co-convened the Physical Sciences Working

Group of the Consortium for History of Science, Technology, and Medicine. My research activities for the year are summarized below.

## **Publications**

### ***Edited books***

Joseph D. Martin and Cyrus C. M. Mody, *Between Making and Knowing: The History of Tools in Materials Research*, WSPC Encyclopedia of the Development and History of Materials Science, vol. 1. Singapore: World Scientific, 2019. (In press).

### ***Articles in books***

Joseph D. Martin, "Cultural Scaffolding and Technological Change." In *Beyond the Meme: Development and Structure in Cultural Evolution*, Minnesota Studies in Philosophy of Science 20, ed. Alan C. Love and William C. Wimsatt, 425–44. Minnesota, 2019.

### ***Articles in journals***

Agnes Bolinska and Joseph D. Martin. "Negotiating History: Contingency, Canonicity,

and Case Studies." *Studies in History and Philosophy of Science Part A* (2019): in press. (DOI: 10.1016/j.shpsa.2019.05.003).

Joseph D. Martin. "Mildred Dresselhaus and Solid State Pedagogy at MIT." *Annalen der Physik* 531 (2019): in press.

Joseph D. Martin. "El estado sólido y el nuevo mapa de física." *Investigación y Ciencia*, June 2019.

Joseph D. Martin. "When Condensed Matter Physics became King." *Physics Today* 72, no. 1 (2019): 30–37.

John C. Besley, Nagwan Zahry, Kevin C. Elliott, Aaron M. McCright, Norbert E. Kaminski, and Joseph D. Martin. "Conflict of Interest Mitigation Procedures May Have Little Influence on the Perceived Procedural Fairness of Risk-Related Research." *Risk Analysis* 39, no. 3 (2019): 571–85.

### ***Online***

Agnes Bolinska and Joseph D. Martin. "What Is the Value of History of Science for Philosophy of Science?," *Communiqué: Canadian Society for the History and Philosophy of Science* 100 (Summer 2019): in press.



## **Lectures, seminars and conferences**

### *October 2018*

Joseph D. Martin. "Who Was Physics For?: Companies, Combatants, Countries, and Colleagues." Joint 3rd International Conference on the History of Physics of the European Physical Society, San Sebastian, Spain, 17–21 October 2018

### *December 2018*

Joseph D. Martin. "Lessons from Past Technological Transitions." Policy Workshop: Future Threats and Challenges of Quantum Technologies, Centre for Science and Policy, University of Cambridge, 4 December 2018.

### *January 2019*

Agnes Bolinska and Joseph D. Martin. "Negotiating History: Contingency, Canonicity, and Case Studies." CamPoS, Department of History and Philosophy of Science, University of Cambridge, 30 January 2019. Presented with Agnes Bolinska.

### *March 2019*

Joseph D. Martin. "When Condensed Matter Physics became King." Trinity College, University of Cambridge, Science Society Symposium, 10 March 2019.

### *April 2019*

Joseph D. Martin. "Rethinking Industrial Patronage of Academic Research in the Early Cold War." Departmental Seminar, Department of History and Philosophy of Science, University of Cambridge, 24 April 2019.

### *May 2019*

Joseph D. Martin. "Who Made the Makers?: How Materials Science Happened." AD HOC, Department of History and Philosophy of Science, University of Cambridge, 15 May 2019.

Joseph D. Martin. "Mildred Dresselhaus and Solid State Pedagogy at MIT." Cavendish Laboratory, University of Cambridge, 21 May 2019.

### *June 2019*

Agnes Bolinska and Joseph D. Martin. "Negotiating History: Contingency, Canonicity, and Case Studies." Canadian Society for the History and Philosophy of Science, University of British Columbia, Vancouver, Canada, 1–3 June 2019.

### *July 2019*

Joseph D. Martin. "Tools for Characterizing Materials." History of Science Society, Utrecht, The Netherlands, 23–27 July 2019.

Joseph D. Martin. "Tools for Characterizing Materials." 12th International Conference on the History of Chemistry, University of Maastricht, Maastricht, The Netherlands, 29 July–2 August 2019

Agnes Bolinska and Joseph D. Martin. "Negotiating History: Contingency, Canonicity, and Case Studies." British Society for the Philosophy of Science, University of Durham, Durham, UK, 17–19 July 2019.

### *August 2019*

Agnes Bolinska and Joseph D. Martin. "Negotiating History: Contingency, Canonicity, and Case Studies." 16th International Congress of Logic, Methodology and Philosophy of Science and Technology, Prague, Czech Republic, 5–10 August 2019.

## Dr Richard A. McKay

During the 2018-19 academic year, Dr Richard A. McKay worked 50% full-time as a Wellcome Trust Research Fellow and the remainder of his time as a coach for academics, executives, and other high-performing thought leaders at Rich Life Coaching ([www.richlifecoaching.co.uk](http://www.richlifecoaching.co.uk)). He continued working as chief investigator for the 'Before HIV' project and in his position as Director of Studies for HPS at Magdalene College. Dr McKay also continued in his role as Policy Development Officer on the executive committee of the Society for the Social History of Medicine, and served on the program committee for the *Memory Lives On: Documenting the HIV/AIDS Epidemic* conference hosted by Archives and Special Collections, University of California at San Francisco Library. He also worked as a historical consultant for the documentary film, *Killing Patient Zero*, which was based on his first book and premiered in April 2019 at the Hot Docs Canadian International Documentary Festival in Toronto.

### Publications

#### Reviews

Katie Batza, *Before AIDS: Gay Health Politics in the 1970s* (Philadelphia: University of Pennsylvania Press, 2018), review in *Journal of Social History*, 27 November 2018.

### Lectures, seminars and conferences

#### January 2019

"What came before Zero? STIs Among Men Who Had Sex with Men in California, 1945-1965," (presentation at UCSF Archives and Special Collections, San Francisco, 10 January 2019).

#### February 2019

"Sexually Transmitted Infections Among Men Who Had Sex with Men in the United States,

1945-1965" (presentation at Advanced Topics in Infectious Diseases weekly grand rounds, Weill-Cornell Medical School, New York City, 15 February 2019).

"Patient Zero, Affective Labour, and the Value of Historical Research" (annual Elias E. Manuelidis Memorial Lecture in the History of Medicine, Yale University, New Haven, 18 February 2019).

#### April 2019

"Gay and queer-identified men in New York City recall their experiences of venereal disease before HIV" (presentation at the annual meeting of the American Association for the History of Medicine, Columbus, Ohio, 27 April 2019).

### Public Engagement and Impact

#### January 2019

"Patient Zero and the Making of the AIDS Epidemic" (public presentation at the San Francisco Public Library, San Francisco, 10 January 2019).

#### April 2019

"The Making of Patient Zero" (co-panellist in discussion on the history of Patient Zero and the making of *Killing Patient Zero*, Glad Day Books, Toronto, 25 April 2019).

## Rune Nyrup

My work this year has been based at the Leverhulme Centre for the Future of Intelligence, where I pursue both my own research in AI ethics and collaborate with other members of the Centre. At the Department of HPS I contributed to MPhil supervisions and served as a member of Board and the Degree Committee. I was on parental leave 3 Dec – 18 April.

## Publications

### Peer-reviewed conference proceedings

Nyrup, R. forthcoming. "Three Uses of Analogy: A Philosophical View of the Archaeologist's Toolbox", *Interarchaeologia 5: Proceedings of the Eighth Baltic Archaeology Seminar*.

Whittlestone, J., Nyrup, R., Alexandrova, A. and Cave, S. forthcoming. "The Role and Limits of principles in AI Ethics: Towards a Focus on Tensions", *Proceedings of the 2019 AAAI/ACM Conference on Artificial Intelligence, Ethics and Society*.

### Reviews

Nyrup, R. 2018. "Samuel Schindler: *Theoretical Virtues in Science*", *BJPS Review of Books*.  
<https://bjpsbooks.wordpress.com/2018/10/09/schindlertheoreticalvirtues/>

### Other

Nyrup, R., Whittlestone, J. and Cave, S. forthcoming. "Why value judgments should not be automated". Evidence submitted to the UK Government's Committee on Standards in Public Life's review into artificial intelligence and its impact on standards across the public sector.

Whittlestone, J., Nyrup, R., Alexandrova, A., Dihal, K. and Cave, S. 2019. *Ethical and Societal Implications of Algorithms, Data, and Artificial Intelligence*, London: Nuffield Foundation. [Policy report].

### Lectures, seminars and conferences

October 2018

"Machine Ethics and the Threat of Moral Atrophy", *Regulating the Tyrell Corporation: Company Law and the Emergence of Novel Beings*, London.

"Explanations for Medical AI", *CamPoS*, Department of HPS, University of Cambridge.

"Explainable Artificial Intelligence: What is it and what's the problem?", *The Future of (Artificial) Intelligence*, Universität Bonn.

April 2019

"Human Values and Explainable AI", *Technology and New Media Research Cluster Seminar*, Department of Sociology, University of Cambridge.

May 2019

Panellist on "Explaining Responsibly", *TILTING Perspectives: Regulating a World in Transition*, Tilburg Institute for Law, Technology and Society.

July 2019

"Explanatory Pragmatism as a Philosophy for the Science of Explainable AI", *BSPS*, Durham.

"Transparency in Algorithmic Decision Making: Double Standard or False Dichotomy?", *Joint Sessions*, Durham.

August 2019

"A Philosophy for the Science of Explainable AI", *American Political Science Association Annual Meeting*, Washington DC.

September 2019

[title tbd], *Issues in Explainable AI: Blackboxes, Recommendations, and Levels of Explanations*, University of Saarland

**Simon Schaffer**

In 2018-19 Simon Schaffer was chair of the Board of HPS, manager of the Part 1B course, chair of the Whipple Museum Committee, chair of the Senior Faculty Promotions Committee, and member of the Management Committee of the Scott Polar Research Institute. He served on the appointments committee of the Adrian Fellowship, Darwin College. He continued to serve on the Awards Committee of the early modern history section of the British Academy and the selection panel for the British Academy's Knowledge Frontier Awards. He also continued as member of the Advisory Board of the Science Museum London and the editorial boards of *History of Science*, *Journal of Early Modern History*, *Science and Culture in Nineteenth-century Britain*, *Austral Historia* and the *Science Museum Journal*. In 2018 -19 he was appointed a member of the Bank of England Banknote Personality Committee.

## **Publications**

### ***Edited***

'Nineteenth-century survey sciences: enterprises, expeditions and exhibitions', *Notes and Records of the Royal Society* 73.2 (June 2019) special issue, co-editor

### ***Articles in journals***

'Instruments and ingenuity between India and Britain', *Bulletin of the Scientific Instrument Society* 140 (March 2019), 2-13

## **Lectures, seminars and conferences**

### ***November 2018***

'Ingenuity and instrumentation between Britain and India', Scientific Instrument Society, Gerard Turner Memorial lecture, Burlington House, November 9, 2018

'Trust in early computation', University of Cambridge Trust in Technology Initiative, November 20, 2018

'What is progress?', Policy Leaders Round Table, Cambridge Science and Policy, Trinity Hall, Cambridge, November 23, 2018

'The future of artificial intelligence: views from history', Symposium on History of AI, Babbage Lecture Theatre, Cambridge, November 29, 2018

### ***December 2018***

'The object of death in oriental natural history', How scientific objects end, Department of History & Philosophy of Science, University of Cambridge, December 3, 2018

### ***January 2019***

'The Cavendish and the invention of the modern laboratory', Cavendish Laboratory, Cambridge, January 23, 2019

'Replicas in the history of art and science', CRASH, University of Cambridge, January 29, 2019

### ***February 2019***

'Why trust public science?', Insight Lecture, Francis Crick Institute, London, February 18, 2019

'Unclear physics, occult chemistry and passionate stories', Jeff Hughes: a Celebration, University of Manchester, February 22, 2019

### ***March 2019***

'The Laboratory', Sidney Sussex Greats lecture, March 5, 2019

### ***April 2019***

'Newtonian ambiguities: between ingenuity and genius', Conference on Ingenuity in early

modern art and science, Trinity Hall,  
Cambridge, April 11, 2019

'L'idéologie du mètre', Musée des Arts et  
Métiers, Paris, April 18, 2019

'Oriental knowledges and the politics of  
expertise', Seminar on Intellectuals on the  
Margins, University of Ghent, April 26, 2019

#### May 2019

'Newtonian calculations', Conference on  
Sharing Risk, 6<sup>th</sup>-21<sup>st</sup> centuries, Archivio del  
Stato, Genoa, May 18, 2019

#### June 2019

'La terre est un organisme', Collège des  
Bernardins, Paris, June 21, 2019

#### September 2019

'Smyth's elevation', Stars, Pyramids &  
Photographs: Charles Piazza Smyth 1819-  
1900, Royal Society of Edinburgh, September  
3, 2019

## Carolyn Schmitz

I have started my current position as a  
Wellcome Trust Research Fellow in Medical  
Humanities at the Department of History and  
Philosophy of Science in October 2018. Within  
this last year, in which I have mainly focused  
on my research, I have co/conveyed together  
with Justin Rivest (History Department) the  
"Early Modern Work in Progress Reading  
Group" and took the lead in guiding the  
German Therapy Group. I have also become a  
member of the Postdoc Society of Trinity  
College.

### Publications

#### Edited books

Carolyn Schmitz, *Los enfermos en la España  
barroca y el pluralismo médico: espacios,  
estrategias y actitudes* ('The sick in baroque  
Spain and the medical pluralism: spaces,  
strategies and attitudes'), Serie: Estudios  
sobre la Ciencia, 71, Madrid: Consejo Superior  
de Investigaciones Científicas, 2018.

### Articles in journals

María Luz López Terrada and Carolyn Schmitz,  
Licencias sociales para sanar: La construcción  
como expertos de salud de curanderas y  
curanderos en la Castilla del Barroco, *Studia  
Historica.Historia Moderna*, 40,2 (2018), pp.  
143-175.

### Reviews

Carolyn Schmitz, Review of Cristian Berco,  
From Body to Community: Venereal Disease  
and Society in Baroque Spain, Toronto:  
University of Toronto Press, 2016, *Dynamis*  
2018; 38 (2): 509-512.

### Lectures, seminars and conferences

#### November 2018

Title: "¿Guardar el orden o imponer la  
voluntad? Madres y padres y la toma de  
decisiones terapéuticas en la España  
Moderna".

Conference: Seminario Internacional Género e  
Historias de Vida: Entre la Integración y la  
Resistencia, Universitat de València, 8-10  
November 2018.

#### January 2019

Title: "From cures to courts of justice: medical  
encounters, the issue of generation, and social  
order in early modern Spain".

Seminar: "From Generation to Reproduction  
Seminar", Department of History and  
Philosophy of Science, University of  
Cambridge, 29 January 2019.

February 2019

Title: "Tabu, Geheimhaltung oder offene Kommunikation? Das kommunikative Verhalten von impotenten Männern im frühneuzeitlichen Spanien".

Conference: Männlichkeiten: Praktiken und Diskurse zu Körper, Gesundheit und Krankheit (1400-1850), Institut für die Geschichte der Medizin der Robert-Bosch-Stiftung, Stuttgart, Germany, 28 February – 1 March 2019.

June 2019

Title: "Which physician is best for us? Taking legal action for medical provision in early modern Spain".

Conference: 13<sup>th</sup> Max Weber June Conference: Drivers and Consequences of Transformation, European University Institute, Florence, Italy, 12-14 June 2019.

## Anne Secord

### Publications

#### Articles in books

'Containers and collections', in H. Curry, N. Jardine, J. A. Secord, and E. C. Spary, eds, *Worlds of Natural History* (Cambridge: Cambridge University Press, 2018), pp. 289–303.

'Specimens of observation: Edward Hobson's *Musci Britannici*' in Liba Taub, Joshua Nall, and Frances Willmoth, *The Whipple Museum of the History of Science* (Cambridge: Cambridge University Press, 2019), pp. 101–17.

### Lectures, seminars and conferences

November 2018

'The Politics of Participation: Creating Scientific Communities in nineteenth-century British Botany'. Seminar paper presented in

the Institute of Philosophical Research, National Autonomous University of Mexico (UNAM).

July 2019

'What Do Maps Map? Finding the Way in Early Nineteenth-Century British Botany'. Paper to be presented in the session 'Mapping' at the Annual History of Science Society Meeting, Utrecht.

## Prof. Jim Secord

Other than Lent 2018-19, I have been on leave for much of the past academic year, combining travel and lecturing with work on my book on history of science in relation to communication, tentatively titled 'Knowledge in Transit'.

### Publications

#### Edited books

*Worlds of Natural History*. Cambridge: Cambridge University Press, 2018, xxv + 655 pp.; co-edited with H. A. Curry, N. Jardine and E. C. Spary.

*Correspondence of Charles Darwin*. Cambridge University Press, Vol. 26 (1878), 2018, xlv + 768 pp.; co-edited with F. Burkhardt and the Darwin Correspondence Project editorial team.

#### Articles in books

'Eureka!', in *Surprise: 107 Variations on the Unexpected*, ed. by M. Fend, A. te Heesen, C. von Oertzen and F. Vidal, Berlin: Max Planck Institute for the History of Science, 2019, 356–359.

'Life on the Moon, Newspapers on Earth', in *Moon: A Celebration of our Celestial Neighbour*, ed. by M. Vandenbrouck et al, London: Royal Observatory Greenwich, 2019, 150–155, 240.



'Talking Origins', in *Reproduction: From Antiquity to the Present Day*, ed. by N. Hopwood, R. Flemming and L. Kassell. Cambridge: Cambridge University Press, 2018, 375-389.

'Spontaneous Generation and the Triumph of Experiment', in *Reproduction: From Antiquity to the Present Day*, ed. by N. Hopwood, R. Flemming and L. Kassell. Cambridge: Cambridge University Press, 2018, 'Exhibit 26'.

'Global Geology and the Tectonics of Empire', in *Worlds of Natural History*, ed. by H. Curry, N. Jardine, J. Secord and E.C. Spary. Cambridge: Cambridge University Press, 2018, 401-417, 610-612.

'Natural History and its Histories in the Twenty-first Century', in *Worlds of Natural History*, ed. by H. Curry, N. Jardine, J. Secord and E.C. Spary. Cambridge: Cambridge University Press, 2018, 535-544, 632-634.

