

BOOK REVIEWS

Jeannette A. Bastian, Reviews Editor

Archiving Websites: A Practical Guide for Information Management Professionals

By Adrian Brown. London: Facet Publishing, 2006. 238 pp. \$79.00. ISBN-10: 1-85604-553-6, ISBN-13: 978-1856045537.

Adrian Brown heads digital preservation at the U.K. National Archives, and in that position he has been engaged in the U.K. Government Web Archive project launched in late 2003. As part of this project, the National Archives collaborates with the European Archive (which in turn is partnered with the Internet Archive) and the U.K. Web Archiving Consortium. The collective goal of these efforts, stated in a variety of ways, is to maintain searchable digital collections of important websites and make them freely accessible to the public. Inevitably, managers of such projects have to cope with difficult issues surrounding selection, quality assurance, metadata and description, preservation, user service, and overall management. While Web archiving is not new, Brown feels that most of what has been written is technical and directed to knowledgeable practitioners. He seeks to address the rest of us: archivists, records managers, policy makers, or Web developers. To that end, he draws on his extensive experience making decisions in this arena to present an overview of best practices in Web archiving and a guide to establishing one's own program.

In an unusual presentation, the book opens with a glossary of technical terms. This is very sensible, as it implies that the reader will need to know these terms to make the most of the content. The first two chapters introduce the material by reviewing the degree to which significant communication and information has been moved exclusively to the Web, and, as a result, how transient that information can be. Fortunately, as Brown notes, only five years passed between the first Web page and the first large-scale Web archiving project (the Internet Archive), and similar projects have followed, extending beyond the Web to include many other forms of born-digital materials. Some projects focus on government information and others on all information related to a specific nation. Almost all collaborate. As part of these collaborative endeavors, the International Internet Preservation Consortium (IIPC), a consortium of national libraries and the Internet Archive, is developing tools and standards for Web archiving.

Most of the rest of the book deals with the components of the Web archiving process. The first chapter, on selection, emphasizes the importance of establishing

and then frequently revisiting selection policies. Choosing broadly what to archive might be based on topic, creator, genre, or domain, and an especially interesting section covers item-level selection criteria, which include factors such as life cycle, rate of change, and risk appraisal (consequence of loss). An additional decision related to selection is choosing when (and how often) to archive. The next chapter, on collection methods, draws on the technical glossary, as it deals with the problems of harvesting from static and dynamic collections and databases.

The chapter on quality assurance and cataloging is succinct, and, for the most part, devoted to the former topic—ensuring that the archiving program succeeds in accomplishing its goals. Quality assurance involves pre- and post-collection testing of archived sites for problems such as incomplete capture (e.g., missing or inaccessible images, multimedia, or PDF files) and incomplete functionality such as navigation or searches that do not work. Brown makes no specific recommendations regarding description, but does advise that whatever scheme is used, decisions will need to be made about the amount of description and the method. He contrasts the Internet Archive, which relies primarily on automatically generated metadata, with the National Library of Australia's Pandora program, where each website is manually cataloged.

The chapter on preservation is among the longest, and its contents are probably the most familiar to readers of this journal (and the least familiar for the other audiences Brown has in mind). An overview of preservation methods precedes an excellent section on passive and active preservation, and the tip of the preservation metadata iceberg. The remaining few pages cover the special problems of archiving dynamic and complex digital resources and their behaviors. The last of the “technical” chapters looks at delivery to users, including what kinds of discovery mechanisms to offer and how to make sure that the archival content and context are made clear. Four case studies illuminate some of the problems of providing access.

With the technical details of building and maintaining a Web archive in place, the guide turns to a consideration of the legal issues. Brown points out that one chapter (or possibly even a whole book) is not sufficient to cover national and international legislation with respect to intellectual property, and instead he gives an overview of the major issues—intellectual property rights, privacy, content liability, and regulatory compliance—with recommendations for additional resources. Where examples are used, they reference U.K. copyright law. For those of us who have read and thought about these issues in the context of archives and digital libraries, this chapter still holds interest because of the special nature of archived Web sites.

The penultimate chapter reviews choices for operational management: in-house implementation, outsourcing, and consortium participation. More space is devoted to the consortium model, including a case study of the U.K. Web Archiving Consortium, but a guide to selection and implementation compares

the advantages, disadvantages, and pitfalls of all three across a number of factors. The final chapter offers the obligatory “what’s around the corner” look at the future, including several paragraphs on data storage (bits, bytes, and holography), Web archiving toolkits, and the Web itself (introducing Web 2.0 and the semantic Web), along with a longer section on trends in preservation standards and practices.

