

useful and informative. Archivists are not the audience that Millar had in mind when writing, and they will find little new here themselves, but this very readable text can be readily recommended to those seeking guidance on preparing their archives for transfer to a repository or those just beginning to explore the idea.

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**History in the Digital Age.** TONI WELLER, ed. London: Routledge, 2013. x, 212 pp. ISBN 978-0-415-66697-8.

In this important collection of essays for archivists, Toni Weller, a Visiting Research Fellow at De Montfort University, Leicester, UK, and editor of the international journal *Library and Information History*, has brought together a respected group of international and interdisciplinary scholars who share a variety of experiences in researching, and teaching and writing about, digital material. These academics produced ten essays focusing on how to conceptualize and understand the implications of the new domain of digital history.

The book is divided into four interpretive sections: “Re-conceptualizing History in the Digital Age,” “Studying History in the Digital Age,” “Teaching History in the Digital Age,” and “The Future of History in the Digital Age.” The first section considers concepts of historical evidence and its interpretation and analysis in historiography. The common thread, as expressed in Luke Tredinnick’s “The Making of History: Remediating Historicized Experience,” is the need “not to sacrifice the rational, logical, and empirical approach to knowledge that has been the hallmark of the humanities since the Enlightenment, but rather to complement it with different ways of discovery” (p. 47). Tredinnick reminds us that “the histories written throughout the early modern period continued to be ecumenical about evidence, lacking later scholarship’s rigorous classification of source materials, and frequently placing scripture, literature, myth and tradition on an equal footing” (p. 47). Not until the nineteenth century did the notion of an objectively understood past become the dominant historical discourse. “It reflected the investment of the past in a written archive that was itself governed by the contingencies of an emerging administrative rationality” (p. 47). In both discovery and discourse, digital technology adds to historical evidence the qualities of immediacy and variety of experience, which suggests new implications for our understanding of the past – that perhaps the digital environment is forcing historians to reassess historical consciousness as we are confronted with new means to access, discover, and relate the idea of history.

The next two sections, on studying and teaching history, do not, understandably, examine all new digital implications, but they cite new digital means to produce, disseminate, and codify knowledge. In his essay “Studying the Past in the Digital Age,” Mark Sandle expands on this idea of a digital re-assessment of knowledge by observing that notions of authenticity are threatened in the digital environment. Sandle observes that, “The forms of primary sources ... are only as useful and as good as the amount of work ... that goes into preparing and publishing them. The researcher ... is somewhat at the mercy of those people providing the digital version, to ensure it is authentic” (p. 135). Like many scholars in the humanities – Susan Brown and Marlene Manoff come to mind<sup>1</sup> – Sandle draws a very close relationship between the materiality of the records and their authenticity. He is correct to note that digital technology “changes the relationship and the nature of the process of inquiry and analysis” (p. 135), but new technologies have always influenced the research and discovery experience. More thought is required to fully understand exactly how a record’s materiality shapes our historical consciousness, our individual and collective understanding of the past. Moreover, in his discussion of how technology threatens notions of authenticity, it would have been helpful if Sandle had mentioned the work of archivists confronting digital records. Standards such as the Preservation Metadata Maintenance Activity (PREMIS), Metadata Coding and Transmission Standard (METS), and the Open Archival Information System (OAIS) have been developed to tackle this very problem, but they are not properly examined in this monograph.

In her introduction, Weller argues that the practice of history cannot ignore the paradigm shift introduced by the age of digital information. As she mentions often, the book’s remit is not how to better utilize digital technologies to research and write history; rather, the book attempts to “throw a conceptual spotlight” on the “interpretation, analysis and engagement” historians have with the myriad challenges of the digital records environment (p. 2). This book is needed, Weller tells us, because

current historical scholars do not really engage with the conceptual impact of the digital age despite using digital resources in their work and consequently current students of history are often not taught to think about these conceptual issues or to apply traditional historical methodologies to their everyday digital and online experiences (p. 2).

