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The Department

Introduction

It is no exaggeration to say that the 2019-2020 academic year has been the most disrupted in the Department’s history. In the Michaelmas and Lent terms, the Department faced what has been called the most extensive programme of industrial action in the history of UCU, with more than 20 days of strikes between November, February and March. UCU members were striking over continued disputes in the Universities Superannuation Scheme as well as perceived failure by universities to make significant improvements on pay, equality, casualisation and workloads.

Had the UCU action been the only disruptive element in the year it would have been noteworthy enough. However, it was quickly, and totally, eclipsed in magnitude by the emergence of the novel coronavirus disease, known at the time of writing as Covid-19, during the early months of 2020. Following a rapid spread through Europe and the UK during late February and March and a series of rapidly escalating national responses, the University decided on 18 March 2020 to suspend all non-essential work in University buildings, instruct staff to work from home where possible, and instructed colleges to send all students home. This was ahead of the UK Government’s decision on the 23rd of March to instigate a nation-wide lockdown that banned all non-essential travel and mandated strict “social distancing” to prevent uncontrolled spread of the disease. At the time of writing, lockdown has been eased, but a return to “normality” is not expected for the foreseeable future. The University of Cambridge was ahead of the curve in announcing that all teaching of larger groups in the 20-21 academic year would be delivered digitally rather than in person. What seemed highly pessimistic when announced in May has come in the interim to seem like rather prudent forethought.

This disruption began during the Easter vacation, and although there is no novel material taught during Easter term, disruption to exams for undergraduates and to dissertation writing for Part III and MPhil students is undeniable, compounded by earlier missed lectures due to UCU action. Changes to examination methods will be explained, where relevant, in the annual report. Although they have been able to access ebooks and journals where available, Part III and MPhil students were cut off from physical resources at the University such as libraries, and travel bans and lockdowns have made archival work, or other kinds of fieldwork, impossible.

Despite the awesome scale of the disruption to usual department life, the staff and students of the Department have risen to the occasion, salvaging what can be salvaged of the end of the year and continuing as many seminars, revision sessions and even study groups as possible online through video conferencing and collaboration software.

Although it can seem crass to talk of opportunities for the Department during the most serious global pandemic in a century, it is undeniable that the HPS Department has a virtually unrivalled set of expertise to make sense of and better understand the broader context of the pandemic and its impact on society. A virtual seminar titled Covid-19: Perspectives from HPS was arranged for the 23rd of April with perspectives on the pandemic from several members of the department was attended by over 100 people; numbers that are not possible to achieve in person given the room capacities in the HPS Department. This success inspired staff to hold the Departmental Seminars virtually during the Easter Term, with a series of ‘Virtual Conversations’ about the pandemic featuring views from members of the HPS Department as well as experts in HPS in other institutions around the world. These conversations were recorded and are available on the University’s media streaming site.

With the pandemic having devoured so much of our time and attention this year, it is easy to overlook the other, less earth-shaking news of the year, though no less important to record it for posterity. For a start, 2020 marks the year of Professor Jim Secord’s retirement from the HPS Department, and
although his presence in academic life will be missed, we are happy to report that he plans to have a role in department life for the foreseeable future. Professor Secord has been a towering pillar of the department’s academic community—as well as the international History of Science community—for a long time, having also served as the Head of Department. Due to the pandemic, the planned celebration Secord in Transit has been postponed until 2021. Correspondingly, the Department hired a new University Lecturer in the History of Life, Human and Earth Sciences, Dr Staffan Müller-Wille, who began in January 2020.

The Whipple Museum has a significant change of staff too, with Claire Wallace leaving her position as Collections Manager and Rosanna Evans leaving her position as Learning Coordinator; with Morgan Bell joining us to be the new collections manager and Allison Gilles joining to be the new Learning Coordinator. Claire and Rosanna were with the Museum for a number of years, and will be missed.

Finally some more light-hearted news. During the lockdown in the pandemic, Steve Kruse from the museum discovered that a duck had made a nest in the HPS courtyard during lockdown, and had hatched 12 ducklings. Although the expecting mother duck had selected a location that was well protected to hatch her ducklings, she clearly had not investigated to check whether there was enough food or else a way to exit the enclosed space. With some help from a local animal rescue charity, Steve and Toby Bryant made daily visits to feed and water the rapidly growing baby birds. Incredibly, none of the ducklings were lost, and they were released to the lakes in Milton Country Park once they were large enough to transport.
Congratulations

Mary Brazelton and Marta Halina were promoted to Senior Lecturers.

Carolin Schmitz’ book *Los enformos en la España barroca y el pluralismo medico: Espacios, estrategias y actitudes* (“The sick in Baroque Spain and medical pluralism: Spaces, strategies and attitudes”) won the XXII National Prize of University Publishers, in the category of Best Book in Health Sciences.

Mary Brazelton won the International Society for the History of East Asian Science, Technology and Medicines’ Zhu Kezhen award, the highest award given by the ISHEASTM for a published journal article of original scholarship in the history of science, technology and medicine in East Asia, for her article ‘Engineering Hearlth: Technologies of Immunization in China’s Wartime Hinterland, 1937-45’.

Mary was also the winner of the ‘Partnership’ category at the 2020 CUSU Student-Led Teaching Awards.

Victoria Ford (HMS MPhil) and Victor Parchment (PhD) both won awards in this year’s Vice-Chancellor’s Social Impact Awards.

Katrina Maydom was awarded the Emsley Prize for History by St Edmund’s College for her doctoral thesis on ‘Materia Medica from the Americas in British Medical Culture c. 1680-1730’. The prize is awarded by the college to the student achieving the highest mark or recommendation in History at a postgraduate level.

Grace Field won the Hanneke Jannsen Memorial Prize 2019 for her MPhil thesis, completed in HPS, entitled ‘Putting theory in its place: The relationship between universality arguments and empirical constraints’. The prize is awarded for the best Masters these in the history or philosophy of physics from the preceding two years.

Edwin Rose was awarded the Munby Fellowship at the University Library.

The website of the Darwin Correspondence Project, run by members of the University Library and HPS, was awarded the Ayrton Prize, awarded biannually by the British Society for the History of Science for ‘digital engagement in the history of science, technology and medicine’. The prize was shared with the Excavating AI project developed by the AI Now Institute.
## Staff and Affiliates

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<th>Administrative Staff</th>
<th>Alison Smith</th>
<th>Matt Farr</th>
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<td>Tamara Hug</td>
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<td>Rick Welch</td>
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Visitors and Students

**Visitors**

Christoffer Basse Eriksen  
Raine Daston  
Annelie Drakman  
Enno Fischer  
Sarah Hijmans  
Cao Hui  
Nina Jessen  
Jiayuan Liang  
Paul Sampson  
Chelsea Silva  
Miriam Solomon  
Anna Svensson  
Cynthia Tang  
Marco Tamborini  
Babu Thaliath  
Lisa Wijsen  
Adrian Yee

**PhD students**

Fiona Amery  
Claudia Baisini  
Lukas Beck  
Olesya Bondarenko  
Laura Brassington  
Gregory Bridgman  
Jules Brown

**Visitors**

Tyler Brunet  
Eoin Carter  
Rebecca Charbonneau  
Azita Chellappoo  
Charlotte Connelly  
Theo Di Castrì  
Katherine Duncan  
Rhianna Elliott  
Adrian Erasmus  
Grace Field  
Gianamar Giovannetti-Singh  
Angela Gui  
Sebastian De Haro  
Leore Joanne Green  
Meira Gold  
Henrique Gomes  
Arthur Harris  
David Harrison  
Celine Henne  
Yijie Huang  
Isaac Kean  
Miles Kempton  
Rory Kent  
Cristian Larroutur Philippi  
Zinhle Mncube  
Claire Oliver  
Erlend Owesen  
Daniel Ott

**PhD students**

Howard Parchment  
Jonathan Penn  
Peter Rees  
Edwin Rose  
Raphael Scholl  
Guy Sechrist  
Elizabeth Seger  
Reuben Shiels  
Anna Skulberg  
Hamed Tabatabai Ghomi  
Hannah Tomczyk  
Michael Thornton  
Ann-Sophie Thwaite  
Bobby Vos  
Oscar Westerblad  
Sheryl Wombell  
William Wong  
Joseph Wu  
Jia Yu

**HPSM MPhil students**

Owen Ayers  
Emily Berman  
Catherine Brooks  
Emma Clarke  
Florent Dumont  
Ahmad Elabbar  
Kassel Galaty
Mikaela Gerwin
Jeremy Gray
Ciara Halton-O'mahony
Joshua Hillman
Alan Huang
Peter Hunt
Supriya Kamath
Charlotte Laurence
Nathaniel Marcus
Katherine Moar
Hani Mohseni
Nitika Mummidivarapu
Hugo Murphy
Aloys Nahas
Matthew Nairne
Francis Newman
Miguel Ohnesorge
Jared Perlo
Jonathan Reid
Elmar Rollings
Jeffrey Rubel
Shruti Santosh
Bernhard Seidler
Amelia Urry
Xinyi Wen

Part III students

Ben Adams
Kimberley Alexander

Freya Casson
Victoria Clarkson
Molly Judd
Sean McMahon
Andrew Preston
Jess Sharpe
Olivia Vanstone

HMS MPhil Students

Anna Ahlsog
Meir Barth
Tyler Chan
Lotte Elton
Victoria Ford
Rachel Gerrard
Joshua Law
Linfield Rachel
Simone Martineau
Eana Meng
Ella Monkcom
Sula Ndousse-Fetter
Oyinkansola Ojo-Aromokudu
W Anna Sephton
Alexander Spalding
Scott Spivey
Karlijn Van Vlerken

Part II Students

Eleanor Aris
Jonathan Barnes
Aoibh Bourke
Jacob van Buren
Thomas Burke
Alexander Burns
Jing Si Chai
Anna Chalmers
Bavankanth Chandrasekaran
Candice Chow
Jonathan Cottrell-Mason
Grace Exley
Johanna Friese
Edward Harborne
Xinrui Hu
Rebecca Hunter
Abigail Jordan
Korbinian Kettnaker
Hannah Kossowska-Peck
Max Lay
Zak Lakota-Baldwin
Sarah Longworth
Isobel Marchant
Charlotte Morris
Rosamund Powell
Imogen Sandford
Shalom Savant
Timothy Sim
Rebecca Stoklund-Lee
Valentin Theil
Emily Webster
Charlotte Zemmel

Classics students taking Paper 1

Holly McNicholl
Katherin Wills
Rosa Watmough

PBS students taking HPS4

Callum Manchester
Sohum Patel
Emma ruin
Ellen Taylor Bower

Philosophy IB students taking Part II Paper 5

Tiger Chan
Jessye Clarke
Siobhan Corby-Tobin
Emma Crook
Maddie Dunbar
Faye Effard
Joe Folley
Ella Hopcroft
Jonathan Huang

Will Hunter
Atilla Kaplan
Gail Lazarus
Marianne Marcopoulou
Peter McLaughlin
Andrey Patsalides
Jeremy Pearson
George Pugh
Florence Robinson Adams
Jack Sherer-Clarke
Stormer Sidsel
Lauren Somers
Odette Straw
Joseph Turell
Nicolai Van der Steen
Hannah Virji
Freya Whiteside
Bojin Zhu

Phoebe Jarvis
Esme Norbury
Charlotte Palmer

BBS PEM

Gayatree Amalananda
Caija Addai
Helen Blake
Oliver Carr
Lucy Gardner
Anjali Jayasekera
Clare Jayasekera
Pippa Sayers
Winefride Scorey
Megan Taylor

PBS taking IB HoS

BBS Early Medicine

Olivia Cox
Hannah Lefroy
Emma McLoughlin
Lewis Waters

BBS Modern Medicine

Alex Gallagher
Rebecca Hayward

Esther Ademeno
Harry Armstrong
Isabelle Crampton
Arlette Olabi Doko
Anna Fernandez
Isabel Green
Jennifer Grint
Anna Kelly
Ruby Shu Qin Liu
Temitope Aduke Longe
Alexandra Pitts
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Staff and Students of the Department of History and Philosophy of Science, October 2019
**Comings and Goings**

*Claire Wallace*, who was Collections Manager at the Whipple Museum, left in November 2019 to become Curator of the Suffolk Regiment Museum. The position was filled by *Morgan Bell*, who took up the job in February 2020. *Rosanna Evans*, who was Learning Coordinator at the Whipple Museum, left in December 2019 to become Learning Associate: Schools and Teachers at the Fitzwilliam Museum. The position was filled by *Alison Giles*, who began in January 2020.

*Dawn Kingham* returned from her maternity leave in November 2019. *Francesco Mannu*, who had been covering her maternity leave in the library, left that position on her return. He then took on a position in the Department to help in the Whipple Museum, which came to an end in February 2020.

*Jenny Bangham*, Wellcome Trust Research Fellow, left in February 2020 to take up a position at Queen Mary University of London.

*Riana Betzler*, Teaching Associate and Research Associate, and MPhil and PhD alumni, left the Department in July 2020 to take up a position as McDonnell Postdoctoral Fellow at Washington University in St. Louis.

*Agnes Bolinska*, Teaching Associate and Research Associate, left the Department in August 2020 to take a new position at the University of South Carolina.

*Andreas Sommer* took up a position in the department as a Research Associate in January 2020.

*Jessica Lee* starts her position as a Research Assistant on Helen Curry’s project ‘From Collection to Cultivation: Historical Perspectives on Crop Diversity and Food Security’ in August 2020.

*Jonnie Penn*, PhD alumni, begins work as a Research Associate on Richard Staley’s Mellon Sawyer Project on Histories of Artificial Intelligence in July 2020. *Susie Gates* also joined this project as Events Coordinator, which she started in January 2020.

*Sam Robinson* starts as a Teaching Associate in September 2020.

*Sarah Dry* started in September 2019 as a Research Associate on Richard Staley’s Making Climate History project.

*Staffan Müller-Wille* starts as a new University Lecturer in the Department from January 2020.
Roles and Responsibilities

Departmental Positions

**Head of Department:** Tim Lewens

**Departmental Administrator:** Tamara Hug

**Director of Graduate Studies:** Nick Hopwood

**HPS MPhil Managers:** Agnes Bolinska & Salim Al-Gailani

**HMS MPhil Managers:** Lauren Kassell & Jacob Stegenga

**Part III Manager:** Riana Betzler

**Part II Manager:** Dániel Margócsy

**Part IB Manager:** Nick Hopwood (M), Simon Schaffer (L&E)

**Staff Development Officers:** Tim Lewens (academic), Tamara Hug (administrative)

**Dignity Officers:** Anna Alexandrova, Richard Staley, Staffan Müller-Wille

**College Liaison Officer:** Dániel Margócsy

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

**Graduate Training Officer:** Salim Al-Gailani

HPS Board and Degree Committee

**Chair of the HPS Board Committee:** Nick Hopwood (M), Simon Schaffer (L&E)

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

**Professors and Readers:** Anna Alexandrova, Nick Hopwood, Lauren Kassell, Tim Lewens, Dániel Margócsy, Simon Schaffer (Chair) Jim Secord, Richard Staley, Jacob Stegenga, Liba Taub

**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:** Angela Breitenbach, Emma Spary

**Co-options:** Mary Brazelton, Stephen John

**Elected Members:** Jenny Bangham, Rune Nyrup

**Philosophy Faculty Board Representative:** Stephen John

Examiners

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

**Senior Examiner:** Matt Farr

**Examiners:** Salim Al-Gailani, Emma Perkins, Simon Schaffer, Anna Alexandrova, Andrew Buskell
NST Part II History and Philosophy of Science including BBS Philosophy and Ethics of Medicine

**Senior Examiners**: Staffan Müller-Wille

**External Examiner**: Prof Simon Werrett (UCL)

**Examiners**: Agnes Bolinska, Marta Halina, Daniel Margócsy, Jim Secord, Leah Astbury, Sachiko Kusukawa, Tim Lewens, Jacob Stegenga

MPhil/Part III in History and Philosophy of Science and Medicine

**Senior Examiner**: Mary Augusta Brazelton

**External Examiner**: Dr Chiara Ambrosio (UCL)

**Examiners**: Riana Betzler, Salim Al-Gailani, Agnes Bolinska, Nick Hopwood, Matt Farr, Jacob Stegenga

MPhil in Health Medicine and Society

**Senior Examiner**: Anna Alexandrova

**External Examiner**: Dr Andrew Webster (UCL)

**Examiners**: Darin Weinberg, Sian Lazar, Natalie Kaoukji, Tim Lewens
## Prizes, Projects and Honours

### Student Prizes

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<tr>
<th>Prize Type</th>
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<tr>
<td>Jacob Bronowski Prize</td>
<td>Highest Part II Exam Mark</td>
<td>Johanna Friege and Abigail Jordan</td>
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<td>Bronowski Prize: Best Performance in the First Half of the HPS Part III Course</td>
<td>Kim Alexander</td>
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<td>Frances Willmoth Prize</td>
<td>Highest Part II Dissertation Mark</td>
<td>Johanna Friege and Charlotte Zemmel</td>
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<td>Lipton Prize: Best Overall Performance on the HPS Part III Course</td>
<td>Jess Sharpe</td>
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<td>Redhead Prize</td>
<td>Best Performance in the Essay Component of the HPSM MPhil</td>
<td>Hugo Murphy</td>
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<td>Benyamin Habib Prize: Best Performance in the First Half of the HMS MPhil Course</td>
<td>Rachel Gerrard</td>
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<td>Anita McConnel Prize</td>
<td>Best Piece of Work on an Object in the Whipple Museum</td>
<td>Francis Newman, for “Indigenous, authentic, obsolete? “Universal” equinoctial ring dials in India during the late 19th century.”</td>
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<td>Forrester Prize</td>
<td>Best Performance in the Dissertation in the HMS MPhil</td>
<td>Yisha Barth, for “Bio-divergent Identity Therapy: Habilitating from the Biographical Disruption of Diagnosis in Sci-Fi Fantasy Culture”</td>
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Seminars and Special Lectures

Research Seminars

Departmental Seminar organised by Agnes Bolinska

Twentieth Century Think Tank organised by Mary Brazelton and Richard Staley

Coffee With Scientists organised by Anna Alexandrova

Cabinet of Natural History organised by Jules Skotnes-Brown

AD HOC organised by Hasok Chang

History of Medicine Organised by Lauren Kassell, Dániel Margócsy, Jenny Bangham, Nick Hopwood and Mary Brazelton

CamPoS organised by Matt Farr

The Dialectic organised by Bobby Vos

Graduate Seminars

Aims and Methods of Histories of the Sciences organised by Nick Jardine

Science in Print organised by Jack Dixon

Reading Groups

Kinds of Intelligence Reading Group organised by Henry Shevlin

Twentieth Century Reading Group organised by Mary Brazelton, Josh Nall, and Richard Staley

Calculating People organised by Anna Alexandrova and Christopher Clarke

Social Epistemology of Science Reading Group organised by Olesya Bondarenko and Lukas Beck

Power and Identity in Philosophy of Science organised by Azita Chellappoo

Joint sessions of Philosophy of Psychology and Psychiatry Reading Group and Philosophy of Medicine Reading Group organised by Riana Betzler and Sahanika Ratnayake

Philosophy and History of Physics Reading Group organised by Jeremy Butterfield, Matt Farr and Bryan Roberts

Early Science and Medicine Work In Progress organised by Lauren Kassell, Silvia de Renzi and Dániel Margócsy

Language Groups

Latin Therapy organised by Arthur Harris

Manchu Therapy organised by Mary Brazelton

Greek Therapy organised by Liz Smith

The Fifteenth Cambridge Wellcome Lecture in the History of Medicine was given on Thursday 13th February 2020 by Professor Sarah Richardson, with the title The maternal imprint: gender, heredity and the biosocial body

The Hans Rausing Lecture in the History of Technology was cancelled in the 2019-2020 year owing to the ongoing COVID-19 Pandemic.
## Students

### Student Numbers

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### Examination Results

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Graduate Degrees Awarded

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Part II Essay and Dissertation Titles

Primary Source Essays

Reichenbach, The Direction of Time

Do we have knowledge of the past?

