

Name: Simon Werrett

Address:

Department of Science & Technology Studies
University College London
Gower Street
London WC1E 6BT

Email: s.werrett@ucl.ac.uk

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Title: Introduction: Rethinking Joseph Banks

Summary: Following a series of AHRC-funded workshops, the papers in this special issue provide new perspectives on the naturalist Sir Joseph Banks (1743-1820). Moving beyond a focus on Banks's work with Captain Cook's first voyage of exploration to the Pacific, the papers expand on, while challenging, views of Banks as a "centre of calculation" and all-powerful agent of science and imperialism in Georgian Britain. Banks is shown to have relied on a variety of expert men and women as actors and audiences for botany, operating with more diversified agendas and practices than previous pictures of Banks have suggested.

Keywords: Sir Joseph Banks; natural history; enlightenment; women and science;
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Main Document

The papers in this volume explore new perspectives on the career of Sir Joseph Banks (1743-1820) and the scientific culture of his time. They were first presented in a series of workshops held at University College London, the National Portrait Gallery, the National Maritime Museum and the Royal Society for the AHRC-funded Network Grant “Joseph Banks: Science, Culture and the Remaking of the Indo-Pacific World” in 2016-2017.¹ Banks has often been considered the foremost agent of natural history, perhaps of all British science, in the period between his voyage with Captain James Cook in 1768-1771, and his death in 1820. Historiography of Banks has identified him as a pivotal figure who used his wealth and high social standing to forge an unprecedented connection between science and imperialism in Georgian Britain. Accordingly, he is variously described as a “centre of calculation”, a “consummate empire-builder” and “autocrat of the philosophers”.² While Banks was undoubtedly a central authority in the science of his time, indeed recognized by his contemporaries as such, recent scholarship and the AHRC workshops make apparent the diverse communities and agents with whom Banks engaged and upon whom he depended in the pursuit of imperial goals and natural history. Since the well-known studies in the 1990s of John Gascoigne and David Philip Miller on Banks, Neil Chambers has done much to edit, publish, and interpret Banks’s correspondence, opening up a wealth of new information for scholars.³ In a forthcoming book exploring the globalization of Banks, Jordan Goodman proposes that while Banks undoubtedly presided over numerous influential institutions, he was less a global agent with an imperial agenda for science than an expert facilitator or connector, whose access to a multitude of communities interested in his patronage, collections, and knowledge enabled him to recommend collaborators and supporters for a great diversity of projects. For Goodman, Banks had no over-arching agenda in these affairs

but across several decades his efforts contributed to forging a variety of labours connecting the sciences and empire.⁴ If Banks was a centre, this was less calculated and more distributed than has tended to be supposed.

In this issue of *Notes and Records*, four papers expand our picture of the communities connected to Banks and the agency they enacted in matters of science and global botanical exchange. If there was a “Banksian learned empire” between the 1770s and 1820, as David Philip Miller once put it, then we need to understand the particular constitution of its population, the precise techniques it brought to bear in the production of natural knowledge, the structures of kinship, succession and patronage that it entailed, and the tensions and antagonisms that disrupted it.⁵ Following Goodman, the contributions here present a Banksian enterprise marked by contingency and opportunity as much as any imperial agenda.⁶

Much important work has been done in recent times to elucidate female networks engaging with the sciences in the late eighteenth and early nineteenth centuries.⁷ As Arlene Leis has shown, the collecting practices of Banks’s wife Dorothea and sister Sarah Sophia were closely intertwined with his own.⁸ Here, Carl Thompson examines how women engaged more broadly with Banks and natural history, contributing to a now substantial body of literature on women in the period who pursued natural history, botany, travel and exploration.⁹ Thompson shows how, for example, the West-Indies-born Maria Riddell, the author and illustrator Maria Graham and the adventurer Sarah Bowdich all travelled to distant lands, explored and botanized, and established a presence for themselves in contemporary natural historical circles in Britain. Despite ongoing constraints and resistance, these and

other women succeeded in carving a niche for themselves in the botanical landscape of Georgian Britain.

Banks's library at Soho Square included works by women botanists, such as the manuscript florilegium of New York plants by the American botanist Jane Colden and Maria Riddell's 1792 natural historical account of a *Voyage to the Madeira, and Leeward Caribbean Isles*. Women in turn used Banks's library, as Maria Graham and Sarah Bowditch both did in the 1820s to prepare scientific publications and assess the collections.

