

Biografie SIMON JOHN SCHAFFER

Born 1 January 1955 British citizen

Current position:

Department of History and Philosophy of Science, University of Cambridge
Professor of History of Science (since 2003)

Education:

BA/MA in Natural Sciences, University of Cambridge (awarded 1975)
MA in History of Science, Harvard University (awarded 1976)
PhD in History and Philosophy of Science, University of Cambridge (awarded 1980)

Professional history:

- Lecturer in history of science, Imperial College London, 1981-1984
- Lecturer in history and philosophy of science, University of Cambridge, 1984-1992
- Reader in history and philosophy of science, University of Cambridge, 1992-2003

Other appointments and affiliations:

- Research fellowship, St John's College Cambridge, 1979-1981
- Fellowship, Darwin College Cambridge, 1985-present
- Member of Council, British Society for the History of Science, 1983-1987 and 2004-present
- Silverman visiting professor, History and Philosophy of Science and Ideas, Tel Aviv University, 1987
- Visiting professor, History Department, UCLA, 1989
- Network member, Walther Rathenau Stiftung, Verbund für Wissenschaftsgeschichte, Berlin, 1989-1993
- Directeur d'Etudes, Centre Koyré, Ecole des Hautes Etudes en Sciences Sociales, Paris, 1994 and 2001
- Visiting Research Fellow, Humanities Research Centre, Australian National University, 1996
- Lawrence Stone visiting professorship, Davis Center, Princeton University, 2003

Grants and collaborative research projects:

- British Academy research grant in the humanities, for study at the Centre Alexandre Koyré, Paris, 1980
- Royal Society Research Grant in History of Science, 1984-1985
- (£500 for study of distribution of seventeenth century air pumps)
- Research co-worker: Steven Shapin

- Royal Society Research Grant in History of Science, 1988-1989
- (£2000 for prosopography of Cavendish laboratory 1871-1895)
- Research co-worker: Matthew Price
- Nuffield Research Fellowship in Social Science
- (stipend for one year's full-time teaching replacement), 1991-1992
- Leverhulme Trust, joint project on the History of Victorian environmentalism (including stipend for research fellow), 1991-1994 (co-administered with John Hedley Brooke (Lancaster University) and Colin Russell (Open University), research conducted by Sarah Wilmot)
- Research project: Innovation in Britain and Germany 1870-1920 (financial support from the Renaissance Trust, the Isaac Newton Trust and the Committee for the Public Understanding of Science including the stipends of three full-time researchers), 1991-1995 (collaboration with Whipple Museum of the History of Science)
- Research co-workers: H. Otto Sibum, Robert Brain, Richard Staley
- British Academy Research Grant
- (£17,500 stipend for a research assistant on the measurement of work in nineteenth century German physics), 1994
- Research co-worker: H. Otto Sibum
- British Academy Research Readership
- (support for two years' full-time teaching replacement, 1998-2000)
- Research project: Itineraries of precision: science, travel, instrumentation (international collaboration with EHESS Paris, MPI für Wissenschaftsgeschichte, Berlin and Museum of History of Science, Oxford, 1998-2002)
- Research project: Things that Talk: Relations between art and science (international collaboration directed by Lorraine Daston (MPI für Wissenschaftsgeschichte, Berlin)), 2001-2003

Editorships:

- Editorial board, Isis, 1982-1985
- Editorial board, Science in Context, 1985-1999
- Editorial board, Works of Thomas Hobbes, Clarendon Press, 1991-present
- Editorial board, Calendar of Correspondence of John Herschel, Cambridge University Press, 1994-1998
- Associate editor (Physics and meteorology) New Dictionary of National Biography, Oxford University Press, 1994-2004
- Editorial board, Voprosy istorii estestvoznaniya i tehniki, 1996-2000
- Editorial Board, Cahiers de science et vie, 1995-2001
- Editorial board, Environment and history, 1997-1999
- Editorial board, Canadian Journal of History, 1998-present
- Editorial board, Needham Research Institute, 2002-2004
- Editor, British Journal for History of Science, 2004-present