To what extent can we accept the reductionist view of time direction given by Reichenbach?

Reichenbach's philosophy of the direction of time and how it influences how we should interpret our subjective experience of time

A display of Reichenbach's principle of common cause as a good method for conducting investigations in the historical sciences

In what sense does Reichenbach think that time does not have a direction?

What does it mean for time in classical mechanics to be 'ordered but not directed'?

Does Reichenbach achieve thermodynamic reduction of his common cause principle?

Cancer Drugs Fund

How the evolutionary biology of cancer poses problems for the Cancer Drugs Fund

Can the creation of the Cancer Drugs Fund be ethically or politically justified?

Moving from an asymmetric arms race to a mutually hurting stalemate: incorporating the Cancer Drugs Fund within a model of conflict

Does public fear of cancer justify the existence of the Cancer Drugs Fund?

The Cancer Drugs Fund and informal carers

The Cancer Drugs Fund and Welsh devolution

The War on Cancer and risk management in the CDF

Issues regarding informed consent in the implementation of the Cancer Drugs Fund

The rule of rescue: a moral debate between empathy and cost-effectiveness

A conditional defence of the Cancer Drugs Fund

A consideration in determining whether NICE's preference for RWE in the new CDF is justifiable: dependence of strength of evidence on specific goals

Responsibility-sensitive health care and the Cancer Drugs Fund: an argument against onco-exceptionalism

Regulation as innovation policy: NICE to the public or to big pharma?

Discrepancies between nominal, descriptive and normative accounts of the Cancer Drugs Fund

Standard QALY maximisation and analysis of its exceptions within the CDF

Is the Cancer Drugs Fund fair?

"Why not a COPD drugs fund? Disease classification and policy justification

Can the existence of the Cancer Drugs Fund be justified on the grounds of accountability for reasonableness?

A positive reform or a policy error? Reasons why the CDF needs RWE on top of RCT for cancer drugs regulation

Ehrlich, The Population Bomb

How do Paul Ehrlich’s views in The Population Bomb relate to the contemporary feminist discourse?

Paul Ehrlich's The Population Bomb: the bomb metaphor and the politicisation of the environmental movement in the nuclear age
India and *The Population Bomb*: an investigation into Ehrlich's use of India

Human rights in *The Population Bomb*

*The Population Bomb*: a collaboration of publisher and author

*The Population Bomb* and the struggle for reproductive rights

An analysis of Paul Ehrlich's self-representation as a 'scientist' in *The Population Bomb* (1968)

Feminist responses to the Population Bomb in the US, 1968–78

Paul Ehrlich, scientific expertise and the media: why did *The Population Bomb* become a bestseller?

From 'one stinking hot night in Delhi' to the destruction of mankind: India's role in *The Population Bomb*

*The Population Bomb* 'defused': critiques of Paul Ehrlich across the political spectrum

Wilderness, conservation and Malthusianism: the Sierra Club and Paul Ehrlich's *The Population Bomb*

American apocalypse: Cold War narratives in the scenarios of *The Population Bomb*

**The Stanford School**

Nancy Cartwright's *The Dappled World*: the limits of induction and the importance of scientific realism

Taking home truths seriously: a critique of Hacking's entity realism

Does Hacking see black holes?

Scientific realism and Nancy Cartwright's *Dappled World*

A response to Cartwright on supervenience in *The Dappled World*

"Shifting the burden of proof: fundamentalism versus metaphysical pluralism

Flaws in Cartwright's dappled world argument: reasons why the laws of physics should still be believed as universal

**Discovery and Visual Culture: the Nova Reperta of Johannes Stradanus**

Taking scholarship out of the study: the importance of severing knowledge from solitude in the *Nova Reperta*

How does Johannes Stradanus' presentation of America reflect religious fears of the New World?

Stradanus: a Florentine dream

"The centrality of religion in Stradanus' Astrolabe print in *Nova Reperta*

Printing propaganda: the interconnected roles of technology and patronage in the Medici court

**Franz Boas’ The Mind of Primitive Man**

Great minds and social animals: Galton, Cattell and Boas and the limits of hereditary explanations of intellect

How can the work of Noah Carl be compared to that of Franz Boas's *The Mind of Primitive Man*?

Towards reconstructing Franz Boas's epistemology in *The Mind of Primitive Man* above and beyond the scientist/activist paradigm

Questioning the origins of paradigms: an exploration of anthropological thought in the works of Franz Boas

Language and cultural relativism in the works of Boas, Sapir and Whorf

The many minds in *The Mind of Primitive Man*: examining the interaction between Boas, his reader and his subject
Caught between two nations: the relationship between Boas’ scientific activism in Germany and the USA

Dissertations

Evaluating the extension of empathy from humans to non-human animals

How did rubella in pregnant women become a public health concern in Britain in the mid-to-late 20th century, and what are the legacies of this movement?

What is feminist science?

Using values to balance the accuracy vs bias trade-off in AI: an exploration of representative data and aspirational values

Do animals suffer from mental disorder? A study into the basis of animal psychiatry

To what extent is moral judgement in humans innate?

The reception of Robert Young’s ‘Mind, Brain and Adaptation in the Nineteenth Century’ (1970)

Presenting women as army surgeons: visual representations of female doctors at Endell Street Military Hospital

A comparison between contractualist and consequentialist bases for generating obligations to future generations

SPRI and interwar polar logistics: the logistics of the British Graham Land Expedition, 1934–37

The history of the menstrual cup

Uncovering the relationship between the individual and the community in knowledge production: improving feminist empiricism with formal social epistemic modelling techniques

Lennart Nilsson’s fetal photographs in Britain (1965 to 1975)

Algorithmic bias and inductive risk: an account of objectivity in scientific research using machine learning

The ethical issues surrounding informed consent in the implementation of artificial intelligence in healthcare: what must be considered before prescribing intelligent wearable devices in cardiology?

Agriculture in Chinese promotional material and propaganda, 1949–59

The search for objectivity and the demarcation criterion

Would it be reasonable to permit performance-enhancing drugs in sport?

The Institute of Economic Affairs and the Tobacco Strategy: interrelations of climate science, market interests and debate in the 1990s

The 1931 Maxwell centenary celebrations: ‘the recognition he deserved’?

The commodification objection to human gene patenting: moving towards a values-based account

Fetal research, abortion and the press in 1970s Britain

Can nonhuman animals fulfil the rationality criterion of personhood?

From ‘belligerent Rosy’ to ‘first-rate scientist’: representations of Rosalind Franklin in The Double Helix and beyond

"John Kendrew and the progression of myoglobin protein models, 1950–1975

Winds of change: lessons from Clyde River on decolonisation and climate
MPhil and Part III Essay and Dissertation Titles

HPSM MPhil Essay and Dissertation Titles

Owen Ayers
Rethinking viability in maternal-fetal surgical ethics
An exchange of ignorance: science in Tom Stoppard's Arcadia
Ordinal measurement: the cardinal sin of depression research?
Dissertation: The onto-mythology of essentialism in genetic research about homosexuality

Emma Clarke
Do animals have personality? The psychological assessment of non-human animals
Open science in Canada: transparency, accountability, public engagement and trust in government science
Fieldwork and pedagogy in the Canadian Arctic in the 1990s: encounters between indigenous knowledge and science
Dissertation: The case of menopause in killer whales: feminist epistemology in evolutionary biology and marine mammal science

Emily Berman
Prescriptions and the press: doctors, the media and heroin regulation in Britain from 1965–1970
Fathoming the seafloor: early geophysical research in the Scotia Arc
Conflict and controversy: malaria at Mian Mir
Dissertation: Science in the smoke: the rise and decline of the UK Medical Research Council's Air Pollution Research Unit

Catherine Brooks
Epistemic recklessness: a new objection to DTC genetic testing
Compelled and empowered; a re-evaluation of the key concepts within addiction
The Dalkon Shield and the construction of pelvic inflammatory disease as a feminist health issue
Dissertation: Black box AI or black box medicine? Explainability as a misguided requirement for artificial intelligence within healthcare

Florent Dumont
Does Carnap's metaontology require a first order metaphysical position?
Can biological functions be naturalised?
Kant, McDowell and the myth of the given: how can intuitions have conceptual content?
Dissertation: Fictionalism, figuralism and metaontology

Ahmad Elabbar
Inductive risk and the IPCC: the significance of low-confidence findings
Regulating dual-use research of concern (DURC): the trouble with the basic/applied research distinction in EU law
Discerning group expertise: a critique of Anderson on lay assessment of scientific testimony
**Dissertation:** Constructing policy relevance: authorship and lost knowledge in the context of the IPCC

**Kassell Galaty**

A Procrustean mould: the failed attempt to standardise medical records in the NHS in 1965

Becoming a doctor: understanding the intersection of physician attire, medical professionalism, and identity

Dr Macaura's Pulsocon: a tale of self-promotion and policing the press in the complex and contradictory world of Edwardian patent medicines

**Dissertation:** A lack of supervision: promoting autonomy at the periphery in 'Where There is No Doctor' and the legacy of 1980s national community health worker programs

**Mikaela Gerwin**

'By reason of a bad husband': domestic trauma and medical encounters in Richard Napier's casebooks

Tools of advancement: aesthetics, science and order through naval surgical instruments

Injecting pituitrin and pushing off the devil: communications of reproduction in late colonial India dair training

**Dissertation:** Corporeal soundscapes: embodied knowledge making in medical encounters of speechlessness

**Jeremy Gray**

'Divers improvements': John Wallis and the recognition of Arabic mathematics

'In untechnical language': George Bruce Halsted and the introduction of non-Euclidean geometry to the United States

'Dissertation:' Our sex in print': the almanacs of Sarah Jinner, their parody, and medical authority

**Ciara Halton-O'Mahony**

How the British public ingested Mechnikov's theory of life extension

Women and hygiene in 1920s Soviet Russia

**Dissertation:** To your health! Consumption of alcohol as a health-seeking behaviour in early Soviet Russia, 1921–1945

**Joshua Hillman**

Was Pegasus magical? Euhemerism, allegory and the reception of Liber mineralium in 17th-century England

Reviewing the 'infidel philosophy': Henry Thomas Buckle and the historiography of scientific history-writing

What does the philosophy of science offer the history of premodern science? A practice-based approach to PHS

**Dissertation:** 'When the colliers perceive this black colour, they are sure of soon finding the coal': coalminers, embodied knowledge and the classification of coal in 18th-century Britain

**Alan Huang**

The reception and representation of anaesthesia in 19th-century China

Charting Seychelles: British surveys of Seychelles' lands and seas in the 19th century

Making of climate history in early 20th-century China and the discussion of the Little Ice Age

**Dissertation:** Economy in the time of rinderpest: prevention of cattle plague in early 20th-century China (1868–1935)
Peter Hunt
Disciplining weakness of will: representing judgment violation within revealed preference theory
How underdetermination threatens the truth-aptness of scientific theories
Instrument as argument: an object biography of Sekiya Seikei’s wire earthquake model
Dissertation: ‘Why can the ring only be destroyed in Mordor?’: understanding, fiction and the magic of explanation

Supriya Kamath
Investigating extended cognition from the top down: a constitutive mechanistic phenomenon perspective
Voluntary groups, the state, and the National Rubella Campaign (1983–1987)
Are mental disorders ‘real’? Four interpretations of realism and their implications for psychiatry
Dissertation: Minimal pluralism about folk psychological explanation

Charlotte Laurence
Licensing soft contact lenses: a case study in transnational technological exchange
Constructing consent frameworks: respecting autonomy in posthumous organ donation policy
Dissertation: From sin to sympathy: how letters to the editor changed the British national discourse on inebriety

Marcus Reid
Planning without
Itch by itch: modeling introspection as a component of self-report measurement
Casella’s Compass for the Blind: locating instruments for the blind in Victorian Britain and at international exhibitions
Dissertation: ‘Exhibits of processes’: working agricultural laboratories and other industrial science demonstrations at international exhibitions, 1893 to 1915

Katherine Moar
Growing up with ‘the Bomb’ and the student protestors of the 1960s
‘An unhappy marriage’: the influence of the context of the courtroom on the operation of psychiatry
Szilard in Bloomsbury, Heisenberg in Copenhagen, Oppenheimer in Alamogordo: anecdotes and the history of the creation of the atomic bomb
Dissertation: Plays, playwrights and British nuclear culture: an analysis of J.B. Priestley’s ‘Summer Day’s Dream’ (1949) and Marghanita Laski’s ‘The Offshore Island’ (1954)

Nitika Mummidivarapu
Arthur Kornberg’s continual reframing of his 1958 discovery of DNA synthesis
The case for epistemic paternalism in direct-to-consumer genetic tests for health predisposition
‘The permanent is ebbing’: ecopoetry as a model for understanding climate change
Dissertation: The promise of CRISPR: a rhetorical analysis of dominant metaphors in an emerging technology
Hugo Murphy

'The development theory is run mad': Charles Henry Bennett's Darwinian caricatures, 1863–1872

Engineering the economy: the origins, uses and legacy of the Phillips Machine

Clock-work in the age of mechanical reproduction: tempo, sync and modernity in Charlie Chaplin's Modern Times

**Dissertation:** Automated magic: automata and early film at the Egyptian Hall, c.1875–1905

Aloys Nahas

Are candle flames teleological? A critique of the organisational account of organismal teleology

Kant and the possibility of intrinsic purposes in nature

Canguilhem's biomedical holism and the threat of genetic reductionism

**Dissertation:** The baby in the cybernetic bath: biological teleology between autopoietic self-maintenance and cybernetic adaptivity

Hani Mosheni

How can science communication be objective?

Consciousness and schizophrenia – how can we make sense of the phenomenon of thought insertion in a subjectivist framework?

Laws as necessary connections between universals: timeless vs time-limited necessities

**Dissertation:** The a priori in science and Wittgensteinian certainties

Matthew Nairne

Positive computing: origins and prospects

Global cooling and the emergence of the new climate science

Neutrinos, nuclei and natural kinds: why essentialism is still too demanding

**Dissertation:** From value-freedom to fair procedures: making the science behind public policy legitimate

Francis Newman

Joseph and Dorothy Needham in China, 1972: perspectives on the Cultural Revolution

Gender, education and experiment in Jeremiah Joyce’s Scientific Dialogues

Indigenous, authentic, obsolete? 'Universal' equinoctial ring dials in India during the late 19th century

**Dissertation:** 'Science as a diplomatic weapon': scientific freedoms in Sino-British exchanges, 1961–1966

Miguel Ohnesorge

How to be a pluralistic realist

Theodolites at 20,000 feet: justifying precision measurement during the trigonometrical survey of Kashmir, 1855–65

Inductive risk and industry bias: from risk conventionalism to risk empiricism

**Dissertation:** Flattening the Earth: coordinating measurements of polar flattening in 19th-century geodesy

Jared Perlo

No (Italian) man’s land: the great southern emigration and Italy’s changing eugenics

Doctoring orthodoxy: epistemic trust, vaccine-hesitancy, and the Orthodox Jewish community in New York City
Touring batteries: the electric touring car in America, 1895–1905

**Dissertation:** Dying for medicine: AIDS, trust and America's changing ethics of zidovudine provision from 1987 to 2003

Jonathan Reid

Genetic parenthood: conceptions, challenges and future directions

Planetary defense and the new space economy: a brief history of asteroid mining

Can we cure ageing? A conceptual analysis of biogerontology

**Dissertation:** Well-ordered science and the politics of life extension

Elmar Rollings

James Hutton's organic machine

The material constitution of submarine warfare in the Cold War: submarines and the Cuban Missile Crisis

'A battle for the sky is raging, and the heavens are losing': the construction of orbital space by Starlink and astronomers

**Dissertation:** 'Little winged heroes': military messenger pigeon training and management in the Middle East Pigeon Service during the Second World War

Jeffrey Rubel

The beef with a 'Jack Tar' accent: whalemeat in World War II and post-war Britain (1940–1954)

'Color and light': color theory and mechanization in Sunday in the Park with George's Chromolume

'One is lonely and two is boring': Company and mid-20th century human sciences

**Dissertation:** 'This ugly thing': the Internet and its portrayal in American musical theater, 1996–2019

Shruti Santosh

In light of cross-cultural issues in psychiatry, can we conceive of depression as a natural kind?

Theory of mind and the frame problem

Feminist epistemology in primatology

**Dissertation:** The intrinsic value and moral significance of consciousness

Bernhard Seidler

Albrecht Dürer's demons and their bellows

Immaterial contagion

Francke's cabinet of curiosities and Stahl's sensory medicine

**Dissertation:** The body of the artist: anecdotes of illness and death in Giorgio Vasari's Vite

Amelia Urry

A world piece: America's 'portrait' and the environmental view of Landsat

Data over time: studying the effects of climate change requires taking a long view, but are current science funding practices up to the task?