### **Lectures, seminars and conferences**

#### *October 2018*

'Circulation or Communication: Rethinking Knowledge in Transit', Dept. of History, Lund University, Sweden

#### *November 2018*

'Adam Sedgwick's Legacy', Dept. of Earth Sciences, University of Cambridge,

Plenary address, International Commission on History of Geology, Mexico City, Mexico, 2018.

'Communication vs Circulation', European Society for the History of Science, London, 2018.

#### *July 2019*

'Voyaging in Strange Seas: Libraries as Instruments of Scientific Discovery from Darwin to Eddington', invited lecture in

association with Discovery exhibition, Cambridge University Library.

#### *July 2019*

Panel on John Herschel, History of Science Society meeting, Utrecht, Netherlands.

## **Jacob Stegenga**

I have been on sabbatical this year. It has been a productive year. My second book was published in the autumn. During the first half of my leave I finished three articles and they are now under review in journals. During the second half of my leave, I began the preliminary stages of a new book.

I spend six months as a visiting scholar in Bordeaux, as a fellow of their 'Excellence Initiative'. There was an author-meets-critic session for my book *Medical Nihilism* at the American Philosophical Association annual meeting, and there was a symposium devoted to this book in Bordeaux. I was invited to speak in many venues in Europe and North America, and was a keynote speaker in four conferences.

### **Publication for 2018-19**

#### **Books**

*Care and Cure – this is a textbook for philosophy of medicine*

#### **Online**

'Do Antidepressants Work?' Aeon magazine, online.

### **Lectures, seminars and conferences**

#### *October 2018*

“The Natural Probability Theory of Stereotypes”, *University of Toronto HPS Colloquium*, Toronto, Canada

“The Perils of P-Hacking and the Promise of Pre-Analysis Plans”, *Keynote Lecture, Perspectives on Scientific Error*, Groningen, Netherlands

“The Perils of P-Hacking and the Promise of Pre-Analysis Plans”, *Understanding Replication Across the Sciences*, Western University, London, Canada

“Bayesian Mechanista”, *University of Tampere*, Tampere, Finland

“Medical Nihilism”, *Philosophy of Science Association*, Seattle, USA

#### November 2018

“The Natural Probability Theory of Stereotypes”, *University College Cork Philosophy Colloquium*, Cork, Ireland

#### December 2018

“Response to Commentators on *Medical Nihilism*”, *Book Symposium*, University of Bordeaux, France

“The Early Detection Debate: A Resolution”, *University of Bordeaux*, Bordeaux, France

#### February 2019

“The Early Detection Debate: A Resolution”, *Institute Gustave Roussy*, Paris, France

“Bayesian Mechanista”, *University of Paris Insitute for History and Philosophy of Science Colloquium*, Paris, France

“Medical Nihilism”, *Philosophy of Medicine Seminar*, University of Geneva, Geneva, Switzerland

#### April 2019

“The Sciences of Sexual Desire”, University of Notre Dame Philosophy Colloquium, South Bend, USA

“Response to Commentators on Medical Nihilism”, Author-Meets-Critics, American Philosophical Association, Pacific Division, Vancouver, Canada

“Debiasing Inference”, *Keynote Lecture, Biases in Science Conference*, Munich, Germany

“Medical Nihilism”, *Educating The Whole Physician Conference*, University of Notre Dame, South Bend, USA

#### May 2019

“The Sciences of Sexual Desire”, Jagiellonian University, Krakow, Poland and Aarhus University Philosophy of Science Colloquium, Aarhus, Denmark

“Disorders of Sexual Desire”, Keynote Lecture, Association for the Advancement of Philosophy and Psychiatry, San Francisco, USA

“Debiasing Inference”, *Workshop on Evidence Amalgamation*, Cork, Ireland

“The Natural Probability Theory of Stereotypes”, *Munich Centre for Mathematical Philosophy Colloquium*, Munich, Germany

“Medical Nihilism”, *Jagiellonian University*, Krakow, Poland

# Seminar Programmes

## Michaelmas Term 2018

### Departmental Seminars

Seminars are held on **Thursdays from 3.30 to 5pm in Seminar Room 2**. There is tea and coffee before the seminar at 3pm in Seminar Room 1, and there are refreshments afterwards at 5pm in Seminar Room 1.

Organised by Agnes Bolinska.

**25 October**      **Robert Iliffe (University of Oxford)**  
Principia and the air-pump: the social and political roots of Newton's science

Historical accounts both of the genesis of Newton's scientific method and of the varied reception his published work enjoyed in the late 17th century have appealed to his touchy personality and to the relative incompetence of his critics. In offering asymmetric explanations and indulging in simplistic psychologizing, this approach has serious limitations. By contrast, in this talk I examine what Newton's private and public writings say about what he took to be the ideal structure of a truth-seeking scientific community. Unlike more democratic proposals for practising natural philosophy, whose core principles were drawn from natural history, Newton's ideal scientific polity was strongly hierarchical, open only to expert subjects who had undergone rigorous training. I link Newton's comments on the structure of scientific institutions to his prescriptions for maintaining a healthy and productive mind and body, and also to his religious and political views. I conclude by considering the explanatory status of such approaches.

**1 November**      **Mat Paskins (London School of Economics)**  
Material substitutions in historical perspective: the cases of the British Substitutes and Vegetable Drugs Committees during World War Two

In this talk, I discuss two British government committees which were tasked during World War Two with the solution of finding substitutes for materials which had been made scarce by the war: the Substitutes Committee of the Ministry of Supply, and the Vegetable Drugs Committee of the Ministry of Health. I argue that these bodies cast a suggestive light on problems of 20th-century chemical governance in Britain, and the long history of attempts at material substitution by scientific means. The eminent industrialists and academic chemists who made up the Substitutes Committee ended up fighting a war chiefly of quotidian materials, trying to solve problems of degreasing wool, seeking replacements for leather, and worrying over the wide introduction of plastics. At the same time, their committee was tightly integrated into both government and private sector mechanisms of production and supply, and they boasted of being able to coordinate otherwise unrelated substitution efforts. They also speculated on a number of possible novel uses for colonial surpluses. The Vegetable Drugs Committee, meanwhile, was a remarkably diffuse entity which was torn between trying to provide support for voluntary collection of wild British plants, and ambitious schemes for complete self-sufficiency in drug production throughout the British Empire.

**8 November**      **Luke Fenton-Glynn (University College London)**  
Probabilistic actual causation

Actual (token) causation – the sort of causal relation asserted to hold by claims like 'the Chicxulub impact caused the Cretaceous-Paleogene extinction event', 'Mr Fairchild's exposure to asbestos

caused him to suffer mesothelioma', and 'the H7N9 virus outbreak was caused by poultry farmers becoming simultaneously infected by bird and human 'flu strains' – is of significance to scientists, historians, and tort and criminal lawyers. It also plays a role in theories of various philosophically important concepts, such as action, decision, explanation, knowledge, perception, reference, and moral responsibility. Yet there is little consensus on how actual causation is to be understood, particularly where actual causes work only probabilistically. I use probabilistic causal models, and associated causal graphs, to cast some light on the nature of probabilistic actual causation.

**15 November**     **Denis Walsh (University of Toronto)**  
Being human, being *Homo sapiens*

Neo-Aristotelian ethical naturalism attempts to characterise human moral goodness as a natural phenomenon. It posits a substantive, essentialist, normative concept of human nature as an explanatory primitive. Human nature, according to neo-Aristotelianism, is an instance of a generalised organismal nature. Opponents object that no such concept of organismal nature is sanctioned by best scientific practice. I offer a roundabout defence of the naturalistic status of neo-Aristotelianism. I argue that the concept of an organismal nature required by neo-Aristotelians can be found Aristotle's notion of *Bios*, a central feature of his theory of the organism. I next argue that something quite like *Bios* is required in contemporary evolutionary biology in order to explain the fit and diversity of organismal form.

**22 November**     **Amanda Rees (University of York)**  
Creating citizen history of science: science, fiction and the future of the 20th century

If something isn't real, or true – if it's (whisper it) fake – then, other than to debunk it, it can sometimes be hard to see why you should study it. By focusing on the histories of the future, this paper will show how the humanities, and in particular the history of science, can engage with the unreal, the fictional and the imaginary. By doing this, we will show how the idea of 'expertise' and the figure of the 'expert' can be interpreted more broadly, and indicate ways in which non-historians can influence the structure and shape of academic histories. We will begin by exploring these ideas in relation to science fiction, the nature of fictional realities and the impact of the imaginary on academic disciplines, and we will end (we hope) with a game in which players can reconstruct – and sometimes redirect – the history of the 20th century.

### **Twentieth Century Think Tank**

The Twentieth Century Think Tank offers broad coverage of 20th- and 21st-century topics in the history, philosophy and sociology of science, technology and medicine. The regular programme of papers and discussions takes place on Thursdays over lunch.

Think Tank meetings are held fortnightly on **Thursdays, 1–2pm in Seminar Room 2**. All welcome!

Organised by Mary Brazelton, Joseph Martin and Richard Staley.

**11 October**     **Joe Bassi (University of Texas, El Paso)**  
How US science moved west: Boulder, Colorado and the development of US space sciences in mid-20th century America

From being considered a 'scientific Siberia' in the 1940s, Boulder as a scientific centre represented an important transition of US science as it 'moved west' in the 20th century. The answer to this question lies in the complex confluence of individual scientific ambitions relating to sun-earth connection research, the pre and early Cold War context of science in the US, and political machinations at various levels of government. This presentation lays out the early phases of this

transition process, and particularly focuses on the efforts of solar astronomer Walter Orr Roberts, Colorado Senator 'Big Ed' Johnson, the Boulder Chamber of Commerce, and others in bringing sun-earth science to Boulder in the late 1940s and early 1950s. This investigation thereby sheds some light on the process by which scientific/academic centres (or 'peaks') were created in the US west in the 20th century.

**Koji Hirata (Emmanuel College, Cambridge)**

**25 October** A city of future past: urban planning and urban construction in northeast China after the Communist Revolution

This paper examines how industrial enterprises and ordinary people participated in construction of cities in the early years of the People's Republic of China (1949 to present), especially between 1952 and 1957. Much of the past scholarly literature on urban planning in the early PRC focused on the state bureaucracy. By contrast, I explore how urban-planning policies were implemented at the ground level, by focusing on the case of Anshan – a major steel industrial city in Manchuria (northeast China) that had previously been constructed as a Japanese colonial city prior to 1945. To examine the construction and reconstruction of this city, I draw upon a wide range of newly available sources, including interviews, local newspapers, official municipal histories, and confidential government reports. My paper begins with a brief overview of the establishment of the PRC city-planning bureaucracy, which is followed by a discussion of the process and outcomes of urban construction. I then discuss the population movement to Anshan from the countryside, and how this contributed to issues of housing shortages in the city. Altogether, this re-examination of the Chinese urban political economy demonstrates that local-level negotiations among various actors, including lower-level officials, enterprise managers, and even migrant workers, lay at the heart of urban construction in Mao-era China.

**Sam Robinson (University of York)**

**8 November** Anticipations of the ocean: technological futures of the Cold War ocean

The UN Law of the Sea (1968–1984) was intended to legislate for the new capabilities that developments in underwater science and technology opened up for developed nations. In reality the negotiations became a point when the superpower technological hegemony of the global ocean was challenged by the 'Group of 77' – nations that saw the negative potential of new technologies in terms of the external exploitation of their resources. Science policy was formed in response to the anticipated capabilities of such technologies which far outweighed the realities of extracting deep-sea minerals and resource exploitation in remote and inhospitable environments. Thus, the discussion of ocean science and technology within the treaty negotiations were built on anticipatory understandings of the potential exploitation of the oceans.

This paper will argue that international law-building for science and technology can be framed as an anticipatory response to claims made for potential future use. Thereby these negotiations, based on unsettling scientific futures, are themselves forms of scientific imaginaries. The navigation of potential uses of science, by diplomats, reveals the role of science communication within complex negotiations, and the importance of the distinction (and sometimes the blurring) of the real and the imagined in international relations. The Law of the Sea was a site where scientific futures were imagined in several contexts; a uniquely challenging moment in international law creation where lawmakers looked to the future rather than responding to their past or present situations.

**22 November** *Cancelled*

**Ksenia Tatarchenko (University of Geneva)**

**20 December** The thaw in the Pole: Cold War science and showcasing at the Siberian science-city and Antarctic expeditions (1955–1964)

This paper focuses on the interdependencies in the process of making international science and producing knowledge about extreme environments by establishing connections and comparisons between two historical episodes: the creation of the Siberian science-city and the early Soviet Antarctic expeditions. It reveals how the Cold War framework highlighted a key ambiguity of Soviet science: producing universal knowledge in socialist way. Thanks to recent works on Cold War sciences, we now know that circulating people, ideas and artefacts operationalized, breached, and occasionally transcended geopolitical divisions. Scholars working on polar regions also demonstrate how these regions are constructed both as strategic locations and rhetorical forms of domination over nature. This paper adds another dimension to a discussion of such entanglements among several historical sub-disciplines – Big Science as spectacle. It argues that showcasing was a constitutive element, not an accidental byproduct, of Khrushchev-era massive investment into ostensibly civilian scientific infrastructures across Siberia and Antarctica. In 1957, the year of Sputnik, the Soviet press announced the creation of the first Siberian science-city, Akademgorodok, and the images of 'Ob', the flagman of the Soviet expedition sailing south for the third time, proliferated. The aim here is not only to correct misleading historiographic claims conflating remoteness with 'freedom' and de-Stalinization with de-Sovietization, but to explain the very size of historical record associated with these projects. Situated across the globe, Siberian science-cities and Antarctic bases were presented in an unexpectedly similar way, as model scientific communities. In the process, both regions and their natural environments became not only the elements of scientific representations as circulating 'mobiles', but the stages for enacting the competing versions of modernity. Both locales enticed numerous visitors to record and share their experiences. Yet such visitors often passed over a key aspect of these sites – the co-dependency between the openness of international science and the secrecy regimes of national defence. Akademgorodok had many ties to 'plutopias', the closed cities of the Soviet nuclear programme, and Antarctica's international 'science and peace' to the Arctic's Cold War frontier.

**Coffee with Scientists**

The aim of this group is to explore and enhance the interface between HPS and science. Though many of us in HPS engage closely with science and scientists, we could benefit from more explicit discussions about the relationship between HPS and science itself, and from more opportunities for HPS-scholars and scientists to help each other's work.

Generally we meet on **Fridays, 3.30–5.00pm in Seminar Room 2**. Further information and reading materials will be distributed through the email list of the group; please contact Hasok Chang (hc372) if you would like to be included on the list.

Monday 15 October, 5.00–6.30pm

**David Teplow (UCLA)**, hosted by Hasok Chang

What is science? A view from a practising scientist

*Joint event with [AD HOC](#) – please note unusual day and time*

Friday 23 November, 3.30–5.00pm

**William Harris (Physiology, Development and Neuroscience, Cambridge)**, hosted by Joe Martin  
Genes, neurons, development, brains and behaviours

**Cabinet of Natural History**

This research seminar is concerned with all aspects of the history of natural history and the field and environmental sciences. The regular programme of papers and discussions takes place over lunch on Mondays. In addition, the Cabinet organises a beginning-of-year fungus hunt and occasional expeditions to sites of historical and natural historical interest, and holds an end-of-year garden party.

All seminars are held on **Mondays at 1pm in Seminar Room 1**. Please feel free to bring your lunch.

Organised by Laura Brassington (lb685).

**8 October**      **Spike Bucklow (Fitzwilliam Museum, Cambridge)**  
The long-lost Paston Collection

This talk will consider some aspects of a 17th-century collection of natural history, paintings, literature and musical instruments that was housed at Oxnead in North Norfolk in the 17th century. The collection was assembled by Sir William Paston and his son, Robert Paston, both of whom were famed for their hospitality and learning. The collection's core included objects obtained on Grand Tours and fabricated from materials derived from the Americas, Pacific, China and India. The full extent of the collection is known only through house inventories and auction lists, since it was dispersed by Robert Paston, 1st Earl of Yarmouth and his son, William Paston, 2nd Earl of Yarmouth. Approximately 1% of the collection's items was depicted in a monumental still-life painting of c.1664. The talk will outline the nature of exchanges implied by the collection and its painting.

**15 October**      **Emma Spary (History, Cambridge)**  
Putting the pieces together: Canadian ginseng and botanical expertise in the French Regency

This paper will examine the complex history of the relationship between French botanical knowledge, commerce and Royal institutions in the 1710s–1730s through the case of Canadian ginseng. Its discovery in 1717, growing in newly-colonised French Canada, was ostentatiously publicised back in the metropolis. The history of how this Canadian plant came to be attributed properties similar to those of the famous Chinese drug which was its namesake has been told several times, most recently as a story of widening separation between the interests of botanists and those of clergy. Using previously neglected archival materials, I will argue, in contrast, for a far more complex response to the new drug, centred on a reconfiguration of the relationship between state power and botanical expertise during the 1710s. These developing connections shifted the scope of botanical practice away from classical humanism and towards a new view of the distant natural world as a source of national prosperity; they also placed a new emphasis upon the botanical garden as a space of proof and demonstration. The ways in which Canadian ginseng changed as an object of knowledge can be seen to express these forming and transforming relationships between statecraft, natural knowledge and wealth.

**22 October**      **Annual Fungus Hunt**

**29 October**      **Justin Rivest (History, Cambridge)**  
Elite paternalism and exotic drug demand in early modern France: the case of the Marquis de Louvois and quinquina, circa 1685

My talk will explore the links between household medical consumption of prominent aristocratic families and the early bulk consumption of exotic, non-European drugs by the French army in the 17th century. Men of state like the French War Secretary, the Marquis de Louvois, approached their personal health problems – as well as those of their families and servants – through personal networks of informants, suppliers and experts. Looking specifically at Peruvian cinchona bark (quinquina), I will consider how Louvois' personal advocacy of the drug helped extend its use to his

subordinates, servants, the king and ultimately in bulk volumes to thousands of soldiers during an epidemic of intermittent fevers at the construction site of the Eure Canal.

Louvois' drug networks were not in any sense dependent upon traditional 'medical' actors such as physicians or apothecaries: it was in fact Louvois who supplied his physicians with quinquina, not vice versa. His networks of supply and information included reliable familial clients from many walks of life, from domestics to jewellers and bankers, and other servants scattered strategically through various institutions and settings, both in France and abroad.

