

is a new standard that is continuing to evolve, it is impossible to capture within one publication all of the changes that have been made from AACR2 or the changes that have occurred within RDA since its implementation, even when focusing on one type of resource. This book makes a good start, however, and cartographic resources catalogers will find it addresses most of their questions about cataloging with RDA.—*Laura Evans (evans@binghamton.edu), Binghamton University, Binghamton, New York*

References

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2. *Anglo-American Cataloguing Rules*, 2nd ed., 2002 rev., 2005 update (Chicago: American Library Association; Ottawa: Canadian Library Association; London: Chartered Institute of Library and Information Professionals, 2002).
3. *Cartographic Materials: A Manual of Interpretation for AACR2*, 2002 rev., 2nd ed. (Chicago: ALA Editions, 2003); *Map Cataloging Manual* (Washington, DC: Library of Congress, 1991).

After the Book: Information Services for the 21st Century. By George Stachokas. Kidlington, UK: Chandos, 2014. 210 p. \$80.00 softcover (ISBN: 978-84334-739-2).

Both inside and outside of the library, the use of print information objects declines while the use of electronic information objects escalates. This phenomenon and how libraries respond to it should be the chief concerns of librarians going forward, according to author George Stachokas. Stachokas argues that nearly everything about the practice of current librarianship is rooted in “the print era” and is therefore “intrinsically linked to the physical library” (35). Given that society “increasingly abandons print” (1), librarians face the daunting task of reshaping themselves and their profession; otherwise, they “risk the problem of seeming and becoming obsolete” (36). Stachokas warns, “Those who manage information in the so-called information age do not really have the luxury of clinging to the past” (39). He proposes that libraries move away from print resources altogether and become fully electronic.

Stachokas understands the value of the profession, even in this information age. He does not want librarians to become obsolete and believes the possibility to be thoroughly avoidable. In *After the Book*, he lays out a three-part roadmap to the fully electronic library. Chapter 4, “Solving the Problem, Part 1: Professional Identity and Preparation,” calls for root-and-branch education reform in library and information science (LIS). Though he acknowledges a few exceptions, Stachokas paints LIS higher education with a broad brush. He calls the MLIS and its equivalents “too

simple to earn” (55) and claims that classroom learning does not “[reflect] the full range of actual practice” (14). LIS education should create information specialists rather than generalist librarians, asserts Stachokas, and librarians of the twenty-first century should specialize in areas relevant to the current profession. Such areas include technical support, evaluating emerging technology, human-computer interaction, metadata creation/curation, analytics, informatics, and information law. Developing a “new professional culture” (65) within LIS education will allow graduates to go directly to their markets and serve users at the point of need.

This final point leads straight into the argument presented in chapter 5, “Solving the Problem, Part 2: Reorganizing the Library to Serve Users.” Here, Stachokas dismisses the idea that the library as an entity is inherently tied to a physical place. In the first chapter, “The Challenge of Electronic Resources,” Stachokas claims rather that the twenty-first-century library “retains its importance as an organizational unit, not as a building or physical facility” (14) thanks to his idea that libraries “exist to provide services based on information” (36) rather than information objects themselves. Given these assertions, the need for reorganization becomes apparent.

Stachokas stresses that this reorganization will dramatically benefit library users. Studies show that over the last fifteen years the circulation of print materials in libraries has been on a steady decline, while the use of the library’s electronic resources has risen exponentially (23). This trend is not limited to academic repositories. The book retailer Borders closed its doors in 2011; conversely, the e-book is the “fastest growing segment of the market for overall book sales” (27). For Stachokas, it is clear that “what is not available in [electronic] format must become electronic in order to be useful” (79).

In light of this information seeking behavior, librarians—no longer tied to physical spaces or objects—will embed themselves where their markets are: in schools, malls, community centers, and law offices. Organizational units of librarians will be embedded in some cases; in others, a single librarian will suffice. Whether their units are made up of one or many, Stachokas’s twenty-first-century librarians are meant, with the electronic resources at their disposal and with their technological know-how, to individually fill the role of the twentieth-century physical library. Of course, this level of reorganization is the end game, and Stachokas recognizes that such a shift will not come all at once. Furthermore, he acknowledges, some institutions, such as universities that place emphasis on a particular discipline, will continue to require some sort of physical space for library operations.