Hearsay, gossip, misapprehension: Alfred Newton's secondhand histories of extinction

**Dissertation:** The astronomer at the end of the world: communicating scientific authority in Camille Flammarion's fin de siècle fiction
Xinyi Wen
When Jupiter meets Saturn: Aby Warburg, Karl Sudhoff and two images of astrological medicine
Anatomia Signaturae: Wolfgang Fabricius’ visualisation of plant signatures

Part III Essay and Dissertation Titles

Ben Adams
‘Chemical McCarthyism’? Public discourse on drug testing under New Labour
Autism, medicalisation and the new neurodiversity

Kim Alexander
On the app: history and innovation in representations of Natural Cycles, the world’s first certified digital contraceptive
Taking cervixes seriously: considering the psychological benefits of widening cervical cancer screening provision
Dissertation: Too pragmatic to push: towards an evidence-based assessment of obstetric risk and the ethical permissibility of maternal request caesarean sections

Freya Casson
Yellow weather warning: impact-based forecasting and the voice of 21st-century meteorology
Exchange and identity: the Bristol Zoological Gardens, 1835–1843
Dissertation: Radical observer: the travels of Joseph Beete Jukes

Victoria Clarkson
‘The path of least resistance’: telling GPs how to prescribe antibiotics in the UK, 1980–2000
The Duchess of Beaufort: an investigation into the gendered realms of early modern botany and horticulture
Dissertation: Investigating the impact of the 2000 House of Lords Select Committee report on the practice of Traditional Chinese Medicine in the UK

Molly Judd
The itinerary maps of Matthew Paris: an analysis of their political, religious and social context
Philips’ Popular Manikin and Philips’ Model of The Human Body (Female): popular anatomy, object lessons, and nature studies around 1900
Dissertation: The medicinal uses of breast milk beyond infant feeding: c.1600–c.1750

Sean McMahon
Conflicting levels of classification: the need for more legislative mental disorder kinds in UK mental health legislation
The Synopsis Scientiae Caelestis
Dissertation: The Promising Families Survey: a eugenic project through the lens of biological citizenship
Andrew Preston
The co-production of healthcare services: examining the substantive benefits

The creation of the 'person-made' disease in the 20th century: a case study in schistosomiasis

Dissertation: 'Black kidneys': the case for de-racialising kidney pathology

Jessica Sharpe
A partnership in science and suffrage: Dr Ethel Williams and Frances Hardcastle

Is social prescribing paternalistic? A meta-expertise framework

Dissertation: Dental dams as a technology of safer sex: lesbians, AIDS and biopolitics

Olivia Vanstone
Assessing the epistemic practices of traditional medicine and Western medicine

The recklessness of scientists in the works of H.G. Wells, c. 1900

Dissertation: Has the artificial intelligence research community developed episodic memory?

HMS MPhil Essay and Dissertation Titles

Anna Ahlskog
“What are the ethical issues surrounding the distribution of Norplant to low-income and Black women and teens in the US?”

How do researchers, through refining and defining different categories of ‘being’ reinforce or tear down epistemic barriers to inclusion?

Not Quite Queer Enough: Analysing Sociological and Queer Approaches to Bisexual Reproduction

Dissertation: Navigating Invisibility and Visibility: Lived Experiences of Ehlers-Danlos Syndrome

Emancipatory Supercrip Practices: A Comparative Ethnographic Analysis of Para-athletics and America’s/ Britain’s Got Talent Reality TV Shows

Dissertation: An ethnographic and sociological case study of ‘disability culture’ within a science-fiction/fantasy convention as a potential site of synthesis of theoretical tensions between the disability studies and therapeutic/rehabilitative methods literatures concerning the role of biomedical knowledges and discourse in the vitalisation of disability culture and that culture’s project of emancipatory empowerment.

Meir Barth
The ethical speech act: The dilemma of rhetorical projection of epistemic certainty in psychiatric diagnosis

Cogno-ergonomic values: The influence of the scientist’s mentality on ontological choice in biomedical research and beyond

Tyler Chan
Using Absolute Versus Relative Risk Measures: An Investigation into the Doctor-Patient Communication within the Medical Encounter

Using Artificial Intelligence for Clinical Decision-Making: A Trustworthy Operation?

High Drug Prices: Should America Nationalise its Pharmaceutical Industry?

What is Opioid Addiction?
Lotte Elton
Non-maleficence and the ethics of consent to cancer screening
No one here spoke sign language: d/Deafness, language, and medicine.
Social epidemiology versus the “experimental turn”:
Dissertation: The role of social epidemiology in evidence creation and policy-making

Victoria Ford
In our pants or between our ears: gender inequality in sexual dysfunction diagnosis and treatment
Users, Responsibility, and Risk: Emergency Contraception in Canadian Student Newspapers, 1970-2005
The Little Blue Book: Sexual Health Peer-Education at the University of Cambridge 1970-1990
Dissertation: Embodying Infection: How Young Women Experience Chronic Yeast Infections

Rachel Gerrard
The ethics of doctor-patient paternalism
The Politics of Autism and the DSM-5
Is the NHS’ lung health check program ethical?
Dissertation: It’s All in Your Head: The Debate Over the Classification of Chronic Fatigue Syndrome and Fibromyalgia

Joshua Law
Avert Thy Mortal Eyes: An Analysis of Technology Use and Addiction
Making an Epidemic: Towards an Environmentalist History of Human Body Mass
A Distance Between Us: Searching for the Magic Bullet Model in Medical Research
Dissertation: Medicalisation and its Discontents: Philosophical Theories of Disease, Fat Activism, and the Disease Status of Obesity

Rachel Linfield
Autonomy: Right or Rite? Dor Yeshorim and their ethical justifications for omitting the BRCA gene test from their services for ultra-orthodox Jewish populations
Sexuality and Control in Jacob Zahalon’s "Treasure of Life"
The National Childbirth Trust Opposes Routine Episiotomy: Mobilizing a National Survey in the United Kingdom, 1974-1985

Simone Martineau
Learning and Maintaining Biomedical Objectivity and Detachment
Health wearables, biopower, and 21st century politics
Clinical Errors and Elusive Kinds: Treatment-Resistant Mental Disorders & the Philosophy of Psychiatry
Data, health, and looping: theorizing how data make disease in today’s technological landscape

Eana Meng
(How) Does Medicine Work?: A Case Study of the Black Panther Party’s Use of Acupuncture
Does Acupuncture Work? A Call for the Use of N-of-1 Trials and First-Person Accounts as Evidence

“The Promised Land”?: The Black Panther Party’s 1972 Delegation to the People’s Republic of China

Dissertation: Needles to Needles!: The Use of Ear Acupuncture for Addiction by Patient-turned-practitioners in the United Kingdom

Ella Monkcom

In critical anthropology, subjects are rendered as either victims or perpetrators. Discuss.

Risk construction, the medical expert and the expert patient: exploring parental decisions not to vaccinate

Exploring the contradictory demands of the precautionary principle: the case of Foetal Bovine Serum

Dissertation: ‘It was a mental struggle of “I want to do this, but I don’t want to do this”’ - How women’s experiences of breastfeeding pain contribute to our understanding of infant feeding choices

Sula Ndousse-Feta

How women’s experiences of breastfeeding pain contribute to our understanding of infant feeding choices

Patents, Power and the Licensing of Life: Examining the TRIPS Agreement in Sociohistorical Context

Life on the Line: Quarantine and Contest in the 2014 Ebola Epidemic in Liberia

Dissertation: The embodiment of the epidemiological gaze within inequitable socioeconomic landscapes. This project will pull together observations on distancing/isolation/quarantine measures to examine how the mandates of public health measures come up against the economic and social reality of communities in Baltimore/Boston, USA and/or Yaoundé/Douala, Cameroon.

Oyinkansola Ojo-Aromokudu

When, if ever, is population screening ethically justified?

Healthcare ought not to be concerned with an individual’s wellbeing. Discuss.

Biomedical innovation in cancer is segmenting people in unintended ways

Dissertation: On Off-Label Drug Use: A Critique of Evidence-Based Medicine Considering the Realities of Clinical Practice

Anna Sephton

Conceptions of health and illness: Public health, the nation state and the social body

Inefficacy in the Cancer Drugs Fund: cancer solidarity and the focus on life-extension

‘Shock’ and the Porous Body in the World War I Trench Environment

Dissertation: Testimony as negotiation in the context of HIV/AIDS in South Africa; public mourning or ‘speaking pain’ for the social good, and limitations of language in testimony

Alexander Spalding

When the Waxwork Speaks Back: Assessing historical narratives of the changing nature of patient agency and medical authority with respect to clinical encounters in psychiatry, focusing on the late 19th and early 20th century British context

In Search of a Polyvocal & Polytonal Critical Medical Anthropology of Global Mental Health Practices

Negotiating ‘Cancer Risk’: an Ethnographic Ruminations on Molecular Biology, Subjectivity, and Contemporary Biopower
Dissertation: In Search of Compassion That Scales: Selective Coordinations of Major Depressive Disorder and the Acquisition of an Ambivalent Body at a British 'Healthtech Startup'

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

Discuss, using ethnographic examples, the effectiveness of cancer biomedicine in 'saving and extending lives' in the Global South

Yellow fever, hookworm, and infrastructural change in colonial Belize, 1919-1932

Dissertation: Double Displacement: Home and Health among Latin American Migrants (or 'Paisas') at a London Food Market

Van Vlerken
Discussing the diagnosis of dementia

Identified and statistical lives in medical screening

The medicalisation of grief

Dissertation: Justifying non-invasive prenatal testing: on public health and reproductive autonomy

PhD Theses

Awarded

Sebastian Kroupa for 'Georg Joseph Kamel (1661-1706): A Jesuit Pharmacist at the Frontiers of Colonial Empires'

John Michael Thornton for 'Cyberhealth and Informational Wellbeing'

Pascal Zambito for 'Logic is a geometry of thinking: Space and Spatial Frameworks in Wittgenstein's Writings in the Making of Modern Magnetism'

Joseph Wu for 'The Limits of Screening'

Meira Gold for 'Victorian Egyptology and the making of a colonial field science, 1850–1906'

William Wong for 'A study of evolutionary contingency: characterisation, mechanisms, and evidence'

Jenny Bulstrode for 'The eye of the needle: magnetic survey and the compass of capital in the age of revolution and reform'

Sebastian De Haro for 'On Inter-Theoretic Relations and Scientific Realism'

Annie Thwaite for 'Magic and the material culture of healing in early modern England'

Azita Chellappoo for 'Conceptual Challenges in Cultural Selection'
The Library

A keepsake and some very hands on printing from 2019’s Science in Print seminar series.

With infinite complacency men went to and fro over this globe about their little affairs, serene in their assurance of their empire over matter. It is possible that the infusoria under the microscope do the same. [...] It is curious to recall some of the mental habits of those departed days. – H.G. Wells, from the opening of The War Of The Worlds.

Overview:

The academic year of 2019-2020 started in a traditional manner, but went on to develop in some unexpected directions. November saw Dawn Kingham returning from her maternity leave, and we bid a farewell to Francesco Mannu, who had been ably assisting in Dawns absence.

We welcomed Sheryl Womble and Rhianna Elliot to our team of evening invigilators, joining old hands Rebecca Charbonneau and Annie Thwaite.

Michaelmas Term started with the usual gaiety, and it was wonderful to welcome back returning students, and get to know the new cohort. Michaelmas also saw the return of a fuller offering of the Science in Print Graduate Training Seminar series. This was a very popular seminar with students in HPS and across the wider university, and turned out to be a real highlight of the year.

In November the Library was represented at the Dissertation & Research Fair, this year hosted at St John’s College, taking along some items from the special collection, as has become traditional.
The library stayed open and offering a full service throughout the UCU industrial action in late 2019-early 2020, and Library Assistants Dawn and James are to be praised for allowing operations to continue as normal during this time.

BUT THEN

EVERYTHING CHANGED…

In response to Departmental, Cambridge University Library, University, and Governmental direction and guidance in the light of the Covid-19 pandemic, everything changed. In an action packed couple of weeks in March, the Library was forced to make and execute plans for effective remote working, to enable the support of the teaching and learning needs of the department and the wider scholarly community to continue as best as possible, during the national lockdown and beyond. That this was achieved so swiftly, calmly, and professionally is down to the remarkable adaptability, ingenuity and resilience of the Library Assistants, Departmental Professional Services staff, the Academic staff and the student body, and the Librarian would like to express huge thanks to everybody for all of their efforts and patience during this time.

In what must have been one of his last official acts as Departmental Computer Officer, Mark Rogers provided Jack and James with 2nd monitors to take home, at the 11th hour on the very last day of work on site, an act of kindness which prevented who know how many temper tantrums and enabled the Librarian, at least, to work from home in a far more effective manner than would have been possible otherwise.

During the national lockdown period, the Whipple Library, in common with the other University Libraries, remained ‘open online’, providing support remotely via email, MS Teams, and on the phone. Ebook purchasing increased considerably, and the Librarian worked closely with colleagues in the UL’s ebooks & ejournals purchasing teams to ensure that the needs of HPS was as well catered for as possible. Dawn continued to produce interesting and informative blog posts from home, maintaining the tempo and ensuring continued external interest and engagement with the Whipple Library collections.

Reflecting back on what was undoubtedly an extremely difficult period for everyone, what stands out is the good humour, patience, and family-feeling of the HPS community, and this expressed itself in numerous ways. The Librarian continued to host a virtual tea and cake hour on Friday afternoons throughout Lent & Easter Terms, which was enthusiastically joined by many students, across the entire world. It was impressive seeing how early in the morning many were prepared to eat cake in their respective time zones. Departmental social events continued too with virtual quizzes and social evenings. Though we were apart, I don’t think we ever felt alone.

The Department and Library were eager to resume some onsite activity as soon as possible, and work towards this started as early as May. Following the timetable dictated by the University Library, we were able to get staff working back on site by mid-August, and open the library to users by late September.

We were able to introduce two new services for library users, Click & Collect of books, Bookable Study Spaces (as the library is currently only able to operate at 50% seating capacity). We continued scanning for reading list material and are engaged in the UL’s Scan and Deliver programme for reader requests of scanning material. Through the extraordinary efforts of library staff, the support of the Department and University Libraries, and the understanding and patience of students and academics, the Whipple Library is in as strong a position as any to begin the academic year 20-21.

Collections:
Purchasing of physical material was necessarily curtailed by the pandemic, but ebooks were purchased throughout with both Department and UL funds. One notable acquisition for the Special Collection was the 3rd edition of Janet Taylor’s *The Principles of Navigation Simplified*. This edition is not held elsewhere in Cambridge, and will be a valuable addition to the collection. Thanks to Dr’s Josh Nall and Boris Jardine for spotting it.

Staffing:

Librarian: Jack Dixon

Library Assistants: Dawn Kingham, James Livesey, Francesco Mannu (secondment Maternity Cover).

Departmental Senior Accounts Clerk and Senior Clerical Assistant, Aga Lanucha.

Invigilators: Annie Thwaite, Rebecca Charbonneau, Rhianna Elliot, Sheryl Wombell.

This Annual Report is briefer than most, though the year has felt longer. We look forward to things improving in the next year.

For so it had come about, as indeed I and many men might have foreseen had not terror and disaster blinded our minds. These germs of disease have taken toll of humanity since the beginning of things--taken toll of our prehuman ancestors since life began here. But by virtue of this natural selection of our kind we have developed resisting power; to no germs do we succumb without a struggle, and to many--those that cause putrefaction in dead matter, for instance--our living frames are altogether immune.[...] By the toll of a billion deaths man has bought his birthright of the earth, and it is his against all comers; it would still be his were the Martians ten times as mighty as they are. For neither do men live nor die in vain.

– H.G Wells, in a more cheerful mood, at the end of *The War of The Worlds*. 
Three more photographs from Science in Print

Simon Jaffa. A short-lived, but very delicious, member of the Library Morale Support Team.
This year marked the 75th anniversary of the donation of Robert Whipple’s collection of objects and books to the University of Cambridge. To celebrate, the Museum held a special exhibition, displaying over 200 objects from Whipple’s founding gift. The exhibition officially opened on 24th October with a special evening event and we were very pleased that many relatives of Robert Whipple were able to attend, as well as members of the Department of History and Philosophy of Science, and many other friends of the Museum. A packed Museum heard speeches from the University’s Vice-Chancellor, Professor Stephen Toope, Chair of the Board of the Department of History and Philosophy of Science, Professor Simon Schaffer, and the Director of the Whipple Museum, Professor Liba Taub.

Two long-standing Museum staff-members left the team this year: Claire Wallace, Collections Manager, took up an exciting position as Curator of the Suffolk Regiment Museum, and Rosanna Evans, Learning Coordinator, joined the Fitzwilliam Museum as part-time Schools and Teachers Learning Associate while continuing work towards her PhD at the University of Leeds. Morgan Bell, the new Collections Manager, and Alison Giles, the new Learning Coordinator, joined the team in early 2020.

This was also, obviously, a notable year for the impact of Covid-19 on the Museum. In line with other museums and visitor attractions, and indeed, much of the country, we were forced to close to the public from March to the end of September. For much of this period, our access to the Museum was restricted to periodic building checks.

We took this opportunity to significantly improve our digital offer, notably with the launch of our new website. It was also a great opportunity to work on data cleaning and general database improvements, and to create content for children and families to enjoy at home. The Museum team
was also instrumental in getting the Departmental building up to a Covid-safe standard, ready for limited re-opening.

Somewhat more cheerily, Steve Kruse discovered a family of ducks in the Departmental courtyard during a building check. Over the following six weeks, with support from a local wildlife charity, he cared for them until they were ready to be released into the wild. Departmental staff, and the wider HPS community eager for good news during the lockdown, enjoyed watching the ducks grow and thrive through the images shared on social media and email lists.

Exhibitions

75th Anniversary Exhibition: Robert S. Whipple and the Founding of the Whipple Museum

In 1944, Robert S. Whipple (1871–1953) presented his collection of more than one thousand scientific instruments and a similar number of related rare books to the University, hoping to promote history of science as a subject of study and research. In November of that year, an exhibition was held in the East Room of the Old Schools to mark the official presentation of R. S. Whipple’s gift. This year, we held a 75th Anniversary Exhibition in celebration of Whipple’s founding gift.

Left: Celebratory bookmark produced based on a 1944 newspaper clipping
Top right: Our 2019 exhibition
From a small telescope bought in Tours to what is possibly the oldest armillary sphere in the world, Whipple’s bequest is a varied and intriguing collection. But, the exhibition asked, what were Whipple’s intentions and interests? And how has the collection helped shaped research in the history of science?

We were extremely grateful to the descendants of Robert S. Whipple; the Ann D Foundation; the Whipple Librarian, Jack Dixon; the Fitzwilliam Museum; the University of Cambridge Museums; and of course, the Department of History and Philosophy of Science, whose history and activities are so intimately entwined with our own, for their help in developing the exhibition

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**Special Projects**

**Launch of the new website**

With incredibly fortuitous timing, the Museum launched its new website in March, just as Covid-19 forced the Museum to physically close to the public. We were able to open—virtually—as never before! James Livesey was seconded from the HPS Department to work part-time on the site, setting up and transferring content from the old website to the new University site. This was a challenging endeavour, which he tackled with great dedication. The Museum thanks James for his hard work and flexibility!

The previous website had not been significantly updated for more than ten years, so the change was long overdue. As well as looking more modern, with a more intuitive interface, the website is easier for staff to maintain. Our ‘Explore’ articles, often written by students based on their research, continue to be a major attraction.

**Accreditation**

All Accredited museums must periodically have their Accreditation reviewed by Arts Council England. This is an important process, ensuring that the Museum meets nationally agreed standards, is eligible to apply for certain funding schemes, and maintains its world-class reputation. This year the Whipple’s Accreditation was due for renewal. Due to Covid-19, the final stages of approval have been postponed, but both Claire Wallace and Steven Kruse spent significant amounts of time collating and re-writing the policies and procedures required, and submitting the return.