There are five appendices: a list of Web software tools referenced in the text, a model permissions form from the British Library, a model script for collection testing, a model log used to track issues arising from testing, and a model job description for a Web archivist. A six-page bibliography and an adequate and accurate index follow. The bibliography mainly lists further resources (e.g., models, state of the art reviews, and standards), many of which are available online.

The writing is terse and economical (without being dense), there are a few useful illustrations, and the overall tone is intentionally practical and down-to-earth. For U.S. readers, the U.K. emphasis is minimal and does not detract from the message. Brown emphasizes the importance of careful recordkeeping throughout—for instance, the chapter on quality assurance gives guidelines for how to keep track of issues that arise in testing, and two model logging forms relevant to this activity appear in the appendices. Several of the chapters could stand alone quite well as introductions to their topics. The chapter on preservation, for example, would make a very good introductory reading for students, or for employers and other stakeholders who need to be brought up to speed on the issues and options. Although on the short side, this book achieves what it set out to accomplish and contains enough specialized content on Web archiving to be of value to archivists who have been asked to undertake such projects for their institutions.

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Memory Practices in the Sciences

By Geoffrey C. Bowker. Cambridge, Mass.: MIT Press, 2006. 312 pp. \$34.95. ISBN 0-262-02589-2.

In *Memory Practices in the Sciences*, Geoffrey C. Bowker elevates the humble record from evidence of action to enabler—or spoiler—of scientific thought and human advancement. Our ways of working influence our recordkeeping methodologies, which influence our records systems. Our records systems shape our record. What Bowker makes clearer is the relationship between record-keeping practices, the content of records, and the interpretative narrative that

results. Memory practices include rules, forms, standards and protocols, data structures, and the technical, formal, and social practices that lead to records creation. The Linnaean list, Charles Lyell's geologic archives, and the biodiversity database are memory practices created to communicate and enable the development of scientific ideas about the world and humanity's role in it. These memory practices are, as Bowker asserts, where knowledge and ideology meet.

Geoffrey C. Bowker, executive director, Regis and Dianne McKenna Professor, Center for Science, Technology and Society, Santa Clara University, is well qualified to tell this story. He has written a book with Leigh Star on the history and sociology of medical classifications (*Sorting Things Out: Classification and Practice*, published by MIT Press in September 1999) and is now working on *How to Read Databases*. He has participated in international efforts to enable data sharing and collaboration, and he has written widely on information infrastructure, interoperability, and other topics.

While science is one of the few modern institutions to claim a perfect memory of the past, that claim has never been justifiable. Experience is multi-dimensional, surrounding, and environmental; it cannot be captured, only represented. Such accommodation is circumscribed by the technology, culture, and politics of the day. Bowker explores three instances of memory practices developed in the nineteenth, twentieth, and twenty-first centuries, revealing how their creators' necessary assumptions about time and nature and the records systems' inescapable discontinuities and omissions influence scientific and social discourse.

His central example is the biodiversity database that seeks to classify all entities in the web of life. Growing social and political awareness of human impact on the earth increases the sense of urgency associated with this memory practice. Unlike the list or the narrative, which are unidirectional and fixed, the database is manipulable; it appears to avoid fixing and prioritizing its contents. This nonsequential memory form was prefigured by the manila folder and hanging file, which allowed the rearranging of data, and by carbon paper, which allowed data to exist in more than one arrangement. Bowker suggests that our need to extend this thinking, our drive "to database" invented the technology, rather than the reverse. "Databasing" has been perceived as a perfect memory practice for the important endeavor of mapping the world's organisms and a number of biodiversity project titles incorporate the term.

This heroic endeavor requires sufficient infrastructure, use of standards, metadata, and the ability to share data. Scientific culture and practice, however, do not always cooperate. For example, Bowker notes that an effective biodiversity database will draw together data from many different scientific disciplines using many different information technologies (from paper to supercomputer). But the point is that pure data does not exist; some context must always be known. And, developers of metadata standards always need to think about

how much information to give to make the information maximally useful over time. Providing more information to make the data useful to the widest community over the longest period creates more work. Yet empirical studies show that people do not consider preserving information about their data beyond what is necessary to guarantee its immediate usefulness a good use of their time (p. 116).

But this is not the only obstacle. Large-scale technoscience is “massively multidisciplinary.” With few exceptions, scientists are not trained to share information across disciplinary divides. And the focus of technoscience, and funders, is the large-scale information infrastructure, not maintenance of old systems and data, even though that data is essential to understanding the impact of human activity on the planet. Bowker deplores the failure of science to put the maintenance of information infrastructure high on the agenda and argues that data reuse should become “the clarion call within technoscience” (p. 123).

