

Editorial

Past editors' favourite papers published during their time in office

BJHS celebrated fifty years of publication in 2012, but like a glamorous film star *d'un certain age*, the journal gets to be fifty all over again, this time on account of reaching fifty volumes of publication. During its first decade, the four issues of each volume were published over two years instead of one. From then onwards, the quantity and quality of scholarship in the field increased to a point where a volume of three, and later four, issues could be sustained each year. The journal was further expanded by one research article per issue in the 2010s.

There have been twelve editors to date, including the editor of the forerunner *Bulletin of the British Society for the History of Science*:

N. H. de V. Heathcote (editor of the predecessor journal, *Bulletin of the British Society for the History of Science*)

H.D. Anthony (1962–1966)

Maurice P. Crosland (1966–1971)

Robert Fox (1971–1976)

Nicholas W. Fisher (1976–1981)

David Knight (1981–1989)

John Hedley Brooke (1989–1994)

Janet Browne (1994–2000)

Crosbie Smith (2000–2004)

Simon Schaffer (2004–2009)

Jon Agar (2009–2014)

Charlotte Sleight (2014–present)

CUP and the present editor came up with the idea of creating a special, virtual issue of the journal featuring one article selected by each surviving editor. At the time of printing that collection was available at www.cambridge.org/bjhs/50. Before moving on to their selections, a word about the editors who have passed away ...

Niels Hugh de Vaudrey Heathcote (1895–1985) studied physics and was an early professional historian of science at UCL. His obituary appeared in *BJHS* (1987) 20, pp. 350–351 (at <https://doi.org/10.1017/S0007087400024006>). The journal's second

editor, Herbert Douglas Anthony (1892–1968), was apparently more of a learned amateur. He received no obituary in his own journal, and the ten-year retrospective (*BJHS* (1971) 5, p. 425) makes no mention of his recent death. An obituary may, however, be found in *Proceedings of the Geologists' Association* (1970) 81(1), pp. 158–159 (at [http://dx.doi.org/10.1016/S0016-7878\(70\)80042-6](http://dx.doi.org/10.1016/S0016-7878(70)80042-6)).

All editors subsequent to this are still alive and have contributed to this special issue, with the exception of Maurice Crosland who is, regrettably, in poor health. As though choosing a single paper to represent their period of tenure were not difficult enough, it should be pointed out that most editors inherit a backlog of papers to publish from their predecessor, and that accordingly many of the papers they have selected are apparently published by their successor. Notwithstanding this limitation, everyone has been game in abiding by the rules set for them in this exercise. Their selections, and brief commentaries, follow ...

Robert Fox (1971–1976)

Steven Shapin, 'Property, patronage, and the politics of science: the founding of the Royal Society of Edinburgh', *BJHS* (1974) 9, pp. 1–41

Editing a journal of the history of science in the 1970s was an exciting business. The proliferation of methodological options and topics for legitimate enquiry opened enticing avenues. But the passage from precept to practice required more than programmatic statements. It called for conceptual breadth, rigorous argument, and meticulous documentation of the kind that characterized Steven Shapin's 'Property, patronage, and the politics of science'. Breaking with the idea that the institutions of science have necessarily responded to the demands of the scientific enterprise, Shapin cast the founding of the Royal Society of Edinburgh in 1783 as an episode rooted in local cultural politics. As a former national capital with an ancient university; an established scientific, literary and political elite; and an elaborate system of aristocratic patronage, Edinburgh had little in common with the emerging industrial towns, such as Manchester, where (as Arnold Thackray showed, also in 1974) the Lit and Phil was founded (in 1781) by modern-minded doctors and others in response to a raw urban setting with next to no cultural traditions. Shapin's Edinburgh, by contrast, was a nest of rivalries and shifting power relations: crucially between a declining Whig faction and a rising Tory interest, and between a long-established Philosophical Society and its upstart rival, of 1780, the Society of Antiquaries of Scotland, both with aspirations to cultural primacy extending to the sciences. Contingency loomed large too in wrangling about control of the university's and other natural-history collections following the appointment of the Revd John Walker as professor of natural history in 1779 over the subsequently resentful William Smellie. Finally, rivalry won out over reconciliation, and the RSE (something of a Tory fiefdom) and the Society of Antiquaries (with a Whig tinge) went their independent ways, with the charters of both societies receiving the royal signature on the same day in 1783.