**Conservation projects**

Due to the impact of Covid-19 and staff turnover, conservation projects were largely put on hold. However, we did fit automatic blackout blinds to the skylights of the Main Gallery. Following on from the necessary refurbishment to the Main Gallery roof last year, these blinds can easily be opened and closed remotely from the gallery floor. Regulating light levels is an important aspect of preventative conservation: a balance must be maintained between display and protecting light-sensitive objects from deterioration. As always, we are very grateful to the donors to the Whipple Museum Conservation Fund for their generosity, which helps to ensure the preservation of objects in our collection.
Teaching and Research

Departmental Teaching

The Whipple Museum plays an important role in teaching within the Department of History and Philosophy of Science. Lecturers use the Museum displays and the collection to illustrate their own lectures, and lecture-demonstration classes on instruments, models, and collections are specifically offered for the Part III and MPhil programmes. Students have the opportunity to work with the Museum’s collection as part of their studies and every year a number of undergraduates and postgraduate theses have been undertaken on objects.

Student Essays and Theses


Object-based teaching

In November—as in previous years—the Museum’s Curator of Modern Sciences, Dr Joshua Nall, delivered an introductory talk and, with Dr Boris Jardine, a graduate training session on ‘Researching in Museums’ for the new cohort of Part III and MPhil students, using objects from the collection. The main goal of this session was to show off the diverse array of instruments, models, and ephemera in the Whipple Museum’s collection, and to encourage graduate students to consider using material culture in their research.

Dr Nall also ran seven ‘Material Sources’ Graduate Training sessions across both Michaelmas and Lent terms, which took student groups to a range of sites across Cambridge to view material objects and discuss their place in the history of science with experts. He also convened and lead the ‘Modern Science, Technology, and Environment’ MPhil/Part III working group, and, with Dr Dániel Margócsy, gave an MPhil/Pt III lecture on ‘What is a Scientific Instrument?’, which included a follow-up object-handling seminar. In November he ran two gallery teaching sessions on ‘Science, Instruments, and Empire’ for history undergraduate students from Bishop Grosseteste University, Lincoln.

In January, Dr Nall ran an object-based seminar on the material culture of the scientific revolution and its relations to English literature, for Dr Ruth Abbot’s English Faculty Pt IB Paper 6, ‘English Literature and its Contexts 1660-1870’. On 18th February, he also ran an object-based seminar on ‘Historical Argument and Practice: Non-Textual Sources’ with Dr Emma Perkins for Newnham 1st-year History undergraduates. Finally, he led an object-based seminar on objects and visual communication for
Part II Natural Sciences students taking an optional module on science communication (run by Dr Jane Gregory at the Institute for Continuing Education).

As in previous years, Professor Nick Hopwood, Dr Mary Brazelton, and Dr Jardine all used Museum objects in various aspects of their undergraduate and graduate teaching.

## Staff Research

### Research talks


On 29th October, he gave a tour and talk on the history of life on Mars to the Cambridge Astronomical Association.

In July, Morgan Bell, gave an online talk on the history of Cambridge Scientific Instrument Company for Cambridge Museum of Technology's public webinar series.

In August, Professor Liba Taub presented a paper remotely, ‘Representing Mathematics’, at the 9th Conference of the European Society for the History of Science, on Visual, Material and Sensory Cultures of Science (the conference could not be held as planned in Bologna).

### Research Collaborations

As a research and teaching museum and collection, we must ensure the long-term and sustainable preservation of our cultural objects. With much-appreciated support from the DAAD-University of Cambridge Research Hub, the Whipple Museum has collaborated with UCM and Leibniz-Gemeinschaft Research Museums and the Leibniz-Research Alliance Historical Authenticity – Centre for Contemporary History Potsdam to investigate authenticity. 'Authenticity' is a concern that shadows every step of the work of the museum, from the acquisition of objects to their display and interpretation. Variations on the question 'Is it real?' underlie all aspects of our work. Historical authenticity—linked to dynamic issues of cultural and societal expressions and values—and the question of being authentic with regard to a specific time, place and situation cannot be assumed, nor taken for granted.

The project has been led by the Whipple Museum of the History of Science and the Department of History and Philosophy of Science, working with University of Cambridge Museums and the Leibniz-Forschungsverbund Historische Authentizität; project coordinators are the Director of the Whipple, Liba Taub; Ulf Hashagen, Deutsches Museum, Munich & LMU, Munich; and Achim Saupe, Leibniz-Research Alliance Historical Authenticity – Centre for Contemporary History Potsdam)

### 3rd to 5th December: Making it Real conference

The conference, ‘Making it Real: Historical Authenticity and Preservation in 21st Century Museums and Collections in Germany and the UK’, interrogated issues of authenticity in our museums, especially with regard to material held in our collections and its preservation. We circulated a Call for Papers for the conference that was held at the Whipple Museum of the History of Science,
Cambridge, 3-5 December 2019, as a collaboration between the University of Cambridge Museums & Collections and the Leibniz Research Alliance Historical Authenticity. We were gratified by the response, and were not able to accept all offers of papers.

The programme included the following talks, arranged topically:

**Section 1:** Authentication and authorisation. Objects, places and institutions in political-cultural contexts

- Sally Foster (Stirling University): *What replicas can tell us about authenticity, if we let them speak*
- Barbara Wood (University of Hertfordshire): *How Shifting Power and Authority in Heritage Reinvent ‘Authenticity’ in Museums*
- Stefanie Jovanovic-Kruspel (Natural History Museum Vienna): *The Case of the Novara-Spear: Spolia in 19th Century Museums. Between Authenticity and Storytelling*

**Section 2:** Virtual authenticity - a contradiction?

- Dennis Niewerth (German Maritime Museum, Bremerhaven): *Authenticity as Virtuality: Producing ‘The Real’ in Digital Cultural Heritage*
- Dominik Kimmel (Römisch-Germanisches Zentralmuseum – Leibniz Research Institute for Archaeology, Mainz): *Evidence in Virtual Worlds*
- Willi Xylander (Senckenberg Museum für Naturkunde, Görlitz): “Para-Authenticity” - An approach to presenting “the real life” in a virtual reality animation on soil animals

**Sections 3 and 4:** The real and the authentic between replicas, copies, fakes and forgeries

- Silke Berdux (Deutsches Museum, Munich): *To speak or not to speak? The Kempelen speaking apparatus in the Deutsches Museum in Munich, its replica, and issues of authenticity*
- Anna-Magdalena Heide (German Mining Museum, Bochum): *Commissioned Authenticity. The Example "Portraits of Famous Miners"*
- Charlotte Colding Smith (German Maritime Museum Bremerhaven): *Authentication and Presentation of Scrimshaw and Whale Ivories in a Modern Museum Context*
- Elaine Charwat (UCL & Oxford University Museum of Natural History): "Not the real thing?" Natural History Models and Casts as Uncomfortable Objects
We were especially pleased by the range of types of collections and objects covered, and also by the diversity of contributors, from seasoned curators to advance doctoral candidates. It is anticipated that some of the talks will be published as papers in a volume to be edited by another of the participants, Dominik Kimmel, *Museums: Places of authenticity*, which will present an overview on current research and aspects in the field. (The volume is expected to be published later in 2020.)

We were also delighted to offer participants three curator-led collection tours 1: to the Museum of Classical Archaeology, led by Suzanne Turner; the Whipple Museum, led by Joshua Nall, and an impromptu (by popular demand) visit to the British Commonwealth Collection of Building Materials in the Department of Earth Sciences, led by Liz Hide. The first two tours were prearranged; the desire for the final tour emerged during the course of the conference, as the nature of the holdings were recognised as unusual and very relevant. This was an unexpected—and very welcome—development.

In addition, during academic year 2019-20, the joint project facilitated one research-led visit for a curator with colleagues, between the museums of the Leibniz Alliance and the University museums and collections in Cambridge, pursued in line with the research agenda outlined above. The Leibniz-Forschungsverbund Historische Authentizität contributed funding, as did the DAAD Hub. More research-led visits and exchanges are hoped for, post pandemic.

*Formal and Lifelong Learning*

Our Learning Co-ordinators, Rosanna Evans and Alison Giles, have continued to create and deliver learning sessions and organise events and outreach over the last year. Covid-19 lockdowns and the closure of the Museum for much of 2020 have meant adapting the learning programme to include more online content, which will continue to be on offer even when physical visits become possible again.

Over Michaelmas term, Rosanna Evans ran several events to mark our 75th anniversary, including a special ‘party’ event for families and a Saturday opening.

The new Learning Co-ordinator, Alison Giles, joined the Museum team at the end of January 2020. With Rosanna’s help, the Museum hosted a very successful “Twilight at the Museums” event in February, attended by over 1,000 visitors. Unfortunately, the rest of the planned events programme for 2019/2020 had to be cancelled and we were unable to provide any further education sessions on site.

With staff working from home, the learning offer was adapted to provide online opportunities for the public to engage with the Museum and its collections. Collaborative work with the other University of Cambridge Museums was crucial to maintaining the Whipple Museum’s profile and using digital interactions to widen our audience. Several resources were added to the UCM’s ‘Home Activities’ page and a video tour of the 75th anniversary exhibition was created for the Alumni festival. Alison took part in planning and delivering a session for trainee teachers, explaining how to use museum objects to enhance learning, and provided content for the ‘Summer with the Museums’ programme which sent learning resources to local families during the summer holidays.

The handling collection has proved invaluable as a resource because it can be used from home to interact with a wide range of audiences. New ‘object of the week’ sessions were created for the ChYpPS holiday activity scheme and can now be adapted for schools and other audiences. Science equipment from the Museum’s learning resources was used to create equipment boxes for use by the inclusion unit at Sawston Village College, with a range of hands-on sessions prepared ready for the start of term in September 2020.
Widening access to the Whipple’s collections remains a priority for the Learning Coordinator. Alison has given virtual talks to adult groups including Cambridgeshire Libraries Engage groups and the social group at the Arthur Rank Hospice, resulting in one patient being able to visit the Museum and remember his links to the Cambridge Scientific Instrument Company. She also worked with Form the Future to talk to secondary school children about careers in museums, using objects from the handling collection as an example of what she does. This work is planned to continue during 2020/21, with an extension of the offer to local adult groups and to uniformed organisations.

Alison is an East of England area representative for GEM (Group for Education in Museums) and the secretary of CHEG (Cambridgeshire Heritage Engagement Group), allowing the Museum to provide advice and training for a wide range of museum professionals around the country. This work has included hosting a skills share on Twitter and mentoring as part of the GEM 1-1 mentoring scheme and Foundation Course, as well as organising face-to-face and online meetings.

### Outreach Events

#### 2 October 2019 NSW Royal Society visit

#### 9 October 2019, Freshers’ Fair

Rosanna Evans was at University freshers’ fair promoting the Whipple Museum and its activities.

#### 9 October 2019, Professor Kim Sterelny: Norms and their Evolution

On the 9th October, the Museum hosted a talk by Professor Kim Sterelny on ‘Norms and their Evolution’, organised by Dr Marta Halina.

#### 14 October 2019, Dr Joshua Nall’s Book Launch


#### 21 October 2019, Relaxed Opening

On this date, the Museum hosted a relaxed opening, which was aimed at visitors with autism or other special needs, and their siblings, parents and carers.

#### 22 October 2019, Arts Pioneers

Rosanna Evans hosted the Arts Pioneers at the Museum, an activity club for young people aged 11-16 who have physical and learning disabilities.

#### 23 October 2019, Cambridge Film Festival

#### 24 October 2019, Saturday Opening: 75th Anniversary & 26 October, Party Games

The Museum held two special events to celebrate the 75th Anniversary of Robert Whipple’s gift to the University.

#### 1 November 2019 Mary Brazelton’s Book Launch

On 1st November, the Museum hosted the launch of Mary Brazelton’s book, *Mass Vaccination: Citizens’ Bodies and State Power in Modern China*.

#### 20 November 2019 Discover Creative Careers
Josh Nall provided a tour and introduction to the Museum for youngsters looking for inspiration for their future careers.

22 November 2019 Library Presents: Space Explore and Create
The Museum held another successful collaboration with the Whipple Library.

1 December 2019 Mill Road Winter Fair

6 December 2019 Leicester Museum Group visit

14 Feb 2020 Bridging Binaries Tour
Volunteer Sam led this tour highlighting LGBQT+ links to the Whipple’s collections. Tours have stopped due to the closure of the Museum, but we retain close links with the volunteers and have plans to create audio and video content for the tours that will be accessible both within and beyond the Museum.

19 Feb 2020 Twilight at the Museums
A very successful UCM event which saw over 1,000 people visit the Museum to explore our collections.

11 Mar 2020 Burwell Engage talk
Alison gave a talk on the handling collection for the Engage group at Burwell library, a group aimed at reducing isolation for older adults.

28 May 2020 GEM Skills Share Twitter hosting
Alison working with GEM to provide a network for skills sharing among museum education.

17 June 2020 Initial Teacher Education session
Alison working with trainee teachers from the University of Cambridge PGCE course on how to use museum objects in learning.

28th July 2020 Session with Young Creators at Headstone Manor and Museum
Morgan talked to the Young Creators group about her role as a Collections Manager and answered their questions.

31 July, 7 Aug, 14 Aug, 21 Aug, 28 Aug ChYpPS object of the week sessions
Four live online sessions and a final video to introduce local young people to the collection and to ways of thinking about the history of science.

14 Aug 2020, 9 Sep 2020 Arthur Rank Day Therapy social group
Alison gave a talk via Zoom on objects from the handling collection.

21 Sep 2020 Form the Future event at Trumpington Village College
Alison answered questions from pupils about working in a museum.
Television, Radio and Other Media Appearances

On 31 October, Dr Joshua Nall was interviewed by Cambridge TV for a news feature on 75th Anniversary exhibition.

Also in October, the Museum featured in the filming of a documentary on astronomical models, presented by Dr David Rooney.

On 30 April, University of Cambridge Museum’s Opening Doors Project Coordinator Nikki Hughes interviewed Steve Kruse about his career and experience in the museum sector.

In July, Morgan Bell was a panellist on a special history of science collections edition of the game show Call My Bluff for the British Society for the History of Science’s Global Digital History of Science Festival.

On 11 September, Dr Seb Falk was recorded for BBC Radio 4’s Today Programme in the Whipple Museum, to promote the launch of his book *The Light Ages: The Surprising Story of Medieval Science* (Allen Lane, 2020). The book features the Whipple’s iconic late-medieval English astrolabe (Wh.1264), which Seb began studying as part of his Masters and PhD studies in Cambridge HPS.

Grants and Donations

Whipple Museum Conservation Fund

Dr Kenneth and Mrs Anne Young made a generous donation to our Conservation Fund via Cambridge in America, in memory of his two brothers, Ian and Donald, who both died in the past year. As always, we are very grateful to them for their long-standing support.

Connecting Collections

The Museum is grateful to Arts Council England for their ongoing provision of the Strategic Enablement Grant, administered through their Major Partner Museum Programme. This supports Alison Giles in her education and outreach activities.

Other Donations

We thank the Ann D Foundation for their continuing contributions.

Staff News

Two long-standing members of staff left the Museum this year.

Claire Wallace was Collections Manager from 2010 until the end of 2019. Although her background was chiefly in professional archaeology, she also had previous experience working and studying in
museums, having researched the representation of women and children in museum displays during her MA.

During her time at the Whipple, Claire made many key contributions to the Museum. When she took over, she immediately faced the challenge of upgrading the display cases in the Main Gallery. These had been judged as a weakness by a security review. Subsequently, she managed the Accreditation renewal, much re-configuration of museum storage, and managed the safety of the collections during gallery refurbishments—most notably the successful Globes Gallery refurbishment in 2013 and the installation and deinstallation of exhibitions in the Special Exhibition Gallery. Her calm, reassuring presence and grounded problem-solving abilities will be missed.

Claire has taken over as Curator of the Suffolk Regiment Museum, which, as well as appealing to her personal interest in the Armed Forces, is much closer to her home in Bury St Edmunds.

Rosanna Evans was Learning Coordinator from 2016 until the end of 2019; although her work in the Museum and Department began well before this period. In fact, her first involvement with the Whipple Museum was as a work experience student, which helped cement her interest in a career in museums.

After her undergraduate degree, she applied to work as an intern at the Whipple Museum and worked on various projects, including the digitisation of the Museum’s image slides, before becoming Collections Assistant and then Learning Coordinator. She also completed an MA in Museum Studies at the University of Leicester during this time. In her role as Learning Coordinator, she greatly expanded the learning offer and upgraded the resources available to the public, showing great energy and creativity. In 2018, she began a PhD part-time with the University of Leeds and the Science Museum. She is an energetic museum professional, passionate about improving and widening access to museums.

Rosanna is now working as part-time time Schools and Teachers Learning Associate at the Fitzwilliam Museum.

Morgan Bell took over from Claire as Collections Manager. Morgan was previously Assistant Curator at Cambridge Museum of Technology.

Alison Giles took over from Rosanna as Learning Coordinator. She will be combining her role with working at Burwell Museum and Windmill.

Charis Millet, UCM intern, helped with installing our 75th Anniversary exhibition.

Christina Rozeik performed conservation on many of our Robert Whipple Collection objects, also in advance of our anniversary exhibition.

Francesco Mannu was employed to help cover general duties in the Museum while the Museum was short-staffed after Claire and Rosanna left.

During the academic year 2019–20, Dr Nall continued to serve as Chair of the Royal Astronomical Society’s Heritage Committee.
Training

4 March 2020 Cambridgeshire Heritage Engagement Group
Alison Giles was secretary of the Cambridgeshire Heritage Engagement Group, organising and attending this meeting on young people volunteering.

6 May 2020 YouTube caption training
Alison Giles attended UCM training to make sure that YouTube videos are more accessible.

12-18 June 2020 Institute of Continuing Education course on the Scientific Revolution
Alison Giles attended this course, to improve her subject knowledge around the collections.

14 July CHEG meeting
Alison Giles attended this general catch up to discuss ways of running education programmes during Covid-19.

15 May 2020 Disposals Livestream Q&A (run by Social History Curators Group and the Collections Trust)
Morgan Bell attended an online panel session on rationalisation, which offered practical advice on how to ethically dispose of objects.

29 and 30 July 2020 Race Awareness training
Alison Giles attended this discussion of ways of ensuring that we are actively combatting racism in our programmes.

19 May 2020, 4 June 2020, 23 June 2020, 8 Jul 2020, Change Makers Action Group reading group
Alison Giles attended these sessions, discussing ways of making the UCM more diverse, accessible, and inclusive.

2 Aug 2020 Mental Health Awareness Training Day
Alison Giles attended this training day which thought through ways of making sure that the Museum is having a positive effect on the mental health of visitors and staff.

2 June 2020 Spectrum book club – Inventory (run by the Collections Trust)
Morgan Bell attended an online training session on the Spectrum procedure Inventory, which focussed on implementing best practice in this area of collections management.

11 August 2020 Spectrum book club – Documentation planning (run by the Collections Trust)
Morgan Bell attended an online training session on the Spectrum procedure Documentation planning, which focussed on implementing best practice in this area of collections management.

