

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

Kohn Centre

The Royal Society

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Conference Description:

Early modern naturalists collected, generated, and shared massive amounts of paper. Inspired by calls for the wholesale reform of natural philosophy and schooled in humanist note-taking practices, they generated correspondence, reading notes (in margins, on scraps, in notebooks), experimental and observational reports, and drafts (rough, partial, fair) of treatises intended for circulation in manuscript or further replication in print. If naturalists claimed all knowledge as their province, natural philosophy was a paper empire. In our own day, naturalists' materials, ensconced in archives, libraries, and (occasionally) private hands, are now the foundation of a history of science that has taken a material turn towards paper, ink, pen, and filing systems as technologies of communication, information management, and knowledge production. Recently, the creation of such papers, and their originators' organization of them and intentions for them have received much attention. The lives archives lived after their creators' deaths have been explored less often. The posthumous fortunes of archives are crucial both to their survival as historical sources today and to their use as scientific sources in the past.

How did (often) disorderly collections of paper come to be “the archives of the Scientific Revolution”? The proposed conference considers the histories of these papers from the early modern past to the digital present, including collections of material initially assembled by Samuel Hartlib, John Ray, Francis Willughby, Isaac Newton, Hans Sloane, Martin Lister, Edward Lhwyd, Robert Hooke, and Théodore de Mayerne. The histories unearthed—of wrangling over the control and organization of the papers of dead naturalists (and by extension, of the legacies of the dead and the living), of putting the scraps and half-finished experiments cast off by fertile minds to work, of extending and preserving their legacies in print—serve not only as an index of the cultural position of scientific activity since the early modern period. They also engage us in thinking about genealogies of scientific influence, the material and intellectual resources that had to be deployed to continue the scientific project beyond the life of any one individual, the creation and management of scientific genius as a posthumous project, and scientific activity as a collective endeavor in which scribes, archives and library keepers, editors, digital humanists and naturalists' surviving friends and family members had a stake.

Programme:

9:15am: Registration/coffee

9:30am: Welcome and Introduction:

Dr Vera Keller, Dr Anna Marie Roos, Dr Elizabeth Yale

9:45am: Session I. Archival Afterlives: Miscellanies and Method

Chair: Dr Anna Marie Roos, University of Lincoln

Dr Vera Keller, University of Oregon: *Scarlet Letters: The Mayerne Papers within the Royal Society Archives*

Abstract: This talk explores a cache of papers in the Royal Society archives deriving from the collections of Sir Theodore Mayerne (1573-1654/5), a Huguenot physician, political negotiator, alchemist, patron of art and inveterate experimenter into the world of craft. Many of these items are themselves the papers of earlier individuals, which Mayerne collected and transformed. Mayerne died several years before the Royal Society was founded. How did his collections enter the Society? And what can they tell us about the Society's relationship to earlier practices and networks of experimental study?

Mayerne's papers informed the Society's History of Trades program, which reached its height in the 1660s and 1670s. They also informed discussions within the Society concerning the proper method of experiment. For Mayerne did not merely collect techniques; he further experimented upon them and deployed unique and innovative literary technologies within his experimental studies. At a moment in the early 1680s when discussions in the Society reviewed the proper method of prosecuting experiments, they did so in light of Mayerne's papers. In order to understand the relationship between scientific experiment and craft, we need to explore not only the relationships between craftsmen and Fellows of the Royal Society, as previous treatments of the History of Trades program have done. We must also question how practices of registering collective empirical knowledge in the Royal Society related to previous literary technologies, such as those of Mayerne, who had already been collecting and processing textual remains from the world of craft.

Dr Richard Serjeantson, Trinity College, Cambridge University: *University natural philosophy in the archives*

Abstract: This paper will explore the archival afterlives of an important but still not much studied genre of scientific archive: the manuscripts created by students of philosophy, and especially natural philosophy, in the universities of seventeenth-century England. Natural philosophy was an important—perhaps indeed the central—study of the university 'arts course' that was pursued by students studying for the degrees of Bachelor of Arts (BA) and of Master of Arts (MA). The study of natural philosophy generated a broad range of manuscript materials. These include notes from printed sources, taken in commonplace-books (such as that of Francis Willughby) or other kinds of notebook; structured arguments generated by or for the important exercise of disputation (such as those of John Selden or Edward Leigh); systematic treatises of natural philosophy, whether composed by students themselves (such as Robert Boothe's 'Synopsis totius philosophiæ'), or copied out by them, or by paid scribes; correspondence with distant authorities (such as Henry Power's letters to Sir Thomas Browne); and other records of experimentation and reading (such as Isaac Newton's 'Certain Philosophical Questions'). Building on the work of Costello, Feingold, C. J. Cook and others, and also drawing upon archival documents now in London, Oxford, Cambridge, Nottingham and Los Angeles, this paper will have two related goals. The first will be to offer a typology of student natural philosophy archives, explaining when, how and for what purposes they were produced. The second goal will be to ask what happened to such materials after their creation, and what accidents of survival have led to their continued archival afterlife.

