

Michael Trevor Bycroft

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University of Warwick
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EDUCATION

- Oct 2010–
Sep 2013 **PhD, History and Philosophy of Science**
University of Cambridge, UK
“Physics and Natural History in the Eighteenth Century: the Case of Charles Dufay”
Supervised by Hasok Chang and Simon Schaffer
Examined by Lorraine Daston and John Heilbron
- Sep 2007–
Aug 2008 **MA, History and Philosophy of Science**
University of Toronto, Canada
- Jan 2006–
Dec 2006 **BA Hons., History and Philosophy of Science**
University of Canterbury, New Zealand
- Jan 2003–
Dec 2005 **BSc, Physics and Mathematics**
Included a minor in English and History
University of Canterbury, New Zealand

ACADEMIC EMPLOYMENT

- Sep 2017–
present **Assistant Professor of History of Science and Technology**
History Department, University of Warwick
- Oct 2014–
Aug 2017 **Leverhulme Early Career Research Fellow**
Global History and Culture Centre, History Department, University of Warwick
- Oct 2013–
Sep 2014 **Post-doctoral Research Fellow**
Art and Knowledge in Pre-Modern Europe research group, directed by Sven Dupré
Max Planck Institute for the History of Science, Berlin
- Apr 2008–
Apr 2013 **Research Assistant for Mark Solovey, Professor in the History of Social Science**
University of Toronto
Researched the history of vegetarianism, terrorism, and behavioural science
Worked on an ad hoc basis, 3 months in total

RESEARCH FUNDING

- Oct 2014–
Sep 2017 **Leverhulme Early Career Research Fellowship**
Held at the History Department, University of Warwick
£63,000 over 3 years, including salary and research expenses
- Oct 2013–
Sep 2014 **Post-doctoral Research Fellowship**
Held at the Max Planck Institute for the History of Science, Berlin
£27,000 over 12 months, including salary and travel expenses
£27,000 for a further 12 months - declined
- Oct 2010–
Sep 2013 **Gates Cambridge Scholarship**
Held at the University of Cambridge, UK
£80,000 over 3 years, including tuition fees and living costs
- Sep 2007–
Oct 2008 **Masters and PhD Studentship**
Institute for the History and Philosophy of Science and Technology
University of Toronto
£25,000 over 12 months, including tuition fees and living costs
£75,000 for a further 3 years – declined

SCHOLARSHIPS and PRIZES

- Jan 2003–
Dec 2007 **Tower Undergraduate Scholarship**
Held at the University of Canterbury, New Zealand
£5,000 over 3 years, for tuition fees
- Jan 2003–
Dec 2003 **University of Canterbury Undergraduate Scholarship**
£1,500 over 12 months, for tuition fees
- 2008 **Honourable Mention, Kiran Van Rijn Essay Prize**
Institute for the History and Philosophy of Science and Technology
University of Toronto, Canada
- 2006 **Ada Wells Essay Prize in English Literature**
University of Canterbury, New Zealand
- 2005 **Ada Wells Essay Prize in English Literature**
University of Canterbury, New Zealand
- 2005 **John Connal Scholarship**
University of Canterbury, New Zealand
Monetary prize for academic excellence

ACADEMIC PUBLICATIONS

Books

Gems and the New Science: Craft, Commerce and Classification in Early Modern Europe
Under review for Synthesis, a book series published by the University of Chicago Press

Gems in the Early Modern World: Materials, Knowledge and Global Trade, 1450-1800
Co-edited with Sven Dupré (Utrecht University / University of Amsterdam)
Under contract with Palgrave MacMillan

Journal articles

(with Tijl Vanneste and Bleue-Marine Massard) “Isaac Schabracq et sa Manufacture Royale des diamants.” In progress for a special issue, edited by Liliane Pérez, of *Revue d’histoire moderne et contemporaine*, due for publication by Fall 2018.

“Rococo Science: Style and Substances at the Paris Academy of Science, 1710-1740,” accepted for publication in the *Journal of Interdisciplinary History*.

“Goldsmiths on Gems: Craft Guilds, Global Trade and Natural History in Seventeenth-Century Paris,” revise and resubmit with *Journal of Early Modern History*.