3 June 2020 DCN Online Safeguarding Seminar
Alison Giles was involved in this discussion on how to ensure that children and young people are safe during online events.

13 August 2020 Using and resolving temporary numbers (run by Museum Development North West and the Collections Trust)
Morgan Bell attended an online workshop on temporary numbers, which offered practical advice and training on how to use and resolve them.

9 September 2020 GEM Zoom catch-up
Alison attended this general catch up to discuss ways of running education programmes during Covid-19.

17 September 2020 GEM Queer Voices in Museums training
Alison Giles organised and attended a talk from Meg Roberts on how to tell LGBTQ+ stories within collections.

25 September 2020 GEM/Museums Association Manifesto for Learning and Engagement
Alison Giles attended the launch of new strategy from the Museums Association.

Loans
Due to Covid-19, the Museum was not able to facilitate loans over this period. We expect that our loans programme will resume once general restrictions ease.

New Acquisitions

6710  fx-102 scientific electronic calculator, with mains power adapter and case, by Casio Computer Company Ltd., Japanese, 1976 (c)

6711  ‘Henderson Dial’ mining theodolite, by J. T. Letcher, English, late 19th Century

6712  compound microscope in solid nickel silver, No. 288, by Ross, English, c. 1845, with Wenham’s binocular apparatus added c. 1859-1860

6713  flat mathematical scale rule, reigle platte, based on scales illustrated and described in Geometriae Practicae, pars Tertia by Adrian Metius, by Wiglius, Dutch [attributed], late 1620s (c)

6671.3  copperplate printing block for R. T. Gunther, Early Science in Cambridge, no. 3 of 11, image of Babbage’s calculating machine, attributed to Oxford University Press, English, 1937 (c)

6671.4  copperplate printing block for R. T. Gunther, Early Science in Cambridge, no. 4 of 11, image of Frost’s magic cube of nine, attributed to Oxford University Press, English, 1937 (c)

6671.5  copperplate printing block for R. T. Gunther, Early Science in Cambridge, no. 5 of 11, image of King’s College astrolabe, attributed to Oxford University Press, English, 1937 (c)
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>6671.6</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 6 of 11, image of the celestial planisphere under the English Globe, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
<tr>
<td>6671.7</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 7 of 11, image of sector under the English Globe, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
<tr>
<td>6671.8</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 8 of 11, image of Castlemaine's English Globes, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
<tr>
<td>6671.9</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 9 of 11, image of the Grand Orrery of St John's College, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
<tr>
<td>6671.10</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 10 of 11, image of the Newtonian reflector by G. Hearne, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
<tr>
<td>6671.11</td>
<td>copperplate printing block for R. T. Gunther, <em>Early Science in Cambridge</em>, no. 11 of 11, image of the old Botanic Garden, attributed to Oxford University Press, English, 1937 (c)</td>
</tr>
</tbody>
</table>
Annual Reports of Members of the Department

Anna Alexandrova

This year I worked on two projects: Expertise Under Pressure, supported by the Centre for Humanities and Social Change at CRASSH and the New Institute at Hamburg and the ESRC project Many Dimensions of Wellbeing with colleagues at the Bennett Institute for Public Policy. In both cases we are exploring how expertise about public policy can be responsible and inclusive. At the Department we revived the Calculating People Reading Group which met to discuss recent and classic writings in history and philosophy of social sciences. I was delighted to welcome two new PhD students Isaac Kean and Cristian Larroulet-Philippi, who joined an already flourishing group of Lukas Beck, Olesya Bondarenko, and Sahanika Ratnayake. The frequent virtual meetings with this group and our heroic and inspiring MPhil and undergraduate students kept me going through this tough spring and summer.

Publications

Articles in journals

Lectures, seminars and conferences

“Happiness and Technocracy”
  a. Royal Institute of Philosophy Series, Exeter University, November 2019
  b. LMU Practical Philosophy Series, Nov 2019 (by video)
  c. Copenhagen Well-being and Philosophy seminar, December 2019
  d. University of Warwick, Leverhulme Bridges

“Mental Health without Well-being” (with Sam Wren-Lewis)
  a. KCL Philosophy of Medicine Seminar, Feb 2020
  b. Cambridge University Psychiatry Society Webinar, July 2020

Podcasts and videos:

Thriving: the role of culture in defining and advancing well-being, the WHO Culture and Health webinar series 2020 –May 7th 2020

Politics of Economics: Epistemic Humility, video conversation with Erik Angner for the CRASSH Politics of Economics Series, May 2020

Cultures of Expertise and the Politics of Behavioral Science, podcast conversation with Erik Angner and Michael Kenny, April 2020

https://www.mixcloud.com/adrian_currie/episode-4-anna-alexandrova-cambridge-social-value-expertise/

Mary Augusta Brazelton

In May, I was very fortunate to receive a Student-led Teaching Award in Partnership from the Cambridge University Students’ Union. In June, I participated in an intensive ‘Pandemic Histories Think Tank’ run by the WHO-Western Pacific Region.
Publications


Articles in journals


Online


“Epidemic control in Chinese public health: past and present.” History and Policy opinion article, 31 March 2020


Lectures, seminars and conferences

October 2019

November 2019
“The History of Mass Vaccination in Modern China.” Cambridge Infectious Diseases Annual Meeting of Minds Symposium, University of Cambridge.

December 2019
“Mass Vaccination and Wartime China’s Place in Global Medical Networks.” Talk at China-UK Humanities Annual Forum, China-UK Humanities Alliance, Peking University, Beijing, China.

March 2020
“The production of penicillin in China and transnational circulations of biomedical knowledge, 1940-49,” scheduled talk at Association for Asian Studies, Boston, MA, cancelled due to COVID-19 outbreak.

Hasok Chang

The 2019–20 academic year was a period focused primarily on research, being the last of my three years of research leave as a British Academy Wolfson Research Professor.

In the Department I have continued to look after a large number of PhD students. I have continued the coordination of the Coffee with Scientists and AD HOC seminar groups. My collaborative agreement with the Department of Chemistry for experimental work continues. I remain a Fellow of Clare Hall.

In professional service, I have continued to focus on the cause of integrated history and philosophy of science, at the national and international levels (UK Network for Integrated HPS, (international) Committee for Integrated HPS, and the Joint Commission of the International Union of the History and Philosophy of Science and Technology). I have also continued my service as a member
of the Governing Board of the Philosophy of Science Association, and as the Deputy Chairman of the Society for History of Alchemy and Chemistry.

Publications

Articles in books

Articles in journals

Lectures, seminars and conferences

October 2019
‘Is physics the foundation of all sciences?’, Fellows Talk for the Clare Hall Alumni Weekend, 28 Sep 2019. [not reported in last year’s report]
‘The pragmatic meaning of reality’, Serious Metaphysics Group, Faculty of Philosophy, University of Cambridge, 30 Oct 2019.

November 2019
‘Understanding and knowledge as ability’, Lakatos Award Expert Seminar (with Henk de Regt), London School of Economics, 21 Nov 2019.

December 2019
‘Realism for realistic people’, Manuscript workshop (with Michela Massimi and Nancy Cartwright), University of Edinburgh, 4 December 2019.

January 2020
‘Introduction to the philosophy of science: Is water H_2O?’, Natural Philosophy Society, Radley College (Oxfordshire), 21 January 2020.

Helen Anne Curry

This academic year my CRASSH Pro Futura research fellowship, which I’ve spent preparing a book manuscript on the history of efforts to conserve maize diversity, came to conclusion. Happily, the fellowship’s conclusion was immediately followed by the launch of a Wellcome Trust Senior Investigator Award, "From Collection to Cultivation: Historical Perspectives on Crop Diversity and Food
Security" in August. This five-year project will bring a team of researchers together at HPS to chart the histories of the different types of knowledge, labour, techniques and tools needed to transform plants gathered around the world into novel crop varieties. It aims to change our understanding of how and by whom modern agricultural crops, and modern diets, have been made.

Publications

Edited books
Special Issue, "The Collection and Conservation of Plant Genetic Resources," *Culture, Agriculture, Food & Environment* 4, no. 2 (December 2019)

Articles in books

Articles in journals

Online
‘How Gardeners are Reclaiming Agriculture from Industry, One Seed at a Time,’ *The Conversation*, 18 December 2019

Interview, *Proof Podcast* (America’s Test Kitchen), "Atomic Peanuts and Gamma Grapefruit," *Season 4, Episode 1*

Reviews


Lectures, seminars and conferences

October 2019
"Endangered Maize Diversity and the Origins of Seed Banking," Kew Millennium Seed Bank, Wakehurst Place

"In Search of Native Seeds: Histories of Indigenous Agriculture and the Imagined Futures of Farming," Global History Seminar, University of Warwick

December 2019
"The Many Lives of Mandan Maize," Republic of Plants workshop, IIT Madras, Chennai

Marta Halina

This year I continued as Director of the Kinds of Intelligence programme at the Leverhulme Centre for the Future of Intelligence. Our third annual Kinds of Intelligence conference was rescheduled due to COVID-19. I was awarded two new grants this year from the Templeton World Charity Foundation. The first grant with Adrian Currie (Exeter University) is for a book project on creative intelligence and the second with colleagues in Australia (Andrew Barron and Colin Klein) is for a three-year project on major transitions in cognitive evolution. This year, I served on the Poster Committee for the Philosophy of Science Association, continued as Director of Studies and Study Skills Tutor at Selwyn College, and served as Part II Ordinary Examiner in the Department, among other roles.

Publications

Articles in journals
‘The Animal-AI Testbed and Competition’, (with Matthew Crosby, Benjamin Beyret, Murray Shanahan, José Hernández-Orallo,
Nick Hopwood continued as director of graduate studies and chair of the degree committee and as HPS REF lead for outputs and open access; in Michaelmas Term he also chaired the HPS board and managed the Part IB course. With the other historians of medicine and health in the Department he began using a 4-year Wellcome grant to enhance our seminars and fund the Cambridge Wellcome Lecture. Nick is a deputy chair of the University’s Strategic Research Initiative on Reproduction and a faculty advisor to the CRASSH research group on Health, Medicine and Agency. He chaired the Levinson Prize committee of the History of Science Society and was awarded a 2020–21 Boston Medical Library Fellowship in the History of Medicine at the Countway Medical Library for research on human in vitro fertilization and embryology at Harvard Medical School in the mid-twentieth century. CUP brought the co-edited Reproduction: Antiquity to the Present Day out in paperback.

**Publications**

**Articles in books**


**Articles in journals**


**Online**

(with R Flemming and L Kassell) 10 things we learned about the history of reproduction, Cambridge Core blog, 25 September 2019

**Reviews**


**Lectures, seminars and conferences**

October 2019


Organized and (with R Flemming, S Golombek, L Kassell and J Secord) participated in panel discussion, ‘When was reproduction invented?’, Cambridge Festival of Ideas
November 2019
‘Imaging human embryos: A history’, Forum on Science and Society, European Molecular Biology Laboratory, Heidelberg
‘Human development: A history of serial images’, evening lecture, Generative Images: Biology, History, Media, Internationales Kolleg für Kulturtechnikforschung und Medienphilosophie, Bauhaus University, Weimar

April 2020
‘Reproduction in a pandemic’, special seminar, COVID-19: Perspectives from HPS, Department of History and Philosophy of Science, University of Cambridge

April–May 2020
‘Technologies of conception’, History of Reproduction, University of Groningen Honours College Winter School

July 2020
‘Scales for magnified things’, Elusive Images: Making Visible Things in the History of Science, roundtable, BSHS Global Digital History of Science Festival

Boris Jardine

During the academic year 2019–20 Boris Jardine concluded his Leverhulme/Isaac Newton Trust project, ‘The Lost Museums of Cambridge Science, 1865–1936’. The project resulted in a number of publications, notably the fourth issue of BJHS Themes, entitled ‘How Collections End’ (co-edited with Jenny Bangham and Emma Kowal), and the electronic resources ‘History of the New Museums’ (see below, ‘Online’).

Publications

Articles in books

Articles in journals

Online
‘History of the New Museums’; introduction to a digital resource documenting the development of the New Museums Site: https://cudl.lib.cam.ac.uk/collections/newmuseums

Reviews

Lectures, seminars and conferences

October 2019

December 2019

February 2020
‘Paper Instruments’, Images of Science graduate seminar

March 2020
‘What’s in a (street) name? Humphrey Cole’s London and the Specificity of Place in Elizabethan Practical Mathematics’, Science in the City, 1500-1800, Science Museum/Institute of Historical Research [but conducted online owing to the coronavirus pandemic]
Lauren Kassell

Lauren Kassell spent Michaelmas Term 2019 in Cambridge and the spring semester 2020 as a Distinguished Visiting Professor at the Department of History of Medicine, Johns Hopkins University. In Cambridge, she managed the MPhil in Health, Medicine and Society, continued to act as Co-Director of Research for Cambridge Digital Humanities, and was Director of Studies in HPS at Pembroke College, where she is a Fellow and sits on various committees. At Hopkins, she taught a graduate seminar on Cases. She continued to serve on the advisory boards of Annals of Science and Renaissance Studies and on the Research Libraries UK Special Collections Advisory Group. She sat on funding committees at the Wellcome Trust and the Folger Shakespeare Library, as well as the advisory boards of various journals and series.

Publications

Articles in books

Online

Reviews

Lectures, seminars and conferences


2/2020 ‘Inscribed, Coded, Archived: Digitizing Early Modern Medical Casebooks’, History of Science and Medicine Program, Yale School of Medicine, 24 February 2020

9/2019 ‘Written in the Stars: Digitizing an Astronomical Archive’, Hong Kong Institute for the Humanities and Social Sciences, Hong Kong University, 19 September 2019

Public engagement

Panelist for ‘The Occult’, Forum for Philosophy, LSE, 30.10.19, https://richmedia.lse.ac.uk/publiclecturesandevents/20191030_1830_the_Occult.mp3

Tim Lewens

Tim took over from Liba Taub as Head of Department in September 2019. He also continued in the role of co-chair of the University’s REF Unit of Assessment for Philosophy. Much of his time was taken up in the second half of 2019-20 with leading the Department through the first phases of the Covid pandemic.

Publications

Articles in books
Richard A. McKay

During the 2019-20 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 (www.richlifecoaching.co.uk). He continued as chief investigator for the ‘Before HIV’ project, which was extended until January 2021, 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. He delivered a keynote talk at the KDocs Film Festival in Vancouver in February 2020, and at Magdalene College presented the UK premiere of Killing Patient Zero, the documentary feature film based on his monograph, Patient Zero and the Making of the AIDS Epidemic. Dr McKay also provided expert commentary for journalists investigating the COVID-19 pandemic, for news outlets in Canada, Denmark, France, Portugal, Spain, Sweden, the UK, and the US.

Publications

Articles in journals
(with Margaret Pelling, Margaret Humphreys, Frank Huisman, Abigail Woods, and Yewande Okuleye) ‘Why Do We Do What We Do? The Values of the Social History of Medicine,’ Social History of Medicine 33 (2020), 3-17

Online

Lectures, seminars and conferences

October 2019
‘Emulating Darwin Judiciously’ The Definitions of Humanity Conference, Bordeaux.
Table Ronde, Les Définitions de l’Humanité, Musée Nationale de la Préhistoire, les Eyzies.

November 2019

‘Blurring the Germline’ University of Strasbourg.

February 2020

May 2020
‘Gremlins in the Germline’ Reproduction SRI, Cambridge

57
Killing Patient Zero, UK film premiere and Q & A session, Magdalene College, Cambridge, 29 February

April 2020
‘Patient Zero, Affective Labour, and the Value of Historical Research’, Guest Lecture Series, Contemporary History Institute, Ohio University, 9 April (event cancelled due to COVID-19 pandemic).

June 2020
‘On the Margins – Epidemics and the Disenfranchised’, panellist on virtual roundtable, Pandemic Histories series sponsored by Canadian Society for the History of Medicine, 15 June

Staffan Mueller-Wille

Publications
Articles in books

Articles in journals

Online

January 2020
Panel Discussion “Do we need a philosophy of the historiography of science?”, Workshop Turning the Mirror: From Scientific Pluralism to Pluralism in HPS, University of Exeter, Egebnis – Centre for the Study of Life Sciences, Jan 8-9, 2020


May 2020
“Genetics and Epigenetics: Historical Reflections”, Workshop “Interdisciplinary reflections on inheritance, development and environment”, Cambridge Reproduction SRI, May 1, 2020

“Calculating Trust”, HPS Virtual Conversation, University of Cambridge, May 28, 2020

July 2020
Author Interview with Soraya de Chadarevian, BSHS Global Digital History of Science Festival, Jul 6–10, 2020

September 2020
“Linnaeus in Lapland: Generating Knowledge in Transit”, Science Studies Colloquium Series, University of Oslo, Sep 9, 2020

Simon Schaffer

Simon Schaffer was on sabbatical leave in Michaelmas Term 2019. He was the E.G.R. Taylor Lecturer at the Royal Geographical Society and was awarded the Wilkins-Bernal-Medawar Medal of the Royal Society. From autumn 2019 he became a co-investigator on the Leverhulme Trust project Making Climate History. In 2020 he was chair of the Board of HPS, manager of the Part 1B course, chair of the Whipple Museum Committee and member of the Management Committee of the Scott Polar Research Institute. He chaired the Awards Committee of the early modern history section of the British Academy and served on the Advisory Board of the Science Museum.
Publications

Edited

Articles in books


Articles in journals


Lectures, seminars and conferences

October 2019

‘The Time Machine’, BBC Radio 4, In Our Time, www.bbc.co.uk/programmes/m0009bmf, October 17, 2019

‘Eddington, Newall and the Archaeology of Cambridge’s Early Modern Science’, Festival of Ideas, McDonald Institute for Archaeological Research, University of Cambridge, October 21, 2019

November 2019
‘Chocolate’, Valedictory Workshop for Professor Lissa Roberts, Museum Boerhaave, Leiden, November 25, 2019

January 2020
‘Sociology and Science & Technology Studies’, Science & Technology Reading Group, Department of Sociology, University of Cambridge, January 23, 2020

February 2020
‘Measurement’, King’s College Cambridge, February 20, 2020

March 2020
‘Remembering Bob Young’, Darwin College Cambridge, March 13, 2020 (organiser)

April 2020

May 2020


August 2020
‘Sensory and Material Economies in Early Fossil Capitalism’, European Society for History of Science, Bologna, 31 August 2020 (chair)

Carolin Schmitz
From 10/2019 until 7/2020 I was on maternity leave, a time that coincides much with the dates for the Academic Year 2019-2020.

Publications

Articles in books


Lectures, seminars and conferences

January 2020

September 2020
Conference Paper: Surgical Textbooks Meet Legal Records: Instructing and Witnessing the Practice of Surgery in Early Modern Spain. Part of Panel: Learning by Doing and Doing to Learn: Skills, Texts and the Materiality of Surgical Knowledge in Early Modern Europe, convened by: Elaine Leong and Maria Pia Donato
Seminar Programmes

Michaelmas 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.