11:00 am: Tea/Coffee, Marble Hall

11:15 am: Session II. Archival Afterlives: Natural Histories

Chair: Dr Felicity Henderson, University of Exeter

Dr Elizabeth Yale, University of Iowa: *'A Dying Hand': Crafting the posthumous legacies of John Ray*

Abstract: In the early eighteenth century, not all papers left behind by seventeenth-century naturalists were archived; many were printed. Why choose one option over the other? Who involved themselves in cases of posthumous authorship, and how did printing and publication function absent an author? This paper considers the case of naturalist John Ray, exploring how Ray's wife and daughters, editors, publishers, and biographers, building on the foundations of his papers, as well as their memories of his life, established the seventeenth-century naturalist as the eighteenth-century's "Great Father of the Botanick Science" (to quote Ray's friend and biographer, the botanist Samuel Dale). As was quite common, Ray left behind fragmentary and incomplete papers, meaning that surviving friends and family members, and associates they drafted into the process, had to make difficult decisions about what materials to publish and how much to edit them prior to publication. With an array of stakeholders ostensibly coming together to honor the memory of the dead and ensure his work was not lost to posterity, yet also pursuing ends of their own, the posthumous publication of Ray's papers was an emotionally and intellectually fraught process.

Dr Anna Marie Roos, University of Lincoln: *'Fossilised Remains': William Huddesford, and the Lhwyd and Lister Ephemera in the Bodleian Library*

Abstract: This paper concerns the recent rediscovery and posthumous fate of the Bodleian Library's ephemera (papers and copperplates) involved in the production of the first field guide to fossils, Edward Lhwyd's *Lithophylacii Britannici Ichnographia* (1699) as well as Martin Lister's *Historiae Conchyliorum* (1685-92), the first scientific work of conchology. Lhwyd worked in collaboration with Lister; both Lister's masterwork on conchs and Lhwyd's field guide were reissued in revised editions in the 18th century by Ashmolean keeper William Huddesford, as the original texts contained terms for species that 18th-century readers found incomprehensible. We will examine the fate and provenance of the archives generated by the 17th- and the 18th-century editions of these books with an eye to analysing the techniques by which older taxonomic information was repurposed for Enlightenment natural philosophy.

12:30 pm: Lunch, Marble Hall

1:45 pm: Session III. Archival Afterlives: Script and Print in the Sloane Collections

Chair: Dr Anne Goldgar, King's College, London

Dr Arnold Hunt, King's College London, *Under Sloane's Shadow: The Archive of James Petiver*

Abstract: James Petiver (1665-1718), apothecary and botanist, assembled one of the most significant collections of natural history specimens in eighteenth-century England. Yet he has often been treated rather patronisingly by modern scholars (Raymond Stearns, for example, characterised him as 'vain, excessively ambitious, and occasionally dull') and is generally thought to have had little understanding of how to organise his collection. Sir Hans Sloane, who bought Petiver's specimens after his death, remarked that 'he did not take equal Care to keep them, but put them into heaps, with sometimes small labels of Paper, where they were many of them injured by Dust, Insects, Rain, &c.' D.E. Allen, in the *Oxford DNB*, writes that 'for Petiver, acquisition was virtually all: he had scant inclination to document or arrange his collections with the care that they deserved'. In this paper, I will argue that Petiver's reputation has suffered from the posthumous fragmentation of his archive. Absorbed into Sloane's vast collection, his papers and specimens were subsequently divided between the British Library and the Natural History Museum, and the complex web of connections between them has been broken. This paper seeks to reconstruct Petiver's archival afterlife in order to reassess his achievement as a collector.

Alison Walker, British Library, *Collecting knowledge; annotated material in the library of Sir Hans Sloane*

Abstract: Sir Hans Sloane (1660-1753), physician and scientist, President of both the Royal Society and the College of Physicians, built up the great collection of books, objects and specimens, which became the principal foundation collection of the British Museum. The Sloane Printed Books Project, based at the British Library, is working to identify the contents of his partially dispersed library. In addition, the project is gradually revealing what lies beneath the bibliographical surface of Sloane's library: other libraries, other collectors and creators of knowledge.

The number of books in Sloane's library annotated by previous owners is significant, and it is clear that Sloane valued the knowledge embodied in them. A significant proportion of the annotated material is of medical interest: notes relating to medical practice include bibliographical listings, case notes, remedies and pharmaceutical ingredients. Examples from 17th century libraries also illustrate how collections were created, managed and passed on to later owners. The richness and complexity of the professional annotations reflect the significance of printed resources during this period, demonstrate collectors' awareness of the value of both classic and modern authors and illustrate the particular ways in which physicians recorded their knowledge.