Even more daunting obstacles loom. Some entities are hard to classify because they are singular or nebulous, and, with so little comparative data available, they remain unclassified, thus perpetuating the cycle of exclusion Bowker calls “reverse bootstrapping.” Some items are named and classified repeatedly since the rules for acceptance—in botany, for example—are multiple, including when and where the name is published, its sound, and the desirability of conserving or altering names to reflect new classifications. “Reconciling clocks” in different scientific disciplines is another challenge, since the processes used to calculate age are based on assumptions (not always correct or verifiable) specific to the different fields, and their results do not always agree (p.179). Bowker’s unpacking of the processes that feed the biodiversity database effort increase our appreciation for the complexities of scientific thinking and the challenges of data sharing and representation.

Overall, though, Bowker’s point is generalizable to all fields of study: recordkeeping systems “contain traces of their own past” (p. 178). Bowker describes Linnaean classification as a memory device. The need to develop taxonomies and ontologies in working with the natural world are simply ways to organize information for easy recall. The problem, of course, with these systems is that we encapsulate our present thinking in them. Once embedded in a records system, these present decisions influence views of the past and the future. Linnaeus based his work on the folk classifications available to him that, for obvious reasons, were richer in the area of economically important species. This bias influenced evolutionary theories that use the number of species within a genus as a measure of divergence and thus age. Bowker provides dozens of similar examples, drawing on a wide body of literature. Archaeology is called for. Bowker argues for memory practices that can overcome presentism by accommodating multidimensional, contradictory data. Our interpretations, in any case, should acknowledge the flaws in our data.

This book will be of most interest to those in science studies, a field that combines the history of science and the sociology of scientific knowledge. However, *Memory Practices* holds lessons for records managers and archivists as well, suggesting questions one might ask when participating in systems design processes, analyzing data for reuse, or appraising systems and data for long-term value. Some of these questions relate to the details of work process, the data structures and standards used, and their history, and the temporal, geographic, methodological assumptions in specialized fields of study. While archivists working in data-intensive research settings may find the book a more immediately applicable ally in efforts to bring attention to the creation and management of records, the issues Bowker raises are broadly interesting and relevant.

Bowker's style is personal, but dense, nearly impenetrable at times, full of connections and humor. It's a pleasure to reconsider the idea of the earth as archive, storing in random access fashion the records of its creation and geologic development over time or to encounter a discussion of Babbage's view that "the air itself is one vast library," containing, if one were unfortunately capable of the sensitivity required to hear it, "all the accumulated words pronounced from the creation of mankind" (p. 64). It's not entirely unexpected to come across Bart Simpson's tree of life (showing the relationship of monkeys, sea monkeys, and Flipper, among other things) in a book that includes a whimsical comment on how information-infrastructure-speak has invaded our interactions with people, or how "the academic passion for photocopying and filing away articles" masks its intended purpose—discarding (p. 15). The discussions are layered and rich, with many lines of thinking to follow. *Memory Practices* is a book that will fully reward a second and third reading.

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Managing and Archiving Records in the Digital Era: Changing Professional Orientations

Edited by Niklaus Bütikofer, Hans Hofman, and Seamus Ross. Baden, Switzerland: Hier + Jetzt, Verlag für Kultur und Geschichte, 2006. 131 pp. €26.80. ISBN 3-03919-019-9.

This volume arose from a workshop conducted by the Electronic Resource Preservation and Access Network, known as ERPANET, held in Bern, Switzerland, in October 2004. As workshop host and director of the Swiss Federal Archives Andreas Kellerhals explains in his preface, academic and practicing archivists from eight countries were brought together to discuss the

challenges faced by archivists and records managers in the new digital era. Contributors were asked to address a series of questions: 1) What are the main challenges when managing and preserving digital information and records? 2) Will the new digital order change user needs or expectations of information, records, and/or archives management? 3) Are existing archival paradigms adequate to meet the challenges of the new digital order? What impact will the new continuum paradigm have on the way records and archives management are organized now? Do traditional archival paradigms offer us other—additional—options? 4) What new organizational or business models does the new technology offer us to organize records and archives management? Will there perhaps be a shift in responsibilities from archives to records management or the other way around? 5) What impact will the new digital order have on the interaction with related disciplines, such as information management, libraries, content management, knowledge management, and so on? 6) What impact will all this have on the archival or records management discipline (p. 7)?

Ten essays (nine in English and one in French) follow, representing perspectives and traditions throughout Europe, Australia, and North America that capture where archival professions are now with regard to the new digital order, and where they might go from here.