Drawing on this case and a few others, I argue that the personal consumption of élites served as a crucial mediator for population-scale consumption of exotic drugs. Far from an economy of individualised consumption, I argue that the state marketplace for exotic drugs originated within a broader culture of paternalism and charity: it was an extension of the personal care of aristocratic patrons for their clients and servants.

**Martha Homfray-Cooper (History, Cambridge)**

**5 November** The Curious Martin Folkes (1690–1754): sociability and collecting in the mid-18th century

Martin Folkes, President of the Royal Society and of the Society of Antiquaries, has not been treated kindly by historians. He has either been seen as an aristocratic menace to the progress of 18th-century science or else ignored completely. And yet his contemporaries awarded him prestigious scientific positions. The vast majority of contemporary voices praised him for his involvement in a wide variety of sciences – antiquarianism, numismatics, mathematics, astronomy and natural history. The disconnect between the negative picture of Folkes as drawn by historians and contemporaries' more positive testimonies requires explanation. This talk examines Folkes's correspondence networks, his possessions, and his travels around Europe. Contemporaries had a set of criteria for what counted as good science very different to that which scholarship presumes. In the first half of the 18th century, good science shifted from being about singular, one-off curiosities to valuing large collections of knowledge. Folkes was fundamental to encouraging and modelling this shift. Science was no longer about finding the unique; it was now about building large collections and ordering them. Folkes simultaneously collected various objects and European-wide correspondents and he himself conformed wonderfully to the criteria of good science which he helped to shape. This talk seeks to reconstruct how he successfully self-fashioned himself as the Curious Martin Folkes and how this relates to mid-18th century scientific practices.

**Marie de Rugy (History, Cambridge)**

**12 November** Mountains, rivers and forests: the colonial mapping of southeast Asia, between observation and vernacular cartography in the 19th century

During British colonisation of Burma and French rule in Indochina, surveyors were sent throughout the territory to explore, measure, observe and describe it and to draw topographical maps. On the one hand, they used their own techniques and proved to be scientific actors, charting the territory on maps according to European norms. On the other hand, they collected indigenous information to help them understand an unknown territory and given that they were not always able to make proper observations themselves.

In this paper, I will concentrate on the representation of natural elements, such as mountains, rivers and vegetation to show how fundamental they have been in the mapping of territory, but also how diversely they have been depicted by different actors. European officers, Indian surveyors, Burmese foresters, Shan traders and Vietnamese administrators all have particular ways of drawing a map and describing a landscape. By analysing topographical and indigenous maps, I will try to



understand these different perceptions of a territory through its constitutive elements and question the integration of vernacular knowledge in European mapping.

**Oscar Kent-Egan (HPS, Cambridge)**

**19 November** Isaac Van Amburgh the lion tamer: spectacle, education and natural history in Britain, 1825–1872

In August 1838, an enigmatic American showman by the name of Isaac Van Amburgh arrived in London with a troupe of performing lions. He exhibited daring feats of control over these creatures and helped establish lion taming as a popular and profitable act in theatres and circuses. He toured Europe until 1845 and inspired numerous imitators. His shows were the first dedicated exclusively to lion taming and attracted various sections of society, ranging from members of the working classes to Queen Victoria. The question of how Van Amburgh tamed his lions sparked widespread discussion. He was secretive about his training methods and papers speculated on whether rational instruction, brute strength or special knowledge of animal behaviour explained his powers. This talk explores the marketing and press coverage of Van Amburgh's shows. It considers the complex imagery spun around his performances. Newspaper reports often claimed that the acts revealed social and scientific lessons. They were tied in with Lord Brougham's attempts to reform working class education and debates on behavioural studies of animals. Van Amburgh's show was not merely dismissed as a vulgar spectacle or violent entertainment. I argue that the press transformed it into an illustration of the improvability of nature and the value of practical, experiential knowledge of animals. These interpretations influenced the development of lion taming in the second half of the 19th century and help explain the persistence of the practice.

**Margot Lyautey (EHES, Paris/Tübingen)**

**26 November** Plant protection in France and Germany from the 1930s to the 1950s: the case of the Colorado potato beetle

In this paper, I aim at proposing a French-German history of the rise of chemical insecticides from the 1930s to the 1950s using the Colorado potato beetle as a case study. This particular insect was one of the most feared agricultural pests after World War I. Being such a big threat for food supply in France and Germany, especially during World War II, the potato beetle was considered as public enemy number one in agriculture. It was also one of the first agricultural pests fought at a European level through chemical means, and was contemporary to the advent of chemical pesticides. Originating from the USA, hence the name *Colorado*, the potato beetle infested Europe in the early 1920s, starting in Bordeaux's haven and then spreading year after year until the end of the 1950s. Furthermore, this insect had strong cultural implications throughout the 20th century. In World War II German occupation soldiers were nicknamed 'Potato Beetles' ('Doryphores') by the French population because they were invaders and were known to eat a lot of potatoes. After the war, the Colorado potato beetle was presented in East Germany in communist propaganda to be a biological weapon used by the USA, in order to sabotage socialist agriculture with insects supposedly brought on German territory using planes. Through a French-German history of the fight against the Colorado potato beetle, I will try to show what comparative history can bring to the history of agriculture, which is often studied inside national frames.

**AD HOC**

AD HOC (Association for the Discussion of the History of Chemistry) is a group dedicated to history of chemistry. While our main focus is historical, we also consider the philosophical, sociological, public and educational dimensions of chemistry. The group meets on **Mondays at 5pm in Seminar Room**

1. Coordinated by Karoliina Pulkkinen.

- 15 October**     **David Teplow (UCLA)**  
What is science? A view from a practising scientist
- 22 October**     **Agnes Bolinska (HPS, Cambridge)**  
Synthetic vs. analytic approaches to protein and DNA structure determination
- 12 November**   **Hasok Chang (HPS, Cambridge)**  
Is everything really made up of elementary particles?
- 26 November** *Cancelled*

### History of Medicine

Seminars are on **Tuesdays from 5.00 to 6.30pm in Seminar Room 1**. Tea and biscuits are available from 4.40pm. All welcome!

[Other History of Medicine events](#)

### Early Science and Medicine

Organised by Dániel Margócsy.

- 16 October**     **Oded Rabinovitch (Tel-Aviv University)**  
Writing the Scientific Revolution in Louis XIV's France
- 6 November**     **Jessica Hamel-Akré (HPS, Cambridge)**  
From angel food to vegetable diets: medicalizing the feminine appetite in the British 18th century
- 27 November**     **Peter Jones (King's College, Cambridge)**  
Missing friars: rethinking late medieval medicine

### History of Modern Medicine and Biology

Organised by Mary Brazelton and Nick Hopwood.

- 9 October**     **Bibia Pavard (Panthéon-Assas University, Paris)**  
'Living differently from now on': the utopia of abortion activism in 1970s France
- 23 October**     **Gareth Millward (University of Warwick)**  
'Since the introduction of the Sick Pay Scheme, sick absence has increased': sick pay, sick leave and sick notes in the nationalised industries c. 1948–1959
- 13 November**     **Marissa Mika (University College London)**  
Living archives and dying wards: ethical records preservation at the Uganda Cancer Institute

### Generation to Reproduction

Organised by Nick Hopwood and Dániel Margócsy.

- 30 October**     **Wendy Kline (Purdue University / University of Strathclyde)**  
Psychedelic birth: bodies, boundaries and consciousness in the 1970s

**20 November** *Cancelled*

## **CamPoS**

CamPoS (Cambridge Philosophy of Science) is a network of academics and students working in the philosophy of science in various parts of the University of Cambridge, including the Department of History and Philosophy of Science and the Faculty of Philosophy. The Wednesday afternoon seminar series features current research by CamPoS members as well as visitors to Cambridge and scholars based in nearby institutions. If you are interested in presenting in the series, please contact Matt Farr (mwef2). If you have any queries or suggestions for other activities that CamPoS could undertake, please contact Huw Price, Jeremy Butterfield or Anna Alexandrova.

Seminars are held on **Wednesdays, 1.00–2.30pm** in Seminar Room 2.

[Further details of the composition and activities of CamPoS](#)

**10 October**                      **Jonathan Cohen (University of California, San Diego)**  
Many Molyneux Questions

(Joint work with Mohan Matthen)

Molyneux's Question (MQ) concerns whether a newly sighted man would recognize/distinguish a sphere and a cube by vision, assuming he could previously do this by touch.

We argue that (MQ) splits into questions about (a) shared representations of space in different perceptual systems, and about (b) shared ways of constructing higher dimensional spatiotemporal features from information about lower dimensional ones, most of the technical difficulty centring on (b). So understood, MQ resists any monolithic answer: everything depends on the constraints faced by particular perceptual systems in extracting features of higher dimensionality from those of lower. Each individual question of this type is empirical and must be investigated separately.

We present several variations on MQ based on different levels of dimensional integration — some of these are familiar, some novel adaptations of problems known elsewhere, and some completely novel. Organizing these cases in this way is useful because it unifies a set of disparate questions about intermodal transfer that have held philosophical and psychological interest, suggests a new range of questions of the same type, sheds light on similarities and differences between members of the family, and allows us to formulate a much-augmented set of principles and questions concerning the intermodal transfer of spatiotemporal organization.

**17 October**                      **Rune Nyrup (Leverhulme Centre for the Future of Intelligence, Cambridge)**  
Explanations for medical artificial intelligence

(Joint work with Diana Robinson)

AI systems are currently being developed and deployed for a variety medical purposes. A common objection to this trend is that medical AI systems risk being 'black-boxes', unable to explain their decisions. How serious this objection is remains unclear. As some commentators point out, human doctors too are often unable to properly explain their decisions. In this paper, we seek to clarify this debate. We (i) analyse the reasons why explainability is important for medical AI, (ii) outline some of the features that make for good explanations in this context, and (iii) compare how well humans and AI systems are able to satisfy these. We conclude that while humans currently have the edge, recent developments in technical AI research may allow us to construct medical AI systems which are better explainers than humans.

**24 October**

**Karim Thébault (University of Bristol)**  
Leibniz, Mach and the C-Series

According to Carlo Rovelli the (undirected) time orderings of physical states should be given relationally via reference to internal clocks [1]. Internal clocks do not generically provide an always increasing (or decreasing) parameterization of physical states. This means that Rovelli's internal time proposal allows for violations of 'temporal monotonicity'. Alternative proposals that retain temporal monotonicity have recently been shown to lead to physically distinct models for quantum cosmology [2]. The status of temporal monotonicity is thus of potential empirical significance.

In this talk we will consider the status temporal monotonicity in a philosophical perspective with reference to three particular historical figures. First, we will examine the extent to which this aspect of time features in Leibniz's positive account of time, as reconstructed by Arthur [3]. Next, we will consider the relevance of some suggestive remarks from Mach's *Science of Mechanics* [4]. Finally, we will consider the extent to which temporal monotonicity is equivalent to McTaggart's C-series, as reconstructed by Farr [5].

We conclude by briefly considering the challenge to various forms of realism about temporal monotonicity posed by general relativity.

[1] Rovelli, C. (2002) *Phys. Rev. D* 65 124013.

[2] Gryb, S., & Thébault, K. P. (2018). *Physics Letters B* 784 324-329.

[3] Arthur, R. T. (1985). Leibniz's theory of time. In *The natural philosophy of Leibniz*, pp. 263–313. Springer.

[4] Mach, E. (2013). *The Science of Mechanics*. Cambridge University Press.

[5] Farr, M. *The C Theory of Time*. Unpublished draft.

**31 October**

**Karina Vold (Leverhulme Centre for the Future of Intelligence, Cambridge)**  
Reconciling the opposing effects of neurobiological evidence on criminal sentencing judgments

(Co-authored with Eyal Aharoni, Corey Allen, Jennifer Blumenthal-Barby and Gidon Felson)  
Legal theorists have characterized physical evidence of brain dysfunction as a double-edged sword, wherein the very quality that reduces the defendant's responsibility for his transgression could simultaneously increase motivations to punish him by virtue of his apparently increased dangerousness. However, empirical evidence of this pattern has been elusive, perhaps owing to a heavy reliance on singular measures that fail to distinguish between plural, often competing internal motivations for punishment. In this talk I will present a new study that employed a test of the theorized double-edge pattern using a novel approach designed to separate such motivations. This is the first study of its kind to quantitatively demonstrate the paradoxical effect of neuroscientific trial evidence and raises implications for how such evidence is presented and evaluated.

**7 November**

**Christoph Hoerl (University of Warwick)**  
Temporal binding and the idea of a 'sense of agency': a critical examination

Voluntary action gives rise to a temporal binding effect, in which the interval between intentional movements and their causal consequences is subjectively compressed. In the current psychological literature, temporal binding is widely conceived of as a measure of a 'sense of agency' involved in voluntary action. I provide an analysis of the explanatory framework that I take to be in play in existing accounts based on this idea. I raise two key problems for such accounts – an empirical and a conceptual one – and argue that the very idea of a dedicated 'sense of agency' rests on a confusion between two different issues. I then outline an alternative explanatory framework, which

instead construes temporal binding as a measure of a belief in causality. I show how such an alternative framework, too, can explain the results of studies in which temporal binding has been shown to be affected by factors that specifically impinge on participants' judgements about the extent to which they are themselves actively involved in bringing about the timed events.

**14 November**      **Ali Boyle (Trinity Hall, Cambridge)**  
Memory: what is it good for?

Increasingly, memory researchers are of the view that memory is not for remembering. That is, we do not have episodic memories (memories of personally experienced events) because being able to remember is itself beneficial, but because it confers some other advantage – most often, the ability to 'project' oneself into the future. This claim has been used to lend support to novel accounts of episodic memory's nature, and to motivate new evidential standards for its detection in animals. In this talk, I aim to show that the arguments for this claim are unsound, and offer a (qualified) defence of the view that remembering is the function of episodic memory.

**21 November**      **Katie Robertson (Philosophy, Cambridge/University of Birmingham)**  
Time-asymmetry in thermal physics

The second law of thermodynamics has a lot to answer for. Reichenbach claims it was responsible for the direction of time. Atkins claims that 'the second law is one of the all-time great laws of science, for it illuminates why anything – anything from the cooling of hot matter to the formulation of a thought – happens at all'. And Hawking claims it is a tautology.

In this talk, I discuss the different concepts of time-asymmetry in thermal physics and claim that the second law has less bite than the authors above suggest. Instead of an arrow of time, it is more appropriate to say, as Uffink suggests, that the second law describes the ravages of time. Instead of considering thermodynamics to be the source of the arrow of time, I claim that statistical mechanics is the theory we should focus on. By looking at a particular framework advocated by Zwanzig, Zeh and Wallace, I discuss how the time-asymmetry in statistical mechanics arises out of the underlying time-symmetric dynamics.

**28 November**      **Matt Farr (HPS, Cambridge)**  
The C theory of time

Does time have a direction? Intuitively, it does. After all, our experiences, our thoughts, even our scientific explanations of phenomena are time-directed; things evolve from earlier to later, and it would seem unnecessary and indeed odd to try to expunge such talk from our philosophical lexicon. Nevertheless, in this talk I will make the case for what I call the C theory of time: in short, the thesis that time does not have a direction. I will do so by making the theory as palatable as possible, and this will involve giving an account of why it is permissible and indeed useful to talk in time-directed terms, what role time-directed explanations play in science, and why neither of these should commit us to the claim that reality is fundamentally directed in time. On the positive side, I will make the case that the C theory's deflationism about the direction of time offers a superior account of time asymmetries in physics than rival time-direction-realist accounts.

## **HPS Workshop**

**Wednesdays, 5–6pm, weekly from 7 November**

Organised by Jules Skotnes-Brown, Eoin Carter, Peter Rees and Emilie Skulberg (History workshops); Katy Duncan, Céline Henne and Bobby Vos (Philosophy workshops)

HPS Workshop seeks to break the isolation of graduate research and encourage collaborative thinking by allowing students to present work in progress in a supportive seminar environment. The workshops will have alternate sessions focusing on Philosophy and History, but interdisciplinary presentations are always welcome. After each seminar, we will head to a local pub.

Students are invited to present on any aspect of their research that they are grappling with or desire feedback on, including:

- Unpacking complicated sources, concepts, or archives
- Presenting drafts of chapters, conference papers, or publications
- Proposing new ideas or strategies towards HPS research

The session is comprised of two parts: 20 minutes where the speaker outlines their work in progress (indicating areas that they would like feedback to be based upon) and 40 minutes of discussion. Students interested in presenting in a Philosophy workshop should contact Bobby Vos (bfmv2). Those interested in presenting in a History workshop can contact Peter Rees (pr381).

### **Aims and Methods of Histories of the Sciences**

**Mondays, 11.30am–1pm, weekly from 22 October (6 sessions)**

**Nick Jardine, with Geoffrey Lloyd, Hasok Chang, Raphael Scholl and Jeffrey Skopek**

These graduate seminars will consider aspects of the history, aims, methods and current problems of the history of science. The opening sessions will give an overview of the formation of history of science as a discipline and of the range of recent approaches. There will then be discussion of the educational and polemical uses of histories of the sciences by scientists; and debate about the problems of anachronism faced by historians of science. Subsequent meetings will address the the roles of sympathy and antipathy in historical biographies, and approaches to the history of cross-cultural communication in the sciences.

[\*Aims and Methods of Histories of the Sciences on Moodle\*](#)

### **Kinds of Intelligence Reading Group**

The Kinds of Intelligence Reading Group meets **biweekly on Thursdays during term time from 11am to 12noon in the Board Room**. Readings are focused on topics in cognitive science, biology and philosophy of mind, with topics including learning, memory, consciousness and artificial intelligence, understood from an interdisciplinary perspective. Participants from all disciplines are welcome. Organised by Marta Halina.

#### **25 October**

['Using Artificial Intelligence to Augment Human Intelligence'](#) (2017), led by Karina Vold

#### **8 November**

['Empiricism Without Magic: Transformational Abstraction in Deep Convolutional Neural Networks'](#) (2018), led by Marta Halina

#### **22 November**

['Deep Reinforcement Learning: A Brief Survey'](#) (2017), led by Matthew Crosby

#### **6 December**

['Deep Learning: A Critical Appraisal'](#) (2018), led by Henry Shevlin

### Twentieth Century Reading Group

The group discusses books and papers relating to the history and historiography of 20th-century science, technology and medicine, broadly construed. We meet on **Thursdays, 1pm to 2pm in the Board Room**. Organised by Mary Brazelton, Joseph Martin, Charu Singh and Richard Staley.