3:00 pm: Session IV. Archival Afterlives: Archiving for Future Pasts

Chair: Professor Larry Stewart, University of Saskatchewan

Dr Leigh Penman, University of Queensland: 'Omnium exposita rapinae': *a biography of the papers of Samuel Hartlib, 1662-2015*

Abstract: The Anglo-Prussian intelligencer Samuel Hartlib died at Axe-Yard, Westminster, on 10 March 1662. What was left of his life were a few sticks of broken furniture and a motley collection of some 26,000 sheets of 'loose papers,' the result of some 36 years of gathering and distributing knowledge. While today Hartlib's papers enjoy widespread recognition as 'an embarrassingly rich and daunting resource' for researchers—a profile assisted greatly by the publication of pioneering 'full text' electronic editions in 1995, 2002 and 2013—this has not always been the case. Before their deposit in an institutional library in

1964 they had an adventurous history, and were valued for utilitarian, personal, scholarly and reputational purposes. They had served variously as treasured personal possessions, a family heirloom to be monetized, useless scraps of paper, the centrepiece of a grand utopian project, a portion of one of the great private libraries of nineteenth-century Britain, a chattel of an English noble family based in Kenya, and the possession of two professors of education at Sheffield University. Incorporating insights from recent theoretical studies of the archive, as well as material history, this paper outlines a 'biography' of Hartlib's papers. Following Appadurai, I consider Hartlib's papers as a social artefact, in the sense that their story is inextricable from the stories of those that have used and abused them. Knowledge of the liquid microsociologies of interest and neglect, which have irrevocably altered both their form and content informs historical and historiographical opinion on Hartlib himself, as well as his endeavours. Because these microsociologies have shaped the form and content of the archive, they have also had implications for its electronic presentation; this is a significant consideration given that the vast majority of consulters of Hartlib's papers have never and will never encounter the physical archive itself. A biography of Hartlib's papers, then, offers the opportunity not only to reflect on the historicization of reputations, but also archival and scholarly practices based around the archive.

Ms Victoria Sloyan, Wellcome Library: *Collecting Genomics: archiving modern, collaborative science*

Abstract: Modern scientific collections bear little resemblance to their early modern forebears, yet the same traditional archival approaches are being applied to both. This paper will serve as a counterpoint to the main conference focus by examining modern scientific archives and archival collecting today and will explore some of the issues raised by twenty-first century scientific archives.

Scientific research is no longer the preserve of wealthy amateurs dabbling in isolation, but is a collaborative and often interdisciplinary affair undertaken in research institutions and commercial organisations. Twentieth century scientific collecting has tended to focus on key individuals, but there is a risk that this approach fails to effectively capture the collaboration behind areas of research. The Wellcome Library's Collecting Genomics Project has adopted a documentation strategy-based approach to collect scientific archives and capture the networks and collaboration behind record creation.

This paper will set out Collecting Genomics' surveying methodology and results and also explore some of issues faced when cataloguing the resulting archives. Like many modern archives, scientific collections now frequently include born-digital material, which presents preservation and arrangement challenges. Rapid technological change makes media and file format obsolescence a serious issue and careful thought also needs to be given to how digital and paper records are integrated in a single catalogue. Another consideration is sensitivity review: scientific collaboration occurs not just with colleagues, but often with commercial companies and other third parties, resulting in sensitivity considerations for archivists, beyond the personal data issues that they are familiar with. Overall this paper will show how the Collecting Genomics project is adapting traditional archival approaches in order to effectively deal with new types of scientific archives and the new contexts in which they are being created.

4:15 pm: Tea/coffee

4.30 pm: Commentary and Discussion

Professor Michael Hunter, Birkbeck College, University of London

5:30 pm: Plenary

Dr Lauren Kassell, Pembroke College, Cambridge: *Stars and scribes, astrology and archives, simulcast*
University of Oregon

Abstract: The story of astrology's heyday in seventeenth century England is well known. Cheap print and political turmoil fuelled its popularity, while Copernicanism, mechanical philosophy and medical protectionism challenged its credibility. Almanacs and handbooks document one part of the story, polemical books and pamphlets the other. I want instead to focus on astrological charts, kept singly or in series in casebooks or later amassed in collections. Whether forecasting the weather or judging a person's fortune, astrologers mapped the stars on pieces of paper. Sometimes these were discarded, but often they were kept, retained, and sometimes collected, reused or recalculated. This history of the accumulation and study of astrological archives—called by one astrologer a 'body of astrology' and by another 'astrological experiments'—parallels the rise of natural history, but astrologers faced distinct epistemological and practical challenges, often answered by consulting increasing numbers of records, current and historical. The ultimate astrologer antiquarian was Elias Ashmole (1617-1692), who collected and studied the majority of English astrological records that now survive. This paper considers Ashmole's pursuits amidst a broader history of astrology and archives.

6:30 pm: Conference Close

7:00 pm: Conference Dinner

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