Notes

- ¹ A search of *American Archivist* issues reveals no articles or reviews with "digital humanities" in the title, and a search of the term in article text only turns up a handful of articles, some with almost no connection to the topic. This observation applies to a number of archival studies/science journals. Of a few exceptions, the most notable is Kate Theimer, "Archives in Context and as Context," *Journal of Digital Humanities* 1, no. 2 (2012), http://journalofdigitalhumanities.org/1-2/ archives-in-context-and-as-context-by-kate-theimer.
- ² Jacqueline Wernimont, "Whence Feminism? Assessing Feminist Interventions in Digital Literary Archives," *Digital Humanities Quarterly* 7, no. 1 (2013); Elizabeth Losh, "What Can the Digital Humanities Learn from Feminist Game Studies?," *Digital Humanities Quarterly* 9, no. 2 (2015).
- ³ Wernimont's list appears here: https://docs.google.com/spreadsheets/d/1pPscJX7I7Vvuc4YIBbd38nbWgJjp-0FiI5yZ1sxG6Vk/edit#gid=0 (full disclosure: this reviewer is on that list), and FemTechNet is based at https://femtechnet.org.
- ⁴ The Twitter thread is available at https://twitter.com/brimwats/status/1130211221909716992.
- ⁵ The Archive of Early Middle English is still under development, but the aspects that Kim refers to are present on the development site at http://scottkleinman.net/aeme-dev.
- ⁶ The book has been published as open access and is available at Debates in the Digital Humanities Manifold website: https://dhdebates.gc.cuny.edu/projects/bodies-of-information.

Archival Afterlives: Life, Death, and Knowledge-Making in Early Modern British Scientific and Medical Archives

Edited by Vera Keller, Anna Marie Roos, and Elizabeth Yale. Leiden: Brill, 2018. 276 pp. Hardcover and EPUB. \$135.00. Hardcover ISBN 978-90-04-32429-9; EPUB ISBN 978-90-04-32430-5. DOI: https://doi.org/10.1163/9789004324305.

A rchival Afterlives: Life, Death, and Knowledge-Making in Early Modern British Scientific and Medical Archives, edited by historians Vera Keller, Anna Marie Roos, and Elizabeth Yale, brings together a selection of essays tracing the posthumous fates of early modern British scientific archives. In doing so, the book also provides a history of early archival practice, with scientists (or rather, natural philosophers) stewarding, arranging, and making accessible (or inaccessible) the papers of their peers and near-contemporaries. "Archival afterlives" are defined as collections' changing significance "... according to use, location and context," and their impact continues to be recognized "long after [their] creation" (p. 222). This is no new idea for archives, whether applied to the archives of scientists, artists, or businesses; archival records are always only one research visit away from attaining fresh and often-unexpected relevance. But this concept of an archival afterlife seems especially apt for scientific records, where advancements in knowledge are built upon each other, and current accepted knowledge can be traced back through the centuries. Archival Afterlives sets out to show how "the new sciences came into being through the use and manipulation of archival collections," following earlier scholarship on scientific archives, particularly *Archives of the Scientific Revolution*, edited by Michael Hunter (p. 11).¹ Modern-day archivists will take pleasure in seeing how our seventeenth- and eighteenth-century scientist-archivist predecessors engaged in "listing, recording and labelling," aware that "good classification could significantly enhance . . . intellectual [...] value" of a collection (p. 207). Early on, these scientist-archivists recognized the necessity of "backing up" their materials using methods familiar to modern archivists and recordkeepers. One of Hans Sloane's first tasks as president of the Royal Society, reports Elizabeth Yale, was to have two copies made of the society's council minutes, "that one might be lodged in some different place for a Security to preserve Copies of the Books against any accident of fire or otherwise" (pp. 190–91).