Everyone is welcome – feel free to bring along your lunch.

This term the first meeting of the Twentieth Century Reading Group will be a general one, aiming to bring together those who are working in the history and historiography of the sciences in the long 20th century, or who are interested in doing so for MPhil/Part III papers and dissertations. We aim to share interests and projects, get a sense of common concerns, and develop an agenda for the rest of the term based around participants' research interests. Our second meeting will discuss cartography, and later meetings will be determined by our collective interests.

**4**  
**October** Research and reading agendas

**18**  
**October** William Rankin, *After the Map: Cartography, Navigation, and the Transformation of Territory in the Twentieth Century* (Chicago/London: Univ. of Chicago Press, 2016)

### Philosophy and Psychiatry Reading Group

We meet on **Fridays, 11am–12noon in the Board Room** starting on 19 October. Organised by Riana Betzler and Joe Gough.

**19 October**

- Engel, G. L. (1977) The need for a new medical model: a challenge for biomedical science. *Science*, 196(4286), 129–136.

**26 October**

- Pilgrim, D. (2002). The biopsychosocial model in Anglo-American psychiatry: Past, present and future? *Journal of Mental Health*, 11(6), 585–594.
- Ghaemi, S. N. (2009). The rise and fall of the biopsychosocial model. *The British Journal of Psychiatry*, 195(1), 3–4.

**2 November**

- Kandel, E. R. (1998). A new intellectual framework for psychiatry. *American Journal of Psychiatry*, 155(4), 457–469.

**9 November**

- Murphy, D. (2010). Complex Mental Disorders: Representation, Stability, and Explanation. *European Journal of Analytic Philosophy*, 6(1), 28–42.

**16 November**

- Cooper, R. (2004). What is wrong with the DSM? *History of Psychiatry*, 15(1), 005–025.

**23 November**

- Insel, T., Cuthbert, B., Garvey, M. Heinssen, R., et al. (2010). Research Domain Criteria (RDoC): Toward a New Classification Framework for Research on Mental Disorders. *American Journal of Psychiatry*, 167(7), 748–750.
- Sullivan, J. (2016). Models of Mental Illness. In H. Kincaid, J. Simon, & M. Solomon (eds.), *The Routledge Companion to the Philosophy of Medicine*. New York: Routledge, 455–464.

### **30 November**

- Murphy, D. (2017). Can psychiatry refurnish the mind? *Philosophical Explorations*, 20(2), 160–174.

### **The Intersection of Gender, Race and Disability with Philosophy of Science**

This new reading group meets on **Mondays, 2–3pm, in the Board Room**. Organised by Azita Chellappoo (asc63).

### **8 October**

Allen, Anita L. (2009). The Poetry of Genetics: On the Pitfalls of Popularizing Science. *Hypatia* 24 (4): 247–257.

### **15 October**

McKinnon, Rachel (2015). Trans\*formative Experiences. *Res Philosophica* 92 (2): 419–440.

### **22 October**

Carlson, Licia (2016). Feminist Approaches to Cognitive Disability. *Philosophy Compass* 11 (10): 541–553.

### **29 October**

Shiva, V. (1987). The violence of reductionist science. *Alternatives*, 12 (2): 243–261.

### **5 November**

Boisselle, L. N. (2016). Decolonizing Science and Science Education in a Postcolonial Space (Trinidad, a Developing Caribbean Nation, Illustrates). *SAGE Open*, 6 (1): 2158244016635257.

### **12 November**

Gallegos, Sergio A. & Quinn, Carol V. A. (2017). Epistemic injustice and resistance in the Chiapas Highlands: the Zapatista Case. *Hypatia: A Journal of Feminist Philosophy* 32 (2): 247–262.

### **19 November**

Goldenberg, Maya J. (2013). How can Feminist Theories of Evidence Assist Clinical Reasoning and Decision-Making? *Social Epistemology* (TBA): 1–28.

### **26 November**

Roth, A. (2018). Experience as Evidence: Pregnancy Loss, Pragmatism, and Fetal Status. *Journal of Social Philosophy* 49 (2): 270–293.

### **Science and Literature Reading Group**

#### **AI Narratives**



This term the Science and Literature Reading Group joins forces with the [AI Narratives](#) research programme from the [Leverhulme Centre for the Future of Intelligence](#).

All are welcome to join in our wide-ranging and friendly discussions. The group is organised by Kanta Dihal and Melanie Keene.

For recaps, further readings, news, and other updates, please follow us on Twitter [@scilitreadgrp](#) or visit [our blog](#).

Readings will include:

- [Alan Turing, 'Computing Machinery and Intelligence' \(1950\)](#)
- [Nnedi Okorafor, 'Mother of Invention' \(2018\)](#)
- [Isaac Asimov, 'Sally' \(1953\)](#)
- ['Robots of Brixton' \(2011\)](#)

### **Philosophy of Medicine Reading Group**

This reading group is dedicated to new and old problems in philosophy of medicine. All are welcome.

Meetings take place on **Tuesdays, 1–2pm, in Seminar Room 1.**

Conveners: Tim Lewens, Stephen John, Jacob Stegenga, Anna Alexandrova

#### **9 October**

Schaffner, K. 2000. ['Medical informatics and the concept of disease'](#), *Theoretical Medicine and Bioethics* 21: 85–100.

#### **16 October**

Chin-ye, B. & Upshur, R. 2018. ['Clinical judgment in the era of big data and predictive analytics'](#), *Journal of Evaluation in Clinical Practice* 24: 638–645.

#### **23 October**

Mittelstadt et al. 2018. ['Is there a duty to participate in digital epidemiology?'](#), *Life Sciences, Society and Policy* 14:9.

#### **30 October**

Anderson, A. & Anderson, L.S. 2007. ['Machine ethics: creating an ethical intelligent agent'](#), *AI Magazine* 28: 15–26.

#### **6 November**

Coeckelbergh, M. 2015. ['Artificial agents, good care, modernity'](#), *Theoretical Medicine and Bioethics* 36: 265–277.

#### **13 November**

LaRosa, E. & Danks, D. 2018. ['Impacts on trust of healthcare AI'](#), *Proceedings of the 2018 AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society*.

Danks, 2016, ['Finding trust and understanding in autonomous technologies'](#), *The Conversation*, 30 December 2016.

## Philosophy and History of Physics Reading Group

The reading group meets on **Tuesdays, 4.30pm to 6.30pm in the Board Room**. Organised by Joe Martin (jdm205) and Matt Farr (mwef2).

This Michaelmas, we'll be exploring the theme Physics and Empiricism. Our ultimate goal is to discuss ongoing debates about the role of empirical data in advancing the forefront of physics, for which we'll use two recent books:

- Richard Dawid, ['String Theory and the Scientific Method'](#) (Cambridge, 2013)
- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018)

Dawid is currently available as an e-book through the UL, and the Whipple has ordered several copies of the Hossenfelder book, which it will keep on hold.

Before we dive into the contemporary debate, however, we'd like to develop a historical perspective on empirical philosophy as it relates to physics, and to that end, we'll revisit some classics.

### 9 October

For the first session, we'll read excerpts from William Whewell's ['Philosophy of the Inductive Sciences'](#), in particular book 1, chapter 2 (pp. 16–50) and book 3, chapter 8 (pp. 245–54).

### 16 October

W. V. O. Quine, ['Two Dogmas of Empiricism'](#), *The Philosophical Review* 60, no. 1 (1951): 20–43.

In addition, try to take a look at one (or both!) of the following:

- Carl G. Hempel, ['Problems and Changes in the Empiricist Criterion of Meaning'](#), *Revue Internationale de Philosophie* 4, no. 11 (1950): 41–63.
- Rudolf Carnap, ['The Elimination of Metaphysics through Logical Analysis of Language'](#), *Erkenntnis* 2 (1931): 219–41. (Trans. Arthur Pap). Or you might like to brave [the original German](#).

### 23 October

Guest paper by **Karim Thébault (University of Bristol)**:

On the Universality of Hawking Radiation  
Sean Gryb, Patricia Palacios and Karim Thébault

In all major derivations of Hawking radiation there is an exponential red-shift between the late time radiation detected and the black hole horizon, where the radiation originates. Unruh has estimated that the 'frequencies which are needed to explain the radiation produced even one second after a solar mass black hole forms, correspond to energies which are  $e^{10^5}$  times the energy of the whole universe'. What we take to be the essential lesson is that, absent a well-trusted theory of quantum gravity, any derivation of Hawking radiation as a phenomena that depends on near horizon physics must be supplemented with an argument for the insensitivity of the effect to short distance physics. That is, we need an answer to the question 'is Hawking radiation universal?' (Jacobson 2005, p.80). We will seek to answer Jacobson's question as follows. In Section 3, we will consider what is meant by a universality argument. To do this we will examine, in some detail, the structure and limits of more

familiar Wilsonian universality arguments found in the condensed matter context. Then in Section 4 we will consider three potential arguments for the universality of Hawking radiation that respectively draw upon: i) appeal to the universality of the Unruh effect combined with the equivalence principle; ii) the anomaly cancellation derivation; and iii) our ability to arbitrarily modify the dispersion relation of the scalar field used in the Hawking style derivation. Finally, Section 5 provides a detailed comparison between the two families of universality arguments. Perhaps unsurprisingly, we will conclude that none of the universality arguments for Hawking radiation that are available measure up to the standard set by Wilsonian universality arguments in condensed matter context physics. This largely negative conclusions offers a framework for future development.

### 30 October

- Richard Dawid, [\*String Theory and the Scientific Method\*](#) (Cambridge, 2013), Introduction and Chapter 1
- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018), Preface and Chapter 1

### 6 November

- Richard Dawid, [\*String Theory and the Scientific Method\*](#) (Cambridge, 2013), Chapters 2 and 3
- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018), Chapters 2 and 3

### 13 November

- Richard Dawid, [\*String Theory and the Scientific Method\*](#) (Cambridge, 2013), Chapter 5
- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018), Chapters 4 and 5

### 20 November

- Richard Dawid, [\*String Theory and the Scientific Method\*](#) (Cambridge, 2013), Chapters 6 and 7
- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018), Chapters 7 and 8

### 27 November

The readings for this week are:

- Sabine Hossenfelder, *Lost in Math: How Beauty Leads Physics Astray* (Basic, 2018), Chapter 10
- George Ellis and Joe Silk, '[Scientific Method: Defend the Integrity of Physics](#)', *Nature* 516, no. 7531 (2014): 321–23

In addition, the [proceedings of the 'Why Trust a Theory?' conference](#) at LMU Munich are online. We will discuss the final roundtable discussion, '[Has Physics changed? – and should it?](#)'.

### Early Science and Medicine Work-in-Progress

This is a termly forum for early career scholars to discuss their work-in-progress. We usually discuss two pieces of work at each session.

If you would like to participate, please email the organisers, Justin Rivest (jr723) and Carolin Schmitz.

Meetings are held in the Board Room at the start of each term:

- Tuesday 2 October, 5–8pm
- Tuesday 15 January, 5–8pm
- Tuesday 23 April, 5–8pm

Convened by Lauren Kassell, Silvia De Renzi (OU), Elaine Leong (MPI) and Dániel Margócsy.

### **Casebooks Therapy**

Organiser: Lauren Kassell

'Casebooks Therapy' is an informal reading group for those interested in using the [manuscripts of Simon Forman and Richard Napier](#) in their research.

The aim of the reading group is to improve the palaeography skills of those who attend, as well as to provide guidance about how to make sense of Forman's and Napier's records. No familiarity with early modern handwriting is necessary, and the group is open to all. Attendees are invited to suggest a particular page or case from the casebooks that they have trouble reading to work through collaboratively. Participants should bring a laptop.

If you are interested in attending, please email Lauren Kassell (ltk21).

### **Latin Therapy**

Latin Therapy is an informal reading group. All levels of Latin are very welcome. We meet on **Fridays, 3.00 to 4.00pm in the Board Room** starting on 12 October, to translate and discuss a text from the history of science, technology or medicine. This is an opportunity to brush up your Latin by regular practice, and if a primary source is giving you grief, we'd love to help you make sense of it over tea and biscuits!

To be added to the mailing list, or to suggest a text, please contact Arthur Harris.

### **Manchu Therapy**

The Manchu Therapy group meets **fortnightly on Tuesdays, from 3.00 to 4.00pm, in the Lodge** starting on Tuesday 9 October.

Manchu Therapy is an informal group for those who have an interest in the Manchu language, or who are working with Manchu documents, to learn more and improve their reading skills. (See this brief description of the [Manchus and the Manchu language](#).) Every other week, we will meet to read texts together. All are welcome.

For more information or to be added to the mailing list, please contact Mary Brazelton.

### **Greek Therapy**

Greek Therapy meets **every Wednesday during term time in the Board Room from 5.30 to 7pm**.

We are an informal group for beginners and for experienced readers of Greek seeking to brush up their skills – all levels are welcome. Sessions usually involve a basic grammar session at the beginning followed by reading through a more advanced text. This term we will be reading selections from Aristotle's *Nicomachean Ethics*.

For more information or to be added to the mailing list, please email Liz Smith.

# Lent Term 2019

## Departmental Seminars

Seminars are held on **Thursdays from 3.30 to 5pm in Seminar Room 2**. There is tea and coffee before the seminar at 3pm in Seminar Room 1, and there are refreshments afterwards at 5pm in Seminar Room 1.

Organised by Agnes Bolinska.

### ***Fourteenth Cambridge Wellcome Lecture in the History of Medicine***

**Marta Hanson (Johns Hopkins University)**

**17 January** Heaven and Earth are within one's grasp: the healer's body-as-technology in classical Chinese medicine  
*Tea at 3.30pm; lecture at 4pm*

Some 16th to 17th-century Chinese medical scholars used the phrase 'Understanding is within one's grasp' (*liaoran zaiwo* 瞭然在握) to emphasize how their readers could use 'hand mnemonics' (*zhangjue* 掌訣) to master the cosmic patterns relevant for medical care. These authors included instructions for potential healers to use their hands to think with, for example, by prognosticating based on seasonal cycles, predicting epidemic periods, and differentiating aberrant from normal pulses. To have something 'within one's grasp' (*zaiwo* 在握), in Chinese as well as in English, metaphorically meant to understand (*liaoran* 瞭然). Early modern Chinese healers instrumentalized their bodies in complex ways as diagnostic instruments and measuring units as well as time-keeping, mnemonic, and calculating devices. Understanding how classical Chinese medical texts recorded the healers' body-as-technology illuminates the range of knowledge about Heaven and Earth early modern healers were expected to use their hands as well as their minds to master. This lecture will use select examples of the healer's body-as-technology in classical Chinese medicine and suggest that the field of extended cognition within cognitive science offers some productive insights into this historical phenomenon.

**24 January** **Lina Jansson (University of Nottingham)**  
Newton's methodology meets Humean supervenience about laws of nature

Earman and Roberts [2005a,b] have argued for Humean supervenience about laws of nature based on an argument from epistemic access. In rough outline, their argument relies on the claim that if Humean supervenience is false, then we cannot have any empirical evidence in favour of taking a proposition to be a law of nature as opposed to merely accidentally true. I argue that Newton's methodology in the *Principia* provides a counterexample to their claim. In particular, I argue that the success or failure of chains of subjunctive reasoning is empirically accessible, and that this provides a way of gaining empirical evidence for or against a proposition being a law of nature (even under the assumption that Humean supervenience fails).

**31 January** **Ruth J. Salter (University of Reading)**  
Bathing, bloodletting and bed-rest in the high medieval monastery

Focusing on 12th-century English monastic communities, this paper considers three practical applications of healthcare undertaken within medieval monasteries. While the great monastic libraries would have contained medical manuscripts, the collection of such items varied from house to house and, more importantly, such materials would not have been accessible to the majority of the

cloistered community. The practices of bathing and bloodletting, and the allowance for bed-rest, however, would have been experienced and witnessed first-hand by many of the community. As such, these practical applications have the potential to offer us insight into the healthcare within the monastery, and into monastic understandings of health and the body.

Within this paper, the three practices will be taken in turn to consider their uses, and concerns about their abuses, in order to draw attention to the practicalities of claustral healthcare, and to pose questions regarding medical practices within the monastery. The questions raised by this paper are also key to my next proposed research project; a project that intends to consider the experiences, understandings and practicalities of monastic healthcare within the Anglo-Norman world.

**7 February**      **Leah McClimans (University of South Carolina)**  
Patient reported outcome measures are different

Since the 1970s epidemiological measures focusing on 'health-related quality of life' or simply 'quality of life' have figured increasingly as endpoints in clinical trials. Before the 1970s these measures were known, generically, as performance measures or health status measures. Relabelled as 'quality of life measures' they were first used in cancer trials. They were relabelled again in the early 2000s as 'patient-reported outcome measures' or PROMs, in their service to the FDA to support drug labelling claims. To the limited degree that the philosophical literature addresses these measures, it tends to associate them with two of the major theories of well-being: subjective well-being and capability approach to quality of life. My general argument in this paper is that philosophers ought to treat quality of life measures/PROMs as distinct from these theories of well-being with their own theoretical commitments, values and epistemic concerns.

The primary reason I will give for this argument is that we cannot separate the rise in popularity of quality of life/PROMs from their role in representing and amplifying patients' perspectives. The nature of this representation is due to a historical context in medicine that emphasizes patient autonomy and patient expertise. I will argue further that these measures are 'patient-centred' to the degree they are patient directed and inclusive. Finally, I will end by suggesting that the theory quality of life/PROMs needs is not an attribute theory or a theory of prudential value, but an epistemic theory that governs patient and others contributions to the construct.

**14 February**      **Pratik Chakrabarti (University of Manchester)**  
Past unlimited: the canal of Zabita Khan

This paper shows how deep time superseded various other forms of historical imaginations in India. In doing so, it critiques the conceptions of deep history, of the ways it overwrites other histories. It traces this process through the history of the canal of Zabita Khan. In the early 19th century, the British began one of their most ambitious irrigation projects in India. As British engineers started to dig the Doab canal, they realised that there existed an medieval system of canal networks. In the course of the excavations, ancient canals appeared indistinguishable from old riverbeds and geomorphological rivers and the lines between the monument and the terrain or the 'natural' and the 'historical' become imperceptible. Rivers moved, legends moved with them; dead riverbeds became canals, canals became natural channels of water and mythical rivers were traced in the landscape. In the process, the landscape, the legends, and the monuments became part of this colonial antiquarianism in which the history of a medieval canal was recounted as one of deep history.