1 Susan Brown, “Don’t Mind the Gap: Evolving Digital Modes of Scholarly Production across the Digital-Humanities Divide,” in *Retooling the Humanities: The Culture of Research in Canadian Universities*, ed. Daniel Coleman and Smaro Kamboureli (Edmonton: University of Alberta Press, 2011), 203–31; Marlene Manoff, “The Materiality of Digital Collections: Theoretical and Historical Perspectives,” *Portal: Libraries and the Academy* 6, no. 3 (July 2006): 311–25.

Weller is right to argue that there is a need for such a collection of essays to address the conceptual needs of historians; she notes that there is nothing similar on the historians' reference shelf. From this observation she supplies a list of "challenges that were not thought of only a few decades ago" (p. 6). The list is divided into two sections. The first section highlights a concern for a method that might be more appropriate for archivists: preservation through digitization, migration of formats, preservation of born-digital material, and the cost of access and the stability of technologies. The second section cites the conceptual concerns of historical theory: information provenance, the "intangibility" (p. 6) of digital material, and "teaching students about engaging in digital experiences" (p. 7). In this distinction between issues of method and theory, a larger archival perspective and a reference to the considerable archival literature would have been useful.

Many of the difficult issues relating to digital research sources for historiography are being addressed in archival practice. The series of reports from the InterPARES project have supplied a conceptual digital framework, including the meaning of authenticity in a digital domain and the properties of evidence and records in a digital format.<sup>2</sup> Furthermore, the OAIS model has offered us an international standard for creating a trusted digital repository.<sup>3</sup> These are ongoing processes that would benefit from historians' contributions.

The questions of historiography raised in this collection of essays are reflected in the postmodern dilemma of contemporary archives: multicultural societies and modern bureaucracies with their distributed forms of governance, and information technologies with their interchangeable form and instantaneous distribution, are fragmenting the concept of a record and threatening to decouple the record from its traditional provenance of a single, definitive creator. The archival characterization of the challenges of electronic records is imposing: distributed custody, instantaneous reproduction and distribution, fixity of form and stability of content, heterogeneous and collaborative authorship and authenticity reinterpreted. When added to the concerns of historians covered in this book – the movement for open information and open data, the intangible materiality of digital sources, the historiographical engagement with social media, intellectual commons and publication rights, and wholesale digitization

2 See, for example, Luciana Duranti and Randy Preston, eds., *International Research on Permanent Authentic Records in Electronic Systems (InterPARES) 2: Experiential, Interactive and Dynamic Records*, Padova, Italy: Associazione Nazionale Archivistica Italiana (2008), accessed 10 January 2014, [http://www.interpares.org/display\\_file.cfm?doc=ip2\\_book\\_complete.pdf](http://www.interpares.org/display_file.cfm?doc=ip2_book_complete.pdf).

3 The Consultative Committee for Space Data Systems, *Reference Model for an Open Archival Information System (OAIS)*, Recommended Practice, Issue 2, CCSDS 650.0-M-2, Magenta Book (CCSDS: Washington, DC, June 2012), <http://public.ccsds.org/publications/archive/650x0m2.pdf>.

of archival sources – it should be clear that a cross-disciplinary collaboration between historians and archivists is the only possible means to address challenges of such magnitude.

Finally, the essays remind us that our conceptualization of history continues to evolve over time and across societies. Several authors note that our understanding of historical experience has always been more than purely empirical. Chronicles, annals, epics, myths – the interpretive parameters of our historical understanding include an evolving combination of the subjective, contingent, and moral, presented through ever-changing literary style. Finding the means to capture this humanist historical engagement – this “human measure” beyond the empirical, modernist theories of nineteenth-century positivism – in professions increasingly driven by technology is one of the biggest challenges historians and archivists face in the digital environment. The challenge must be met with a cross-disciplinary response that brings out the strengths of both professions. In this sense, the book is best regarded as an opening gambit. It describes how historiography conceptualizes digital challenges and offers a nod in the direction of the archival profession. A similar work offering the valuable interpretive digital perspective of the archival profession would be a timely response.

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