Thompson thus reveals how women travellers contributed to, and drew upon, contemporary botanical science, forming part of an extended network of female scholars whose participation in the sciences is increasingly coming to light. Soho Square is interesting to compare in this regard to the Royal Institution, where as Harriet Lloyd has recently shown, women made up much of the audience for lectures by the Royal Institution's principal chemist, Humphry Davy.¹⁰ Davy is the subject of Tim Fulford's contribution to this issue. Fulford argues that Davy needs to be identified as a protégé of Banks in various of his exploits at the Royal Institution, the Royal Society and the Geological Society. Banks was involved in Davy's appointment to the Royal Institution and Davy learned to take advantage of a milieu of clubbable social occasions and private patronage fostered by Banks that helped propel him to become Banks's successor as president of the Royal Society. Davy followed Banks's presidential tactics, cultivating alliances with promising men of science while excluding controversial or disloyal individuals. But there were limits to this approach. Hampered by a stroke and lacking Banks's social status and authority, Davy struggled in these endeavours. Nevertheless, throughout his career Davy shared with Banks an interest in

promoting practical experimentation in e.g. agriculture, chemistry, mining and manufactures, and in ridding contemporary science of radical elements.

Fulford's contribution recalls the importance of recognizing the diversity of Banks's interests, which as past and present scholarship has shown went beyond the imperial exploration and Pacific natural history he is primarily associated with.¹¹ As Julian Hoppit has recently indicated, Banks spent much time attending to his significant landholdings and estates in Lincolnshire, engaging in projects of fen drainage, canal-building, and agriculture. He was much engaged in fisheries and fishing, and there is a splendid manuscript record of one of his extravagant fishing expeditions at the Yale Center for British Art.¹² Banks seems to have divided his estates along different lines. The family seat in Revesby Lincolnshire was a place for enlightened land management. Banks devoted his estate near Ashover in Derbyshire in part to a mining enterprise. Spring Grove in London was an experimental site, where Banks cultivated plants like cranberries from America, and raised Merino sheep which would ultimately be exported to support colonies in Australia and New Zealand. Soho Square was alternatively dedicated to botany and the work of classification. Banks's annual calendar divided his time among these locations and their associated activities.

Understanding these aspects of Banks's activities then helps us to identify individuals and communities who constituted Banks's network or, as in the case of Davy, supported or continued his projects and investigations. A key individual in this regard was Charles Blagden, who served as secretary to Banks and the Royal Society between 1784 and 1797. In a recent PhD and in her contribution to this issue, Hannah Wills examines Blagden's role in Banks's career and the two men's often fraught relationship. They first became acquainted in the early 1770s before Blagden worked as a physician for the British army in North America

during the War of Independence. Blagden sent intelligence to Banks on American flora and fauna, and after further efforts to cultivate Banks on his return, he was eventually rewarded with election to the secretaryship of the Royal Society. Blagden is interesting because he represents someone who was not especially interested in gaining a great scientific reputation – he did some experiments and published a few papers but made few contributions – but did see in his acquaintance with Banks a chance to join higher society and raise his wealth and social status through association with his famous patron. Unfortunately for Blagden, this failed to transpire, leading to a fall-out with Banks from which their relationship never recovered. Instead, Blagden finally succeeded in gaining access to elite society through circles of educated women of the kind discussed by Carl Thompson. After Banks, Blagden enjoyed what Wills calls a kind of ‘distributed patronage’ from a large number of aristocratic women whom he would visit each day to bring them news of the latest scientific and botanical discoveries.¹³

An interesting aspect of Wills’s work concerns the geography of cultures of advancement, or the ways regimes of patronage and social status differed from place to place, with consequences for the circulation of knowledge. Wills’s contribution shows how important place was in Banks’s career. Decisions about credit and knowledge depended on social and physical locations. In the summer of 1777 Banks moved into new premises at 32, Soho Square, a site large enough to house his family and expanding library and collections. The final paper in this issue focuses on the community of scholars at Soho Square and their strategies for managing information passing through Banks’s home. Edwin Rose tracks the complex labours of Banks’s librarians and collection managers including Daniel Solander, Jonas Dryander and Robert Brown, who processed, catalogued, annotated and researched thousands of plant specimens, books, and records in Banks’s herbarium and library. Using a