Librarians will require novel survival strategies in the brave, new world of fully electronic libraries. Stachokas outlines a few in chapter 6, “Solving the Problem, Part 3:

Adapting to Scarcity.” In this information age, the ratio of the total amount of information created to the amount of available library collection space will continue to shrink. Librarians need to be “more selective in identifying what information should be included in or defined as part of their own unique collections and what should be left to other information service providers” (131). The rapid rate at which information is created and acquired entails a “scarcity of information about information” (131), and librarians will need to adopt new approaches to metadata.

Additionally, ever-tightening economic constraints result in a scarcity of financial resources for libraries. For libraries to thrive in times of scarcity, Stachokas believes they must remain flexible, ready to quickly adapt to changing user behavior and to experiment with new technologies. He sees consortia as one way of mitigating economic scarcity. Library consortia can pool funds to pay for information access and IT infrastructure that individual members cannot afford on their own. Implementation of patron-driven acquisition and acquisition on-demand programs can ease the aforementioned selection problem and ensure that library collections remain relevant to user needs. Consortia have the opportunity to use their platforms to “[combat] commonly held misconceptions about open access” (141), to calm the fears of academia and to eventually reduce journal subscription costs.

After the Book outlines quite a radical transition for libraries, one that even Stachokas admits many libraries either will be slow to begin or, perhaps, may not be able to begin at all because of financial constraints, lack of qualified personnel, or other reasons. Libraries that serve large numbers of disabled users will not be able to act on Stachokas’s advice because of usability concerns. Such a hard shift will also require a good deal of administrative support that may be difficult or impossible to obtain. Libraries may encounter opposition to his proposed changes, from both librarians and nonlibrary administrators, for reasons ranging from lack of financial resources to a fear of technology. While Stachokas delves deeply into what libraries need to do to continue thriving in the twenty-first century, he does not have much to say about the real-world feasibility of his proposal. Should some libraries move forward with abandon while others lag behind? If so, this may create an unnecessary division between libraries (electronic haves and print have-nots) reducing the commonality between librarians. For that matter, will the heavy specialization suggested above be worth the trade-off of partitioning the profession and possibly diminishing the professional community between librarians? And what should be done in situations where fiscal concerns are a severely limiting factor? These are all big questions that will have to be dealt with if anything like Stachokas’ vision can come to fruition.

Of course, Stachokas states upfront that his treatise “is not intended to answer all possible questions about how to make a successful transition to a more purely electronic library . . . but it should inspire critical thought and discussion about how to get started” (17). And on these terms, *After the Book* is wildly successful.—Chuck Hodgin, (chuck.hodgin@belmont.edu), Belmont University, Nashville, Tennessee

Preserving Complex Digital Objects. Ed. Janet Delve and David Anderson. London: Facet, 2014. 375 p. \$115.00 softcover (ISBN: 978-1-85604-958-0).

Digital preservation efforts share many of the goals, ethics, and priorities of analog preservation but incorporate distinctive vocabulary, technology, and methodology.¹ “Complex digital objects” are objects defined as simulations and visualizations, gaming environments, and software-based art (xii). By definition, these objects contribute additional layers of complication to preservation. These are the focus of *Preserving Complex Digital Objects*.

This compendium offers a print record of the papers presented during the POCOS (Preservation of Complex Objects Symposia) project (three symposia held, respectively, in London, Glasgow, and Cardiff in 2011 and 2012) and concludes with “pathfinder solutions” (a summary and analysis of symposia presentations leading up to proposals for future initiatives).

As they note in their introduction, editors Delve and Anderson strive to represent the many stakeholders having an interest in complex digital objects, i.e., game designers, artists, and historians. The multifaceted structure they develop successfully anchors these diverse groups and charts a course for an initial exploration of the advanced digital preservation issues such items pose.

The volume’s forward (by the head of digital scholarship at the British Library, Adam Farquhar), and preface (by the head of resource discovery at JISC (www.jisc.ac.uk), Neil Grindley), offer a rationale for the POCOS project in general and for this publication in particular. These are followed by an annotated list of contributors and a separate glossary of acronyms (helpful to all readers, but especially useful to those beginning to study digital preservation).

The introduction considers the nature and composition of “complex objects” discussed in the forward and the intricate processes their preservation requires. Delve and Anderson use these observations as an armature on which to build the book’s framework of six sections. The first section, “Why and What to Preserve: Creativity versus Preservation,” presents theoretical and historical considerations from the perspectives of game development, archival philosophy, and digital artwork construction. “The Memory Institution/Data Archival Perspective” offers the administrative perspective on complex digital object preservation through