**31 October**

**Elliott Sober (University of Wisconsin-Madison)**

CRISPR gene-drive and the war against malaria – the evolutionary ABCs

CRISPR is a new technology, but it mimics a process in nature that has been known for about 80 years, meiotic drive. In this talk, I'll explain some of the basic evolutionary principles that allows a driving gene to increase in frequency in a population even when it harms the individuals that house it. I'll also discuss two strategies that are now being pursued for using CRISPR gene drives to eradicate malaria. One involves driving to extinction the mosquitoes that spread malaria to humans; the other involves modifying the immune systems of those mosquitoes so that they are less able to spread malaria.

**7 November**

**Raffaele Danna (History, Cambridge)**

The adoption of Hindu-Arabic numerals in England and Italy, a comparative perspective (13th–16th centuries)

While the first introduction in Europe of Hindu-Arabic numerals has been investigated among scholars, the history of their diffusion across the continent is not well known. On the background of the most detailed reconstruction available of the European tradition of practical arithmetic, the paper offers a comparative perspective on the adoption and social circulation of Hindu-Arabic numerals in England and Italy. The comparative approach is justified by the observation that these two societies adopted Arabic mathematics in strikingly different ways. While in England Arabic mathematics was used in scholarly contexts starting from the 12th century, its practical application was still limited at the end of the 16th century. Despite being an early mover, English society proved rather reluctant in adopting the new numeral system. Italian urban societies, on the contrary, introduced Hindu-Arabic numerals in practical contexts from the late 13th century, and started a progressive adoption which made the new symbols widespread across urban social strata from the 15th century. What were the reasons underlying these different patterns? Relying on a vast set of accounting, practical as well as theoretical sources and studying the wider practices and social contexts in which mathematics was used, the comparative analysis allows to identify a complex convergence of factors that allowed for the appropriation of Arabic mathematics in late medieval Italian society as well as for its recombination within a new framework. The novel possibilities opened up by their adoption made the use of Hindu-Arabic numerals a necessary tool for economic activity, triggering their consolidated spread in practical mathematics. It was a contingent, but not random, appropriation of a foreign form of mathematical knowledge. The spread of Hindu-Arabic numerals in England from the 15th century is understood as a reception of the developments that had started on the other end of the continent, opening a perspective on the varying social roles of mathematics across time and space.

**14 November**

**Wesley Buckwalter (University of Manchester)**

Science and the approximation account of knowledge
It is widely accepted that knowledge is factive, meaning that only truths can be known. This theory creates a sceptical challenge. Because many scientific beliefs are only approximately true, and therefore false, they do not count as knowledge. I consider several responses to this challenge and propose a new one. I propose easing the truth requirement on knowledge to allow approximately true, practically adequate representations to count as knowledge. In addition to addressing the sceptical challenge, this view also coheres with several previous theoretical proposals in epistemology.

Karin Nickelsen (LMU Munich)
21 November  Cooperative division of cognitive labour: the social epistemology of photosynthesis research

Historians and philosophers of science have long recognised that the generation of scientific knowledge is a social endeavour, and that traditional epistemologies, which focus on individual scientists, are unable to capture its dynamics. Historians have provided rich accounts of research groups and institutions, although more recently, epistemological questions have received less attention. Philosophers of science, on the other hand, have developed formalised models that are difficult to match with actual historical episodes. In this paper, I argue that an integrated HPS perspective helps to better understand the social epistemologies of scientific collectives.

I flesh out this claim by presenting episodes from the history of photosynthesis research in the late 19th to mid-20th century. In this period, photosynthesis became a subject of great interest for researchers from many different disciplines, while the underlying mechanism remained obscure. I claim that, although the researchers were to some extent competing, their mostly cooperative interactions resulted in a division of cognitive labour that was never formally agreed, but in effect ensured the persistence of a plurality of complementary approaches. By this means, individual scientists improved their own chances of success, while also taking part in the success of others.

28 November  Cancelled

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 and Richard Staley.

Michael Barany (University of Edinburgh)
17 October  Making a name in mid-century mathematics: individuals, institutions and the open secret of Nicolas Bourbaki

In 1948, the American Mathematical Society received an application for membership from Nicolas Bourbaki, the pen name of a radical group of French mathematicians then rewriting the foundations of modern mathematics. While that application was quietly dismissed, a second application a year later and the correspondence it provoked together expose significant fault lines beneath the Americans' efforts to lead an international discipline in the wake of World War II. This article draws on a wide range of archival sources to situate Bourbaki's applications amidst the distinctive ways mathematicians established subjective identities in interaction with professional institutions in the mid-20th century. I show how Bourbaki's advocates parodied the period's norms of identification, exploiting newly important ambiguities and challenging newly reconfigured power structures in mathematicians' postwar disciplinary practice. The group's status as an open secret allowed its members to take special advantage of their new disciplinary circumstances while propounding an
aggressively transgressive intellectual programme. I close by developing a tension – between individuals and institutions – made more or less explicit in Bourbaki's applications and the responses to it, which sheds new light on recent understandings of subjectivity and embodiment in the history and sociology of modern science.

31 October

Arathi Sriprakash and Peter Sutoris (Faculty of Education, Cambridge)
The science of childhood: postcolonial development in India, 1950s

In this paper we examine how, in the decade following India's independence, the psychology of childhood became a locus of experimentation, and an avenue through which approaches to postcolonial development were expressed. Tracing the ideas of educational reformers, psychological researchers and child welfare advocates, we show how a 'science of childhood' in this period emphasised both the inherent potential and the emotional complexity of India's young citizens. However, while identifying this potential, these actors at times circumscribed it by deploying culturalist assumptions about Indian childhood that were linked to a teleology of the new nation state. These were ideas that shaped a 'pedagogic' approach to postcolonial modernisation. Nation-building was not just a technocratic undertaking, but an educative project that was scientific, spiritual and therapeutic in orientation. We reflect on the need for a greater attention to the pedagogy of the state in analyses of past and present state-citizen relations.

14 November

Sarah Dillon (Faculty of English, Cambridge)
'The Ineradicable Eliza Effect and Its Dangers': Weizenbaum, *Pygmalion* and the implications of gendering AI

Preface 4 of Douglas Hofstadter's *Fluid Concepts and Creative Analogies: Computer Models and the Fundamental Mechanisms of Thought* (1995) is entitled 'The Ineradicable Eliza Effect and Its Dangers'. Hofstadter defines the Eliza effect as an 'illusion', 'which could be defined as the susceptibility of people to read far more understanding than is warranted into strings of symbols – especially words – strung together by computers' (157). More widely, the Eliza effect in computer science names our tendency to unconsciously assume that computer behaviours are analogous to human behaviours, with a consequent effect on our perception of their ontological status. Hofstadter considers this dangerous in its effects because it misrepresents the capacities and capabilities of the research, and the technologies it creates. 'The operational term here is', he says, 'hype', but with an interesting caveat, 'and yet it is', he repeatedly says, 'inadvertent' (167). He acknowledges that it benefits the researchers, but he describes it as merely an 'overly charitable way of characterizing what has happened' (157). For Hofstadter, the Eliza effect is not mal-intentioned, but 'like a tenacious virus that constantly mutates', he says, it 'seems to crop up over and over again in AI in ever-fresh disguises, and in subtler and subtler forms' (158). Hofstadter identifies this phenomenon, but he is doing so as a scientist, in relation to its consequence for scientists and scientific research. What he does not do is think about the social and ethical consequences of the Eliza effect, and about the role of rhetoric in triggering it. In this paper, I explore the Eliza effect in this regard, from a feminist and a literary perspective. The Eliza effect gets its name from the responses to Joseph Weizenbaum's first natural language processing software, ELIZA, which he named after the heroine of George Bernard Shaw's play *Pygmalion* (1913). Understanding ELIZA's historical and literary origin stories highlights the role of gendering in triggering the Eliza effect, and its feminist dangers. This literary historical case-study can then inform contemporary debate regarding, for instance, the societal harm of the gendering of virtual personal assistants, in particular in relation to such social consequences as the objectification of women, and the replication of gendered models of power and subservience. More broadly, the paper demonstrates the role that literary narratives play in shaping the development, reception and impact of science and technology.

28 November

Cancelled
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.

The theme of this term’s meetings is 'Philosophy of Science in the Wild’. We host four practising Cambridge scientists from engineering, psychology, zoology and material science, each of whom is engaged in projects with recognisable philosophical components: how to balance different methods (Crilly), how to rank different sources of evidence (Christie), how to implement open and reproducible science (Orben), and how to communicate science (Dolan). We start with a brief presentation of their work before moving on to a relaxed and friendly Q&A.

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 Anna Alexandrova (aa686) if you would like to be included on the list.

18 October   Nathan Crilly (Engineering Design, Cambridge)
Pluralism and monism in design fixation research

8 November   Alec Christie (Zoology, Cambridge)
What works in wildlife conservation? Assessing the evidence to save the planet

22 November  Amy Orben (Emmanuel College and MRC Cognition and Brain Sciences Unit, Cambridge)
1 million correlations: steps towards reproducible psychological science

29 November  Cancelled

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 Jules Skotnes-Brown (jasb2).

14 October   Kevin Edwards (University of Aberdeen)
Marginalia in the 'bible' of pollen analysis

The annotation of texts and their study has a long history in literature and the humanities, but less so in science. This talk examines the marginalia within a copy of the first edition of *Text-book of modern pollen analysis* – the 'bible' of the discipline of pollen analysis (palynology), published in 1950 by two botanists, Knut Fægri (professor of botany in Bergen) and Johannes Iversen (palaeoecologist with the Danish Geological Survey).

Pollen analysis – the study of pollen grains incorporated in accumulating sediments – is the single most widely used technique in environmental reconstruction. The annotations are the work of 'Mr Pollen Analysis', palynology’s evangelist Gunnar Erdtman, a former schoolteacher who went on to develop one of the major research centres for palynology in Stockholm. A further ingredient in a
sometimes toxic mix is the 'founder' of palynology, the Swedish geologist Lennart von Post, who had approved of an introductory book by Erdtman and then went on to lavish considerable praise on Faegri and Iversen's volume.

The marginalia display strong feelings, even anger, concerning the contents of the book. They are pedantic, yet can often be shown to confront sloppy writing if not sloppy thinking. They certainly permit an insight into the perspectives of a pioneering scientist as well as revealing a lack of inhibition which might otherwise be hidden. They also reflect an adherence to traditional palaeontological approaches to plant systematics at a time when palynology was becoming more statistically and conceptually rigorous, addressing ecological problems at scales from the local to the global.

**Paul Sampson (Rutgers University)**  
21 October  
The lungs of a ship: labour, medicine and the maritime environment, 1740–1800

My overall project, 'Ventilating the Empire: Environmental Machines in the British Atlantic World, 1700–1850', investigates the pre-industrial origins of efforts to improve air quality as a measure for preventing the spread of contagious disease. The portion I will present examines the attempt to ventilate and reform the 'close, confined, putrid air' on Royal Navy ships during the mid-18th century. Alarmed at the high mortality rates of sailors, British experimenter and clergyman Stephen Hales (1677–1761) invented new 'ventilators': hand- or wind-powered bellows constructed to mimic the action of human lungs. Required on all Navy ships after 1756, these machines were unpopular with captains and many sailors, but Hales' theories deeply influenced the work of maritime medical experts James Lind, John Pringle and Gilbert Blane, who viewed ventilation as a vital necessity to be cultivated through hygienic discipline. Management of the shipboard environment was fiercely debated in moral terms that cast the clean, well-ventilated ship as the 'nursery' of sailors and the dirty ship as a 'pestilential maw' – an appellation most frequently applied to slave ships. My work will examine how shipboard ventilation played into debates over the use and abuse of labour both in the Royal Navy and the West Indies slave trade.

28 October  
**Cabinet Annual Fungus Hunt**

4 November  
**Nathan Smith (Zoology, Cambridge)**  
It takes a village: the life and legacy of Henry Thomas Soppitt (1858–1899)

Henry Thomas Soppitt was a greengrocer-turned-drysalter and artisan experimental mycologist whose work primarily focused on discerning the life-cycles of rust fungi. His death on 1 April 1899 was a seminal event in the history of the Yorkshire nature study. Occurring at a critical junction in British mycology, it saw unprecedented response by Yorkshire mycologists to cement his legacy through preservation of his library and herbarium. As time passed, and the fortunes of Yorkshire mycologists continued to decline, there was a continuous return to the work of Soppitt within the community. Focusing on Soppitt's elucidation of the lifecycle of *Puccinia bistortae*, this paper will explore the significance of the discovery to Yorkshire mycologists and the scientific landscape in which it took place.

11 November  
**Matt Holmes (CRASSH, Cambridge)**

Hybrid or chimera? Reinterpreting the botanical exchange of William Bateson and Erwin Baur

After several years fighting in defence of Mendelian genetics, William Bateson was appointed Director of the John Innes Horticultural Institution in 1910, where he investigated the development of plant chimeras. Recent scholarship has portrayed this research as something of a misstep by Bateson, which left him out of touch with modern developments in biology, including the chromosome theory of heredity. This paper argues that Bateson's interest in plant chimeras was partly an attempt to address a longstanding controversy in the annals of natural history: the existence, or non-existence, of graft hybrids. Previously unpublished correspondence between Bateson and the German botanist Erwin Baur reveals that Bateson sought to expose graft hybrids as chimeras in order to preserve
Weismann’s distinction between somatic and germ cells. For his part, Baur helped Bateson to grasp the true nature of plant chimeras and sent him specimens to display at the Royal Society. The timing of this exchange is significant. In Germany, a former debunker of the graft hybrid hypothesis, botanist Hans Winkler, claimed to have created a genuine botanical graft hybrid. In the United States, leading Mendelian William Castle was engaged in a heated exchange with physiologist Charles Guthrie over the existence of animal graft hybrids. Castle portrayed this clash as an attempt by neo-Lamarckians to overthrow both Weismann and Mendel. This wider context revises our picture of Bateson’s interest in plant chimeras from that of a scientific misstep to a necessary effort to tackle an immediate threat to the future of Mendelian genetics.

18 November

Joanne Green (HPS, Cambridge)

‘We the tormentors, the destroyers’: death, emotions and gender in entomology

This paper explores a female entomologist’s feelings towards the insects she collected during the 19th and the beginning of the 20th century. Entomology, ostensibly an exact and objective science, was in actuality filled with emotions, such as the aesthetic joy derived from the beauty and diversity of insects, and the excitement and heightened emotions of the hunt. This paper will place a special focus on the gendered aspects of the relationship between death and natural history, and how entomologists felt about killing insects and turning them into specimens, by focusing on the lepidopterist Margaret Fountaine. Fountaine’s entire life revolved around entomology and her collection, but she was also deeply conflicted, and oscillated between the joy of the hunt and the beauty of her captures, and pity and guilt over killing the insects. In her diary she habitually anthropomorphised butterflies and portrayed them as having feelings, while she herself sometimes felt as a murderer for killing them. However, these emotions were repressed in her scientific writing, illustrating one facet of the gendering of emotions among entomologists.

25 November

Cancelled

2 December

Cancelled

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 5.00–6.30pm in Seminar Room 1. Coordinated by Hasok Chang, and funded by the Society for the History of Alchemy and Chemistry (SHAC).

18 November

Sarah Hijmans (Laboratoire SPHERE, Université Paris 7 Diderot)

Composition and analogy in 19th-century chemistry: the case of aluminium

2 December

Cancelled

History of Medicine

Seminars, funded by Wellcome, 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 Lauren Kassell and Dániel Margócsy.
William Tullett (Anglia Ruskin University)
Smell and 18th-century medicine: ‘powerful and active atoms’?
Schedule note: We will begin with tea at 5pm. The talk and discussion will run from 5.30 to 6.45.

Elaine Leong (University College London)
Learning medicine by the book: reading and writing surgical manuals in early modern London

3 December Cancelled

History of Modern Medicine and Biology

Organised by Jenny Bangham, Nick Hopwood and Mary Brazelton.

Michael Sappol (Uppsala University)
Anatomy's photography: objectivity, showmanship and the reinvention of the anatomical image, 1861–1913
Advisory: This presentation will contain historical photographs of anatomized human bodies and body parts.

Lara Keuck (Humboldt University, Berlin)
Alzheimer's disease: the history of a working title

12 November Lochlann Jain (Stanford University)
In the same vein: the hepatitis B vaccine and America's dirty blood

Generation to Reproduction

Organised by Nick Hopwood and Lauren Kassell.

Katherine Harvey (Birkbeck, University of London)
A question of balance? Thinking about sexual health in medieval Europe

26 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 (mwe2). 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.

Miriam Solomon (Temple University)
On validators for psychiatric categories

The concept of a validator for a psychiatric category developed in the second half of the 20th century and is still in use. Surprisingly, the term 'validator' has never been explicitly defined in the psychiatric literature. Moreover, although lists of different kinds of validators have often been stated, there has been no explicit discussion in the literature about how different kinds of validator evidence should be
aggregated in a decision about how to create, revise or remove a psychiatric category. The goal of this paper is to trace the development of the concept of a psychiatric validator, showing how our understanding has changed over time. With this in mind, I evaluate possible recommendations for aggregating validator evidence.

30 October  
**Henry Shevlin (Leverhulme Centre for the Future of Intelligence)**

Theories of consciousness and animal minds: a modest theoretical proposal

The scientific study of consciousness has made considerable progress in the last three decades, especially among cognitive theories of consciousness such as the Global Neuronal Workspace account, Higher-order Thought theory, and Attention Schema theory. Such theories are typically concerned to identify correlates of conscious and unconscious processing in human beings. However, in light of heightened recent interest in consciousness in animals and even artificial systems, a key question for researchers is whether and how we can apply these frameworks to non-human subjects. In this talk, I review the prospects of this endeavour and discuss some challenges. I focus in particular on what I call the Specificity Problem, which concerns how we can determine an appropriate level of fineness of grain to adopt when moving from human to non-human cases. In light of this and other problems, I argue that most theories of consciousness currently lack the theoretical resources to allow for their straightforward application to non-humans. However, I also argue that a purely behavioural approach to non-human consciousness that eschews explicit theoretical considerations is unlikely to give clear answers to some important cases. Instead, I defend what I call a Modest Theoretical Approach, that aims to combine insights from the theories of consciousness debate with data from behavioural ecology, comparative neuroscience, and other sciences of non-human minds.

6 November  
**Sahanika Ratnayake (Philosophy, Cambridge)**

An appraisal of scientific reasoning as therapy in Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is one of the most popular schools of contemporary psychotherapy. One of the reasons for CBT’s success is its ability to present itself as ‘scientific’. This claim to scientific legitimacy not only influences how CBT’s efficacy is established, but also influences its therapeutic techniques.

Aspects of scientific reasoning and the scientific method are used as part of CBT’s arsenal of therapeutic techniques. For instance, clients are encouraged to evaluate problematic thoughts – referred to as ‘cognitive distortions’ – by testing them as if they were hypotheses.

In this paper, I will examine CBT’s account of cognitive distortions and the way in which scientific reasoning is used to evaluate and rectify them. I shall suggest that these therapeutic techniques cannot be working in the straightforward manner that CBT claims they are, as they fall afoul of some traditional objections from the philosophy of science.

