

Contributions come from several (mainly European) countries, and many different disciplines, including photography, physics, botany, chemistry, meteorology and oceanography.

Just as diverse as the chapters' contents are the different kinds of home they deal with: the town house and the country house, whether aristocratic pile or suburban maisonette, but also inbetween spaces (bespoke laboratories in the home, as well as institutional laboratories meant to reflect the home, such as in Donald L. Opitz's chapter), and incorporating gardens as important parts of the extended domestic environment (as does Julie Davies). I particularly enjoyed many of the authors' evocative descriptions of the ways in which scientific practice took place at home, often using everyday objects such as bits of card and string. As Claire G. Jones shows in her chapter, it is clear that reorienting the term 'home-made' away from connotations of second-rate shabbiness and amateurism would be one important consequence of renewed attention to domestic environments. Considering the emotional as well as the practical work which took place in homes of different kinds, including by the famous inhabitants of Down House discussed by Paul White, similarly enables the writing of more historically nuanced and rounded accounts.

Indeed, many essays demonstrate that a key component of domesticity is (and was) not just location but relationships, a significant complex of home–family–kinship–children–colleagues. These could be scholarly Enlightenment networks such as those described by Isabelle Lémonon; intergenerational relationships, such as the father–son focus of Staffan Bergwik's chapter; the uneasy coming together of family life and social policy depicted in Sven Widmalm's chapter; or the 'fictive kinship' forged in the academic workshop in Helena Pettersson's phrase and work. Such relationships, many of the chapters in this work show, were related to local and gendered identities, whether the 'global Indianness' of Aalok Khandekar's analysis, or the opportunity for the negotiation of gender identities through pulp fiction about newly domesticated wireless technologies, as Katy Price argues. These more dynamic constructions help present domesticity not just as a backdrop for certain kinds of enterprise, but also as an active means by which historical experimenters, authors, correspondents, students, 'citizen scientists' and more could reflect on and participate in creating many different kinds of scientific activity.

Domesticity in the Making of Modern Science is, therefore, an important contribution to the historical geographies of scientific practice, to the history of professionalization, and to the history of family life. Given its range, some scholars might be interested in just one or two chapters which pertain most directly to their areas of interest, but read in its entirety it is a manifesto for reorienting scientific study, past and present. It urges scholars to reclaim the importance of the domestic space, knowledge and residents; and homemade objects, equipment and ideologies. As Alix Cooper advocates in a stirring afterword, the impulses behind this collection can be expanded both chronologically and geographically, to 'discern even broader patterns' (p. 284) and changing relationships between domesticity and the sciences across time and space. In historians' haste to emphasize the role of the laboratory, observatory, hospital or field site, this collection is an important reminder that, for many people, modern science began at home, and is itself a beginning of a new definition for what counts as domestic science.

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Tom Kennett, The Lord Treasurer of Botany: Sir James Edward Smith and the Linnaean Collections. London: The Linnean Society, 2016. Pp. x+388. ISBN 978-0-9935510-0-0. £25.00 (paperback).

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There is no shortage of works centered on Carl Linnaeus, his libertine prolocutor Erasmus Darwin, or Joseph Banks – an early Linnaean who, despite his groundbreaking travels and his pivotal role

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in superintending transfers of knowledge and naturalia, published little of consequence. How strange, then, that James Edward Smith – prolific botanical author, founder of the distinguished Linnean Society, custodian of one of the most remarkable collections in the history of biology, and one of the figures chiefly responsible for Linnaeus's renown in Britain – should be so neglected by comparison. Enter Tom Kennett's *The Lord Treasurer of Botany: Sir James Edward Smith and the Linnaean Collections*, which rectifies this anomaly with a useful and interesting chronicle of Smith's life and scientific contributions.

Born into a well-to-do Norwich Unitarian family, Smith first acquired a fascination for plants from his mother. This interest he pursued in botanical reading and collecting as a teenager, and refined under the mentorship of Hugh Rose, a fellow Norwicher and early translator of Linnaeus. Barred from Cambridge and Oxford owing to his dissenting faith, he pursued medicine at the University of Edinburgh - medicine being the only means of undertaking university-level botanical studies. Edinburgh enabled Smith to study Linnaean taxonomy under John Hope, help found the Edinburgh Natural History Society, and undertake an organized collecting expedition – activities which brought him to Banks's notice. It was through the latter that Smith arranged to purchase the magnificent collections of Linnaeus - including his library, herbarium, manuscripts, shells, fossils, insects, corals and minerals – around which he established the Linnean Society a few years later. Such a coup was not uncontroversial: Swedish interests lobbied to keep the collections in Uppsala, and Britons occasionally chafed at the idea of a scientific society named after a foreigner. But these controversies paled beside the society's importance as a lifeline for natural historians ill served by the Royal Society. They also did nothing to stymie Smith's own prodigious output in the form of botanical manuals, travel narratives, translated works of Linnaeus, pamphlets, scholarly articles, lectures and, most notably, an opulent series of floras embellished with plates illustrated by the well-known natural-history artist James Sowerby. Smith is often dismissed as an interloper who simply "purchas[ed]" his way into the scientific community' (p. 308); this book aptly renders such a view untenable.

