Mrozewski, Tomasz. 2019. Review of *Science in the Archives: Pasts, Presents, Futures*, edited by Lorraine Daston. *Canadian Journal of Academic Librarianship* 5: 1–3. <https://doi.org/10.33137/cjal-rcbu.v5.32839>
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of the pieces are in dialogue with one another; taken as a whole, though, the casual reader might find the volume to be rather dense.

The first half of the book generally reads as straightforward history of science. It opens with a section, “Nature’s Own Canon: Archives of the Historical Sciences,” on the development of particular archives and their role in the development of the sciences of astronomy, geology, and medicine. The second section, “Spanning the Centuries: Archives from Ancient to Modern,” treats more historiographic concerns in the contexts of Classical doxography, ancient history, and monumental archival projects of the nineteenth century.

The second half of the book switches gears, treating current topics in archival practice and will seem much more familiar to readers of contemporary library and information science literature. The third section, “Problems and Politics: Controversies in the Global Archive,” looks at issues around the publication of scientific data in the late twentieth century, genetic archives and the genome as archive, and the US climate archive. The final section, “The Future of Data: Archives of the New Millennium,” looks to emergent archival practices including quantified self, text mining, and data mining.

Reading this work at the same time as I was responding to the engagement around the Tri-Agencies’ Draft RDM Policy (2018)—which covered data deposit and archiving—the questions that interested me most were the existential ones behind archival practices: What are scientific archives supposed to do? What motivates their development? One recurring strand among the chapters is the tension between archiving scientific data for replication and for secondary analysis, which remain two important themes in contemporary discourse around data sharing. If a scientific archive serves to provide replication data for the literature, we might imagine a very different, more limited, but also more practicable, undertaking than a comprehensive archive of “everything” that would seek to make all data collected in specific disciplines available to any possible future user for any purpose whatsoever.

The essays in *Science in the Archives* provide various insights into this dichotomy: on the one hand, in “Empiricism in the Library: Medicine’s Case Histories,” J. Andrew Mendelsohn writes of the importance of the comprehensive, uncured archive of case studies in which “information of uncertain meaning [is] preserved for future interpretation” (95) in the development of modern medicine; conversely, Vladimir Jankovic specifically disputes this “warehouse model” (225) in “Montage and Metamorphosis: Climatological Data Archiving and the U.S. National Climate Program,” arguing that the pragmatic needs of current scientific practice determine the very scope of the archive. While this book doesn’t pretend to provide an answer to the question of whether or how scientific archives ought to privilege collection for

replication's sake or for secondary reuse, it does provide excellent food for thought on the topic.

I found Bruno J. Strasser's article "The 'Data Deluge': turning Private Data into Public Archives" to be the single most interesting piece in the volume, providing both a history of data sharing since the 1970s and a critique of RDM as a revolutionary practice. As Strasser points out, data sharing policies have been most successful where they have play to the "existing moral economy of the experimental life sciences... where professionals made a career (and a living) by turning data into credit" (194). In other words, data deposit thrives when scientists are able to leverage the economy of publication and citation credit in much the same way they do when publishing articles. This, Strasser argues, is "no revolution at all, or only a conservative one" (198). Regardless of the motivation, however, Strasser acknowledges that the uptake in data archiving has "allow[ed] the experimental science of the archives to flourish at the beginning of the twenty-first century" (199).

Whether taken as a whole or for individual articles, *Science in the Archives* is a valuable and insightful look into the role of archives and archival practices in the sciences, and especially useful to academic librarians who wish to contextualize their work with these archives.

REFERENCES

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