Nick Fisher (1976–1981)

David Bloor, 'Polyhedra and the abominations of Leviticus', *BJHS* (1978) 11, pp. 245–272

When I took on the editor's role, it was my intention to broaden our coverage of the history of science, to get beyond the gulf between internalists and externalists, the twain who never seemed able to meet. I wanted to move towards a holistic cultural history of science (although I was not then aware of that designation). But an editor has limited scope to achieve change through empirically grounded articles: one is largely at the mercy of what lands in the in-tray. Moreover, in the 1970s the time between receipt, refereeing, manual typesetting and publication was rather long. Commissioned reviews, especially essay reviews, held far more possibilities.

One possible choice of my favourite piece would be the group of essay reviews occasioned by the practically simultaneous publication of Kuhn's *The Essential Tension*, the posthumous edition of Lakatos's collected papers, and Wolfgang Stegmüller's *The Structure and Dynamics of Theories* (*BJHS* (1979) 12, pp. 289–341). Among them, four very different essays looked at Kuhn from various perspectives, and the whole group made up fifty-three pages of metahistory (including a good deal of meta-metahistory). In considering the historiography of science, Kuhn had written,

The still dominant form, often called the 'internal approach,' is concerned with the substance of science as knowledge. Its newer rival, often called the 'external approach,' is concerned with the activities of scientists as a social group within a larger culture. Putting the two together is perhaps the greatest challenge now faced by the profession, and there are increasing signs of a response. (p. 110)

This sounds more like an editorial manifesto of mine than anything Kuhn later contributed.

My final choice is David Bloor's 'Polyhedra and the abominations of Leviticus', which did indeed set out to answer the question 'How are social and institutional circumstances linked to the knowledge that scientists produce?' (p. 245). This paper began as a review of Imré Lakatos's posthumous *Proofs and Refutations* (1976), grew into an essay review, and finally with my encouragement mutated into a full article. In linking Lakatos's idea of 'monster-barring', when mathematical entities break classificatory boundaries, to the treatment of pollution and taboo by the anthropologist Mary Douglas, and moreover in tying the contributions of mathematicians to their institutional circumstances, Bloor made an important contribution to the ongoing development of the Edinburgh 'strong programme' in the sociology of knowledge. Although philosophers of science have tended to react to it somewhat hysterically (and though Kuhn was gratuitously rude about it in his plenary address to the 1985 International Congress in Berkeley), the strong programme has engendered important empirical studies in the history of science, and has made an essential contribution to the development of the cultural history of science over the last forty years. I am proud to have published Bloor's paper.

David Knight (1981–1989)

Frank James, ‘Thermodynamics and sources of solar heat, 1846–1862’, *BJHS* (1982) 15, pp. 155–181

People go for the book reviews in their journals, but very few read any of the articles – or so I had been told when I had joined the editorial board of *Annals of Science*. I had also noted some critic’s casual remark somewhere that academics write badly. It seemed to me that the two things were connected. Smarting, I resolved to try to do better myself, and avoid the constipated English of many articles in which messages struggle to get out as authors cover their backs. When appointed editor of *BJHS* I did my best to get writers to win readers by deserting the obscurity of a learned tongue, making their articles so clear, attractive and enthusiastic that people would want to know more about things that, on the face of it, had nothing to do with their specialism. Editors are mid-wives, bringing other people’s babies into the world, and unlike bears cannot really lick newborns into shape; my lighten-up campaign enjoyed only moderate success, as these things do. Those doing excellent research are not always receptive of advice, and no editor wants to drive able contributors away or be thought pompous, but I have happy memories of working with young Frank James, whose ‘Thermodynamics and sources of solar heat, 1846–1862’ appeared in *BJHS* (1982) 15, pp. 155–181. He had a striking topic, with wide implications. It was commended by the referees and deserved to be widely read, but it was heavy going. He was very ready to respond to my suggestions, and duly brightened it up – perhaps with relief – and then and since (as our interests in Davy and Faraday converged) his plain English has made what he writes good to read. Editors are gatekeepers and do not always have happy relationships with their contributors and would-be contributors; but in this and other cases, I am glad to say that my time with *BJHS* led to friendships.

