Archival Futures. Edited by Caroline Brown. London: Facet Publishing, 2018. 156 pp. Index. Softcover. \$89.00.

For perhaps as long as the archival profession has existed, so too have conversations about its future. *Archival Futures* takes up this conversation in a collection of essays by authors from the United Kingdom, Australia, Canada, and the United States who are "given a free reign to examine the present and imagine the archival future" (p. xv). What emerges, over the course of nine chapters, is a relatively consistent set of concerns that provides a general point of entry into currents of archival thought, particularly around records management. This question of the future is addressed primarily in terms of a changing technological environment in which a concern with the profusion of digital materials that inherently challenge, in form and volume, established archival practice is coupled with the looming presence of increasingly capable systems that seem poised to overtake many traditional archival functions. The "post-truth era," in its latest iteration, is also invoked in several chapters, revealing another source of tension within the profession.

The underlying anxiety concerns the next iteration of our profession and its values, and, by extension, the role that we as archivists will have to play in such a future. Though varied in their specific perspectives, the authors in this book are, with some notable exceptions, largely unified in their recommendations. In response to an increasingly automated and networked environment, they propose that archivists should embrace new technological skills, diversify their roles, and reorient their work toward areas that capitalize on our interpretive strengths, such as the creation of meaning, context, and authenticity. The cohesion that ties many of the chapters together so effectively can also feel limiting at times, and the overall orientation feels surprisingly reactive. Though they might be occasionally referenced, now ubiquitous conversations around social justice, archival labor and precarity, and the social and economic impacts of technologization as a consequence of neoliberalism remain largely unaddressed in these texts. The relatively narrow geographic distribution and overlapping academic ties of several of the contributors may go some way in accounting for this cohesion.

Kate Theimer begins the volume with a consideration of the impacts of automation and innovation, as embodied by increasingly capable systems, on the evolution of professional work. Drawing heavily from the ideas advanced by Richard Susskind and Daniel Susskind in their book *The Future of Professions: How Technology Will Transform the Work of Human Experts*, Theimer considers "decomposing" archival work into its constituent tasks and determining how far each can be shifted toward automation and externalization. She cites changing user expectations, the increasing porousness of boundaries between disciplines and the delegation of professional work onto paraprofessional positions, and administrative pressure to transition as increasingly capable tools become more cheaply available. As we shift from a print-based society to a digital one, Theimer suggests, "that which is not digital will not matter" (p.10); as such, archivists must learn to master new tools, perhaps becoming data scientists, to anticipate new uses of archives. As intelligent systems disintermediate archivists from our traditional work, we can reintermediate ourselves by reenvisioning our roles to place more emphasis on

meaning-making, contextualization, and advocacy; interacting with archives as a methodology rather than a discipline; and branching into adjacent disciplines, such as history.

Similarly, in chapter 5, Jenny Bunn envisions a continued role for archivists in sense-making activities. Taking as a starting point a pair of articles written in 1989 and 1995 by David Bearman, Bunn examines the evolution of discourse around archival processing to unpack its implications, arriving at three interrelated and progressive framings of what constitutes archival processing. Processing is conceptualized as the activity of manually or automatically importing information from external to internal systems, and an emphasis on documenting record-creating activity, rather than describing records, entails the task of recording and tracking relationships. A qualitative difference between computer processing and human processing, called "sense-making," is proposed. Sensemaking, defined as an analytical process involving acts of interpretation, representation, and inference, must be combined with computer information processing to generate "archival sense" within records, which is tentatively described as "an authentic or at least reasonably accurate representation of the activity from which it arose" (p. 74). Bunn concludes that recalibrating sense-making to our new tools and vastly increased processing power is the future of archival processing.

The idea of authenticity as the core of "archival sense" is also addressed in chapter 2 by Luciana Duranti, who is concerned with the erosion of the integrity of records and recordkeeping processes in the face of rising anti-intellectualism, political bias, mass data collection, and the increased volume in the circulation of mistruths that now bypass, by design, traditional sources of trusted information. For Duranti, also, the continued relevance of archivists lies in their sense-making—in this case, of data protection, privacy, transparency, and accountability concerns—in creating standards and guidelines for codifying transparency requirements and in guiding policymakers who are building new frameworks for increasingly automated decision-making. As we move away from centralized systems of information management and oversight, she concludes, international and cross-disciplinary collaborations are needed to produce tools, standards, methods, and guidelines for addressing the contextualization and verification of records and evidence.

Duranti and Victoria Lemieux draw from a similar well of examples, including the work of the InterPARES Trust Project on TrustChain and the Preservation as a System for Trust (PaaST) standard,¹ the notion of decentralized autonomous collections, and the developing field of computational archival science (CAS). In chapter 3, Lemieux is primarily concerned with the social shift toward networks and the consequent impact of networked technologies on traditionally centralized archival systems. Focusing on blockchain, Lemieux argues that its claim to produce immutable records of transactions, and its potential to take up traditional authenticating functions, makes it of interest to archivists. Lemieux must contend with the as-of-yet limited consensus on the definition and applications of this nascent technology. She argues, however, that archivists can reclaim their role within recordkeeping by defining and implementing their vision for what trustworthy records look like in this context. Lemieux also envisions a new

transdiscipline, which draws archivists into the computational, and computer scientists and engineers into the archival, realm.