**21 February**      **Hasok Chang (HPS, Cambridge)**  
Beyond correspondence: realism for realistic people

In this paper I lay down some groundwork for a pragmatist scientific realism, which will be fully consonant with actual scientific practices. Scientific realism demands that our best scientific theories should give really true descriptions of the world. Truth here is usually conceived in terms of a 'correspondence' between theory and reality – ultimate, metaphysical, and mind-independent reality. However, this idea is useless in practice because such reality is inaccessible to us, and the alleged correspondence only makes sense as a metaphor based on actual representational activities, in which both the 'model' and the 'target' are accessible. This metaphor appears to make literal sense only because we take part in the illusion of the 'ready-made world', according to which reality, independently of any conceptions we impose on it, already has well-defined parts and relations between the parts. Abandoning the illusory metaphor, I propose that realists should accept pragmatism in relation to 'primary truth', which does not consist in agreement with other things that we already know to be true. Primary truth is based on the 'operational coherence' of activities that we engage in; if some coherent activities rely on a certain proposition, then that proposition is true within the domain of those activities. Once we have some primarily true propositions, then correspondence to them defines the secondary truth of other propositions. However, the picture I propose is not a foundationalist one in the traditional sense: a given proposition may be true in a primary or a secondary way, or even both. 'Truth happens to an idea' (William James), and the manner of that happening depends on the contingent contexts of truth-making and truth-finding activities.

**28 February**      **Cyrus Mody (Maastricht University)**  
History of S&T need an oil bath: oil, scarcity and technoscience in the 1970s

Oil is everywhere in the history of science and technology, yet nowhere. In almost all of our disciplines' subfields one can find stray and often puzzling references to oil firms' contributions, yet few of these have been examined carefully, much less connected together. There is a long history of such 'oil spillovers', but they become more pronounced as one approaches the 1970s and the emerging technologies about which governments and investors were most optimistic in that era: nuclear (fission and fusion) and solar power, biotechnology, microelectronics, and scenario planning/resource forecasting. I argue that oil firms' investments in all of these technologies were a response to the resource scarcity debates of the early 1970s. That's perhaps unsurprising, but the involvement of 'oilmen' in the environmentalist organizations propelling that debate is not well known. Oil firms' motivations for intervening in environmental debates are generally assumed to be cynical, but I offer evidence that their calculations were more complex, at least before the collapse in the price of oil in the early 1980s.

**7 March**      **Sharon Crasnow (Norco College/Durham University)**  
V-Dem: measuring democracy

Indices of democracy (measurement of democracy) raise a variety of concerns. First, the latent concept of democracy needs to be clarified in order for coding to proceed and measures to be determined. Second, the multiple purposes for which we might seek measures of democracy suggest that multiple measures are needed, each differently suitable and dependent on the purposes for which they are needed. Questions of aggregation and disaggregation of the components of democracy – many of which differ among the different indices – depend on decisions about indicators of the concept 'democracy' and vary among indices. Third, the belief that measurement serves only as an intermediate step in the process of testing hypotheses limits discussion of the role of measurement in other aspects of knowledge production.

V-Dem (Varieties of Democracy), a project that began roughly 10 years ago, explicitly addresses many of these concerns through greater transparency about methodology and a fine-grained disaggregation of indicators of democracy. 'We provide a multidimensional and disaggregated dataset that reflects the complexity of the concept of democracy as a system of rule that goes



beyond the simple presence of elections. The V-Dem project distinguishes between five high-level principles of democracy: electoral, liberal, participatory, deliberative, and egalitarian, and collects data to measure these principles' ([V-Dem project website](#)). In this talk, I explore the claims made for V-Dem, the question of what it means to measure an abstract concept like democracy, and whether this project can tell us about the measurement of such concepts in the social sciences more generally.

**Charlotte Bigg (CNRS Paris)**

**14 March** The view from here, there and nowhere? Situating the observer in the planetarium and in the solar system

The projection planetarium has probably been the most important single device for communicating astronomy since the early 20th century. I look at the ways in which early planetariums encouraged the rehearsal by spectators of different spatial positions and bodily relationships with regards to (models of) the solar system. Acquiring a proper understanding of the solar system did not simply require participants to adopt 'the view from nowhere' but involved a spatial, physical and sensory journey through multiple viewpoints that often also rehearsed an idealised history of astronomy. Widely praised for its illusionistic rendering of the night skies, the modern planetarium was also a showcase for the precision technology of its maker Carl Zeiss, offering an experience simultaneously of simulated Nature, of astronomy and of technological mastery. Astronomy, the quintessential science of space and time, afforded in the planetarium an occasion for reflecting in broader ways on individuals' and humans' place in the modern world. Planetariums may be understood as materializing and promoting particular epistemological and pedagogical conceptions of the knowing subject; while they partook in the collective reflection on Nature, science and technology in modernity.

### **Twentieth Century Think Tank**

The Twentieth Century Think Tank offers broad coverage of 20th- and 21st-century topics in the history, philosophy and sociology of science, technology and medicine. The regular programme of papers and discussions takes place on Thursdays over lunch.

Think Tank meetings are held fortnightly on **Thursdays, 1–2pm in Seminar Room 2**. All welcome!

Organised by Mary Brazelton, Joseph Martin and Richard Staley.

**Mary Brazelton, Simon Schaffer, Charu Singh and Richard Staley (University of Cambridge)**

**17 January** Decolonising the history of science curriculum

Together with a notorious #ScienceMustFall video circulating on social media, #RhodesMustFall and Fees Must Fall protests in the University of Cape Town of 2015–16 have helped inspire a widespread movement calling for the decolonisation of education. What does this mean for science and the history of science? What should it mean for the curriculum and our courses? Here we discuss questions raised by the colonial history of science and the possibility of decolonisation, considering aims, strategies and experiences gained in teaching the history of science in Cambridge and elsewhere.

**Freddy Foks (History, Cambridge)**

**31 January** Constructing the field: power, persona and paper tools

How did inter-war social anthropologists go about trying to understand a 'whole society'? This paper draws on archival sources to reveal the research methods, political contexts and inter-personal

relations that contributed to the construction of 'the field' in East and Central Africa during the 1930s. By doing so, the paper contributes to a long-running discussion carried on by historians, philosophers and anthropologists about the nature of observation and understanding in the modern social sciences. The paper argues that knowledge produced 'in the field' led to the formation of a distinctive and authoritative scholarly persona in the British social sciences (the figure of the 'social anthropologist'). This persona was constituted by extending the lessons learnt at Bronislaw Malinowski's seminar at the LSE into the politically and socially uneven terrain of Britain's African colonies.

**14 February**      **Audra J. Wolfe (Independent Scholar)**  
A political history of apolitical science

The Cold War ended long ago, but the language of science and freedom continues to shape public debates over the relationship between science and politics in the United States. From the late 1940s through the late 1960s, the US foreign policy establishment saw a particularly American way of thinking about 'scientific freedom' as essential to winning the Cold War. In this presentation drawn from her new book, *Freedom's Laboratory*, historian Audra J. Wolfe will focus on a crucial moment of this story, the late 1950s, when US policymakers explicitly articulated what it meant to describe science as apolitical, objective and international, all in the name of the intensely political goal of Cold War supremacy. A particularly troubling part of this story involves the government's decision to funnel its propaganda efforts, whenever possible, through nongovernmental organizations of scientists. How should historians understand groups of non-state actors doing the state's work? Does the concept of 'transnational science' even make sense for the Cold War?

**28 February**      **Paolo Heywood (Social Anthropology, Cambridge)**  
Making difference: queer activism and anthropological theory

This paper examines two paradoxes. The first is ethnographic: queer activists in Bologna, Italy are concerned with defining themselves in opposition to fixed categories of identity and forms of politics based on them. In so doing however, they must engage with the risk that this endeavour of difference-making itself becomes as fixed and uniform as the identities to which it is opposed. The second paradox is theoretical: a range of anthropologists have recently argued that the relationship between theoretical and ethnographic material should be one of identity or correspondence. Yet such arguments, though highly conceptually stimulating, often reproduce in form what they refute in content: abstraction and metaphysical speculation, thus re-inscribing the difference between our concepts and our data. This paper simultaneously connects these respectively ethnographic and theoretical questions, whilst also deliberately holding them apart. The beginnings of an answer to both, it suggests, lie in an explicit attention to the boundaries and differences, rather than simply the isomorphisms, between theory and ethnography.

### **Coffee with Scientists**

The aim of this group is to explore and enhance the interface between HPS and science. Though many of us in HPS engage closely with science and scientists, we could benefit from more explicit discussions about the relationship between HPS and science itself, and from more opportunities for HPS-scholars and scientists to help each other's work.

We meet on **Fridays, 3.30–5.00pm in Seminar Room 2**. Further information and reading materials will be distributed through the email list of the group; please contact Hasok Chang (hc372) if you would like to be included on the list.

- 18 January**      **Sir Harry Bhadeshia (Dept of Materials Science & Metallurgy, Cambridge)**, hosted by Karoliina Pulkkinen  
The first bulk–nanostructured metal
- 22 February**      **Prof. Chang-Hoon Nam (DGIST, South Korea; Visiting scholar in HPS, Cambridge)**, hosted by Hasok Chang  
'Wise reasoning' in science education
- 1 March**      **Lucy Cheke (Department of Psychology, Cambridge) and Matthew Crosby (Department of Computing, Imperial College London)**, hosted by Marta Halina  
The animal-AI Olympics

### **Cabinet of Natural History**

This research seminar is concerned with all aspects of the history of natural history and the field and environmental sciences. The regular programme of papers and discussions takes place over lunch on Mondays. In addition, the Cabinet organises a beginning-of-year fungus hunt and occasional expeditions to sites of historical and natural historical interest, and holds an end-of-year garden party.

All seminars are held on **Mondays at 1pm in Seminar Room 1**. Please feel free to bring your lunch.

Organised by Laura Brassington (lb685).

- 21 January**      **Jack Ashby (Museum of Zoology, Cambridge)**  
Tour of the recently re-opened University Museum of Zoology and an insider's guide to natural history museums  
*Meet outside the Whale Hall (main entrance of the Museum of Zoology) by 1pm*

The Cabinet of Natural History is invited to a private, guided tour of the recently re-opened University Museum of Zoology, led by myself, the Museum Manager. As well as sharing stories from the history of the museum and highlights from its world-leading collection, the session will explore some of the insights used to develop a critical eye for visiting natural history galleries elsewhere. By using examples from the Museum, I will discuss the relationship between how natural history museums aim (successfully) to inspire wonder in the natural world, and the extent to which museums accurately represent nature in their displays.

Exhibits will range from dodos to whales, as well as giant wombat-relatives and four-tonne sloths. I will discuss the research of the Museum and seek to answer questions, such as the extent to which specimens in natural history museums are authentic and represent the species they are intended to exemplify and what kinds of human biases have been introduced and why. I will argue that museums are a product of their own history and the societies in which they are embedded.

Museums are not apolitical or value-free: if we know what to look for, we might spot evidence of speciesism, the patriarchy and colonialism when we next visit a museum gallery.

- 28 January**      **Genie Yoo (Princeton University)**  
*Advijsen*, old and new: the life span of VOC natural-historical information within the Dutch East Indies

In the last decades of the 18th century, VOC administrators in Ambon dug deep into their own provincial archive in Casteel Victoria to unearth bundles of natural-historical papers written almost a century earlier. Among these late-17th and early-18th century papers were reports and assessments – often labelled *advijns* – written by and for individual administrative officials who sought answers to

specific questions; in this case, questions pertaining to the controlled extirpation of plants in the Maluku islands. Georg Everhard Rumphius (1627–1702) was one among several other 17th-century administrators whose written assessments would come to inform administrative decisions almost a century later, in the last, twilight decades of the Company which witnessed heightened inter-imperial competition and a severe economic downturn that had far-reaching consequences in Company posts across the Indian Ocean and the South China Sea. This paper attempts to historicize how administrators gauged the life span of natural-historical information within this context and looks at VOC practices of recording and retrieving information on one island across time. How did officials' own practices of reading and interpreting the papered past inform their understanding of contemporary problems and solutions? How did they register a century's worth of time and practice in the papers of those whose practical urgencies differed from their own? Did they ever consider information to be outdated and how did they assess the risks of resuscitating old natural-historical methods for new use? This paper attempts to answer these broader questions while also reflecting on the power of the archive for historical actors whose own prognostications were based on fragments of mediated information from a wildly different past.

**4 February**      **Edwin Rose (HPS, Cambridge)**  
 Printing, publishing and circulating books across Joseph Banks's empire

The publication Joseph Banks (1743–1820) is remembered for is the *Florilegium*, a series of copperplates that represent the plants he and Daniel Solander (1733–1782) collected during the *Endeavour* voyage to the Pacific (1768–1771), which remained unpublished until the 1980s. However, from the early 1780s, Banks published and oversaw the production of several works concerning the botany of the West Indies, Japan, India, China, Africa and species cultivated in Kew Gardens.

This talk concentrates on two of Banks's books, *Reliquiæ Houstounianæ* (1781), on the plants of the West Indies, and *Icones Selectæ Plantarum* (1791), on the plants of Japan. Initially, I examine the processes employed to produce a work of natural history in the late 18th century. Banks's publications were privately printed, using the highest quality materials and most skilled craftsmen available in London. Secondly, I examine the distribution of these materials. Banks had a small number of copies printed that he circulated to a specific group within the Republic of Letters and to those undertaking fieldwork in Asia and the West Indies. An analysis of these publications from their inception to distribution gives a new understanding of the methods and incentives for producing and circulating a work of natural history in late 18th-century Britain.

**11 February**      **Sebastian Kroupa (HPS, Cambridge)**  
 Georg Joseph Kamel (1661–1706): natural knowledge in transit between the Philippines and Europe

When stationed in Manila at the turn of the 18th century, the Jesuit pharmacist Georg Joseph Kamel found himself engaged in encounters between European and local traditions of knowledge. Based on his local experience, he produced extensive treatises of Philippine flora, which were later printed in Europe. Focusing on the practices involved in Kamel's knowledge production, this paper will explore Kamel's strategies in translating Philippine nature from local to European contexts. I will open with an examination of Kamel's plant classification system, which reveals categories of knowledge inspired by Filipino indigenous traditions and shows entanglements between European science and local exigencies. However, upon arrival in Europe, these hybrid categories found little understanding among sedentary European naturalists and became lost in translation. Kamel was more successful in his attempts to transplant Philippine medicinal herbs. Through building associations with plants described by canonical authors of the Old World, Kamel sought to 'Galenise' Philippine medicinal plants – that is, to incorporate them into the Galenic medical tradition. In this manner, Kamel

endowed plants with clear theoretical foundations comprehensible to European experts and customers and paved the way for their deployment on both local and global scales and markets.

**18 February**      **Elena Romero-Passerin (University of St Andrews)**  
Students, tourists and farmers: the publics of botanic gardens in the 18th century

This talk will look at the visitors of publicly funded botanic gardens in Edinburgh, Florence and Pisa in the second half of the 18th century. Taken together, those three cities hosted five publicly funded botanic gardens. Botanic gardens were originally created to teach botany to university students. However, by the 18th century, the audience for botanic gardens in general had diversified. This paper will show the diversity of the publics of botanic gardens. Botany had become a popular hobby for the elite. Botanic gardens were recognised as important attractions for tourists going on their Grand Tour in Italy. Even the lower classes of society were now invited to wander around the gardens.

Only two of the gardens studied here were university gardens, two were managed by learned societies, and the last one belonged to a museum of natural history. Each of them had different target audiences and different rules about access. This paper will analyse the rules and testimonies about visitors of the gardens to understand what people wanted when they visited a botanic garden as well as what the institutions themselves wanted from their audience. Ultimately it will argue that the gardens' relationship to the public was an important part of what defines them as 'spaces of knowledge'.

**25 February**      **John Tweddle (Natural History Museum, London)**  
Building knowledge of the natural world: the historical and contemporary contributions of citizen science within the UK

Since the 19th century, volunteer communities of amateur-expert naturalists have played a central role in generating scientific understanding of the UK's natural environment, through observing and documenting the natural world. This long and illustrious tradition continues today, with much of our knowledge of the plant and animal species that occur in the UK deriving from the expertise and passion of these long-term networks of volunteer naturalists.

Set against this continuity, the first part of the 21st century has seen a rapid expansion of the broader field of citizen science. Driven by the emergence of digital technologies, pressing scientific need and rising public interest, citizen science has increased in profile and prominence to become a popular pastime and a distinct academic field. Each year, over a million people from across the UK contribute their time, expertise and enthusiasm to an ever growing diversity of research projects relating to the UK's wildlife and environment. For many contributors, this involvement represents their first direct experience of the process of science.

In this talk I will consider the changing landscape of citizen science and highlight some of the opportunities and challenges that this is presenting for both the field of science and the citizen scientists themselves.

**4 March**      **Anna Svensson (KTH Royal Institute of Technology, Stockholm)**  
The 'dye herbarium': capturing colour in botanical collections

There is an anomaly among the old herbaria in Uppsala. Tucked away on a lower shelf, a smaller collection yields unexpected contents: page after page present colourful skeins of silk and wool samples dyed from lichens. They are the colour samples of the Johannes P. Westring's printed dyer's manual, *Svenska Lafvarnas Färghistoria, eller Sättet att använda dem till färgning och annan*

*hushållsnytt* (Stockholm, 1805). What is this textile collection doing in the herbarium?

Pondering the relevance of dye-related collections and specimens to the history of botany brings the role of colour to the fore: colour, that fleeting quality of the plant that is soon lost from the preserved specimen. The question of how to capture colour is an old problem, reflected in early modern experiments with different ways of preserving and representing them, including painting specimens and making nature prints. The juxtaposition involved in what we might call the 'dye herbarium' is an opportunity for comparison that highlights shared challenges of working with plants as distinctly local and temporal organisms. Both are concerned with preserving particular elements of plants, which given their transience requires accurate labels and systematic procedures.

These observations are a venture into unfamiliar ground for me as a historian, as they have been informed by my own forays into natural dyeing. Methodologically, this has made me more aware of tensions within hierarchies of knowledge shaping my own interpretive frameworks, broadly informed by the material turn in the history of science.