John Brooke (1989–1994)

J.F. McDiarmid Clark, ‘Eleanor Ormerod (1828–1901) as an economic entomologist: “pioneer of purity even more than of Paris Green”’, *BJHS* (1992) 25, pp. 431–452

One of the most gratifying features of my editorship (1989–1993) was the opportunity to publish, in the September and December 1992 issues, four essays which in the society’s Singer Prize competition had emerged as joint winners or had been specially commended. Their authors, all of whom later rose to senior positions in the profession, were John Clark, Mark Harrison, Ben Marsden and Jonathan Topham. Each of their respective articles could rank as my favourite, but I have selected John Clark’s ‘Eleanor Ormerod (1828–1901) as an economic entomologist: “pioneer of purity even more than of Paris Green”’. This is a paper that attractively discussed the life and career of a Victorian spinster, less well known than Caroline Herschel or Mary Somerville, with whom she was compared by *Nature* in 1904. Clark showed how Ormerod used the expertise she developed in the nascent science of agricultural entomology to rise above the gender stereotypes of her day. It is an excellent study of the

ideological conflicts she experienced as an adviser to institutions such as the Royal Agricultural Society of England and the University of Edinburgh, yet debarred from the paid employment that would have been her due had she been a man. Socially conservative rather than a feminist agitator, she nevertheless caused offence by researching subjects such as diseases in cattle and their insect vectors that violated Victorian models of spinsterhood propriety. It is a paper that touched not only on issues in gender history, but also on the historiography of scientific professionalism, applied entomology and the contrast between the development of insecticides in British and North American agriculture. By featuring Ormerod's crusade against the house sparrow and the reasons for it, Clark's essay also made a fascinating contribution to environmental history.

Janet Browne (1994–2000)

Anne Secord, 'Corresponding interests: artisans and gentlemen in nineteenth-century natural history', *BJHS* (1994) 27, pp. 383–408

This article has rightly become a classic both in its focus on artisan naturalists and in its treatment of correspondence as a moral economy. Anne Secord brilliantly analyses the botanical correspondence between gentlemen of science and artisanal botanists in Britain during the nineteenth century and asks how letter writers of low social status operated in networks governed by widespread gentlemanly codes. She argues that artisan botanists were, of course, deferential to their gentlemen correspondents, as the norms of the day required, but were also confident in their practical knowledge and in their power to make gifts of specimens. The article is thoughtful, stimulating and informative in turn. As well as deeply appreciating the scholarship and style displayed here, the article represents for me the importance of thinking about correspondence as a medium for practising science: Secord was one of the first scholars to recognize the historical value of exploring the circulation of knowledge through letters. It has special meaning for me too because we once worked together on the Darwin Correspondence project, and found that letters opened up the world of natural history in unexpected ways.

Crosbie Smith (2000–2004)

Anne Scott, "'Visible incarnations of the unseen": Henry Drummond and the practice of typological exegesis', *BJHS* (2004) 37, 435–454

This article neatly directs the reader's attention away from over-worked themes of the impact of Darwinian and other evolutionary theories on the Victorian churches. Instead, by focusing on Henry Drummond's *Natural Law in the Spiritual World* (1883), it offers a fresh contextual perspective on the working-class Glasgow audiences for such a project. Scott thereby shifts our attention from elite intellectualist debates to religious (Protestant) apologetics in practice – to examine how the working-class audiences (deliberately identified and targeted by the author) constructed meanings of their own for contemporary scientific and theological controversies. As such, it is a fantastic demonstration of the importance of local context for the historian/historian of science.

Simon Schaffer (2004–2009)

Jutta Schickore, 'Misperception, illusion and epistemological optimism: vision studies in early nineteenth-century Britain and Germany', *BJHS* (2006) 39, 383–406