A core objective for modern archives is enabling access, with archivists striving to make records as accessible as possible to enable further research. A trace of this impulse is visible in these early modern archives, with the records of scientific predecessors being preserved and utilized for new discoveries. But this is not always benevolent knowledge-sharing for the sake of it; the motivations here are often rooted in power, commercial interests, and politics. In her chapter, "Scarlet Letters: Sir Theodore de Mayerne and the Early Stuart Color World in the Royal Society," Vera Keller describes the commercial aspect of de Mayerne's research into, and experiments with, colored dyes, as he obsessively sought the secret recipe to Abraham Küffler's lucrative scarlet dye. Theodore de Vaux, the later custodian of de Mayerne's papers, then introduced the papers piecemeal to the attention of the Royal Society (p. 107). In turn, the methods documented in de Mayerne's archives formed the basis of experiments for Robert Hooke, the society's curator of experiments. Scientific records became the basis for further experimentation and discovery, and control of these scientific records boosted the status of de Vaux. By holding the archival records, de Vaux controlled the information within; we begin to see archives as a source of power.

In a pair of chapters about Hans Sloane by Elizabeth Yale and Arnold Hunt, we see more of this interplay between archives and power. In "Playing Archival Politics with Hans Sloane, Edward Lhuyd, and John Woodward," Yale describes how Sloane perceived the power in ownership of archives. Rather than collecting merely for preservation and posterity, Sloane collected to "build institutional and personal power in the present" (p. 192). As part of this extensive collecting, Sloane absorbed the papers of Sir Thomas Browne and Robert Hooke (among many others), with the latter's papers providing the Royal Society with "further discussion and experimentation for over ten years after Hooke's death" (p. 180). In his chapter, "Under Sloane's Shadow: The Archive of James Petiver," Hunt describes a similar trajectory, with the absorption of James Petiver's archives into Sloane's. This is a blessing and a curse; Petiver's papers may have survived, but they were thoroughly subsumed into Sloane's, to the lasting detriment of Petiver's own status.

Those interested in the history of scientific knowledge transfer will be keen to read about Petiver's curatorial style. Hunt likens his methods of "information storage and retrieval" to "hyperlinks," as Petiver and, later, Sloane cross-referenced across texts and specimens (pp. 205, 213). Alison Walker expands on scientific knowledge transfer with her study of annotated materials in the library of Hans Sloane, "Collecting Knowledge: Annotated Material in the Library of Sir Hans Sloane." Walker illustrates how Sloane collected texts "annotated by previous owners" rather than clean, unannotated copies (p. 226). As Walker describes it, Sloane's motivation here may have been to capture "information, or facts, enriched, enhanced and given value by their context, and by their user's understanding" (p. 223). Walker describes working medical texts, "archives of practice," that several practitioners have worked on and annotated successively (p. 233). In this way, early scientists shared and built upon each other's knowledge and expertise. These annotated texts function as evidence of the evolution of knowledge, recording exchange between scientists and their predecessors.

Evolving knowledge and knowledge transfer spanned across media, too, as shown in Anna Marie Roos's chapter, "Fossilized Remains: The Martin Lister and Edward Lhuyd Ephemera." Roos traces the afterlife of Martin Lister's ephemera and shell specimens, and shows the transformation of these specimens into "aesthetically pleasing illustrations and scientific objects," with photographs comparing the original specimens with the resulting published illustrations (p. 150). Roos describes this as "the migration of knowledge of nature, which occurred from one medium to another, from object to drawing to printed image" (p. 172).

The serendipity involved in the survival of archives and the shift from personal collectors to institutional collecting are themes throughout the book. In his chapter, "The Division of a Paper Kingdom: The Tragic Afterlives of Francis Bacon's Manuscripts," Richard Serjeantson shows how, time and again, Bacon's original manuscripts "perished by virtue of having been printed"—once put into print, the original manuscripts were discarded (p. 43). Serendipity is at play, too, in Carol Pal's chapter, "Accidental Archive: Samuel Hartlib and the Afterlife of Female Scholars." Pal reviews the female scholars whose papers found a home in the archives of Samuel Hartlib. This "accidental archive" is described as incomplete, independent from institutions, and with multiple provenances. The concept of the accidental archive might benefit from archival theories around personal papers—not all archives are institutional, and many archival collections "were never intended to function as an archive" (p. 122). Reflecting on the

survival of these papers, which were produced by personal networks of intellectuals, Pal suggests that a shift toward institutional collecting changed the scope and definition of "the archive," with the archive "usually . . . [representing] some form of institution," to the exclusion of female scholars (p. 148).