**11 March**      **Patrick Anthony (Vanderbilt University)**  
Meeting nature halfway: Georg Forster, mining, and the aesthetics of artifice

In 1784, Georg Forster travelled through mining-landscapes in Germany's Harz and Ore Mountains. There he encountered 'a new and rejuvenated Nature'. Steeped in the teachings of the mining elites who guided him, Forster came to see water-, horse- and man-powered industry as a noble human effort to participate in the 'workshop of Nature'. His journals oscillate between hubris and humility: keenly aware of the awesome power of nature evidenced by mine collapses, Forster understood mining as a project of 'fitting', even 'completing', natural landscapes. Following Forster's journey, this talk elucidates the unfamiliar sentimental world of late-18th-century resource extraction, which beguiles two dichotomous historiographical traditions. While some scholars describe the extractive ethos of Forster's generation as a wholesale 'oeconomization of nature', another tradition identifies the turn of the 19th century, with its embrace of holism, as a wellspring of ecological thinking. Indeed, the curious nature of this moment is captured by the fact that so many romantic figures participated in Germany's mining industry – from poets like Johann Wolfgang von Goethe and Friedrich von Hardenberg ('Novalis') to savants like Henrik Steffens and Alexander von Humboldt. Forster, to whom Humboldt attributed his own holism, helps us dwell in the alterity of a worldview whereby human dominion *over* nature was to be 'shared *with* nature'. To that end, this talk grounds the lofty aesthetic meditations of Forster and his contemporaries in the 'working world' of mining, specifically in the hydraulic systems (dams, aqueducts, pumps and hydro-powered ore presses) that epitomized their philosophy of nature.

## AD HOC

AD HOC (Association for the Discussion of the History of Chemistry) is a group dedicated to the history of chemistry. While our main focus is historical, we also consider the philosophical, sociological, public and educational dimensions of chemistry. The group meets on **Mondays at 5pm in Seminar Room 1**. Coordinated by Hasok Chang, and funded by the Society for the History of Alchemy and Chemistry (SHAC).

**28 January**      **Karoliina Pulkkinen**  
Prediction and the periodic table

**18 February**      **Stephen Irish**  
The recognition of pseudomorphism: mineral chemistry as a historical science

**Agnes Bolinska and Hasok Chang**

- 11 March** Protein structure, X-ray crystallography, and pluralism (discussion of a paper by Sandra Mitchell and Angela Gronenborn)

**History of Medicine**

Seminars are on **Tuesdays from 5.00 to 6.30pm in Seminar Room 1**. Tea and biscuits are available from 4.40pm. All welcome!

**Early Science and Medicine**

Organised by Dániel Margócsy.

- 5 February** **Hannah Murphy (King's College London)**  
Surface thinking: skin in early modern medicine
- 19 February** **Anita Guerrini (Oregon State University)**  
Giants and national identity in early modern Europe
- 12 March** **Gabor Gelleri (University of Aberystwyth)**  
Ladies at sea: seasickness and the female body

**History of Modern Medicine and Biology**

Organised by Jenny Bangham, Mary Brazelton and Nick Hopwood.

- 22 January** **Salim Al-Gailani (HPS, Cambridge)**  
Folic acid between science, policy and the market: mainstreaming pre-conceptual vitamins in the 1980s and '90s
- 12 February** **Elizabeth Hallam (University of Oxford)**  
Anatomy museum on the move
- 26 February** **Mathias Grote (Humboldt University, Berlin)**  
Total knowledge? Handbooks and encyclopedism in the 20th-century life sciences

**Generation to Reproduction**

Organised by Nick Hopwood and Dániel Margócsy.

- 29 January** **Carolyn Schmitz (HPS, Cambridge)**  
From cures to courts of justice: medical encounters, the issue of generation, and social order in early modern Spain
- 5 March** **Sally Sheldon (University of Kent)**  
Changing understandings of the human fetus over five decades of legal abortion

**CamPoS**

CamPoS (Cambridge Philosophy of Science) is a network of academics and students working in the philosophy of science in various parts of the University of Cambridge, including the Department of History and Philosophy of Science and the Faculty of Philosophy. The Wednesday afternoon seminar series features current research by CamPoS members as well as visitors to Cambridge and scholars based in nearby institutions. If you are interested in presenting in the series, please contact Matt Farr

(mwef2). If you have any queries or suggestions for other activities that CamPoS could undertake, please contact Huw Price, Jeremy Butterfield or Anna Alexandrova.

Seminars are held on **Wednesdays, 1.00–2.30pm** in Seminar Room 2.

**23 January**      **Lina Jansson (University of Nottingham)**  
Explanatory directionality

In this talk I will argue that being careful about conditions of application provides a way of recovering explanatory directionality even in the presence of seemingly non-directed physical laws. I will show how this solution can be extended to some unexpected cases such as why we might take certain symmetries to explain conservation laws without taking conservation laws to explain the symmetries. Finally, I will consider whether this approach can be used in the case of, so-called, distinctively mathematical explanations of physical phenomena and argue that it can.

**30 January**      **Agnes Bolinska and Joseph Martin (HPS, Cambridge)**  
Negotiating history: contingency, canonicity and case studies

Objections to the use of historical case studies for philosophical ends fall into two categories. Methodological objections claim that historical accounts and their uses by philosophers are subject to various biases. We argue that these challenges are not special; they also apply to other forms of philosophical reasoning. Metaphysical objections, on the other hand, claim that historical case studies are intrinsically unsuited to serve as evidence for philosophical claims, even when carefully constructed and used, and so constitute a distinct class of challenge. We show that attention to what makes for a canonical case can address these problems. A case study is canonical with respect to a particular philosophical aim when the features relevant to that aim provide a reasonably complete causal account of the results of the historical process under investigation. We show how to establish canonicity by evaluating relevant contingencies using two prominent examples from the history of science: Eddington's confirmation of Einstein's theory of general relativity using his data from the 1919 eclipse and Watson and Crick's determination of the structure of DNA.

**6 February**      **James Nguyen (UCL)**  
Non-literal model interpretations

I suggest that the representational content of a scientific model is determined by a 'key' associated with it. A key allows the model's users to draw inferences about its target system. Crucially, these inferences need not be a matter of proposed similarity (structural or otherwise) to its target, but can allow for much more conventional associations between model features and features to be exported. Although this is a simple suggestion, it has broad ramifications. I point out that it allows us to re-conceptualise what we mean by 'idealisation': just because a model is a distortion of its target (in the relevant respects, and even essentially so), this does not entail that it is a misrepresentation, even with respect to the features it distorts. Rather, we should focus on interpreting the distorted aspects of such models non-literally. I investigate various ways of doing so, and demonstrate that for at least some idealised models, the result is that they are not misrepresentations after all, thereby diffusing various puzzles associated with their use in science.

**13 February**      **Peter Epstein (Philosophy, Cambridge)**  
Spatial experience: more than mere structure

According to a widely-held view of spatial experience known as structuralism, perceptual representations of spatial features are merely structurally isomorphic to abstract Euclidean geometry; they do not themselves comprise substantive Euclidean concepts. Building off of a distinction between geometrical and merely metaphorical spaces developed by Tim Maudlin, I show that this



structuralist view fails to explain the way in which we apply our Euclidean concepts to the spatial features we perceive. For, on the structuralist picture, the results of Euclidean geometry would be equally applicable in perception to any set of features isomorphic to Euclidean space. Colours are one such set of features: their variations along the dimensions of hue, saturation and brightness can be used to generate a (metaphorical) colour 'space' that maps onto the structure of Euclidean space. But we do not perceive colours, in spite of their being isomorphic to the features we reason about in Euclidean proof, as instances of Euclidean spatial relations – we do not see groups of objects as, say, square in virtue of their colour properties. It is only when we perceive the literal spatial features of objects – for example, when we see a chessboard as a square – that we take our geometrical concepts to be applicable. This shows that, unlike in the case of colour, the connection between our spatial experience and our geometrical reasoning is more than merely structural.

**20 February**      **Milena Ivanova (HPS, Cambridge)**  
Beauty, truth and understanding

In this paper I explore the epistemic justification of aesthetic values in scientific practice. It is well documented that scientists use aesthetic values in the evaluation and choice of theories they employ. Aesthetic values are not only regarded as leading to practically more convenient theories, but are very often taken to indicate the likelihood of a theory to be true. That is, often scientists place epistemic import on the aesthetic values of theories, deciding whether to commit to a theory in light of its beauty, especially in situation when the empirical data is not available to guide such decisions. The question then arises as to whether beauty can be trusted to be informing our epistemic attitudes towards scientific theories.

I outline some timely defences of the idea that beauty can be a guide to the truth and evaluate whether such defences have been successful. I turn to an alternative explanation for the relevance and importance of beauty in science. I argue that the employment of aesthetic values reflects our own intellectual capacities and provide heuristic guides to achieving understanding.

**27 February**      **Inkeri Koskinen (University of Helsinki)**  
Two types of success: epistemic exchange and societal impact in extra-academic research collaborations

My aim in this paper is to criticise an assumption that is sometimes made explicitly in science policy, but is usually implicit in the literatures on extra-academic expertise and the democratisation of science. According to this assumption, in research collaborations breaking the boundaries of science, success in creating the wanted societal impact requires successful epistemic exchange. I argue that this is not the case, and present a case study as a counterexample. It is possible to succeed in creating the wanted societal impact through extra-academic collaboration while failing in epistemic exchange.

I will begin with an overview of a large and complex development: the democratisation of science and the increase of research collaborations with extra-academic experts. After that, I introduce three measures of success relevant in this context, focusing on the latter two. Following Gibbons et al. (1994) I call the first measure scientific excellence as defined by disciplinary peers. The second is the created societal impact. Its importance is emphasised in virtually all of the literature on the democratisation of science and extra-academic expertise – though the understanding of the nature of societal impact varies greatly. The third measure is epistemic exchange. Researchers provide something to the extra-academic participants in a collaborative project, but also gain something: knowledge and skills from extra-academic experts, a better understanding of the values at stake from citizen participants, or new perspectives and useful criticism from stakeholders (e.g. Epstein 1995; Kitcher 2011; Wylie 2015). The creation of functioning trading zones (Galison 1997) or

boundary objects (Star & Griesemer 1989) can be seen as indicators of success in epistemic exchange.

It is often assumed in the literature that success in creating the wanted societal impact requires successful epistemic exchange. I have conducted a case study where I followed a two-year research collaboration between social scientists, journalists and artists. I use the case as a counterexample, and argue that it is possible to create the wanted societal impact through extra-academic collaboration, even if the participants fail in epistemic exchange.

**6 March**                      *Cancelled*

**13 March**                      **Maarten Steenhagen (Philosophy, Cambridge)**  
On a central puzzle in philosophical catoptrics

This paper will address one of the central puzzles of philosophical catoptrics, the philosophical study of the optical properties of mirrors. When you look in your bathroom mirror you see your own face. This seems obvious. However, it is also natural to say that what you see is a mirror image of your face. I will assess whether these claims are ultimately compatible. My main aim is to clarify our conception of the relation between mirror images and the reality of which they are images. This will contribute to our understanding of the optical properties of mirrors, but will also help refine currently dominant conceptions of images.

## **HPS Workshop**

### **Wednesdays, 5–6pm, weekly from 16 January**

Organised by Jules Skotnes-Brown, Eoin Carter, Peter Rees and Emilie Skulberg (History workshops); Katy Duncan, Céline Henne and Bobby Vos (Philosophy workshops)

HPS Workshop seeks to break the isolation of graduate research and encourage collaborative thinking by allowing students to present work in progress in a supportive seminar environment. The workshops will have alternate sessions focusing on Philosophy and History, but interdisciplinary presentations are always welcome. After each seminar, we will head to a local pub.

Students are invited to present on any aspect of their research that they are grappling with or desire feedback on, including:

- Unpacking complicated sources, concepts, or archives
- Presenting drafts of chapters, conference papers, or publications
- Proposing new ideas or strategies towards HPS research

The session is comprised of two parts: 20 minutes where the speaker outlines their work in progress (indicating areas that they would like feedback to be based upon) and 40 minutes of discussion. Students interested in presenting in a Philosophy workshop should contact Bobby Vos (bfmv2). Those interested in presenting in a History workshop can contact Peter Rees (pr381).

## **Images of Science**

### **Lent Term: Wednesdays, 11am–12.30pm, weekly from 23 January (6 sessions)**

**Sachiko Kusukawa, with Dániel Margócsy, Nick Jardine, Nick Hopwood and Boris Jardine**

These graduate seminars will focus on the role of images in the history of science. Images have been central to observational practices, fieldwork, professional identities and scientific arguments. They contribute to our historical understanding of the sciences within visual culture, material culture,

collecting and making, and the history of the book. Each seminar will be led by researchers who have worked extensively with images, and will be an opportunity to examine both primary and secondary sources.

- Session 1: Historiography (Sachiko Kusakawa)
- Session 2: Art and Science in the Dutch Golden Age (Dániel Margócsy)
- Session 3: Comely Frontispieces (Nick Jardine)
- Session 4: Media (Nick Hopwood)
- Session 5: Paper Instruments (Boris Jardine)
- Session 6: Student presentations/Round-table discussion (SK and others)

[Images of Science on Moodle](#)

### **Ideologies of Science**

**Lent Term: Mondays, 11.30am–1pm, weekly from 4 February (6 sessions)**

**Nick Jardine, with Anna Alexandrova, Mary Brazelton, Stephen John and Richard Staley**

These graduate seminars will explore rival conceptions of the nature of science and of its educational, social and political roles. Ideological conflicts considered will include: radical agnostic John Stuart Mill vs conservative Anglican William Whewell on the methods of natural science and its roles in education and politics; liberal Ernst Mach vs conservative Catholic Pierre Duhem on the history and prospects of the sciences; the Society for Freedom in Science vs socialist visions of the functions of science; the 'two cultures' controversy sparked off by C.P. Snow, champion of science education, and F.R. Leavis, champion of literary education; Philip Kitcher and his critics on science and democracy.

[Ideologies of Science on Moodle](#)

### **Kinds of Intelligence Reading Group**

The Kinds of Intelligence Reading Group meets **biweekly on Thursdays during term time from 11am to 12noon in the Board Room**. Readings are focused on topics in cognitive science, biology and philosophy of mind, with topics including learning, memory, consciousness and artificial intelligence, understood from an interdisciplinary perspective. Participants from all disciplines are welcome. Organised by Matthew Crosby, Henry Shevlin, Karina Vold, Lucy Cheke and Marta Halina.

#### **24 January**

['Designing for motivation, engagement and wellbeing in digital experience'](#) led by Karina Vold

#### **7 February**

['Priors in animal and artificial intelligence: where does learning begin?'](#) led by Matthew Crosby

#### **21 February**

['What kind of kind is intelligence?'](#) led by Henry Shevlin

#### **7 March**

['What can associative learning do for planning?'](#) led by Lucy Cheke

## Twentieth Century Reading Group

The group discusses books and papers relating to the history and historiography of 20th-century science, technology and medicine, broadly construed. We meet on **Thursdays, 1pm to 2pm in the Board Room**. Organised by Andrew Buskell and Richard Staley.

Everyone is welcome – feel free to bring along your lunch.

This term the Twentieth Century Reading Group focuses most of its meetings on the ontological turn in anthropology, featuring a visit from Martin Holbraad on 24 January and linking to presentations at the [Twentieth Century Think Tank](#) from Freddy Foks and Paolo Heywood. (On 7 February, we prepare for Audra Wolfe's visit to the Think Tank.)

Please contact Andrew Buskell (ab2086) if you are unable to access the readings.

### 24 January

#### The Ontological Turn, I. Introductions: A Cantabrigian Movement? (With Martin Holbraad)

Key readings:

- Paolo Heywood. 2018. 'The ontological turn: school or style?' In Matei Candea (ed.) *Schools and styles of anthropological theory*. London: Routledge.
- Martin Holbraad and Morten Axel Pedersen. 2017. *The Ontological Turn: An Anthropological Exposition*. Ch. 1 'The Ontological Turn in Anthropology'.

Further readings:

- Adam Reed. 2016. 'Postscript: Taking the Ontological Turn Personally'. In Bjørn Enge Bertelsen and Synnøve Bendixsen (eds.) *Critical Anthropological Engagements in Human Alterity and Difference*. Cham: Palgrave Macmillan, pp. 295–301.

### 7 February

#### Political Histories of the Apolitical

- Audra Wolfe. 2018. *Freedom's Laboratory: The Cold War Struggle for the Soul of Science*. Baltimore: Johns Hopkins University Press, chap. 5.

### 21 February

#### The Ontological Turn, II. Methods of the Ontological Turn (With Matei Candea)

Key readings:

- Amira Henare, Martin Holbraad, and Sari Wastell. 2007. 'Introduction: Thinking Through Things'. In Amira Henare, Martin Holbraad, and Sari Wastell (eds.) *Thinking Through Things: Theorising artefacts ethnographically*. London: Routledge, pp. 1–31.
- Matei Candea. 2017. 'We Have Never Been Pluralist'. In Pierre Charbonnier, Gildas Salmon, and Peter Skafish (eds.) *Comparative Metaphysics: Ontology After Anthropology*. London: Rowman & Littlefield.

### 7 March

#### The Ontological Turn, III. STS, Anthropology and Actor-Network Theory

Key readings:

- Anna Tsing. 2010. 'Worlding the Matsutake Diaspora: Or, Can Actor-Network Theory Experiment with Holism?' In Ton Otto and Nils Bubandt (eds.) *Experiments in Holism: Theory and Practice in Contemporary Anthropology*. Oxford: Wiley-Blackwell, pp. 47–66.
- Steve Woolgar and Javier Lezaun. 2013. 'The wrong bin bag: A turn to ontology in science and technology studies?' *Social Studies of Science*, 43(3): 321–340.

Further readings:

- Matei Candea. 2018. 'No actor, no network, no theory: Bruno Latour's anthropology of the moderns.' In Matei Candea (ed.) *Schools and Styles of Anthropological Theory*. London: Routledge, pp. 209–223.

### **Philosophy of Psychology and Psychiatry Reading Group**

We meet on **Fridays, 11am–12noon in the Board Room**. Organised by Riana Betzler and Joe Gough.

Our theme this term is 'Skills and Skill Acquisition'.

#### **18 January**

Ryle, G. (1946). Knowing how and knowing that. *Proceedings of the Aristotelian Society*, 46, 1–16.

#### **25 January**

Stanley, J. & Williamson, T. (2001). Knowing how. *Journal of Philosophy*, 98, 411–444.