13 November  
**Wesley Buckwalter (University of Manchester)**

The replication crisis and philosophy

The replication crisis is perceived by many as one of the most significant threats to the reliability of research in cognitive science. Though news of the replication crisis has been dominated by social psychology, all signs indicate that it likely extends to several other fields. This paper assesses the possibility that the crisis and related challenges extend to philosophy. According to one possibility, philosophy simply inherits a crisis by drawing on the same body of questionable evidence as in science. According to another possibility, a crisis is likely to extend to philosophy because philosophers engage in similar practices and structures as those implicated by the crisis in science. Proposals for improving philosophical research are offered in light of these possibilities.

20 November  
**Enno Fischer (Leibniz Universität Hannover)**

Pluralism about actual causation
In this talk I will suggest a pluralism with regard to actual causation: there is not a single and unified concept but a plurality of concepts of actual causation. The motivation for this pluralism is functional. The concepts need to be distinguished because otherwise they do not facilitate some of their key purposes: intervention and the ascription of responsibility. I will also explore some consequences for theories of causal models.

27 November  Cancelled
4 December  Cancelled

The Dialectic

The Dialectic is a new, experimental seminar series premised on the notion that the format of a constructive dialogue (not: debate) is uniquely well-suited for the exposition and analysis of novel ideas and unconventional views on the nature of history, philosophy, science and everything in between.

Each session shall take the form of a dialogue between a Proponent and an Opponent. The Proponent shall advance a thesis, about which they will be questioned by the Opponent. The Opponent may seek to rebut the Proponent's thesis, defend their own counter-thesis, or simply question the Proponent so as to better understand their reasoning.

In the academic year 2019–2020, The Dialectic will be held on a termly basis. For questions, please contact the organiser, Bobby Vos (bfmv2).

Tuesday 29 October, 11am, Seminar Room 1
Hasok Chang (proponent) and Tim Lewens (opponent)
Thesis: Scientific knowledge is about real objects, which are constrained creations of our minds

Aims and Methods of Histories of the Sciences

Mondays, 11.30am–1pm, weekly from 21 October (6 sessions)
Nick Jardine, with Geoffrey Lloyd, Hasok Chang, Cristina Chimisso, 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. Subsequent sessions will discuss uses of histories of the sciences by scientists, the pioneering work of Hélène Metzger on the methods and purposes of history of science, the relations between history and philosophy of science, and historical studies of cross-cultural communication in the sciences.

Participants will be invited to offer contributions and to suggest further readings.

Science in Print

Tuesdays, 3pm–4.30pm, weekly from 29 October (5 sessions)

Understanding how the book is made is vital to the study of its contents, helping to locate its economic and social context, its audience, and ultimately its historical significance. Using examples from the Whipple Library’s rare book collections, the manuscript holdings of the Parker Library, and the University Library’s Historical Printing Collection, this series will explore some bibliographical techniques to identify and describe the structure and production of printed material from the manuscript era through to the hand press period (16th–18th centuries), and consider the uses and abuses of online derivatives. Although the focus will be on scientific texts and illustrations, these sessions will be of interest to book historians in all disciplines, and all are welcome.
The sessions on 29 October and 12 November will be in the Old Library; the session on 5 November will be in the Parker Library, Corpus Christi College; and the sessions on 19 and 26 November will be in the Historical Printing Room at the University Library.

Kinds of Intelligence Reading Group

What? A reading group focused on comparative and theoretical issues in the philosophy of psychology and cognitive science, with particular focus on the puzzles, insights, and challenges presented by non-human intelligence.

When? Thursdays, 11am–12.30pm

Where? Upstairs Boardroom, Leverhulme Centre for the Future of Intelligence

Convener: Henry Shevlin

PART 1: Methodology and Theory

3 October Miracchi (2019), A competence framework for artificial intelligence research

10 October Brown (2019), Infer with care: a critique of the argument from animals

17 October Figdor (2017), On the proper domain of psychological predicates

24 October Guest: Ali Boyle. The impure phenomenology of episodic memory

PART 2: Scientific Frontiers

31 October Marino and Merskin (2019), Intelligence, complexity, and individuality in sheep

7 November Ha & Schmidhuber (2018), World models

14 November Gagliano (2017), The mind of plants: thinking the unthinkable

21 November Guest: Dan Williams. Socially adaptive belief

PART 3: Ethics, Intelligence, and AI

28 November Haas & Klein (draft), Modeling moral problems

5 December Monsó, Benz-Schwarzburg, & Bremhorst (2018), Animal morality: what it means and why it matters

12 December Tomasik (2014), Ethical issues in artificial reinforcement learning

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 fortnightly (starting 10 October) on Thursdays, 1pm to 2pm in the Board Room. Organised by Mary Brazelton, Josh Nall and Richard Staley.

Everyone is welcome – feel free to bring along your lunch.

10 October: Introductions and Research Interests

Our first Reading Group meeting will be a general one, aiming to bring together those who are working in the history and historiography of the sciences in the long twentieth 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 refine an agenda for the rest of the term and year.
based around participants’ research interests. We do have a suggestion for the immediate programme, that we focus on material culture to take advantage of the celebration of the 75th anniversary of the opening of the Whipple Museum. Is there something you’d like to read with others, a good issue to explore? We welcome contributions.

24 October: Thick Things

This week we discuss contributions to an Isis 2007 focus section on 'Thick Things' in our own celebration of the 75th anniversary of the Whipple Museum. Please read Ken Alder's brief introduction and Bruno Latour's 'afterword', and perhaps one other of the several excellent contributions from John Tresch, Gabrielle Hecht, Wiebe Bijker and Alder himself. References to the intro and afterword are:


And the other articles take in technological world-pictures, nuclear things, dikes, dams, bombs and polygraphs...

7 November: The Matter of History – The Copper Atom

This week we consider Timothy LeCain's neo-materialist approach, focusing on chapter 7, 'The Copper Atom' in his recent book The Matter of History, which gives a comprehensive understanding of his approach and also offers an overview of critical issues. Although this can be read on its own, you may also wish to read the book's introduction. The book is available electronically through the University Library, and the reference and a link to the chapter follow:


21 November: The People's War Against Earthquakes; And Scientific and Pedagogical Instruments in Japan

This week the Twentieth Century Reading Group will be discussing a Fa-Ti Fan chapter on cultures of mass science in Mao's China, along with work from an special issue of Historia Scientiarum: The International Journal of the History of Science Society in Japan devoted to Historical Studies of Scientific and Pedagogical Instruments. Amongst them we suggest in particular Boumsoung Kim's paper on seismology in Meiji Japan.


Calculating People

Calculating People is a reading group on history and philosophy of social sciences dedicated in Michaelmas 2019 to the theme 'What counts as evidence in social sciences?'. The group reads leading social science research in alternation with methodological and philosophical articles. All participants commit to doing the reading each time and to attending all sessions. The session starts
with each participant briefly describing their impressions/questions on the reading assigned, after which the chair conducts a discussion on the recurring themes.

The meetings take place on **Thursdays at 2pm in the Board Room**. Organised by Anna Alexandrova and Christopher Clarke.

10 October


17 October


24 October


31 October


7 November


14 November


21 November


**Social Epistemology of Science Reading Group**

This reading group aims to look at some of the important themes in contemporary social epistemology of science – including, but not limited to division of cognitive labour, the mechanisms driving novelty versus conservatism in science, the incentive structures in which scientists are embedded, and the gender productivity gap in scientific research. These themes connect to many issues in integrated HPS, therefore we believe the group will offer a platform for productive intellectual exchange in the Department and beyond.

**When:** Fridays 10am  
**Where:** Seminar Room 2

**Organisers:** Olesya Bondarenko and Lukas Beck  
**Faculty sponsor:** Anna Alexandrova
18 October: Division of epistemic labour and cognitive diversity

25 October: Conservatism in science (1st session)

1 November: Conservatism in science (2nd session)

8 November: Priority rule and incentives system in science

15 November: Gender productivity gap in academia
- Discussion: Gender publication gap in philosophy of science

22 November: Problems of social epistemological modelling

29 November
- Cancelled

6 December
- Open – readings to be decided by participants

Power and Identity in Philosophy of Science

This reading group (formerly the Intersection of Gender, Race and Disability with Philosophy of Science) meets on **Mondays, 2–3pm, in Mill Lane Lecture Room 10**. Organised by Azita Chellappoo (asc63).

14 October


21 October


28 October

4 November


11 November


18 November


25 November

Cancelled

2 December

Cancelled

**Philosophy of Psychology and Psychiatry Reading Group**

Philosophy of Psychology and Psychiatry will join forces with the Philosophy of Medicine Reading Group this term and meet during their usual time slot, **Tuesdays from 1–2pm in Seminar Room 1**. This term’s theme is 'Psychiatric & Psychotherapeutic Ethics'.

Organised by Riana Betzler and Sahanika Ratnayake.

**Week 1 (15 October) – Introduction & Codes of Conduct**


**Week 2 (22 October) – Historical Development of the ‘Ethics Code’ (The American Psychological Association’s Ethical Principles of Psychologists and Code of Conduct)**


**Week 3 (29 October) – Politics & The Goldwater Rule**


**Week 4 (5 November) – Ethics of Diagnosis: Focus on Personality Disorders**

Week 5 (12 November) – Ethics of Treatment: Moral Content

Week 6 (19 November) – Autonomy, Capacity, Rationality, Diagnosis

Week 7 (26 November) – Involuntary Treatment/Commitment

Week 8 (3 December) – Pregnancy & Mental Health Care
- Doctors can perform c-section if woman loses mental capacity, judge rules. The Guardian. 2 September 2019.

Philosophy of Medicine Reading Group
This term we will be holding joint sessions with the Philosophy of Psychology and Psychiatry Reading Group.

Philosophy and History of Physics Reading Group
This reading group meets on Tuesdays, 4.30pm to 6pm in the Board Room. Organised by Jeremy Butterfield, Matt Farr and Bryan Roberts.

Our theme this term is The Arrow of Time. Weekly meetings start on 15 October, but we will not meet on 29 October or 5 November. The last two sessions of term (26 November and 3 December) have been cancelled.

12 November


Early Science and Medicine Work-in-Progress
This is a termly forum, supported by Wellcome, 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. The meeting this term is on Tuesday 8 October, 5–8pm.

Convened by Lauren Kassell, Silvia De Renzi (OU) and Dániel Margócsy.

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, starting on 15 October, from 10.00 to 11.00am in the Board Room.**

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 6.30pm.**

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.

**Lent 2020**

**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 Riana Betzler and Agnes Bolinska.

**16 January**

**Ali Boyle (Trinity Hall, Cambridge)**

Nonhuman episodic memory, scepticism and psychological kinds

For around 20 years, a significant research programme in comparative cognition has been investigating whether nonhuman animals have episodic memory – the form of declarative memory involved in remembering past events. This research programme has yielded many apparently confirmatory results, across a wide range of species. Yet there is little consensus on whether animals have episodic memory. Why is this? There are a number of grounds for scepticism, but here I focus on just one family of sceptical views, which I call 'kind scepticism'. Kind sceptics argue that the evidence doesn't support the hypothesis that animals have episodic memory, since it fails to rule out that they have a form of memory that, though similar to episodic memory, differs in kind. This raises a difficult question about how to delineate episodic memory as a psychological kind. I suggest that kind sceptics and advocates of nonhuman episodic memory are committed to different answers to this question, and that their disagreement can't be settled by appeal to the objective structure of the world, but only by appeal to pragmatic considerations. This dispute is in a sense terminological, but
significant – since it brings into focus important questions about what the episodic memory research programme aims to, and can, achieve.

23 January  
Milena Ivanova (HPS, Cambridge)  
How atoms became real

This paper revisits the debate on the reality of atoms. At the turn of the 20th century, many physicists treated the atomic hypothesis with scepticism, claiming that atoms were fictional entities. While many, such as Ostwald and Poincare, changed their minds after the publication of Thompson's and Perrin's experiments, some, such as Mach and Duhem, continued to oppose the reality of atoms despite the experimental support. I argue that at the heart of this debate are methodological arguments that influenced physicists’ stances both before and after experimental evidence in favour of the reality of atoms. Ostwald and Poincare were able to accept the reality of atoms since the atomic hypothesis became scientific on their terms in light of being experimentally testable, with the multiple ways of calculating the number of atoms in a volume being particularly convincing. Conversely, Duhem and Mach continued to reject the reality of atoms since they held that science should offer explanations that do not go beyond the observable. I evaluate the arguments on both sides and reflect on how philosophical stances impacted on what scientists were willing to accept as genuine scientific evidence.

30 January  
Sabine Clarke (University of York)  
Pick your poison: insecticides and locust control in colonial Kenya

Literature on the use of insecticides in the tropics after 1945 is preoccupied with the WHO’s Malaria Eradication Programme. This scholarship describes a form of technological hubris in which scientists rushed to deploy the quick fix of DDT on the widest possible scale, fuelled by belief in the power of Western science and buoyed by Allied victory. This paper focuses on trials to control locusts in Kenya after 1945 using synthetic insecticides to tell a different story. It shows that approaches to the use of new synthetic insecticides in Britain’s African colonies were often informed by debate about the relative costs of different locust control measures. This reflected the weaker economic position of Britain in comparison to the USA, backers of the WHO programme, but more importantly, regimes of locust control that used substances such as gammexane were evaluated in Kenya against pre-existing methods. In other words, the notion that DDT and related chemicals were wonder weapons of such power that they marked a radical departure from past measures, and quickly rendered all previous insect control methods obsolete, is not borne out by this study. The use of the new insecticides was dependent upon calculations of advantage versus cost in comparison to well-established existing methods. In addition, previous experience with arsenic bait and pyrethrum shaped the testing and deployment of gammexane in significant ways, including evaluation of its toxicity. The perception of the new chemicals as part of a continuum of poisons also informed the attitudes of Kenyan herdsmen. Their suspicion of gammexane was not merely the result of a distrust of Western science and the colonial government, but arose directly from the experience of seeing their cattle poisoned by arsenic bait during the interwar years.

6 February  
Miriam Solomon (Temple University)  
On pluralism in psychiatry

I have argued that pluralism about methods and/or theories is good for science, because it can increase empirical success, but bad for scientific authority, because it hinders consensus. Psychiatry has been dominated by a single conceptual framework for the last forty years (the DSM framework) and enjoyed considerable professional authority. Because of the ‘crisis of validity’, this dominance has recently given way to a pluralist situation in which several different approaches to disease nosology are being developed. In addition to the DSM framework, there is the RDoC program, the network approach, the mechanistic property cluster approach, and others. My paper will explore the
challenges and difficulties of working with pluralism in psychiatry, making constructive suggestions for future research.

13 February at 4pm

**Fifteenth Cambridge Wellcome Lecture in the History of Medicine**
Sarah Richardson (Harvard University)
The maternal imprint: gender, heredity and the biosocial body

The rise of Developmental Origins of Health and Disease and the fetal programming hypothesis is part of a forceful reassertion, over the past decade, of wide-ranging theories of the maternal-fetal interface as a critical determinant of lifelong health and intergenerational patterns in disease distribution. Presenting a history of maternal effects science from the advent of the genetic age to today, this talk analyses three intertwined dimensions of scientific speculations about the long reach of the maternal intrauterine imprint: interest in the power of maternal effects science to disrupt genetic determinist ideas about human fate; conceptual and empirical debate over how to study such effects given their crypticity; and claims about the implications of maternal intrauterine effects for women's well-being and autonomy. In each historical period, scientists' views about what can be empirically studied, and indeed known, about human maternal effects are entangled with cultural beliefs about women's and men's reproductive responsibilities and shaped by scientists' politically and historically situated convictions about the relative importance of genes or social environment to life outcomes.

20 February Cancelled

27 February

Andreas Daum (University at Buffalo)
'I am rhapsodic man': Alexander von Humboldt in search of himself

In recent years, Alexander von Humboldt (1769–1859) has resurfaced as a heroic, public figure. Popular accounts and new text editions suggest that the Prussian-born scholar is one of us in the 21st century: ecological in his thinking, democratic in his beliefs, and far ahead of his own epoch. In contrast, Andreas Daum calls for carefully historicizing Humboldt. Based on an ongoing biographical project, his talk will concentrate on the 1790s, when the young Humboldt pursued widespread research interests and simultaneously tried to reconcile his divergent passions. Rather than navigating on a straightforward course toward his American journey and a future era, Humboldt became entangled in the uncertainties of the revolutionary times that surrounded him. He embarked on a rhapsodic search of himself as a mensch, researcher and friend to his male companions.

5 March Cancelled

**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 and Richard Staley.

23 January

Allegra Fryxell (Pembroke College, Cambridge)
The tempo of modernity: rethinking the history of modern time

Transformations in time and space are fundamental components of definitions of modernity, yet time has only recently gained attention as a crucial category of the modern in historical research. While historians have typically explored changing notions and experiences of time through new technologies or conventions for measuring time, this paper seeks to expand the conceptual definition of time in
modernity by arguing for an interdisciplinary approach that brings the history of science into conversations with the history of art and literary studies. Focusing on the period from the late 19th century to World War Two, ideas of time manifest in period philosophy, psychology, theatre and science fiction are used to capture a general sense of temporality (and its relationship to historicity) in early-20th-century modernity. The paper presents a new form of temporality, palimpsestic time, as a common feature of Euro-American modernity that must be taken into account alongside popular theories of 'social acceleration'.

Zhu Jing (University of Warwick)
6 February Non-Han bodies: anthropology, visuality and biopower in China's southwest borderland during the second Sino-Japanese War (1937–1945)

This paper examines the biopolitics of non-Han bodies by probing how ethnicities were classified and conceptualized in Republican China. Extensive anthropometric research was carried out on non-Han populations in the southwest during the second Sino-Japanese War, during which several anthropologists turned to researching non-Han groups under the rubric of frontier politics (边政 Bianzheng). Through imagery, technology and statistics, Republican scholars sought to generate collective physical traits for non-Han populations, in order to justify state interventions, whether for 'civilizing' the non-Han, cultivating the frontier, reclassifying local ethnic groups or constituting a unifying Zhonghua Minzu. The paper emphasizes the legacies of late imperial ethnography on Republican frontier governmentality, in particular the ideas and techniques of representing racial orders through employing imagery and the body as tools. It thus enriches our understanding of the intersections of science, visuality and frontier biopower in Republican China.

20 February Cancelled
5 March Cancelled

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.

31 January Jenni Sidey-Gibbons (Canadian Space Agency, and Department of Engineering, Cambridge)
Cambridge to cosmos: why and how an academic engineer became an astronaut

14 February James Dolan (King’s College, Cambridge), hosted by Anna Alexandrova
Science communication's 'missing masses': reconciling a scientist's lived experience with the science communication literature

6 March Jerry Kutcher (Department of History, Binghamton University)
Cancer research in the clinic: my twenty years at Memorial Sloan-Kettering Cancer Center

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.