In chapter 4, Geoffrey Yeo questions the viability of our current appraisal practices in light of the increasing capacity and declining cost of digital storage and the availability of computational tools for analyzing data on a large scale, which reduce and potentially remove the need for selectivity. At the heart of these concerns is the need to develop scalable methods for dealing with a profusion of digital data by embracing evolving tools to automate tasks for creating technical and descriptive metadata, acquiring computational skills, and integrating these methods into traditional archival thinking. Concurring with Bunn and others, Yeo concludes that human intervention will "be focused on those aspects of curation that depend on personalized advocacy or the highest levels of . . . sense-making" (p. 56) and that records professionals will have a continuing role in verifying that records are created and secured appropriately. Toward the end of the chapter, Yeo briefly addresses legal and ethical privacy issues, including data privacy laws and notions of the "right to be forgotten."

In chapter 6, Sonia Ranade identifies the main challenges of digital data as those stemming from their diversity, volume, and richness, and argues that traditional archival concepts may no longer be applicable to digital data where the distinctions between record, description, and context are blurred. Ranade concurs with the other authors that trust remains integral and posits that the ways in which we conceptualize and enact trust in an archival context are shifting in the digital sphere. She argues that authority, control, and centralization as means of generating trust and integrity will increasingly shift to mechanisms of transparency, accountability, and quantitative methods for dealing with risk and uncertainty and qualifying confidence in large volumes of decentralized data, whether raw or derived. Ranade offers an optimistic approach, supported by accessible use cases, in envisioning a flexible and user-centric method of working with digital data.

In chapter 7, Barbara Reed and her colleagues draw on work developed during the last decade to define and discuss the applications of recordkeeping informatics. Using a hypothetical case study of children who have experienced out-of-home (foster) care, the authors argue that this sense-making approach provides the building blocks for moving toward accountability and transparency in recordkeeping practice. This is accomplished by establishing context and linkages to reflect the interconnected systems of individuals, organizations, and legal and administrative instruments that create and manage records across time and within a variety of disciplines and jurisdictions. The authors emphasize the core importance of digital metadata in particular in establishing context, access, and tracing the movement of information, and state that the ability to think about metadata—and the application of emerging technologies to its creation—must become more embedded in archival practice.

In chapter 8, Michael Moss and David Thomas focus their attention on the Internet, which they posit is not an entity capable of being archived, but rather is "the archive." Citing several high-profile failures, they claim that the Internet poses a potentially insurmountable challenge to traditional archival methods due to its mutability, elasticity,

atemporality, size, and omnipresence (though they cite global Internet use at only 40 percent). Their chapter takes a multidisciplinary approach, drawing primarily on ideas generated within the fields of media and memory studies, textual theory, history, and law. The authors assert that the Internet has liberated information from the rules and constraints of archival institutions by bypassing the "catalog" and providing direct access to "the metaphorical storeroom" where materials are kept and where they can be discovered serendipitously by users (p. 125). They do not address, however, the underlying infrastructure of the Internet, which includes web indexing, search engine optimization, and the other functional processes upon which search and discovery are predicated. They conclude, in a general sense, that this new environment "[presents] information professions with new opportunities in relation to information availability and access, although it is clear that we will all have to be prepared to see information in new lights" (p. 132).

In the final chapter, Craig Gauld argues that the archival profession has fallen out of love with ideas. Gauld's primary conceit appears to be that a reliance on prevailing, rather than innovative, ideas characterizes the end of the age of archival ideas, though it is at times difficult to parse his positions regarding what constitutes "genuinely new or critical thinking" (p. 142). He appears to categorically dismiss a wealth of contemporary critical thought as "too much conversation . . . criticizing the nature of the archive, and, more specifically, the role of the archivist," a rehashing of previous postmodernist ideas that he likens to "an exercise in self-flagellation" (p. 148). Gauld frames this drought of radical new ideas against an environment of financial precarity and "cosy professional consensus," in which archives are occupied with "more 'practical' matters, ensuring that we become . . . inclusive and accessible organizations" (p. 147). Appearing to break with the consensus, he concludes that the response of the archival community to the challenges of the age of information must be to work within traditional principles and parameters when creating archival solutions to digital problems; however, in doing so, he cites the efforts of several of his coauthors.

Archival Futures provides an accessible entry point for further investigations into some of the concerns that will guide the future of archival work. The most effective chapters focus on clearly delineated sets of issues, grounded in practice, which anchor their concerns into manageable components and allow them to provide concrete points of departure for thinking about the tasks that lie ahead. Though technological changes emerge at the forefront of these considerations, the language is not specifically technical; rather, the authors are concerned with tracing broader trends in the information landscape. These conversations about evolving technologies, which can feel like a fait accompli, often leave underlying questions of archival agency, labor, and ethics unexamined and, as such, miss opportunities for more imaginative speculation about the evolution of archives. Similarly, a set of underpinning dichotomies frames the present and future, as well as paper and digital materials, as a set of fixed points between which we are currently moving in a linear progression, bypassing the very iterative and hybridized nature of current professional practice. Regardless, this book is likely to function as somewhat of a mirror for its readers, who will see their own anxieties or optimisms reflected in its pages.

Publication Reviews —

Lori Dedeyan Processing Archivist UCLA Library Special Collections

NOTE

 InterPARES Trust Project, Model for Preservation of Trustworthiness of the Digitally Signed, Timestamped and/or Seal Digital Records (TRUSTER Preservation Model), February 3, 2018, https:// interparestrust.org/assets/public/dissemination/TRUSTERPreservationModel(EU31)-Finalreportv_1_3.pdf.