“Introchemistry and the Evaluation of Mineral Waters in France, 1600-1770,” in *Bulletin for the History of Medicine*, accepted for publication in special edition on “Testing Drugs and Trying Cures”, ed. Elaine Leong and Alisha Rankin, forthcoming in 2017.

“Wonders in the Academy: The Value of Strange Facts in the Experimental Research of Charles Dufay,” *Historical Studies in the Natural Sciences* 43, no. 3 (2013): 334–70.

“The Trials of Theory: Psychology and Institutional Economics, 1910–1931,” *Journal of the History of the Behavioral Sciences* 46, no. 2 (2010): 144–64.

“Going Outside the Model: Robustness Analysis and Experimental Science,” *Spontaneous Generations: a Journal for the History and Philosophy of Science* 3, no. 1 (2009): 123–41

Papers in edited collections

(with Pierre Crépel) “La correspondance entre Condorcet et Seignette sur l’électricité de la torpille et le flux et le reflux de la mer,” in *La correspondance scientifique de Condorcet avec les provinces françaises*, ed. Nicolas Rieucou (Centre international d’étude du xviiiè siècle, forthcoming in 2017).

“Les articles sur les pierres précieuses dans l’*Encyclopédie*,” under review for publication in 2017 in *Edition Numérique Collaborative et Critique de l’Encyclopédie (ENCCRE)*, ed. Alexandre Guilbaud, Marie Leca-Tsiomis, Alain Cernuschi, and Irène Passeron.

“National Styles Revisited: Collectors and Experimenters at the Royal Society of London and the Paris Academy of Science, 1660-1740,” under review for *Instituting the Sciences in Early Modern Europe*, ed. Giulia Giannini and Mordechai Feingold (Brill, forthcoming in 2017).

“Exotic Taxa: Anselm Boethius de Boodt and the Distinction between ‘Oriental’ and ‘Occidental’

Gems in European Mineralogy,” in *Gems in Transit: Materials, Values and Knowledge in the Early Modern World* (collection under contract with Palgrave MacMillan, publication expected Autumn 2018). This chapter has been positively reviewed by an external reviewer.

“What Difference Does a Translation Make? The *Traité des vernis* (1723) in the Career of Charles Dufay,” in *Translation and the Circulation of Knowledge in Early Modern Science*, ed. Sietske Fransen and Niall Hodson (Brill, forthcoming in 2017).

“How to Save the Symmetry Principle,” chapter in *The Philosophy of Historical Case Studies*, ed. Raphael Scholl and Tilman Sauer, *Boston Studies in the Philosophy and History of Science* 319 (Springer, 2016).

“Dutour et le spath d’Islande: entre l’optique et la géologie,” in *Etienne-François Dutour de Salvert (1711-1789): un physicien auvergnat du XVIIIe siècle*, ed. Pierre Crépel and Jean Ehrard (L’Harmattan, 2014).

“Dutour et l’électricité: défenseur habile du système Nollet,” in *Etienne-François Dutour de Salvert (1711-1789): un physicien auvergnat du XVIIIe siècle*, ed. Pierre Crépel and Jean Ehrard (L’Harmattan, 2014).

“Psychology, Psychologists, and the Creativity Movement: The Lives of Method Inside and Outside the Cold War,” in *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature*, ed. Mark Solovey and Hamilton Cravens (New York: Palgrave MacMillan, 2012).

Book reviews

Review of Antonella Romano, *Impressions de Chine: L’Europe et l’englobement du monde (XVIe-XVIIe siècle)*, in progress for *Renaissance Quarterly*.

Review of Karel Davids and Bert de Munck, *Innovation and Creativity in Late Medieval and Early Modern European Cities* (Ashgate, 2014), forthcoming in 2017 in *Artefact*

“Essay Review of Brad Wray, ‘Kuhn’s Evolutionary Social Epistemology,’” *Studies in History and Philosophy of Science Part A* 43, no. 3 (2012): 425–29.