#### **1 February**

Dreyfus, H. L., & Dreyfus, S. E. (1986). Chapter 1: Five Steps from Novice to Expert (pp. 16–51). *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*. New York: The Free Press.

#### **8 February**

Fridland, E. (2014). They've Lost Control: Reflections on Skill. *Synthese*, 91(12), 2729–2750.

#### **15 February**

Ackerman, P. L. (2007). New Developments in Understanding Skilled Performance. *Current Directions in Psychological Science*, 16(5), 235–239.

#### **22 February**

Dreyfus, H. L. & Dreyfus, S. E. (2004). The Ethical Implications of the Five-Stage Skill-Acquisition Model. *Bulletin of Science, Technology & Society*, 24(3), 251–264.

#### **1 March**

Annas, J. (1995). Virtue as a skill. *International Journal of Philosophical Studies*, 3(2), 227–43.

#### **8 March**

Carraccio, C. L., Benson, B. J., Nixon, L. J., & Derstine, P. L. (2008). From the Educational Bench to the Clinical bedside: Translating the Dreyfus Developmental Model to the Learning of Clinical Skills. *Academic Medicine*, 83(8), 761–767.

## **The Intersection of Gender, Race and Disability with Philosophy of Science**

This new reading group meets on **Mondays, 2–3pm, in the Board Room**. Organised by Azita Chellappoo (asc63).

### **Week 1 (21 January)**

Kidd, I. J., & Carel, H. (2018). Healthcare Practice, Epistemic Injustice, and Naturalism. *Royal Institute of Philosophy Supplements*, 84, 211–233.

### **Week 2 (28 January)**

Howard, A., & Borenstein, J. (2018). The ugly truth about ourselves and our robot creations: The problem of bias and social inequity. *Science and Engineering Ethics*, 24(5), 1521–1536.

### **Week 3 (4 February)**

Delgado, A. N. (2018). Science, Politics and the Production of Biological Knowledge: New Trends and Old Challenges. *Journal for General Philosophy of Science*, 49(3), 467–473.

### **Week 4 (11 February)**

Weasel, L. H. (2004). Feminist intersections in science: Race, gender and sexuality through the microscope. *Hypatia*, 19(1), 183–193.

### **Week 5 (18 February)**

Spencer, Q. (2015). Philosophy of race meets population genetics. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 52, 46–55.

### **Week 6 (25 February)**

Duster, T. (2015). A post-genomic surprise. The molecular reinscription of race in science, law and medicine. *The British Journal of Sociology*, 66(1), 1–27.

### **Week 7 (4 March)**

Almassi, B. (2010). Disability, functional diversity, and trans/feminism. *IJFAB: International Journal of Feminist Approaches to Bioethics*, 3(2), 126–149.

### **Week 8 (11 March)**

'Poetry is not a luxury: Poetry as Epistemic Resource' (To be circulated)

## **Philosophy and History of Physics Reading Group**

The reading group meets on **Tuesdays, 4.30pm to 6.30pm in the Board Room**. Organised by Joe Martin (jdm205) and Matt Farr (mwef2).

This term, we will address the theme of time, focusing on two books:

- **Weeks 1–4:** Jimena Canales, [\*The Physicist and the Philosopher: Einstein, Bergson, and the Debate that Changes Our Understanding of Time\*](#)
- **Weeks 5–8:** Craig Callendar, [\*What Makes Time Special?\*](#)

Both are available at the Whipple, and as e-books through iDiscover.

## **22 January**

Part 1 (pp. 3–52) of *The Physicist and the Philosopher*

## **29 January**

Chapters 4, 12 and 15 of *The Physicist and the Philosopher*

## **5 February**

Chapters 20, 24 and 25 of *The Physicist and the Philosopher*

## **12 February**

Part 4 and the postface of *The Physicist and the Philosopher*

## **19 February**

Chapters 1 & 2 of *What Makes Time Special?*

## **26 February**

Chapters 3, 4 & 5 of *What Makes Time Special?*

## **5 March**

Chapters 6, 7 & 8 of *What Makes Time Special?*

## **12 March**

Chapters 11, 12, 14 of *What Makes Time Special?*

## **Early Science and Medicine Work-in-Progress**

This is a termly forum for early career scholars to discuss their work-in-progress. We usually discuss two pieces of work at each session.

If you would like to participate, please email the organisers, Justin Rivest (jr723) and Carolin Schmitz (cs2003).

Meetings are held in the Board Room at the start of each term:

- Tuesday 2 October, 5–8pm
- Tuesday 15 January, 5–8pm
- Tuesday 23 April, 5–8pm (TBC)

Convened by Lauren Kassell, Silvia De Renzi (OU), Elaine Leong (MPI) and Dániel Margócsy.

## **Casebooks Therapy**

Organiser: Lauren Kassell

'Casebooks Therapy' is an informal reading group for those interested in using the [manuscripts of Simon Forman and Richard Napier](#) in their research.

The aim of the reading group is to improve the palaeography skills of those who attend, as well as to provide guidance about how to make sense of Forman's and Napier's records. No familiarity with early

modern handwriting is necessary, and the group is open to all. Attendees are invited to suggest a particular page or case from the casebooks that they have trouble reading to work through collaboratively. Participants should bring a laptop.

If you are interested in attending, please email Lauren Kassell (ltk21).

### **German Therapy**

German Therapy will be meeting weekly on **Fridays, 10–11am in the Board Room** starting on 22 February 2019 for the rest of Lent Term. Given enough interest, we will continue in the Easter Term (in a time slot to be confirmed). The focus will be on academic reading, combined with various other learning activities. Led by Carolin Schmitz, organised by Hasok Chang.

### **Latin Therapy**

Latin Therapy is an informal reading group. All levels of Latin are very welcome. We meet on **Fridays, 3.00 to 4.30pm in the Board Room**, to translate and discuss a text from the history of science, technology or medicine. This is an opportunity to brush up your Latin by regular practice, and if a primary source is giving you grief, we'd love to help you make sense of it over tea and biscuits!

To be added to the mailing list, or to suggest a text, please contact Arthur Harris.

### **Manchu Therapy**

The Manchu Therapy group meets **fortnightly on Tuesdays, from 10.00 to 11.00am, in the Board Room**. In Lent Term we meet on 22 January, 5 February, 19 February and 5 March.

Manchu Therapy is an informal group for those who have an interest in the Manchu language, or who are working with Manchu documents, to learn more and improve their reading skills. (See this brief description of the [Manchus and the Manchu language](#).) Every other week, we will meet to read texts together. All are welcome.

For more information or to be added to the mailing list, please contact Mary Brazelton.

### **Greek Therapy**

Greek Therapy meets **every Wednesday during term time in the Board Room from 5.30 to 7pm**.

We are an informal group for beginners and for experienced readers of Greek seeking to brush up their skills – all levels are welcome. Sessions usually involve a basic grammar session at the beginning followed by reading through a more advanced text. This term we will continue to read selections from Aristotle's *Nicomachean Ethics*.

For more information or to be added to the mailing list, please email Liz Smith.



# Easter Term 2019

## Departmental Seminars

Seminars are held on **Thursdays from 3.30 to 5pm in Seminar Room 2**. There is tea and coffee before the seminar at 3pm in Seminar Room 1, and there are refreshments afterwards at 5pm in Seminar Room 1.

Organised by Agnes Bolinska.

**25 April**     **Joseph Martin (HPS, Cambridge)**  
Rethinking industrial patronage of academic research in the early Cold War

Robert Maynard Hutchins, the University of Chicago's erstwhile chancellor, remarked in 1963: 'My view, based on long and painful observation, is that professors are somewhat worse than other people, and that scientists are somewhat worse than other professors.' This outlook motivated his efforts to insulate Chicago's scientists from industrial and military influence after World War II. Perhaps unexpectedly, Chicago's science faculty embraced Hutchins's plan to fund three ambitious new research institutes with numerous small subscriptions from industry, which Hutchins hoped would diffuse any one corporation's influence, seeing in the plan a way to protect their basic research ideal. The University of Michigan deployed a similar strategy to attract industry funding post-World War II. Michigan pursued industrial partnerships to support a laboratory that doubled as a living war memorial, enlisting businesses by appealing to corporate responsibility and suggesting a shared obligation to prevent government control over basic research. In each case, businesses contributed generously, often because they shared concerns about government monopoly on critical sectors of scientific research.

Historians have shown how some university-industry collaborations intertwined with the military-industrial-academic complex during the Cold War. MIT and Stanford, for instance, cultivated a cosy relationship with both industry and government, at times steering their research towards economic and military interests. Studies of this type of relationship have shaped current historical understanding of Cold War science. They suggest that individual institutions possessed little latitude to craft the relationships with industry they thought conducive to their institutional goals. A broader survey of institutions, and engagement with industry's own motives for supporting academic science, will situate existing understanding of academia-industry partnerships within a larger, knottier story about American science, technology, academia and industry. I present the Chicago and Michigan cases and describe how they motivate systematic re-evaluation of industrial patronage and its place in Cold War science.

**2 May**     **Darrell Rowbottom (Lingnan University)**  
The instrument of science

In my recently published monograph, *The Instrument of Science: Scientific Anti-Realism Revitalised* (Routledge), I develop and defend a position that I call 'cognitive instrumentalism'. This involves three core theses. First, science makes theoretical progress primarily when it furnishes us with more predictive power or understanding concerning observable things. Second, scientific discourse concerning unobservable things should only be taken literally in so far as it involves observable properties or analogies with observable things. Third, scientific claims about unobservable things are probably neither approximately true nor liable to change in such a way as to increase in truthlikeness. In this talk I will offer some arguments for each thesis, using examples from the history of science, and hence cognitive instrumentalism as a whole.

**9 May**      **Liam Kofi Bright (London School of Economics)**  
Du Bois' plan for scientific inquiry

Social epistemologists are increasingly coming to appreciate the importance of planning out a schedule of inquiry. How we decide what will be investigated, by who and on what schedule, are hugely influential on what we are capable of coming to know or reliably conclude. Presently one prominent social technology we have for allocating resources to projects of inquiry is the peer reviewed grant competition. In this talk I will review a number of critiques of this social technology, motivate an alternative grounded in the historical practice of W.E.B. Du Bois, and point to some relative advantages of the latter course. I end by calling for an integrated HPS project that might help us explore the social epistemic properties of Du Boisian scientific resource allocation.

**Twenty-Fourth Annual Hans Rausing Lecture**  
**Ruth Oldenziel (Eindhoven University of Technology)**  
**16 May**      Whose history of technology? Path dependencies, contested modernities, and pockets of persistence  
*McCrum Lecture Theatre, Bene't Street, at 4.30pm*

**6 June**      **Ofer Gal (University of Sydney)**  
From Kepler's optics to Spinoza's politics: Descartes' turn to the passions

In 1604 Kepler published his *Optical Part of Astronomy*, dramatically changing the role of optics and the fundamental concept of vision. Instead of a window through which visual rays informed reason about its surrounding objects, the eye became a screen on which light painted images of no inherent cognitive value. The naturalization of the senses required a corresponding naturalization of the mind, which Descartes attempted to offer with a theory of the passions. Kepler's optics turned sensations into purely causal effects, but the passions, indicators of benefit and damage to the individual, could provide them with meaning. This was a reversal of the traditional epistemological responsibilities of reason and the passions, and for Spinoza this demanded a reversal of their ethical and political roles. 'Desire is the very essence of man' he stated, and concluded: 'society can be established ... not by reason ... but by *threats*.'

### Twentieth Century Think Tank

The Twentieth Century Think Tank offers broad coverage of 20th- and 21st-century topics in the history, philosophy and sociology of science, technology and medicine. The regular programme of papers and discussions takes place on Thursdays over lunch.

Think Tank meetings are held on **Thursdays, 1–2pm in Seminar Room 2**. All welcome!

Organised by Mary Brazelton, Joseph Martin and Richard Staley.

**9 May**      **Ulrika Björkstén (Clare Hall; Sveriges Radio)**  
How wide and how tall? Genome Wide Association Studies in debate, from height to educational attainment and back

In April 2018 a study was published that claimed to have found evolutionary differences between human populations on different continents, with a larger selection in some populations for genes which could be linked to educational attainment (Racimo et al, *Genetics*, 208, 1565–1584). A few months later the same research group presented new results calling to question the very foundations of their own methodology (Jeremy Berg et al, BioRxiv, 23 June 2018).

In this paper based on a chapter in progress I trace how claims about evolutionary differences

between human populations in the selection of complex traits were constructed from 2010 to 2018, starting with the publication of GWAS-data linked to height by the so-called GIANT-consortium in 2010 (*Nature*, 467, 832–838). This article was considered a breakthrough in GWA-studies of complex human traits, finding hundreds of genetic markers correlating to height differences between individuals. Although the authors carefully noted that these genetic markers could not be used for predictive purposes, but should rather be regarded as indicators of genetic loci suitable for further exploration of functional genetic links to height, this set of markers was subsequently used in a study investigating evolutionary explanations to height differences between different European populations (*Nature Genetics*, 44, 1015–1019). The article published in 2012 was hence one of the first to claim to have found active selection for a complex human trait which differed between populations.

After these two initial articles were published, several years of similar research followed on ever larger datasets, as the GIANT consortium grew. With the increasing power of new datasets, including genetic data from hundreds of thousands of individuals, the number of genetic markers that could be statistically linked to height differences between individuals also grew. These results were in their turn used as starting points for new studies of the evolutionary background to differences in height between different populations, notably between southern and northern Europeans. Simultaneously, the success of the 2010-study had sparked a whole new field of research applying GWAS to an increasing number of human traits, including one as complex and highly culturally dependent as 'educational attainment'. In 2018 the field hence culminated in a study claiming to have found an evolutionary background to differences between human populations in the frequency of genetic markers that could be linked to educational attainment. The political implications of this claim sparked a controversy within the population genetics community (Novembre et al, *Genetics*, 208, 1351–1355) which led to a reconsideration of earlier results. Comparing the GWAS-results from one data set (GIANT) to another (UK Biobank) researchers found that the statistical link between certain genetic markers and height all but disappeared. The explanation given was that the GIANT-dataset suffered from unknown population stratification. This finding brought to question the methodology as such, since it uncovered a hitherto underestimated sensitivity to confounding factors.

Interestingly, the seminal article of the field, published in 2010, included a clear warning of using GWAS-results for prediction. Instead it stated that the genetic markers found should only be used as a starting point for further investigations of genetic functionality. This story hence unfolds as a case study of how scientific results take on new meanings as they leave their original setting and are interpreted by other researchers and implemented as starting points for new studies.

Another aspect of this case study is that the original datasets used had a very heavy bias of northern European genetic data. Recent studies have shown that genetic markers found by GWAS in one population cannot necessarily be transferred in a meaningful way to another population. This story hence also serves as a very concrete illustration of how a Eurocentric approach may skew scientific results.

**16 May (1.00–2.30pm)**      **Jenny Bangham (HPS, Cambridge), Marta Halina (HPS, Cambridge) and Ernesto Schwartz Marin (University of Exeter)**  
Thinking/researching/teaching race, genetics and intelligence in HPS and STS

This presentation will feature an open discussion exploring strategies and approaches towards thinking, researching and teaching these controversial topics of long-standing interest, with specialists in the history of genetics and anthropology, philosophy of intelligence, and the ethnography of biomedicine, forensics and citizen science.

**Coffee with Scientists**

The aim of this group is to explore and enhance the interface between HPS and science. Though many of us in HPS engage closely with science and scientists, we could benefit from more explicit discussions about the relationship between HPS and science itself, and from more opportunities for HPS-scholars and scientists to help each other's work.

We meet on **Fridays, 3.30–5.00pm in Seminar Room 2**. Further information and reading materials will be distributed through the email list of the group; please contact Hasok Chang (hc372) if you would like to be included on the list.

- 26 April**     **Hope Bretscher and Carmen Palacios Berraquero (Cavendish Laboratory, Cambridge)**, commentary by **Hannah Tomczyk (HPS, Cambridge)**  
Confined and free: excitons in 2D
- 10 May**     **Andrew Blake (Chairman, Samsung AI Centre, Cambridge)**, commentary by **Marta Halina (HPS, Cambridge)**  
Should we trust machines that see?
- 17 May**     **Jonathon Crystal (Program in Neuroscience, Indiana University Bloomington)**, hosted by **Marta Halina (HPS, Cambridge)**  
Future planning in nonhuman animals

### **Cabinet of Natural History**

This research seminar is concerned with all aspects of the history of natural history and the field and environmental sciences. The regular programme of papers and discussions takes place over lunch on Mondays. In addition, the Cabinet organises a beginning-of-year fungus hunt and occasional expeditions to sites of historical and natural historical interest, and holds an end-of-year garden party.

All seminars are held on **Mondays at 1pm in Seminar Room 1**. Please feel free to bring your lunch.

Organised by Laura Brassington (lb685).

- 29 April**     **Rebecca Earle (University of Warwick)**  
The politics of the potato in the 19th century

Over the 19th century potatoes became deeply embedded in arguments about the merits of capitalism. Political radicals condemned potatoes as a tool of exploitation. Advocates of free trade denounced them as an obstacle to economic rationality (Ireland being a prime example), and nutritionists investigated the deleterious effects of 'sluggish potato blood' on the urban proletariat's productivity. This talk sketches out the ways in which potatoes, and the everyday eating practices of working people, became entangled in debates about industrialisation and economic change in 19th-century Europe, to show how talking about potatoes provided a way to talk about capitalism.

- 6 May**     **Harriet Ritvo (MIT)**  
When is a cow not a cow?

When we think about animals in the 19th and 20th centuries, we notice two conflicting themes. Nineteenth-century breeders carefully policed the behaviour of their animals, in the interests of maintaining and enhancing quality. On the other hand, like many of their contemporaries, breeders were also attracted by quality of a very different, inconsistent kind: the Romantic cachet associated with wildness. The tension between these conflicting attractions produced divergent experiences for cattle and contrasting agendas for their proprietors; they also fuelled arguments in taxonomy about the degree of difference required for the recognition of separate species. These tensions continue to

shape and inspire efforts to restore lost landscapes and their vanished inhabitants. This talk will explore these themes, considering the relationship between the constraints of domestication and an increasing appreciation for wildness.