While each contributor provides his or her own narrative, the essays work best when read in the context of the volume as a whole. The collection provides readers with a sampling of the varied visions that exist within archival professions throughout the Western world regarding changes emerging from the growing amount of digital information that archivists must manage. Contributors vary from high-level government archivists and business records managers to professors of archival studies and records management. Readers searching for a singular, coherent vision of the future of the profession amid current changes should look elsewhere. This volume is best used as a resource to acquaint readers with different perspectives, paradigms, and policies that may apply in the digital era. Rather than making judgments about the views and recommendations set forth within it, this collection serves as a marketplace of ideas.

The contributors begin by defining their terms. According to Eric Ketelaar, professor of Archivistcs at the University of Amsterdam, the new digital order is “characterized by the increasing irrelevance of constraints of place, time, and medium” and is marked by a major paradigm shift embodied in “the ‘disappearance of the original’ ” (p. 11). Bruno Delmas, archives professor at the École Nationale de Chartes, focuses on the conditions of production and use of archives that are highly accelerated and unstable with digital information (pp.43–44), while Wendy Duff, associate professor at the University of Toronto, emphasizes that the challenges of digital records reside in preservation, not just in technology (p. 106). Helen R. Tibbo, professor at the University of North Carolina, identifies the diffused and distributed nature of records creation, a

dearth of traditional filing and contextualizing schemes, a lack of trained records managers, and the overall volume of records as four major challenges (pp. 21–26). Elizabeth Shepherd, senior lecturer at University College London, focuses on gaining recognition of the legal and social value of digital archives and records in national legal frameworks, allowing for a single archives profession, determining how digital records interests will be represented by professional bodies, and how best to provide digital records education (p. 52). The digital challenges for Maria Guercio, archives professor, University of Urbino, are legal and social certainty, integrity and the trustworthiness of memory, adequate object representation in records, and a critical evaluation of digital records based on legal and technological conditions (p. 95). When read together, these distinct issues, couched in their authors' traditions, coalesce to give a broader sense of the challenges faced by the profession as a whole.

Conflicts between established theory and the requirements of the new digital order illustrate the challenges archivists face. For example, Tibbo notes that the early intervention required to maintain and contextualize digital records conflicts with the Jenkinsonian imperative of noninterference (pp. 19–20). According to Duff, “[c]ontext, evidence, and authenticity remain of utmost importance in the digital age; but not all traditional archival practices and techniques are appropriate to the management of electronic records,” and description and arrangement will continue to have a significant impact on theory and practice (p. 109). More contentious, perhaps, are the conflicts between archival models. Tibbo believes that the records continuum model is only preferable over the records life-cycle model if an electronic records management system (ERMS) is available (p. 28). Australian records management consultant Barbara Reed’s emphatic defense of the records continuum model throughout her essay evinces her concern that many of her colleagues misunderstand the continuum model. Reed begins by stressing the flexibility and multidimensionality of the continuum model and by explaining its specific attributes, including the concepts of information versus records, capture, authenticity and integrity over time, storage environments, and recording metadata (pp. 75–78). Essentially, Reed argues that the records continuum model should become the underpinning for all recordkeeping activity (p. 82), and her essay clarifies how its features might accomplish this task.

Delmas’s assertion that the nature of a profession depends largely on its distinct disciplinary and national contexts (p. 39) plays out in the views expressed by his fellow contributors. While North Americans Tibbo and Duff see a convergence between the traditional roles of records managers and archivists, Europeans Angelika Menne-Haritz (German Federal Archives) and Michael Moss (University of Glasgow) emphasize the differences between the two. Tibbo focuses on issues uniting the information professions, including managing large numbers of discrete but interrelated digital objects, building preservation into

their creation, and relying on and acquiring appropriate technology (p. 29). Menne-Haritz and Moss find sufficient disparity in their job requirements such that the tension between duty to organization and duty to the public and posterity cannot be surmounted (pp. 38, 119). Indeed, Moss advocates for archivists “to reassert the fundamental concept of *cimiliarchio publico* to which records can be passed and be held fiduciarily” rather than joining with records managers (p. 123). The interplay between these views functions as a discourse on the challenges posed by digital information to these related professions and shows the extent to which further analysis and discussion are necessary.

Yet, the contributors share a sense that professionals must change their skills and competencies if they want to thrive in the new digital order. Professionals should utilize appraisal, provenance, and organizational knowledge (p. 37); standardize descriptive practices (p. 80); emphasize communication and joint decision making (pp. 37–38); crosstrain and collaborate (p. 30); adapt to prepare better for the unforeseeable (p. 45); link digital records management to organizational strategies, business plans, and mission statements (p. 67); and establish a core education to train future professionals (p. 81). The contributors all seem to agree that more engagement with users and the public in general is essential to the profession’s success.