Publications:

- 'Halley's atheism and the end of the world', Notes and records of the Royal Society 32 (1977), 17-40
- 'Clouds of light', History of science 15 (1977), 152-3 (essay review)

- 'The phoenix of nature: fire and evolutionary cosmology in Wright and Kant', *Journal for the history of astronomy* 9 (1978), 180-200
- 'John Michell and black holes', *Journal for the history of astronomy* 10 (1979), 42-3
- 'Natural philosophy', in G.S. Rousseau and R.S. Porter, eds., *The ferment of knowledge: studies in the historiography of eighteenth century science* (Cambridge University Press, 1980), 55-91
- 'The great laboratories of the universe: William Herschel on matter theory and planetary life', *Journal for the history of astronomy* 11 (1980), 81-111
- 'Herschel in Bedlam: natural history and stellar astronomy', *British journal for the history of science* 13 (1981), 211-39
- 'Uranus and the establishment of Herschel's astronomy', *Journal for the history of astronomy* 12 (1981), 11-26
- 'The Newtonian Revolution revisited', *History of science* 20 (1982) (essay review)
- 'The matter of ether', *History of science* 20 (1982), 297-303 (essay review)
- 'History of physical science', in Pietro Corsi and Paul Weindling, eds., *Information sources in the history of science and medicine* (Butterworths, 1983)
- 'Natural philosophy and public spectacle in the eighteenth century', *History of science* 23 (1983), 1-43
- 'The political theology of seventeenth century natural science', *Ideas and production* 1 (1983), 2-14
- 'Newton's undergraduate notebook', *History of science* 22 (1984), 94-7 (essay review)
- 'Scoperte scientifiche alla fine del XVIII secolo', in F. Papi, ed., *Intelligibilità e costruzione scientifica* (Franco Angeli, 1984), 97-114
- (English version:) 'Discovery stories and the end of natural philosophy', *Social studies of science* 16 (1986), 387-420
- 'Newton at the cross-roads', *Radical philosophy* 37 (1984), 23-28
- 'Priestley's questions: an historiographic survey', *History of science* 22 (1984), 151-83
- 'Making certain', *Social studies of science* 14 (1984), 137-52 (essay review)
- 'Scientific instruments and their public', in J.A. Bennett, ed., *Science and profit in eighteenth century London* (Whipple Museum, 1985), 10-18
- 'Occultism and reason in the seventeenth century', in A.J. Holland, ed., *Philosophy: its history and historiography* (Reidel, 1985), 117-43
- *Leviathan and the air pump: Hobbes, Boyle and the experimental life* (with Steven Shapin) (Princeton University Press, 1985)
- (French version:) *Leviathan et le pompe à air: Hobbes et Boyle entre science et politique* (La Découverte, 1993)
- (Italian version:) *Il Leviatano e la pompa ad aria: Hobbes, Boyle e la cultura dell'esperimento* (La Nuova Italia, 1995)
- 'Mapping the edges of the abyss', *Isis* 77 (1986), 320-3 (essay review)
- 'Newton's comets and the transformation of astrology', in Patrick Curry, ed., *Astrology, science and society: historical essays* (Boydell and Brewer, 1987), 219-43
- 'Godly men and mechanical philosophers: spirits and souls in Restoration England', *Science in context* 1 (1987), 55-85