**13 May**      **Luz Fernanda Azuela (Universidad Nacional Autónoma de México)**  
Mexican science at the crossroads of French imperialism and Maximilian's empire (1864–1867)

Mexico, which had been an independent nation since 1821, suffered a colonial takeover by the French between 1864 and 1867. During these years Mexican science was torn between the colonialist aims of the Napoleon III and the Hapsburg Empire of Maximilian that the French Intervention had enabled. Maximilian agreed with local scholars on the urgent need for scientific institutions that would foster practical research to support material and cultural progress. His main objective was his régime's legitimation. Napoleon III, in contrast, wanted to boost France's presence in the Americas, and restrain the expansionism of the United States. Both agreed on the need to exploit Mexican resources by promoting natural history, geography, geology and medicine.

Local advances in those disciplines had been pursued for over three centuries, a tradition of research practically unknown in Europe. This led to a distorted appreciation of Mexican scholarship and qualifications, especially from the French Scientific Commission. Conversely, Maximilian engaged with the local scientific community on several projects, whose excellence contradicted the French evaluation of their expertise.

This paper aims to explain the dismissal of Mexican scientific capabilities by the invaders, even when local insight and scholarship proved to be instrumental in achieving the foreigners' goals. It will also point out the asymmetric nature of the conditions in which their collaboration took place, as an expression of imperial subjugation and eurocentrism. And it will echo Kapil Raj's statements on the reconfiguration of 'existing knowledges and specialized practices on both sides of the encounter'.

**Friday 17 May**      **Cabinet Excursion: John Clare Cottage, Swaddywell Pit and Helpston Village Church**

We will be visiting the village of Helpston, the home of poet, farm labourer and naturalist John Clare (1793–1864). We will begin by exploring his cottage and garden, before walking or driving about a mile to a local nature reserve, Swaddywell Pit. In addition to viewing its beautiful orchids and hearing about its geological history, we will learn about the site's connection with John Clare through his criticism of the enclosure movement. We will then receive a guided tour of the local medieval church, where Clare and his parents are buried. We will depart from the Department at 10am and return to Cambridge by 5pm. Cabinet will provide transport and lunch. Due to the capacity of the minibuses, places will be limited to 18 participants. RSVP to Laura Brassington (lb685).

**20 May**      **James Ryan (Victoria & Albert Museum/University of Exeter)**  
Men of eminence: science, photography and biography in the self-fashioning of Robert Hunt in 19th-century England

This paper considers the way the one Victorian man of science – Robert Hunt (1807–1887) – employed biography and the photographic portrait in his wider self-fashioning. A chemist, experimental researcher on light and photography, folklorist, geologist and writer, Hunt manoeuvred his way from humble beginnings in Devon and Cornwall to the relative heights of metropolitan science in mid-19th century London. He used his talents in chemistry, photography and writing, together with support from powerful patrons, to enter the world of science and social respectability. He is a good example of men who, through their talents, exertions and institutional networks, forged

careers in professional science in this period. Like many such men, Hunt lacked the gentlemanly background that had hitherto dominated the world of science. While Hunt's experiments in genres of science writing and his romantic geological interests have recently received scholarly attention, notably from historian of science Melanie Keane, the connections between his literary exertions and his experiments in visual culture have been little studied. This paper considers Robert Hunt's own photographic image and how he used the art of biography to write himself into the history of science. It pays particular attention to Hunt's work in one particular experimental photographic and biographical publication: photographic portraits of men of eminence in literature, science and art, with biographical memoirs, published in six volumes from 1863 to 1867, with photographs by Ernest Edwards, edited by Lovell Augustus Reeve (1814–1865) and E. Walford. In doing so the paper seeks to open up questions about the significance of the photographic portrait and biography in the cultural framing of scientific, gender and class identities in mid-19th century Britain.

**Friday 14 June**      **Garden Party, 1–3pm, Caius Fellows' Garden**  
**Nick Jardine (HPS, Cambridge)**  
 Fungi and feelings

Dramatic pronouncements have been made about the transformative impacts of fungi on human history. My focus will be on the forms of anachronism involved in claims about the foundational roles of the hallucinogenic Fly Agaric in world religions. I shall suggest that these claims are distorted by affective anachronism, inappropriate projection onto past agents of our own feelings, concerns and attitudes, this being a form of anachronism that is especially insidious given historians' need to understand and convey past experiences and values.

## AD HOC

AD HOC (Association for the Discussion of the History of Chemistry) is a group dedicated to the history of chemistry. While our main focus is historical, we also consider the philosophical, sociological, public and educational dimensions of chemistry. The group meets on **Mondays at 5pm in Seminar Room 1**. Coordinated by Hasok Chang, and funded by the Society for the History of Alchemy and Chemistry (SHAC).

**29 April**      **Robin Hendry (Durham University)**  
 Trusting atoms

**13 May**      **Joe Martin (HPS, Cambridge)**  
 Who made the makers? How materials science happened

**10 June**      **Special joint session with the [Science and Literature Reading Group](#), co-hosted by Melanie Keene and Hasok Chang**  
*The Periodic Table* by Primo Levi

## CamPoS

CamPoS (Cambridge Philosophy of Science) is a network of academics and students working in the philosophy of science in various parts of the University of Cambridge, including the Department of History and Philosophy of Science and the Faculty of Philosophy. The Wednesday afternoon seminar series features current research by CamPoS members as well as visitors to Cambridge and scholars based in nearby institutions. If you are interested in presenting in the series, please contact Matt Farr (mwef2). If you have any queries or suggestions for other activities that CamPoS could undertake, please contact Huw Price, Jeremy Butterfield or Anna Alexandrova.

Seminars are held on **Wednesdays, 1.00–2.30pm** in Seminar Room 2.

**Riana Betzler (HPS, Cambridge)**

**8 May** Follow the measures: conceptualization, measurement and interdisciplinarity in the science of empathy

Questions about how empathy should be conceptualized have long been a preoccupation of the field of empathy research. There are several definitions of empathy currently in circulation, as well as significant overlap between empathy and related concepts, such as sympathy, compassion, perspective-taking and mind-reading. This conceptual diversity is widely acknowledged and generally taken to be a problem that needs to be solved. In this paper, I argue that although there is vast and seemingly intractable disagreement about the meaning of 'empathy' in the psychological and cognitive neuroscience literature on it – as evidenced by stated definitions and conceptualizations – researchers working in the field seldom rely on those stated definitions and instead work within certain experimental 'paradigms' characterized by the use of established measures. Continuity and stability comes from the use of those established measures while progress comes from expansion upon those measures. Stated concepts respond flexibly and not always in step with the evolution of research methodologies. By following the measures rather than the stated definitions, we can get clearer on the target(s) of empirical empathy research. Towards the end of the talk, I consider how this 'follow the measures' approach fares when considering interdisciplinary research and the special problems interdisciplinarity might pose.

**Aaron Hanlon (Colby College)**

**15 May** Early modern history of data and epistemology of form

This talk examines several contexts in which the word 'data' entered the English language in the 17th century, and how the usage contexts of the term evolved over the course of the 17th and 18th centuries. A parallel discussion will consider the various forms of evidence privileged within and sometimes across different knowledge domains during the same historical period: Robert Hooke's illustrations, William Petty's interpolated figures, Joseph Priestley's charts, Margaret Cavendish's narrative structures, Abraham Cowley's verse, and others. The talk will address the question of why 'data' was used to describe some forms of evidence and not others as the concept took on life in early modern Britain, as well as why some forms of evidence carried more epistemological weight than others. This history of 'data' and forms of evidence will then (I hope!) provide a useful context for examining various ongoing assumptions about the credibility of some forms of evidence over others.

**Darrell Rowbottom (Lingnan University)**

**22 May** Does science progress?

**HPS Workshop**

**Wednesdays, 5–6pm**

Organised by Jules Skotnes-Brown, Eoin Carter, Peter Rees and Emilie Skulberg (History workshops); Katy Duncan, Céline Henne and Bobby Vos (Philosophy workshops)

HPS Workshop seeks to break the isolation of graduate research and encourage collaborative thinking by allowing students to present work in progress in a supportive seminar environment. The workshops will have alternate sessions focusing on Philosophy and History, but interdisciplinary presentations are always welcome. After each seminar, we will head to a local pub.

Students are invited to present on any aspect of their research that they are grappling with or desire feedback on, including:

- Unpacking complicated sources, concepts, or archives

- Presenting drafts of chapters, conference papers, or publications
- Proposing new ideas or strategies towards HPS research

The session is comprised of two parts: 20 minutes where the speaker outlines their work in progress (indicating areas that they would like feedback to be based upon) and 40 minutes of discussion. Students interested in presenting in a Philosophy workshop should contact Bobby Vos (bfmv2). Those interested in presenting in a History workshop can contact Peter Rees (pr381).

### **Kinds of Intelligence Reading Group**

The Kinds of Intelligence Reading Group meets **biweekly on Thursdays during term time from 11am to 12noon in the Board Room** (but note different time and room on 16 May). Readings are focused on topics in cognitive science, biology and philosophy of mind, with topics including learning, memory, consciousness and artificial intelligence, understood from an interdisciplinary perspective. Participants from all disciplines are welcome. Organised by Matthew Crosby, Henry Shevlin, Karina Vold, Lucy Cheke and Marta Halina.

#### **2 May**

'On the axiomatic foundations of the integrated information theory of consciousness' by Tim Bayne  
Led by Henry Shevlin (CFI, Cambridge) and Matthew Crosby (CFI, Imperial College London)

#### **16 May (1.00–2.30pm in Seminar Room 2)**

'Thinking/researching/teaching race, genetics and intelligence in HPS and STS'  
Led by Jenny Bangham (HPS, Cambridge), Marta Halina (HPS, Cambridge) and Ernesto Schwartz Marin (University of Exeter)  
Joint meeting with the [Twentieth Century Think Tank](#)

#### **30 May**

'Structural representations and models in cognitive science'  
Led by Patrick Butlin (King's College London)

#### **13 June**

'Comparative psychology of AI'  
Led by Cameron Buckner (University of Houston)

### **Twentieth Century Reading Group**

The group discusses books and papers relating to the history and historiography of 20th-century science, technology and medicine, broadly construed. We normally meet on **Thursdays, 1pm to 2pm in the Board Room**, but please note the different arrangements in Easter Term. Organised by Andrew Buskell and Richard Staley.

Everyone is welcome – feel free to bring along your lunch.

This term the Twentieth Century Reading Group continues its investigation of the ontological turn.

Readings are available electronically through the University Library; please contact Andrew Buskell (ab2086) or Richard Staley (raws1) if you are unable to access them.

#### **Thursday 25 April**

#### **The Ontological Turn IV: Annamarie Mol and Ontological Politics**



1–2pm in the Board Room

Key readings:

- Annemarie Mol. 1999. 'Ontological politics. A word and some questions.' *The Sociological Review*, 47(S1), 74–89.
- Annemarie Mol. 2002. [\*The Body Multiple\*](#). Durham, NC: Duke University Press. Ch. 3 'Coordination', pp. 53–85.

### Friday 3 May

#### The Ontological Turn V: Critiques of the Turn

12–1pm in Seminar Room 1 (note unusual time and place)

Key readings:

- David Greaber. 2015. 'Radical alterity is just another way of saying "reality": A reply to Eduardo Viveiros de Castro.' *HAU: Journal of Ethnographic Theory*, 5(2): 1–41.
- Lucas Bessire and David Bond. 2014. 'Ontological anthropology and the deference of critique.' *American Ethnologist*, 41(3): 440–456.

#### Philosophy of Psychology and Psychiatry Reading Group

We meet on **Fridays, 11am–12noon in the Board Room**. Organised by Riana Betzler and Joe Gough.

The theme for Easter Term is **Psychiatry in society: social psychiatry and 'anti-psychiatry'**.

### 26 April

- Frank, LK (1936). Society as the Patient. *American Journal of Sociology*, 42 (3), 335–344.
- Bettelheim, B (1952). Mental Health and Current Mores. *American Journal of Orthopsychiatry*, 22 (1), 76–88.
- *optional*: Staub, M (2011). Introduction. *Madness is Civilization: When the Diagnosis was Social, 1948–1960*. Chicago: University of Chicago Press.

### 3 May

- Szasz, T (1960). The myth of mental illness. *American Psychologist*, 15 (2), 113–118.

### 10 May

- Laing, RD (1964). What is Schizophrenia? *New Left Review*, 28: 65.

### 17 May

- Foucault, M (2006). Chapter 8. *Madness and Civilization: A History of Insanity in the Age of Reason*. New York: Random House.
- *optional*: Downing, L (2012). Chapter 2: Works: Madness and Medicine. *The Cambridge Introduction to Michel Foucault*. Cambridge: Cambridge University Press.

### 24 May

- Pickard, H. (2009). Mental Illness is Indeed a Myth. In Broome, M and Bortolotti, L (eds), *Psychiatry as Cognitive Neuroscience*. Oxford: Oxford University Press.

### 31 May

- Grinker R (1969). Emerging Concepts of Mental Illness and Models of Treatment: The Medical Point of View. *American Journal of Psychiatry*, 125 (7), 865–869.
- Albee, GW (1969). Emerging Concepts of Mental Illness and Models of Treatment: The Psychological Point of View. *American Journal of Psychiatry*, 125 (7), 870–876.

### 7 June

- Rosenhan, DL (1973). On Being Sane in Insane Places. *Science*, 179 (4070), 250–258.

### 14 June

- Double, DB (2006). Chapter 1: Critical Psychiatry: Challenging the Biomedical Dominance of Psychiatry. *Critical Psychiatry: The Limits of Madness*. New York: Palgrave Macmillan.
- *optional*: Double, DB (2006). Chapter 2: Historical Perspectives on Anti-Psychiatry. *Critical Psychiatry: The Limits of Madness*. New York: Palgrave Macmillan.

### The Intersection of Gender, Race and Disability with Philosophy of Science

This new reading group meets on **Mondays, 2–3pm, in the Board Room**. Organised by Azita Chellappoo (asc63).

### 6 May

Taylor, A. (2015). The discourse of pathology: Reproducing the able mind through bodies of color. *Hypatia*, 30(1), 181–198.

### 13 May

Patterson, A., & Satz, M. (2002). Genetic counseling and the disabled: Feminism examines the stance of those who stand at the gate. *Hypatia*, 17(3), 118–142.

### Science and Literature Reading Group

This term the Science and Literature Reading Group returns, taking as its focus texts first published a century ago in 1919. We meet at Darwin College on Monday evenings from 7.30–9pm. All are welcome to join in our friendly and wide-ranging discussions! Organised by Melanie Keene.

For recaps, further readings, news, and other updates, please follow us on Twitter [@scilitreadgrp](#) or visit [our blog](#).

We hope our planned term on AI Narratives will go ahead later in the year.

### 29 April: Gardens

- Amy Lowell, ['Impressionist Picture of a Garden'](#), and ['The Garden by Moonlight'](#)
- Saki, ['The Occasional Garden'](#)
- Virginia Woolf, [Kew Gardens](#)

### 13 May: Cities

- Murray Leinster, ['The Runaway Skyscraper'](#)
- Hope Mirrlees, [Paris: A Poem](#)

### 20 May: Health

- W.N.P. Barbellion, [The Journal of a Disappointed Man](#)
- Edith Wharton, ['Writing a War Story'](#)

### 3 June: Heaven and earth

- Sri Ananda Acharya, selections from [Snow-Birds](#)
- May Wedderburn Cannan, ['Stars'](#)
- Wallace Stevens, [The Curtains in the House of the Metaphysician](#)
- W.B. Yeats, [The Phases of the Moon](#)

### Special joint meeting with [AD HOC](#), 5pm, HPS, 10 June: *The Periodic Table*

- Primo Levi (1919–87), 'Potassium', 'Nitrogen', 'Carbon', from *The Periodic Table* (1975).
- Optional additional reading: 'Primo Levi by Philip Roth', Penguin edition introduction.

### Early Science and Medicine Work-in-Progress

This is a termly forum for early career scholars to discuss their work-in-progress. We usually discuss two pieces of work at each session.

If you would like to participate, please email the organisers, Justin Rivest (jr723) and Carolin Schmitz (cs2003).

Meetings are held in the Board Room at the start of each term. In Easter Term we will meet on Tuesday 23 April, 5–8pm.

Convened by Lauren Kassell, Silvia De Renzi (OU), Elaine Leong (MPI) and Dániel Margócsy.

### Casebooks Therapy

Organiser: Lauren Kassell

'Casebooks Therapy' is an informal reading group for those interested in using the [manuscripts of Simon Forman and Richard Napier](#) in their research.

The aim of the reading group is to improve the palaeography skills of those who attend, as well as to provide guidance about how to make sense of Forman's and Napier's records. No familiarity with early modern handwriting is necessary, and the group is open to all. Attendees are invited to suggest a particular page or case from the casebooks that they have trouble reading to work through collaboratively. Participants should bring a laptop.

If you are interested in attending, please email Lauren Kassell (ltk21).

### German Therapy

German Therapy will continue to meet weekly on **Fridays, 10–11am in the Board Room** during Easter Term. The focus will be on academic reading, combined with various other learning activities. Led by Carolin Schmitz and Katharina Bick, organised by Hasok Chang.

### **Latin Therapy**

Latin Therapy is an informal reading group. All levels of Latin are very welcome. We meet on **Fridays, 3.00 to 4.30pm in the Board Room**, to translate and discuss a text from the history of science, technology or medicine. This is an opportunity to brush up your Latin by regular practice, and if a primary source is giving you grief, we'd love to help you make sense of it over tea and biscuits!

To be added to the mailing list, or to suggest a text, please contact Arthur Harris.

### **Manchu Therapy**

The Manchu Therapy group meets **fortnightly on Tuesdays, from 10.00 to 11.00am, in the Board Room**. In Lent Term we meet on 22 January, 5 February, 19 February and 5 March.

Manchu Therapy is an informal group for those who have an interest in the Manchu language, or who are working with Manchu documents, to learn more and improve their reading skills. (See this brief description of the [Manchus and the Manchu language](#).) Every other week, we will meet to read texts together. All are welcome.

For more information or to be added to the mailing list, please contact Mary Brazelton.

### **Greek Therapy**

Greek Therapy meets **every Wednesday during term time in the Board Room from 5.30 to 7pm**.

We are an informal group for beginners and for experienced readers of Greek seeking to brush up their skills – all levels are welcome. Sessions usually involve a basic grammar session at the beginning followed by reading through a more advanced text. This term we will read selections from Plato's *Timaeus*.

For more information or to be added to the mailing list, please email Liz Smith.