Monetary considerations dictated that Smith address much of his work to a popular audience, especially wealthy female patrons. In so doing, it was necessary to distance himself from more prurient interpretations of the Linnaean sexual system, a difficulty he surmounted by drawing attention to botany's spiritually edifying character. With the ascendency of the natural system, which classified plants according to a much more diverse number of characteristics, Smith found himself defending Linnaeus on another front entirely. Sparring with critics in the natural-system camp could be downright vicious, as evidenced by Smith's ongoing disputes with Michel Adanson and Jean-Baptiste Lamarck in Paris, and with Richard Salisbury much closer to home. Other tensions, such as those with the popular botanical writer William Curtis, and even Banks, had more to do with vocational jealousy. Smith's views occasionally got him into trouble. His pro-revolutionary sympathies, for instance, cost him a prestigious engagement as private tutor to Queen Charlotte, and Cambridge would ultimately deny him a botany professorship on religious grounds. It was from books, lectures and his inheritance that Smith made ends meet, then, despite being (following Banks's death in 1820) the foremost botanist in Britain, and the first individual to receive a knighthood for his scientific accomplishments.

Kennett's survey hews meticulously to its protagonist's correspondence and published writings, which is appropriate for a first modern, full-scale biography of a major historical figure. On the other hand, trained historians will likely notice a lack of engagement with pertinent scholarly debates. There is little discussion of Smith's relation to questions of empire, for instance, despite the fact that he corresponded with several colonial botanists; authored a volume entitled *Exotic Botany*, together with some of the earliest natural histories on Australia; and opposed the 'barbarous name' of *Gingko biloba*, among other things (p. 251). More might have also been said to contextualize Smith's beliefs respecting the 'sanctity of natural history', considering his apparent

affinity for the secularist Jacobins (p. 72). And although his wife's posthumous destruction of the family correspondence makes it difficult to speculate on the character of Smith's – apparently heartfelt – attachments to other men, scholars of gender and sexuality will probably be disappointed with Kennett's seemingly casual pronouncement that 'Smith's sense of morality rules out anything but the most platonic, though intense, of relationships' (p. 45).

These foibles do not, of course, detract from the book's many strengths. For one thing, it ties in with a growing body of scholarship concerning the difficulties involved in establishing a paying scientific career in the nineteenth century, and the cultivation of non-expert readerships this often necessitated. Like any good biography, it likewise succeeds at illuminating not only Smith's life but also the lives of his inner circle, including lesser-known individuals like the Swiss English botanist Edmund Davall, and Mary Watson-Wentworth, Marchioness of Rockingham, an important botanical patron. Kennett sheds a similarly intriguing light on Norwich itself, which, we learn, developed into a centre of textile manufactures, religious Nonconformity, radicalist politics, horticulture and natural history owing largely to a sixteenth-century influx of Protestant refugees from the Spanish Netherlands. As befits its subject matter, *The Lord Treasurer of Botany* is also a beautifully crafted volume, complete with numerous illustrations and coloured plates. These factors combine to make a biography that historians of popular science will probably reckon useful, and that scholars of eighteenth- and nineteenth-century botany and natural history will no doubt regard as indispensable and overdue.

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SARAH K. GILLESPIE, The Early American Daguerreotype: Cross-currents in Art and Technology. Cambridge, MA: MIT Press, 2016, Pp. x + 213. ISBN 978 0 2620 3410 4. £23.95 (cloth). doi:10.1017/S0007087417000711

The daguerreotype – a photographic image exposed on a polished metal plate – as Sarah Kate Gillespie demonstrates in this recent book, is a photographic technology which took root in America immediately after the invention was announced in 1839. While the process was invented in France, Gillespie traces how it was brought to the United States – first by the artist, inventor and experimenter Samuel Morse, to then be adopted by a range of practitioners along the eastern seaboard. Gillespie's book follows the invocation in Robert Taft's early seminal work (*Photography and the American Scene*, 1839–1889, 1938) to examine more closely this important history of the daguerreotype in America. The subject of Gillespie's book is a welcome addition to the history of nineteenth-century photography, the aim of which is to explore the intersecting roles of science, art and technology in the decade following the invention of the daguerreotype.

The book's aims are admirable, but its potential is let down by the perspective taken on the relationship between science, art, technology and photography. The book's structure, featuring four chapter-length case studies, compartmentalizes science, art and technology into discrete forms of perspective and practice. While the first chapter attempts to integrate science, art and technology as equal pursuits of Morse's work in daguerreotyping, the distinction between these categories remains at the forefront. The remaining three chapters reinforce these differences – with standalone case studies on the art, science and technology of American daguerreotypes. Describing Morse, for instance, Gillespie writes that while he 'had engaged with technological experiments for years ... the daguerreotype provides an obvious link between Morse's two careers, art and science, which are typically treated as separate and distinct' (p. 17). This perspective of a divide between art and science – and technologists as 'tinkerers' – is reflective of how the author conceptualizes and historicizes the relationship between photography, science and art. Borrowing the label from the historian of photography Allan Sekula, Gillespie defines science as the 'flip side of art' (p. 11). For historians of photography, science or technology, the reification of such