Archivist Victoria Sloyan picks up the theme of the institutional role in collecting archives in her chapter, "Collecting Genomics: Documenting Modern, Collaborative Science." Sloyan's chapter serves as a warning that, even in spite of actively collecting repositories like the Wellcome Library, scientists' papers remain just as vulnerable as ever. Collecting the papers of a great individual scientist is no longer sufficient in an age of increasingly complicated international collaborations. The challenges posed by digital scientific materials compound existing difficulties. The chances of capturing these important scientific records are further hampered by a culture that still, in an echo of early modern science, places primary importance on publications. The inherent importance of unpublished scientific materials is still often undervalued, and the relevant documents that show the genesis and development of an idea are frequently lost-data, analysis, notes, and drafts, as well as wider documentary materials that demonstrate the cultural and social setting of contemporary science. Describing the Human Genome Archive Project of the Wellcome Library, this chapter advocates a proactive rather than reactive approach, and early intervention, with archivists working with early- to midcareer scientists to capture their involvement in scientific projects and train them in good recordkeeping practices. With practical suggestions about the kinds of records that scientific recordkeepers should aim to preserve, Sloyan's chapter is essential reading for those working in scientific institutions and will also make useful reading for recordkeepers working in similarly dispersed organizations or fields. The Human Genome Archive Project provides a model for modern scientific archival collecting and archive-making.

While most of the authors are historians of science, the book functions as a history of scientific archives. In this light, it is good to see references to archival theory, with mention of the work of Terry Cook and Joan M. Schwartz on archives and power. Contributed chapters by those working in the field (archivist, librarian) are welcome too. Although geared toward historians of science, archivists can engage with plenty in *Archival Afterlives*, such as the history of scientific archives and recordkeeping, methods of knowledge transfer, and the relationships between objects, manuscripts, and publications.

Archivists and recordkeepers working with scientific records will take particular interest in *Archival Afterlives*; it is both pleasing and alarming to witness the parallels between scientists and their records, then and now. "An encounter with the print-shop" used to spell the end for an original manuscript; and still, the current scientific community emphasizes publications over unpublished materials as the primary means of knowledge capture (p. 48). More recently, the open science movement has advocated strongly for sharing scientific knowledge, publications, and data, and perhaps there is scope for this to have a positive impact on scientific archives too. But this impulse toward sharing scientific knowledge is not so new, and we witness this in *Archival Afterlives*. We see it in Hans Sloane's annotated texts, with generations of scientists collaborating through the years to transfer experience and knowledge. We witness, too, the manuscript-sharing networks of Samuel Hartlib, who collected papers with the intention of distributing them, "putting them to immediate use for the public good" (p. 124). And we see how past generations of scientists used their predecessors' archives in the creation of new experimentation and discovery. Recordkeepers working in scientific institutions, arguing for the ongoing value of unpublished scientific records, may find valuable precedence in *Archival Afterlives*.

© Laura Outterside European X-Ray Free-Electron Laser Facility GmbH

Note

Archival Values: Essays in Honor of Mark A. Greene

Edited by Christine Weideman and Mary A. Caldera. Chicago: Society of American Archivists, 2019. 316 pp. Softcover, EPUB, and PDF. Members \$39.00, nonmembers \$55.00. Softcover ISBN 978-1-945246-04-3; EPUB ISBN 978-1-945246-05-0; PDF ISBN 978-1-945246-06-7.

Mark Greene concluded his remarkable Society of American Archivists (SAA) presidential address in 2008 by writing "Defining and committing to values and changing attitudes will increase and broaden our power as a profession and as professionals. . . . We can become stronger, more powerful, more respected, and more visible. We can become more valuable, but only if we know our values."¹ Greene's address sparked the creation of the "Society of American Archivists Core Values of Archivists," which articulates eleven values that "embody what a profession stands for and should form the basis for the behavior of its members."² The creation and adoption of this statement by SAA Council in 2011 has given archivists both seasoned and new a resource that we can use as a basis for explaining the profession to one another and to those

¹ Michael Hunter, ed., Archives of the Scientific Revolution: The Formation and Exchange of Ideas in Seventeenth-Century Europe (Woodbridge, UK: The Boydell Press, 1998).