variety of annotated printed volumes and manuscripts, Rose reconstructs the diverse paper technologies employed to manage Banks's collections.¹⁴ Much of the work carried out at Soho Square involved cross-referencing, or aligning the entries on plant species in existing printed books with Linnaean accounts of their classification and information and specimens coming from previous collectors, voyages of exploration and correspondents around the globe. For example, in 1774, Banks purchased a copy of John Ray's *Historia Plantarum* at auction, which he then had bound with larger paper borders to accommodate notes. Banks then employed an amanuensis, the German physician Sigismund Backstrom, to copy the notes from Hans Sloane's copy of the book into Banks's one. These notes linked entries in Ray's book to specimens in Sloane's herbarium, which by the 1770s belonged to the British Museum. Later Daniel Solander added Linnaean binomials to the entries so that a reader could now use Ray's book to quickly find examples in the herbarium of Linnaean species.

Such endeavours multiplied as Banks's collections of books and dried specimens grew exponentially in the 1780s and 90s. As Rose shows, Banks engaged numerous assistants and librarians to catalogue and cross-reference them. He had an additional floor added to his library in Soho Square in 1792 to accommodate the collections, and classified them using the 1778-80 edition of Linnaeus's *Systema Plantarum* edited by the German botanist Johann Jacob Reichard. A copy of this work was interleaved with blank pages upon which Banks's librarians described new plants arriving from around the world but not yet appearing in Linnaeus's work. Annotations referred to any published information appearing on these specimens after Reichard's edition of *Systema Plantarum*, so that the book was a truly global repository of botanical knowledge worthy of a centre of calculation like Soho Square.

In conclusion, the essays in this volume support and strengthen our picture of Banks as the centre of a global network of knowledge exchange, but they also show that this was a variegated network, both constitutive of, and constituted by, Banks and his collections. Different sites involved different social and epistemological networks so that the geography of Banksian circulation was a complex one. It certainly involved the gathering of specimens from around the world and the dissemination of knowledge in the service of empire, but this was something that emerged incrementally, through the labours of many people, including men and women, and not exclusively with a precalculated agenda.

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¹ The AHRC grant was led by Nigel Rigby (National Maritime Museum) and Simon Werrett (UCL), with Lucy Peltz (National Portrait Gallery), Keith Moore (Royal Society), Mark Carine (Natural History Museum), and Jordan Goodman (UCL).

² See e.g. David Philip Miller, 'The Royal Society of London 1800-1835: A study in the cultural politics of scientific organization,' Ph.D. Thesis, University of Pennsylvania, 1981, p. 9; David Philip Miller, 'Joseph Banks, empire, and 'centers of calculation' in late Hanoverian London,' in *Visions of empire: voyages, botany, and representations of nature* (eds. David Philip Miller and Peter Hahns Reill), pp. 21-37 (Cambridge University Press, Cambridge, 1996); John Gascoigne, *Science in the service of empire: Joseph Banks, the British State and the uses of science in the age of revolution* (Cambridge University Press, Cambridge, 1998); John Gascoigne, *Joseph Banks and the English Enlightenment: useful knowledge and polite culture* (Cambridge University Press, Cambridge, 1994); Richard Drayton, *Nature's government; science, imperial Britain, and the 'improvement' of the world*

(Yale University Press, New Haven, 2000); Patricia Fara, *Sex, botany and empire: The story of Carl Linnaeus and Joseph Banks* (Icon, Cambridge, 2003); Hector Charles Cameron, *Sir Joseph Banks K.B., P.R.S.: The Autocrat of the Philosophers* (Batchworth Press, London, 1952).

³ Neil Chambers (ed.), *The scientific correspondence of Sir Joseph Banks, 1765–1820*, 6 vols. (Pickering & Chatto, London, 2007); Neil Chambers (ed.), *The Indian and Pacific correspondence of Sir Joseph Banks, 1768–1820*, 8 vols. (Pickering & Chatto, London, 2008–2013); Neil Chambers, *Joseph Banks and the British Museum: The world of collecting, 1770–1830* (Pickering & Chatto, London, 2007).