Following the volume’s goal to assist fellow archivists and records managers in thinking about the new digital order, the contributors offer strategies for working with digital information despite the challenges it poses. Some examine successful collaborations with which they have been involved, such as those of the European Investment Bank (p. 63) and the Italian archives (p. 91). Guercio even enumerates what she sees as the essential aspects of a successful digital experience: full control of coherent theoretical principles and rigorous methods, disseminated archival and technological skills, adequate training and continuing education, and innovative guidance supporting national institutions (p. 102). Others provide general guidance to the profession in the form of research recommendations, such as technology that removes the burden from end-users by applying metadata extraction tools and automatic classification and deletion software (p. 106); developing conditions, tools, and metadata for creating and keeping records (p. 96); adding preservation at the system design point and throughout the life of records (p. 111); and further general research on process and protocols (p. 123). These recommendations are not readymade solutions for practicing archivists. They are, instead, questions that seek their answers in ongoing and future research projects.

Kellerhals expresses his conviction that this volume “can help everybody dealing with digital information to identify relevant issues and enduring landmarks in a rapidly changing landscape” (p. 8). Indeed, this is precisely how it functions. The collection begins a more structured discussion of the issues facing archivists in the digital era by presenting multiple conceptions of the nature

and challenges of the digital order and suggesting an array of possible strategies for addressing these challenges. Not all essential questions, such as the nature of preservation and the specific methods applicable to digital information, are addressed, but the issues included are foundational and useful as starting points in this discussion. As Kellerhals notes, the “most important benefit the book can provide for is to prevent simplistic views and to foster acceptance of the fact that where people collaborate across the boundaries of scientific schools, of countries and of more or less closed professional communities[,] different perspectives, other traditions and concepts come into play. . .” (p. 8). To produce a snapshot of current views and the possibilities of things to come, this compilation establishes collaboration as one of its strongest themes, which it demonstrates by drawing on the expertise of international researchers who represent various professions, national traditions, and records paradigms.

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Photographs: Archival Care and Management

By Mary Lynn Ritzenthaler and Diane Vogt-O'Connor, with Helena Zinkham, Brett Carnell, and Kit Peterson. Revised edition. Chicago: Society of American Archivists, 2006. 550 pp. Illustrations. Available from the Society of American Archivists, \$59.95 members, \$84.95 nonmembers. ISBN 1-931666-17-2.

When asked to review this long-awaited book I quickly agreed. I wanted to review what I thought would be one of the most important resources recently written for those involved or expecting to be involved in the management of historical photograph collections. I wasn't disappointed. I approached this review as someone relatively new to the field, part of a small staff in a repository with limited funds yet important historical photograph collections. Many archivists are in comparable situations, involved in the care of photographs but also involved with the management of other collections, staff, researchers, budgets, and countless other issues that come up every day. Because my time and resources are limited, having this book is like having an expert available and waiting to be asked a question, to offer guidance, to present alternatives, and to provide examples.

In this edition, NARA's Mary Lynn Ritzenthaler is now joined by Diane Vogt-O'Connor with contributions by Helena Zinkham, Brett Carnell, and Kit Peterson, also of the Library of Congress. This significantly expanded version addresses the dramatic changes this field has undergone over the last twenty years and effectively replaces the *Administration of Photograph Collections* published by the Society of American Archivists as part of its *Basic Manuals Series* in

1984. The authors intend the book to serve as a “compendium”—a summary of archival practices relating to the issues of managing historical photograph collections—and they address a much wider range of issues than the earlier edition. The volume’s 529 pages indicate just how much has changed in the last twenty years. As every book should, this one starts at the beginning with an overview of photographs from different perspectives—historical, aesthetic, and sociological—which reminded me why I appreciate this genre so much. Because some technical knowledge is necessary to identify, date, and store photographic materials, an all too brief history of photographic processes makes up the second chapter. Each of the following chapters includes an introduction and summarizes best practices. Each falls in sequence, outlining how the work is done according to archival standards—from appraising and acquiring, accessioning and arranging; describing and cataloging; preserving; performing reference services; working out legal and ethical issues of ownership, access, and usage; copying and duplicating; and digitizing—to the work we often wish we could do more of: outreach, public relations, and fundraising. All aspects of managing historical photograph collections are addressed in depth including the new chapters on reading and researching photographs, digitization, and outreach.