- (French version:) 'Dévots et philosophes mécanistes', *Ethnologie française* 23 (1993), 316-35
- 'Authorized prophets: comets and astronomers after 1759', *Studies in eighteenth century culture* 17 (1987), 45-74
- 'Priestley and the politics of spirit', in R.G. Anderson and C.J. Lawrence, eds., *Science, medicine and dissent : Joseph Priestley* (Wellcome Institute, 1987), 39-53
- 'The Darwin letters: brutes and master minds', *Cambridge Review* 109 (1988), 17-20 (essay review)
- 'History of science', in Juliet Gardiner, ed., *What is history today?* (Macmillan, 1988), 73-5
- 'Astronomers mark time: discipline and the personal equation', *Science in context* 2 (1988), 101-31
- *The Uses of Experiment: studies in the natural sciences* (Cambridge University Press, 1989), joint editor and contributor of 'Glass works: Newton's prisms and the uses of experiment', 67-104
- 'Wallfaction: Hobbes on school divinity and experimental pneumatics', *Studies in History and Philosophy of Science* 19 (1988), 275-98
- 'Science and puritanism', *Social studies of science* 18 (1988), 551-6 (essay review)
- 'The nebular hypothesis and the science of progress', in J.R. Moore, ed., *History, humanity and evolution* (Cambridge University Press, 1989), 131-54
- 'The Glorious Revolution and Medicine in Britain and the Netherlands', *Notes and records of the Royal Society of London* 43 (1989), 167-90
- *Robert Hooke: new studies* (co-editor) (Boydell and Brewer, 1989)
- 'Defoe's natural philosophy and the worlds of credit', in S. Shuttleworth and J.R.R. Christie, eds., *Nature transfigured* (Manchester University Press, 1989), 13-44
- 'Newtonianism' in G.N. Cantor et al., eds., *Companion to the History of Modern Science* (Routledge, 1989)
- 'Genius in Romantic natural philosophy', in N. Jardine and A.R. Cunningham, eds., *Romanticism and the sciences* (Cambridge University Press, 1990), 82-98
- 'Measuring virtue: eudiometry, enlightenment and pneumatic medicine', in R.K. French and A.R. Cunningham, eds. *The medical enlightenment of the eighteenth century* (Cambridge University Press, 1990), 281-318
- 'Charles Darwin: at home among the barnacles', *Cambridge Review* 111 (1990), 78-81 (essay review)
- 'Halley, Delisle and the making of the comet', in N. Thrower, ed., *Standing on the shoulders of giants: a longer view of Newton and Halley* (University of California Press, 1990)
- 'States of mind: enlightenment and natural philosophy', in G.S. Rousseau, ed., *Languages of psyche* (University of California Press, 1990)
- *William Whewell: a composite portrait* (co-editor) (Oxford University Press, 1991), contributor of 'The history and geography of the intellectual world: Whewell's politics of language', 201-31
- 'The Eighteenth Brumaire of Bruno Latour', *Studies in History and Philosophy of Science* 22 (1991), 174-92 (essay review)

- 'Self evidence', *Critical inquiry* 18 (1992), 327-62, reprinted in James Chandler, et al., eds., *Questions of evidence: proof, practice and persuasion across the disciplines* (Chicago, 1994), 56-104
- 'Scientific London' (co-author) in Celina Fox, ed., *London World City 1800-1840* (Yale University Press, 1992), 149-62
- 'Victorian metrology and its instrumentation: a manufactory of ohms', in R. Bud and S. Cozzens, eds., *Invisible connexions: instruments, institutions and science* (SPIE Press, 1992), 23-56, reprinted in Mario Biagioli, ed., *The Science Studies Reader* (Routledge, 1999), 457-78
- 'Utopia Limited: on the end of science', *Strategies* 18 (1992), 327-62
- 'The consuming flame: electric showmen and Tory mystics in the world of goods', in J. Brewer and R.S. Porter, eds., *Consumption and the world of goods* (Routledge, 1993), 489-526
- 'Comets and the world's end' in L. Howe and A. Wain, eds., *Predicting the future* (Cambridge University Press, 1993), 52-76 (Italian version:) 'Le comete e la fine del mondo', in idem, *Predire il futuro: dall'oracolo al computer* (Dedalo, 1994), 51-70 (Spanish version:) 'Los cometas y el fin del mundo', in idem, *Predecir el futuro* (Alianza Universal, 1995), 61-84
- 'Augustan realities: nature's representatives and their cultural resources in the early eighteenth century' in George Levine, ed., *Realism and representation* (Wisconsin University Press, 1993), 279-313
- 'A social history of plausibility: country, city and measurement in the eighteenth century' in Adrian Wilson, ed., *Rethinking social history* (Manchester University Press, 1993), 128-57
- 'Comets and idols: Newton's cosmology and political theology' in P. Theerman and A. Seeff, eds., *Action and reaction: the tercentenary of Newton's Principia* (University of Delaware Press, 1993), 206-31
- *From physics to anthropology and back again* (Prickly Pear Press Cambridge, 1994)
- 'Machine philosophy: demonstration devices in Georgian mechanics', *Osiris* 9 (1994), 157-82
- 'Making up discovery', in Margaret Boden, ed., *Dimensions of creativity* (MIT Press, 1994), 13-51
- 'Empires of physics' in Richard Staley, ed., *The physics of empire* (Whipple Museum, Cambridge, 1994), 87-109
- 'Babbage's intelligence: calculating engines and the factory system', *Critical inquiry* 21 (1994), 203-27
- (French version:) 'Les machines calculatrices de Babbage et le factory system', *Réseaux* 69 (1995), 159-91, reprinted in Paul Beaud et al., eds., *Sociologie de la communication* (CNET, 1997), 207-41 and in *Reseaux: the French Journal of Communication* 4 (1996) 271-98
- 'Rayleigh and the establishment of electrical standards', *European journal of physics* 15 (1994), 277-85
- 'Accurate measurement is an English science' in M. Norton Wise, ed., *Values of precision* (Princeton University Press, 1995), 135-172
- (Russian version:) 'Tochnoe izmerenie - eto Angliskaya nauka', *Voprosy istorii estestvoznaniya i tehniki* 2 (1997), 70-108
- 'Science privée et science publique' (interview) in *M* 75 (1995), 39-43