LANGUAGES

English: mother tongue

French: fluent in reading, writing and speaking

German: competent in reading

Latin: competent in reading

WORKSHOPS and PANEL SESSIONS

- 2017
Jul 6-9 “How Can You Tell? Connoisseurship, Quality Control and the Sciences”
With Alexander Wragge-Morley (UCL)
Panel session planned for annual conference of the British Society for the History of Science
- 2017
Feb 24 “A Failed Innovation: Isaaq Schabraaq's Royal Diamond Manufacture in Paris, c. 1780-1788”
Innovation in the Pre-Modern World: Knowledge, Design and Products
Workshop at the Institute for Advanced Study, University of Warwick
- 2017
Mar 6-10 Early modern Antwerp as a global city; reconstructing historical objects; technique in the arts – three events held at the University of Warwick with Sven Dupré (Utrecht) and Christine Goettler (Bern) as Fellows at the Institute of Advanced Study
Co-organised with Anne Gerritsen (University of Warwick)
- 2016
Jun 22-5 “The Quantifying Spirit in the Physical Sciences”
With Daniel John Mitchell (University of Cambridge)
4-speaker session at the 3 Societies Conference, ie. the joint meeting of the British, Canadian and US societies for the history of science
- May 2015-
Apr 2016 “Gems in Transit: Materials, Values and Knowledge in the Early Modern World”
With Sven Dupré and Marta Ajmar
- 2-day workshop at the University of Warwick and the Victoria and Albert Museum, London, 18-19 May, 2015
- 2-day workshop at Utrecht University / University of Amsterdam, 7-8 April, 2016
- 2-day workshop at the Victoria and Albert Museum, London, 11-12 April, 2016
- 2014
Mar 21 “Artists’ Knowledge of Gem Colour”
Roundtable discussion at the conference Early Modern Colour Practices II, 1450-1650
Max Planck Institute for the History of Science, Berlin
- 2013
Nov 21-4 “Natural History and Natural Philosophy in the Eighteenth Century”
4-speaker session at the annual meeting of the US History of Science Society, Boston
- Oct 2012–
May 2013 History of Science workshop
Fortnightly work-in-progress group
History and Philosophy of Science Department, University of Cambridge
- Oct 2011–
Jun 2012 History and Theory
Fortnightly reading group on the methodology of the history of science
History and Philosophy of Science Department, University of Cambridge

SELECTED PRESENTATIONS, 2014-2017

- 2017
Feb 20 “Isaac Schabracq entre les lapidaires et les orfèvres”
Seminar on Jews and the luxury trades in the modern age
Université Paris 7
- 2017
May 10-12 “Ingenuity on Trial: the Detection of Fake Gems in Early Modern Europe”
Ingenuity in the Making conference
University of Cambridge
- 2016
Jul 5-7 “Gem Colour and Artists’ Pigments: the History of an Early Modern Analogy”
Scientiae conference
University of Oxford
- 2016
Jun 7 “Exactitude Without Numbers:
Measurement in the Qualitative Physics of Charles Dufay”
Séminaire de l’Observatoire de Paris
- 2016
May 19 “Les articles sur les pierres précieuses dans l’*Encyclopédie*”
Seminar for the ENCCRE project, a critical online edition of the *Encyclopédie*
Université Paris 6
- 2016
May 3 “The Evaluation of Mineral Waters in Early Modern France”
Centre for the History of Medicine, University of Warwick
- 2015
Nov 6 “Condorcet et Seignette”
With Pierre Crépel
Workshop on Condorcet’s scientific correspondence with provincial academies
Université de La Rochelle
- 2015
Jul 8 “Jewellers, Travellers and the Classification of Precious Stones, c. 1600-1800”
Institut für Kunst und Materielle Kultur, Technische Universität Dortmund
- 2015
Apr 30 “Art, Alchemy and Electricity: Gems at the Paris Academy of Science, c. 1700-1750”
Eighteenth-century seminar, University of Warwick
- 2015
Jun 3 “Art, Alchemy and Electricity: Gems at the Paris Academy of Science, c. 1700-1750”
Oxford History of Alchemy and Chemistry Seminar
Maison Française Oxford
- 2015
Mar 26 “Collectors and Experimenters at the Royal Society of London and the Paris Academy
of Science”
Renaissance Society of America annual conference, Berlin
- 2014
Dec 5 “Collectors and Experimenters at the Royal Society of London and the Paris Academy
of Science”
Instituting Science in Early Modern Europe workshop
Max Planck Institute for the History of Science, Berlin