This book recognizes that photographs are no longer relegated to storage, largely undescribed. Our increasingly visual society has come to value them for the information they contain. For that reason alone, this book is a necessary addition to the bookshelf of anyone who cares for historical photograph collections, large or small, in libraries, museums, schools, city halls, historical societies, clubs, and other cultural heritage institutions. Experienced archivists, or those new to the field, untrained, or inexperienced, who suddenly find themselves caring for photographs will find concise explanations of archival methods in shaded sidebars. Tips and terminology appear in bold type throughout the volume. The photographs do more than add visual interest; they are used to their best advantage, illustrating a wide variety of issues from the first chapter through the last. Experienced archivists will find current issues presented and procedures explained according to generally accepted best practices. Yet, despite best practices, the authors realize that these methods will continue to evolve, and they offer suggestions on various options in every chapter, keeping in mind that financial or staffing resources are often limited. Additionally, because many repositories can’t consistently realize ideal conditions, this manual offers guidance for setting priorities or evaluating the risks of different storage or handling options. Many examples and references point to resources available only on the Internet. The authors intentionally included them because their value far outweighs any concerns that such websites will change or disappear. If they do, the resourceful reader should still be able to locate the information.

I started in the library and archives field in 2002 working in reference with the historical photograph collections of the Bostonian Society, and my value to

researchers increased as I learned more about the collections and the specific images they included. The images in our collections support a broad variety of uses, from the traditional (research by scholars, students, preservationists, and writers), to the unusual (inspiration for artists, graphic designers, and interior stylists; and as evidence for commercial television and movie producers, documentary filmmakers, and game shows).

Though small, our staff saw that digitization could improve access for years to come while protecting the photograph collections. We spent months securing grant funds to create a digital workstation to develop an online catalog of images from our popular collection of Boston's built environment. Moving these images online with standard descriptions shifted access to users wherever and whenever they wanted, and awareness, and therefore use, of these collections has increased exponentially.

Anyone planning a digitization project will benefit from the clearly presented information in chapter 12, *Digitizing Photographs*. At the beginning of our digitization project, digital conversion, image capture, and reformatting were new technologies. Today digital conversion is a mainstream archival activity, making this chapter on digitizing photographs indispensable, even though including information on a technology with evolving standards can date a book and render it useless. Those entrusted with the care of historical photograph collections must become familiar with the terms used and the technology needed for digital images, and that includes today's standards and guidelines for quality, storage, access, and preservation. The archives that take steps to manage digital images created from its existing holdings will also be better prepared to receive born-digital photographs.

In the early part of this decade, when new frontiers of archival practice were being explored, little was written (and even less standardized) on the organization and description of individual photographs. "Visual literacy" came by writing item-level descriptions; standards evolved and integrated into our workflow. Anyone who hasn't cataloged a photograph beyond the format and creator will benefit from the exercises presented in the new chapter 3 on reading and researching photographs.

The chapter on legal and ethical issues is (thankfully) comprehensive. Some practitioners learn the basic requirements of copyright and ethical practices on the job, especially as they relate to privacy and use of photographs. Anyone who works with archival materials will benefit from a fuller understanding of the legal and ethical context of their work.

While the cost of this volume—even with a member discount—may seem high, this quality publication is intended to hold up under regular use. Though slightly oversized, the volume is well bound. When the book is open, the pages lie flat. The typeface and font size are easy on the eyes, unlike the paper it's printed on. Indeed, this is the only fault I could find with this book: its coated

stock reflects any overhead light. Both this book and the information it contains are sure to endure.

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Preservation and Conservation for Libraries and Archives

By Nelly Balloffet and Jenny Hille. Chicago: American Library Association, 2005. vii, 214 pp. \$130.00. ISBN-0: 0-8389-0879-9.

The title, *Preservation and Conservation for Libraries and Archives*, is not exactly a bait and switch, but the phraseology might be a bit misleading. Understand right away that this book does not cover preservation and/or conservation of digital items. Apart from passing references to scanning, the preservation and conservation in question pertain strictly to the paper-based world. And, within that world, the main concerns are those of books and libraries.

The focus on books and libraries should come as no surprise to the many archivists and librarians who have attended workshops led by the authors. Nelly Balloffet and Jenny Hille have well over fifty years between them in library preservation/conservation work. Both have MLS degrees and each runs her own book and paper conservation studio. The two have partnered for many years teaching classes in book and paper repair as well as leading various library conservation workshops. *Preservation and Conservation for Libraries and Archives*, in fact, brings together many separate small manuals written by Balloffet and Hille for their workshops. That the workshops have been specifically for the benefit of smaller institutions means that the information presented in this volume starts at the beginning, is clear, and is leavened with a good dose of realistic recommendations. Hille and Balloffet present their information in six sections: The Basics of Preservation; Getting Started: Work Space, Equipment, Tools and Techniques; Simple Preservation Techniques: Rehousing Library and Archive Materials; Paper Conservation Techniques; Book Conservation Techniques; and Small Exhibitions. Five appendixes support them, including "Care of Photographs," by Ana B. Hofmann, a list of suppliers, and a section on Sources of Help and Advice. In their introduction, the authors state their intention, that "[t]his is not a book to be read cover to cover but rather a place to find information on a variety of subjects," as needed (p. xviii). While each section is thus designed to stand more or less alone, suggested self-references throughout the book help the reader navigate between topics as necessary.