- 'The show that never ends: perpetual motion in the early eighteenth century', *British journal for the history of science* 28 (1995), 157-89
- 'Where experiments end: tabletop experiments in Victorian astronomy' in J.Z. Buchwald, ed. *Scientific practice: theories and stories of doing physics* (Chicago University Press, 1995), 257-99
- 'Babbage's dancer and the impresarios of mechanism', in Frances Spufford and Jenny Uglow, eds., *Cultural Babbage: Technology, Time and Invention* (Faber and Faber, 1996), 53-80
- 'Visions of empire: afterword' in D.P. Miller and P. Reill, eds., *Visions of Empire : Voyages, Botany and Representations of Nature* (Cambridge University Press, 1996), 335-52
- 'Contextualising the canon' in Peter Galison and David Stump, eds., *The disunity of science: boundaries, contexts and power* (Stanford University Press, 1996), 207-30
- 'Piety, physic and prodigious abstinence' in A.R. Cunningham and O.P. Grell, eds., *Religio medici: medicine and religion in seventeenth-century England* (Scolar, 1996), 171-203
- 'The earth's fertility as a social fact in early modern Britain', in B. Gustafson, R.S. Porter and M. Teich, eds., *Nature and society in historical perspective* (Cambridge University Press, 1997), 124-47
- 'Temporary contemporary: some puzzles of science in action', in Graham Farmelo and Janet Carding, eds., *Here and now: contemporary science and technology in museums and science centres* (Science Museum, 1997), 31-39
- 'Metrology, metrication and Victorian values', in Bernard Lightman, ed., *Victorian science in context* (Chicago University Press, 1997), 438-74
- (French version:) 'Un yard divin', *Cahiers de Science et Vie* 50 (1999), 64-70
- 'What is science?', in John Krige and Dominique Pestre, eds., *Science in the twentieth century* (Harwood Academic, 1997), 27-41
- 'Pairs et hors pairs: l'effet du génie', *Cahiers de Science et Vie* 40 (1997) 10-14
- 'Experimenters' techniques, dyers' hands and the electric planetarium', *Isis* 88 (1997) 456-83
- 'Regeneration: the body of natural philosophers in Restoration England', in Steven Shapin and Christopher Lawrence, eds., *Science incarnate: historical embodiments of natural knowledge* (Chicago University Press, 1998), 83-120
- 'Physics laboratories and the Victorian country house' in Crosbie Smith and Jon Agar, eds., *Making space for science* (Macmillan, 1998), 149-80
- 'On astronomical drawing', in Peter Galison and Caroline Jones, eds., *Producing art, picturing science* (Routledge, 1998), 441-74
- 'The Leviathan of Parsonstown: literary technology and scientific representation', in Timothy Lenoir, ed., *Inscribing science: scientific texts and the materiality of communication* (Stanford University Press, 1998), 182-222
- 'The decline (and success) of science in England', *RSA Journal* 146 : 3/4 (1998), 46-51, republished in *Royal Society of Arts, On Design and Innovation* (Gower Publishing, 1999), 115-25
- 'Deus et machina: human nature and eighteenth century automata', *Lettre de la Maison française d'Oxford* 9 (1998), 30-58
- *The sciences in enlightened Europe* (Chicago University Press, 1999), co-editor and author of 'Enlightened automata', 126-65