TEACHING

Lecture course

2015-16 The Scientific Revolution in Perspective
2016-17 20-lecture second-year undergraduate module
Includes a class visit to the Oxford Museum of the History of Science
History Department, University of Warwick

One-off lectures and seminars

Oct 2015– “Science and Reason in the Enlightenment,” “The Medical Renaissance,”
Mar 2017 “Food and Diet in Early Modern Europe,” “The Scientific Revolution,”
“Science and Religion,” “Collecting and Consumption”
Guest lectures for first-year, second-year, and Masters modules
History Department, University of Warwick

2012 “Physics as Stamp-collecting in the Eighteenth Century”
Nov 13 Guest lecture for undergraduate module on “Electrocultures”
Science and Technology Studies Department, University College London

2011 “The Context of Galileo’s *Dialogue on the Two Chief World Systems*”
Oct 24 Guest lecture for the module History and Philosophy of the Physical Sciences
History and Philosophy of Science Department, University of Cambridge

Tutoring

Oct 2014– The Enlightenment
May 2015 First-year undergraduate module
Included a visit to the Enlightenment Gallery at the British Museum
History Department, University of Warwick

Nov 2014 Treasure Fleets of the Eastern Oceans
Third-year undergraduate module
Co-organised class visit to the Ashmolean Museum with Helen Clifford
History Department, University of Warwick

Oct 2012– Introduction to History and Philosophy of Science
Apr 2013 Second-year undergraduate module
History and Philosophy of Science Department, University of Cambridge

Oct 2011– History and Philosophy of the Physical Sciences
Jun 2012 Second-year undergraduate module
History and Philosophy of Science Department, University of Cambridge

2007 History of Evolutionary Biology
Sep–Dec Third-year undergraduate module
Institute for the History of Science and Technology, University of Toronto

IMPACT and PUBLIC ENGAGEMENT

DIVA Diamond Museum consultant.

Advised curators of new permanent exhibition at one-day workshop at the DIVA Diamond Museum, Antwerp, 9 April, 2016. The curators expect 200,000 visitors per year.

“Demonstrating History: An Undergraduate Class Visit to the Oxford Museum of the History of Science”

Blog post on the blog of the Oxford Museum of the History of Science, 8 Feb 2016

“Ephemeral gems”

Presentation at ‘salon’ at the European Gallery, Victoria and Albert Museum, 10 Feb, 2016

50+ essays on www.doublerfraction.blogspot.com

Double Refraction is a research blog on methodological facing the history of science. Since 2012 it has averaged one essay per month, 1,500 words per essay, 600 views per essay.

“You *Can* Please Everyone: A Peace Plan for David Wootton and Steven Shapin”

Guest post on *Shells and Pebbles*, a blog on the history of science maintained by students at the University of Utrecht, 26 June, 2016

19 reviews of popular science books, published online at www.popularscience.co.uk, 2009–2010

Popular Science is a website devoted to short reviews (600 words) of popular science books

Energy for Radio: A Guide for Practitioners, 2012

240-page guide to sustainable energy management for radio stations in Africa, written on contract for Catholic Media Council, Aachen, Germany

Workshops and Scholarships Co-ordinator, World Conference of Science Journalists, London, 2009

ACADEMIC SERVICE

Post-doctoral representative on the Research Committee, History Department, University of Warwick, 2015-2017

External examiner at Masters level for the History and Philosophy of Science Department, University of Cambridge, 2016

“Report of 2012 BSHS postgraduate conference, University of Kent,” *Viewpoint* 100, Feb 2012

“The Natural History of Robert Boyle,” *Chemical Heritage Magazine* 28, no. 3 (Fall 2010)

Review of Michael Hunter, *Robert Boyle: Between God and Science*

“Science in the Shadows,” in *Chemical Heritage Magazine* 28, no. 3 (Fall 2010)

Review of science-related exhibits at the Victoria and Albert Museum, London

“Adventures in Romantic Science: Richard Holmes on Passion, Teamwork, and the Neglected Art of Biography,” *History of Science Society Newsletter* 39, no. 1 (2010)

Interview with Richard Holmes, author of *The Age of Wonder*

“Perspectives on Science,” *History of Science Society Newsletter* 39, no. 1 (2010)

Feature article on a new UK A-level course in the history, philosophy and ethics of science