Archivists can learn and use much here despite the library-centric nature of the information. And, while the world of archives is vast and varied, some of the

six sections are bound to be of more interest to archivists than others. Hille and Balloffet offer a savvy overview of environmental issues in section 1, *The Basics of Preservation*. Stressing the importance of controlled macroclimates, the authors discuss a variety of environmental situations, including the small institution with the old building and limited budget. The authors do, indeed, explain the basics, defining relative humidity and detailing how humidity fluctuates and what those fluctuations can do to books and other paper-based items. Hille also discusses proper storage for a variety of paper formats with helpful illustrations. Of particular note in this section is how Balloffet and Hille present those preservation/conservation issues that should fall to staff and those that should rest with administration. For any well-intentioned but inexperienced archival worker, such differentiations can save both effort and heartache. And speaking of heartache, the authors wisely classify creation of a disaster plan as a preservation basic, stressing the need to look beyond everyday maintenance to the worst-case scenario. The eight pages dedicated to disaster planning and recovery serve as a well-informed introduction to a major area of archival administration.

Section 2 (*Getting Started: Work Space, Equipment, Tools and Techniques*), and section 3 (*Simple Preservation Techniques*) give good counsel to archivists in general, but the specifics of both sections pertain, mostly on an item level, to the conservation and preservation of books. Section 2 starts with directions on how to set up a preservation workspace. While the workspace described is set up primarily for work with books, suggestions on lighting, dedicated space, and security issues are of particular note to archives where preservation projects left unattended in unsupervised spaces undermine the security of closed stacks. Section 3 also begins with good, all-purpose information, such as how to order rehousing supplies (early, for one thing) and how to make those that cannot be ordered. After the initial overview of setting up a workspace, section 2 focuses on the equipment needed for repairing individual books and provides general working tips on how to do so. Four dedicated to different cutters, and four and a half to various book presses, may not provide much information of use to the run-of-the-mill, not-quite-so-bookish archives. Section 3 is more helpful, with advice on rehousing, storage containers, handling guidelines, and creation of enclosures. This information successfully crosses over into archival territory. The instructions on creating enclosures are particularly useful and are much enhanced by Hille's clear illustrations.

Sections 4 and 5 move from the general to the specific, and, in doing so, lose some of their archival pertinence. Section 4 on paper conservation techniques provides clear directions for repairing holes in paper, replacing missing page corners, and mending torn pages in books. The authors vigilantly remind their readers that items of artifactual value should not be repaired in-house, but, instead, should be handled by a conservator—and this is where a schism between libraries and archives appears. It is safe to say that most archives contain

books, but that a majority of archives are not book-based. Some information in sections 4 and 5 can come in handy—what archives couldn't mend a few fold-out maps and reattach some book pages?—but between those items that require professional treatment and those that maintain full evidential value in spite of broken corners and punch holes, there may not be too much to work on in-house using the conservation methods specified here. Such intensive item-level repair work may be excessive for the type of resource-strapped small archives at which the book is aimed.

Along with section 1, section 6, Small Exhibitions, may be of most use and interest to archives and archivists. Any archivist who has ever created an exhibition will wish this book had been available at the time of planning. Hille and Balloffet identify just about every devil to be found in the many details of producing or participating in an exhibit, from issues of lighting to off-gassing display cabinets. Their advice about security technology, lighting options, and display reproductions is up to date as are their lists of suppliers and resources in appendixes B and C. Practical suggestions that can only come from those who have Been There And Done That accompany this technical advice. Hille and Balloffet's suggestion that exhibit organizers communicate with the security staff of the exhibition space, for example, may seem obvious but is actually advice worth the price of the book. Section 6 also includes directions on how to make book supports, how to display flat paper items, and using facsimiles for display, and it continues its counsel through to closing the show while thinking about the next exhibit. Section 6 should be required reading for any archives, regardless of size, considering or already in charge of exhibitions.

Despite the wide net cast by the title, *Preservation and Conservation for Libraries and Archives* is not the only book an archives—especially a small one with limited access to expertise in the field—should have. The focus on book care and library situations means that many of the conservation scenarios presented will have little to offer a majority of archives. That said, Hille and Balloffet have given archivists a well-written, well-informed, and up-to-date resource outlining real-life solutions to general issues of archival interest, such as macroclimate, rehousing, exhibits, handling, and disaster planning. The book-specific information that makes up a large portion of the volume may not offer everyday solutions to a busy archives but such information is certainly good to have in reserve. *Preservation and Conservation for Libraries and Archives* would augment the resource shelf of any archives, large or small, that finds itself working with and caring for books and other paper-based items.