My shortlist includes Lorimer and Spedding on family holidays in the Scottish highlands; Maerker's work on the hermaphrodite monkey, Dietz's study of shell collectors, the late Rikki Kuklick's brilliant analysis of the totemism controversy, and Agar's reflections on the 1960s. But top of the list goes Jutta Schickore, 'Misperception, illusion and epistemological optimism: vision studies in early nineteenth-century Britain and Germany'. The article uses a very sophisticated model of the historical geography of scientific inquiry at a key moment in the institutionalization and networking of experimental enterprise in both physics and physiology. Subtle contrasts are drawn between the separate projects of Purkyne, Mueller, Brewster, Faraday and their collaborators in seeking ways both to identify and in principle to correct the pervasive troubles of optical illusion in the design and use of novel apparatus. The argument is strikingly reflexive: the eye is seen as instrument, but then the vagaries of instrument use are applied to the workings of the whole visual system. Schickore teases out the more significant contrasts between different British and German inquiries, draws attention with philosophical flair to the resources in the different scholarly and metaphysical traditions on which investigators relied, and avoids a simple reduction of scientific culture to postal address. It remains a timely, influential and important intervention both in studies of nineteenth-century experiment and in the making of categories such as subjectivity and observation. It exemplifies a clever use of the primary material in treatises and journals. And most welcome, too, is the insistence on the vital importance of tracing the dynamic movements and exchanges of hardware, print and personnel across Europe as part of the making of a modern culture whose shared principles, on this showing, are as important as any cross-channel distinctions.

Jon Agar (2009–2014)

Vanessa Heggie, 'Experimental physiology, Everest and oxygen: from the ghastly kitchens to the gasping lung', *BJHS* (2013) 46, 123–147

There are several developments that make me proud. I was able to expand the journal by an extra paper per issue, largely to cope with the stream of high-quality papers coming in. I also thought the balance – between special issues and stand-alone papers, between contributions from younger and more established authors – was good, although I remember a few rumblings that my editorial interest tipped too much towards twentieth-century studies. There are also many papers and issues I recall with fondness. The 'British nuclear culture' issue was one such highlight. The topic was addressing the great, transformational project of the modern world from an important angle that had been neglected for the British context. I had been very excited by the conference, and vigorously chased a double-length special issue, which Cambridge University Press, thankfully, endorsed with enthusiasm. Other, individual papers were markers

for aspects of history of science I feel to be valuable: the conversation with the near present (see Cyrus Mody and Michael Lynch on ‘nanoscale objects’, 2011), intercultural exchange (Alper Yalcinkaya on the conflict thesis in the Ottoman world, 2010), seeing the familiar with fresh eyes (Steven Shapin on the ‘ivory tower’, 2012), damn good stories (Joseph Yanielli on an eighteenth-century murder, 2013), objects of beauty (Don Opitz on *Victoria amazonica*, 2014), providing a platform for the best from young scholars (plenty of examples), and provocative new directions (Simon Werrett on recycling, 2013).

But my top pick is also the highest: Vanessa Heggie’s ‘Experimental physiology, Everest and oxygen: from the ghastly kitchens to the gasping lung’. I am always interested in how science comes from encounters with real-world problems. Mountaineers (and high-altitude pilots) have to breathe, and the thin air above eight thousand metres was a mighty challenge. The mortality rate for Everest expeditions was an extraordinary one in twenty. However, high-altitude physiology was a case where the laboratory could be dangerously, fatally misleading. Vanessa’s paper asks what it meant to do science in the laboratory and in the field – central topics for recent history of science, of course – and answers the question with insight and style.

Charlotte Sleight (2014–present)

Alex Csiszar, ‘How lives became lists and papers became data’ (forthcoming, *BJHS* 2017)

Showing favouritism whilst still in post seems like a very bad idea. However, there is a clear contender for the most *timely* paper during my tenure thus far.

The past ten or more years have seen an acceleration in the quantification of ‘quality’ in academia. In the UK, the Research Excellence Framework (REF) scores academics’ work in order to calculate their value. Many things then hang on this value: individual employability and promotion, and departmental funding for research, to name but three. Additionally, and despite current promises that it is only the intrinsic quality of published work that will matter in the next REF, university directors of research are prescribing journals in which their colleagues should and should not publish for maximum contextual-quality indication value (no doubt the German language has a single word for this concept). In my role as editor I have fended off emails from authors beseeching me to attest to the value of *BJHS* (or other history of science journals). I have also received emails from my own institution asking for the definitive top five journals in the field. These latter emails I have routinely deleted. One can imagine some possible effects of these trends upon the fates of journals; though almost certainly not the ones that will actually come to pass. There are too many other things in the mix.

Amidst this madness, Alex Csiszar’s paper explaining ‘how lives became lists and papers became data’ feels very much of the moment. Although he does not intend it as a pre-history of the present situation, it is a source of historically informed, contemporary reflection concerning how our own work intersects with that of the people we study, and concerning the good old historical law of unintended consequences. Onwards to the future, *mes braves*.