Seminars are held on Mondays (except for the seminar on Friday 14 February) at 1pm in Seminar Room 1. Please feel free to bring your lunch.

Organised by Jules Skotnes-Brown (jasb2).

20 January  

Peter J. Bowler (Queen's University Belfast)  

‘Home and colonial’ wildlife literature around 1900

The topic of this paper derives from earlier studies of popular science literature around 1900 and focuses on natural history literature devoted to wildlife in colonies of the British Empire, especially India. The ‘home and colonial’ theme refers to the emergence of a British population in the colony large enough to sustain serious interest in the local wildlife – wildlife that was an everyday experience for them but which would seem exotic and exciting to readers back in Britain. The paper looks at the relationship between material published in Britain and the growing body of works aimed at expatriate readers and increasingly published in India. It also looks at the emergence of societies such as the Bombay Natural History Society, and the links between them and the publication of descriptions of big game hunting in India.

27 January  

Tamara Fernando (History, Cambridge)  

‘Seeing like the sea: the pearl fishery of Ceylon as a maritime assemblage, 1799–1925’

This paper argues that the pearl fishery of colonial Ceylon, which has featured in key economic and state-centric analyses of imperialism in South Asia, may also be read as a multi-species assemblage where the non-human – sharks, molluscs and bluebottle flies, for instance – have new causal and agential power to shape emergent capitalist forms. Importantly, however, this consideration of the non-human above and below the waves of the sea also compels the parsing apart of the ‘human’, revealing a system of multiple, overlapping regimes of labour. Thus, contrary to the model of Raubwirtschaft [plunder economy], which homogenises and flattens both the natural world and those who inhabit it, the fishery represents a tiered and variegated system where overseers, divers, and indentured workers interacted with and produced the ocean and its maritime occupants in independent but intersecting ways.

3 February  

Sarah Qidwai (University of Toronto)  

Decolonising history of evolutionary biology: a perspective from 19th-century India

In an 1896 article in the Urdu journal Tahzib-ul-Akhlaq, titled ‘Adna Halat se Aala Halat par Insaan ki Taraqqi’ (‘The Stages of Human Development from an Inferior to Superior State’), Sir Sayyid Ahmad Khan (1817–1898) wrote, ‘the monkeys that exist today, orangutans and apes, are quite similar to humans in many ways. Darwin claims that middle chains are missing or extinct, but even if we found them, they would only prove similarities among kinds.’ Here, Sayyid Ahmad refers to the English naturalist Charles Darwin (1809–1882), not to discredit or defend Darwin’s theory of evolution, but to support Sayyid Ahmad’s own position on the topic, outlined in ‘Adna Halat’, that humans evolved over time from a common animal ancestor and this process is guided by a divine creator.

This talk examines questions related to Sayyid Ahmad’s views on human evolution and its broader implications related to historians of biology. What is left out when historians use a term such as ‘Darwinism’ to represent the history of evolutionary biology? Does it create a Eurocentric narrative of evolutionary thought focused on a specific area? I will argue that Sayyid Ahmad’s views on human evolution are not only important in how we write about the history of evolutionary biology, but also of the theories of human development from a non-Eurocentric perspective, in this case a Muslim in 19th-century India.
Animal studies scholars have long interrogated the ways in which definitions of what it means to be human have rested upon comparisons with animal others. As this work has shown, monkeys and apes have been pivotal in the history of these definitions. The taxonomical order of primate has been a site for much discussion over the place of humans within the animal kingdom, as well as the grounds for disputes over what constitute distinctively human traits. However, these are often Eurocentric narratives which examine the intellectual debates within Natural History as they played out in imperial scientific societies, publications and research institutions. In contrast, my paper focuses instead on a colonial context, looking particularly at more ephemeral, vernacular Burmese-language texts. It explores how Burmese, British and wider understandings of monkeys intermingled in early 20th-century Myanmar. Monkeys, it will be argued, were entangled with shifting discourse on Buddhism, modernity and nationalism. By focusing on Burmese anti-colonial thought, the paper expands the ambit of animal studies scholarship and carefully attempts to better align its concerns with those of postcolonial and decolonial critique.

At the turn of the 20th century, European and American palaeontologists expanded their research into colonial regions. Partly this took advantage of imperial expansion, which formed a new context for natural history collecting, the increased influence of European and American museums, and the development of geological surveys. It was also connected with new scientific research agendas, with debates and researches on biogeography becoming a major scientific concern. This paper will examine one of the most high-profile instances where these areas intersected: the upsurge of palaeontological excavation in the Fayum in Egypt in the years around 1900. Expeditions from a range of countries and institutions, including the British Museum of Natural History in London, the American Museum of Natural History in New York, and the natural history of museums of Munich and Stuttgart, conducted excavations in the region, seeking to acquire Egyptian fossils and present them to public audiences in their home countries. This paper will examine how these expeditions interacted with one another, and operated through local intermediaries, geological institutions and excavators, as a case-study of the complex interrelations within colonial science in this period. Moreover, it will examine how the fossils collected during these projects were understood to revise dominant interpretations of evolutionary and biogeographic history. They seemed to show the ancestors of elephants, manatees, hyraxes and whales, as well as a range of stranger herbivorous and carnivorous mammals, and therefore filled important gaps in knowledge of life’s history. In this way, this international colonial project drew off a sense of mystery and purpose, marking out Africa as a whole as an important centre of evolutionary development.
27 January  Vanessa Seifert (Department of Philosophy, University of Bristol)  The chemical bond as a real pattern

10 February  Catherine M. Jackson (Faculty of History, University of Oxford)  How can history of chemistry engage chemists? And why should it?

History of Medicine

Seminars, funded by Wellcome, 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.

18 February  Eric Jorink (Huygens Institute and Leiden University)  Reconstructing Noah's ark in the 17th-century Dutch Republic

10 March  Cancelled

12 May  Anne Goldgar (King's College London)  Affect and empiricism in the early modern Arctic

History of Modern Medicine and Biology

Organised by Jenny Bangham, Mary Brazelton and Nick Hopwood.

21 January  Hilary Smith (University of Denver and Needham Research Institute)  The Chinese calorie: nutrition science in early 20th-century China

Sarah Marks (Birkbeck, University of London)

4 February 'You have to incorporate the client's belief system... even when it is the opposite of your own': CBT and psychotherapy in Ghana since 1974

25 February  Cancelled

Generation to Reproduction

Organised by Nick Hopwood.

Laura Kelly (University of Strathclyde)

14 January  The contraceptive pill in Ireland: activism, women's agency and doctors' authority in the 1960s and 1970s

11 February  Elena Serrano (Max Planck Institute for the History of Science)  A good match: gender and the physiology of love in 18th-century Spain

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.

29 January  **Marta Halina (HPS, Cambridge)**  
Creativity and AI

In March 2016, DeepMind's computer program AlphaGo surprised the world by defeating the world-champion Go player, Lee Sedol. AlphaGo has a novel, surprising and valuable style of play, and has been recognized as 'creative' by the AI and Go communities. This paper examines whether AlphaGo engages in creative problem solving according to the standards of comparative psychology. I conclude that although AlphaGo lacks one important aspect of creative problem solving found in animals (domain generality) it exhibits a different capacity for creativity: namely, the ability to transform a conceptual space through something akin to instrumental conditioning. This analysis has consequences for how we think about creativity in humans and AI.

5 February  **Jonathan Birch (LSE)**  
The search for invertebrate consciousness

There is no agreement on whether any invertebrates (e.g. insects, spiders, worms, octopuses, crabs) are conscious and no agreement on a methodology that could settle the issue. How can the debate move forward? I distinguish three broad types of approach: theory-heavy, theory-neutral and theory-light. I argue that the theory-heavy and theory-neutral approaches face serious problems, motivating a middle path: the theory-light approach. At the core of the theory-light approach is a minimal theoretical commitment about the relation between consciousness and cognition that is compatible with many specific theories of consciousness: the hypothesis that conscious perception of a stimulus facilitates, relative to unconscious perception, a cluster of cognitive abilities in relation to that stimulus. This 'facilitation hypothesis' can productively guide inquiry into invertebrate consciousness. What's needed? At this stage, not more theory, and not more undirected data gathering. What's needed is a systematic search for consciousness-linked cognitive abilities, their relationships to each other, and their sensitivity to masking. I illustrate the 'theory-light' approach using the example of bees.

12 February  **Bryan W. Roberts (LSE)**  
The good news about killing people

Modern economics has designed a body of theory for how to make decisions involving irreversible outcomes. Motivated by this theory, we propose a 'Good News Principle' for the decision to kill one's self or others, which states that such a decision depends on the quantity and probability of future good news (supporting not killing), but not of future bad news (supporting killing). We then derive this principle as a theorem of a simple consequentialist model for irreversible acts.

**Science, History of Science and Modernity**

**Tuesdays, 9.30am–11am, weekly from 21 January (6 sessions)**  
Lorraine Daston

The discipline of the history of science originated with the claim that science made the modern world and our periodization still hinges on the premodern/modern divide. But recent scholarship, especially in global history, has challenged the very idea of modernity. We'll be reading both classical and current work on this question and discussing its implications for rethinking the history of science.
Images of Science

Wednesdays, 11am–12.30pm, weekly from 22 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.

Ideologies of Science

Tuesdays, 3pm–4.30pm, 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 social and political roles. Ideological conflicts to be considered include: radical agnostic John Stuart Mill vs conservative Anglican William Whewell on the methods of natural science and its proper place in education; 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, feminism and democracy.

Participants will be invited to offer contributions and to suggest further readings.

Philosophy of Psychology and Psychiatry Reading Group

Thursdays, 10am–11am in Seminar Room 1. Organised by Riana Betzler and Sahanika Ratnayake.

23 January – Involuntary Treatment/Commitment

30 January – Pregnancy & Mental Health Care
• Doctors can perform c-section if woman loses mental capacity, judge rules. The Guardian. 2 September 2019.

6 February

13 February

20 February

27 February
Kinds of Intelligence Reading Group

What? A reading group focused on comparative and theoretical issues in the philosophy of psychology and cognitive science, with particular focus on the puzzles, insights, and challenges presented by non-human intelligence.

When? Thursdays, 11am–12.30pm

Where? Upstairs Boardroom (unless otherwise specified), Leverhulme Centre for the Future of Intelligence

Convener: Henry Shevlin

Part 1: Comparative Cognition

Guest: Konstantinos Voudouris. Inside Insight: Against a Thorpean Dogma.
9 January

16 January No meeting


Change of location: CFI Downstairs Boardroom


13 February No meeting

Part 2: Artificial Intelligence


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 fortnightly on Thursdays, 1pm to 2pm in the Board Room. Organised by Mary Brazelton, Josh Nall and Richard Staley.
Everyone is welcome – feel free to bring along your lunch.

16 January

30 January

13 February

27 February

**Decolonise HPS Working Group**

The Decolonise HPS Working Group is a staff-student collaboration that considers issues surrounding decolonisation in the Department and the field(s) of HPS more broadly, as well as related issues. Discussion includes such topics as curriculum reform, inclusive pedagogy, and collaborations on similar projects with other such groups in the University. The group meets every other Friday at 2pm–3pm in the Board Room. All members of the Department are welcome to attend.

**Power and Identity in Philosophy of Science**

This reading group (formerly the Intersection of Gender, Race and Disability with Philosophy of Science) meets on Mondays, 2–3pm, in Mill Lane Lecture Room 10. Organised by Rory Kent (rdk32).

20 January

27 January

3 February

10 February

17 February

24 February

2 March
Calculating People

Calculating People is a reading group on history and philosophy of social sciences. This term we continue the theme of what counts as evidence in different disciplines. The group reads leading social science research in alternation with methodological and philosophical articles. All participants commit to doing the reading each time and to attending all sessions. The session starts with each participant briefly describing their impressions/questions on the reading assigned, after which the chair conducts a discussion on the recurring themes.

The meetings take place on Tuesdays, 11am–12noon in the Board Room (but check for location on the monitor in the lobby). Organisers are Christopher Clarke and Anna Alexandrova.

All are welcome!

21 January

28 January

4 February

11 February

18 February

3 & 10 March

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
21 January

28 January

4 February
- Bueter, Anke and Jukola, Saana. Forthcoming. 'Sex, Drugs, and How to Deal with Criticism' in *Uncertainty in Pharmacology* (Osimani and La Caze, Eds.)

11 February

18 February

25 February
- Stegenga, Jacob. 'The Medicalisation of Female Sexual Desire', draft chapter.

Presenter: Anna Alexandrova

3 March
- Meynell, Letitia. 'Review of The Case of the Female Orgasm.' *Hypatia* 22(3): 218–222.

Presenter: Miriam Solomon

10 March

**Philosophy and History of Physics Reading Group**

This reading group meets on **Tuesdays, 4.30pm to 6pm in the Board Room.** Organised by Jeremy Butterfield, Matt Farr and Bryan Roberts.

Our theme this term is: spacetime.

21 January

We will discuss David Malament, 'Causal theories of time and the conventionality of simultaneity'. *Nous* 1977.

28 January

We will discuss (i) a philosophical introduction to representation theorems for geometry and spacetime, and then (ii) a paper by Bryan Roberts which generalizes Malament’s 1977 theorem.

4 February

We will have presentations by Grace Field (on black holes) and James Wills (on singularities in general relativity). For a copy of the corresponding papers, please contact Jeremy Butterfield (jb56).
11 February

We will discuss Gryb, Palacios and Thébault, ‘On the Universality of Hawking Radiation’.

18 February

We will discuss Unruh's 1995 paper on sonic analogues of black holes. Discussion will be led by Bryan Roberts, who will kindly provide notes.

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If you would like to participate, please email the organisers, Justin Rivest (jr723) and Carolin Schmitz (cs2003).

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Convened by Lauren Kassell, Silvia De Renzi (OU) and Dániel Margócsy.

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For more information or to be added to the mailing list, please contact Mary Brazelton.

**Easter 2020**

**Departmental Seminars: Virtual Conversations**

During Easter Term we are holding a special series of virtual conversations on the relevance of the history and philosophy of science for the 21st century.

All events take place on **Thursdays from 3.30pm to 5pm UK time** (except for the one on 7 May, which starts at 4pm). They will all be held on Zoom.
Organised by Dániel Margócsy (dm753).

7 May at 4pm
Pandemic and Policy

The threats of the SARS-CoV-2 pandemic, and the effectiveness and harms of the social policies meant to mitigate these threats, rapidly became the most important scientific issues in many years. This session will analyse the pandemic and policy response from a variety of angles. Topics will include the nature and empirical basis for the relevant epidemiological models, the difficulties with exporting policies out of European contexts, and the challenges of democratic citizen science in a context of lay conspiratorial skepticism of science.

Speakers: Elizabeth Anderson (University of Michigan – Ann Arbor), Alexander Broadbent (University of Johannesburg), Eric Winsberg (University of South Florida)

Chair: Jacob Stegenga

Watch the video

14 May
Histories of Medicine for the 21st Century

Historians of medicine study numerous periods and places, traditions of healing, and kinds of knowledge and practice. What does this rich and diverse field contribute towards analyzing, critiquing and shaping concerns about health, health care, and society in the 21st century? This panel brings together four scholars with widely differing areas of expertise to build connections across time, place and methods, and discuss what history of medicine has to offer for the 21st century.

Speakers: Lauren Kassell (University of Cambridge), Projit Bihari Mukharji (University of Pennsylvania), Ahmed Ragab (Harvard University), Dora Vargha (University of Exeter)

Chair: Dániel Margócsy

Watch the video

21 May
Legacies of Early Modern Colonial Science

How was natural knowledge made in colonial encounters across the early modern period? How did natural knowledge contribute to the construction of racial and ethnic difference? And how did the process of colonization reconfigure the concept of knowledge? This panel examines how the 21st-century world continues to be shaped by the answers that early modern peoples provided to these questions.

Speakers: Maria Portuondo (Johns Hopkins University), Simon Schaffer (University of Cambridge), Suman Seth (Cornell University)

Chair: Dániel Margócsy

Watch the video
Calculating Trust

Trust is a central category in the social history of science and philosophy of scientific practice. It is far from obvious that trust should be placed in the veracity and relevance of scientific claims in political decision processes, especially if one keeps in mind that scepticism and pluralism are sometimes highly valued by scientists themselves. This virtual conversation will question the epistemological, cultural and political settings that generate trust in knowledge claims, or else lead to its breakdown. Particular attention will be paid to disciplines that rely on statistical modelling, since these can be seen as trading in uncertainty and the calculability of trust.

Speakers: Stephanie Dick (University of Pennsylvania), Sabina Leonelli (University of Exeter), Staffan Müller-Wille (University of Cambridge), Ted Porter (UCLA)

Chair: Dániel Margócsy

Central European Science in Perspective

The Central Europe of around 1900 saw the emergence of significant elements of modern physics, the environmental sciences and psychology. This seminar investigates the particular political, cultural and social geographies of this region and how these geographies have shaped and may still influence the trajectories of these scientific disciplines. What are the connections between Einstein’s physics, late 19th-century understandings of madness and rationality, and the cultural politics of the German and Habsburg Empires?

Speakers: Holly Case (Brown University), Michael Gordin (Princeton University), Richard Staley (University of Cambridge)

Chair: Dániel Margócsy

Citizen Science

Recent decades have seen pleas and initiatives for public participation in science as a way of increasing the trustworthiness of knowledge production and making it more accountable. Three speakers examine central issues surrounding citizen science, democratisation and trust from the perspectives of sociology, epistemology and philosophy of science.

Speakers: Jennifer Gabrys (University of Cambridge), Axel Gelfert (TU Berlin), Inkeri Koskinen (Tampere University)

Chair: Tim Lewens

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.

We will meet on Thursdays at 5.30–7.30pm (BST), beginning with 7 May, 21 May and 4 June. Meetings will take place on Zoom.

If you are interested in taking part, please email Lauren Kassell (ltk21).

Philosophy of Psychology and Psychiatry Reading Group

**Tuesdays at 3pm on MS Teams.** Organised by Riana Betzler and Sahanika Ratnayake.

**Week 1 – 28 April**
- 'Illness as dis-ability and health within illness' (Chapter 3) in Carel, H. *Illness: The Cry of the Flesh*, Acumen, 2008
- The Soul in Depression, On Being (podcast), 2018

**Week 2 – 5 May**
- Wang, E. W., 'Who gets to be the "Good Schizophrenic"?' *Buzzfeed Reader* 2016. A version of this essay is also printed as 'High Functioning' in Wang’s *The Collected Schizophrenias*, Penguin, 2019.

**Week 3 – 12 May**

**Week 4 – 19 May**
- Fuchs, T. 'Depression, Intercorporeality, and Interaffectivity,' *Journal of Consciousness Studies*, 2013

**Week 5 – 26 May**

Early Science and Medicine Work-in-Progress

This is a termly forum, supported by Wellcome, 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 at the start of each term. This term’s is on Tuesday 21 April 2020, 5–8pm.

Convened by Lauren Kassell, Silvia De Renzi (OU) and Dániel Margócsy.