- 'Un monde apprivoisé', Cahiers de Sciences et Vie 51 (1999), 6-15
- 'OK Computer', in Michael Hagner, ed., *Ecce Cortex: Beitrage zur Geschichte des modernen Gehirns* (Wallstein Verlag, 1999), 254-85, republished in Michael Hagner, ed., *Ansichten der Wissenschaftsgeschichte* (Fischer Verlag, 2001), 393-429
- 'As instituições científicas: a geografia histórica dos laboratorios', in Fernando Gil, ed., *A ciência tal qual se faz* (Edições Joao Sá da Costa, 1999), 415-36
- NOISE - information and transformation (Kettle's Yard, Cambridge, 2000), co-editor and contributor
- 'Fin de siècle, fin des sciences', Réseaux 18 (2000), no. 100, 215-248
- 'Object lessons', in Svante Lindqvist, ed., *Museums of Modern Science* (Science History Publications, 2000), 61-76
- 'Modernity and metrology', in Luca Guzzetti, ed., *Science and Power: the Historical Foundations of Research Policies in Europe* (European Communities, Luxembourg, 2000), 71-91
- 'Modèles normatifs et architecture navale dans un état militaro-fiscale', Réseaux 18 (2000), no. 102, 195-225
- 'Le savant aux deux visages', Cahiers de Science et Vie 62 (2001), 32-37
- 'The disappearance of useful sciences', *Cambridge Anthropology* 22 (2001), 1-23
- 'On with the motley?' *Metascience* 10 (2001), 378-385 (essay review)
- 'James Clerk Maxwell', in Peter Harman and Simon Mitton (eds.), *Cambridge Scientific Minds*, (Cambridge University Press, 2001) 123-140
- 'Devices of iconoclasm', in Bruno Latour and Peter Weibel (eds), *Iconoclasm: beyond the image wars in science, religion and art* (MIT Press, 2002), 498-515
- 'Golden means: assay instruments and the geography of precision in the Guinea trade', in Marie-Noelle Bourguet, Christian Licoppe and H. Otto Sibum (eds.), *Instruments, travel and science* (Routledge, 2002), 20-50
- 'Enlightenment brought down to earth', *History of science*, 41 (2003), 257-268
- 'Paper and brass: the Lucasian professorship 1820-1839' in Kevin Knox and Richard Noakes (eds), *From Newton to Hawking: a history of Cambridge's Lucasian professors of Mathematics* (Cambridge, 2003), 241-293
- 'A science whose business is bursting: soap bubbles as commodities in classical physics', in Lorraine Daston (ed.), *Things that talk: object lessons from art and science* (Zone Books, 2004), 147-194
- 'Fish and ships: models in the age of reason' in Nick Hopwood and Soraya de Chadarevian (eds.), *Models: the third dimension of science* (Stanford, 2004), 71-105
- 'Vigani and after: chemical enterprise in Cambridge 1680-1780', (co-author), in M.D. Archer and C.D. Haley (eds.), *The 1702 Chemistry Chair at Cambridge: Transformation and Change* (Cambridge, 2004), 31-55