⁴ Jordan Goodman, *Planting the World: Joseph Banks and his Collectors* (forthcoming, HarperCollins, 2020); See also Jordan Goodman, ‘After Cook: Joseph Banks and his travelling plants, 1787–1810,’ *The Historian*, 10–14 (Winter 2016/17); Simon Werrett, ‘Joseph Banks: botanical explorer,’ in *Nature’s explorers: adventurers who documented the natural world*, pp. 46–55 (Natural History Museum, London, 2019).

⁵ The term “Banksian learned empire” originated in Miller, ‘Royal Society’, *op. cit.* (note 2), p. 3.

⁶ Such contingency becomes evident on reading the substantial biography of Banks by Harold B. Carter, *Sir Joseph Banks, 1743–1820* (British Museum (Natural History), London, 1988), but deserves more recognition.

⁷ See e.g. Elena Serrano, ‘Chemistry in the city: the scientific role of female societies in late eighteenth-century Madrid’, *Ambix* **60**, 139–159 (2013); Mascha Hansen, ‘Scientifick wives: eighteenth-century women between self, society and science,’ in *Discovering the human: life science and the arts in the eighteenth and early nineteenth centuries* (eds. Ralf Haekel and Sabine Blackmore), pp. 53–68 (V&R University Press, Göttingen, 2013); Hugh S. Torrens. ‘Presidential address, Mary Anning (1799–1847) of Lyme; “the greatest fossilist the world

ever knew”,’ *British Journal for the History of Science* **28**, 257-284 (1995); G. Jeffery Leigh and Alan Rocke, ‘Women and chemistry in Regency England: new light on the Marcet circle,’ *Ambix* **63**, 28-45 (2016); Allan Chapman, *Mary Somerville and the world of science* (Springer, Heidelberg, New York, Dordrecht, London, 2015).

⁸ Arlene Leis, ‘“A Little Old-China Mad”: Lady Dorothea Banks (1758-1828) and Her Dairy at Spring Grove’, *Journal for Eighteenth-Century Studies* **40**, 199-201 (2017); Arlene Leis, Arlene Leis, ‘Cutting, Arranging, and Pasting: Sarah Sophia Banks as Collector,’ *Early Modern Women* **9**, 127-140 (2014); Arlene Leis, ‘Sarah Sophia Banks: femininity, sociability and the practice of collecting in late Georgian England’, Ph.D. Thesis, University of York, 2013.

⁹ On women and botany generally, see Londa Schiebinger, *Plants and empire: colonial bioprospecting in the Atlantic world* (Harvard University Press, Cambridge, 2004); Londa Schiebinger, Claudia Swan (eds), *Colonial botany: science, commerce, and politics in the early modern world* (University of Pennsylvania Press, Philadelphia, 2004); Ann B. Shteir, *Cultivating women, cultivating science: Flora’s daughters and botany in England, 1760-1860* (Johns Hopkins University Press, Baltimore, 1999).

¹⁰ Harriet Lloyd, ‘Rulers of opinion: women at the Royal Institution of Great Britain, 1799-1812’, PhD Thesis, UCL, 2018, explores women as audiences for Davy’s lectures.

¹¹ See e.g. Gascoigne, *op. cit.* (note 2); Chambers, *Joseph Banks, op. cit.* (note 3); Carter, *op. cit.* (note 6).

¹² Julian Hoppit, ‘Sir Joseph Banks’s provincial turn,’ *Historical Journal* **61**, 403-29 (2018); see also John Farnsworth, ‘A History of Revesby Abbey, 1764-1820,’ PhD Thesis, Yale University, 1955; Sarah Sophia Banks, et al., *Sir Joseph Banks’s fishery book of the River Witham in Lincolnshire, 1784-1800*, Yale Center for British Art, SH437. B36 1784.

¹³ Hannah Wills, ‘The Diary of Charles Blagden: Information management and the gentleman of science in eighteenth-century Britain,’ Ph.D. Thesis, University College London, 2019; Hannah Wills, ‘Charles Blagden’s diary: information management and British science in the eighteenth century’, *Notes Rec. R. Soc.* **73**, 1 (2018).

¹⁴ In addition to the works on paper technologies cited in Rose’s paper, see Carla Bittel, Elaine Leong, Christine von Oertzen (eds), *Working with Paper: Gendered Practices in the History of Knowledge* (University of Pittsburgh Press, Pittsburgh, 2019); comparison with Sloane’s paper practices is useful. See James Delbourgo, *Collecting the World: The Life and Curiosity of Hans Sloane* (London: Penguin, 2017).