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Architectural Records: Managing Design and Construction Records

By Waverly Lowell and Tawny Ryan Nelb. Chicago: Society of American Archivists, 2006. xiii, 197 pp. \$62.00. ISBN 1-931666-19-9.

Waverly Lowell and Tawny Ryan Nelb's much anticipated new book, *Architectural Records: Managing Design and Construction Records*, delivers a comprehensive overview of virtually every aspect of working with design records, short of capturing the smell of off-gassing diazo prints between its covers. Co-written in individually contributed chapters by two preeminent authorities on design records (Lowell received the Society of American Archivists' C.F.W. Coker award as a co-author of *Standard Series for Architecture and Landscape Design Records*; Nelb writes and lectures extensively on the topic and created the *Architectural Records Media/Support and Preservation Chart*), this deceptively lean volume is an essential resource for anyone responsible for or interested in learning more about this genre.

The first chapters summarize the progression of Western architectural practice. This historical backdrop provides insight into the evolution of the technological processes that created architectural records, and how these factors have led to the exponential increase in record set size, complexity, and the accompanying issues managers of architectural records collections face today.

Further chapters go into great technical detail about the different types of records created, the diverse media and supports used to generate them, and recommendations on how to maintain and house them. The authors discuss appraisal, arrangement and description, and preservation administration; each section is aptly illustrated with black-and-white photographs throughout the text and a marvelous section of full-color plates. Practical matters such as access, handling, and reproduction are covered in the final chapter, which is followed by useful appendixes on compiling a neighborhood history, disaster response, and series and subseries standards for arrangement. The bibliography is extensive and varied, including germane references from *Scientific American* to *American Archivist*, personal interviews, conference proceedings, and monographs.

Lowell and Nelb's book enables readers to understand design records on both a macrolevel (Who creates them? Why and how should we keep them?) and microlevel (How does chemistry impact storage and preservation?). The information presented provides archivists tools to assess critically the full range of collection challenges—from storage, preservation, patron access, and financial and staffing requirements—and management options to plan strategically according to their repository's mission and patron needs. For archives whose collection scope does not yet include design records, awareness of the hidden costs of proper management may indeed persuade against acquisition opportunities.

Those who fund preservation activities through the grant-writing process will find no lack of technical details to bolster arguments for a reformatting project or to putting the fear of mold into an otherwise indifferent administrator's heart; the return on even minimal financial investment for proper storage and management is manifest throughout.

As mentioned above, the bibliography offers primary source material on effectively all topics related to archival management of architectural and design records and is a tremendous resource on its own. Readers who wish to investigate material to a greater degree than presented in Lowell and Nelb's book have a list of authoritative resources through early 2007 at their command.

The breadth of material presented is also noteworthy. Residential and commercial buildings are not the only topics covered; the authors have also included discussions and illustrations of ships' plans, three-dimensional presentation models, photographs documenting the design process, and equipment and software. All of these materials have unique storage and preservation needs, which archivists would do well to consider as early as possible in the materials' life cycle. From the section on models, for example, one learns to photograph or otherwise document the object in its prime, before parts are cannibalized for other projects, or, worse yet, broken off accidentally due to poor storage.

The appraisal grid on pages 84–85 provides a quick overview of how to determine which documents should be retained (and for how long) or destroyed, and if reformatting is recommended. Archivists of design and construction records will find this section on appraisal an objective tool with which to draft their collection management policy, or to double-check existing guidelines, especially when considered in conjunction with their patron's likely use of the material.

While the text is engaging on its own, *Architectural Records'* many photographs add concrete visual examples that underscore the authors' message, such as the nuanced color variation in sepia prints, and the full-color plates in the gallery section really make this volume a pleasure to flip through. The photos of the Centre Canadien d'Architecture will stir the architectural records archivist's daydreams of ideal design for storage, processing, and reference, while the worst-case scenarios—such as the one portrayed in Figure 2—will elicit involuntary sighs of relief that, however crowded/unprocessed their own collection might be, it is at least not heaped on the floor in some dank basement.

In addition to its comprehensive overview of the physical aspects of design-related materials, foresight is perhaps *Architectural Records'* most important contribution for managers of design collections. The awareness of the *optimal* point to apply the *most productive* intervention to a collection empowers archivists to manage collections most effectively, be it through retroactive treatments, current practices, or planning for the future.

While *Architectural Records* is an excellent overview of construction and design-related archival collections, at 197 pages—a good percentage of which are

filled by images—not every topic can be addressed in great detail, and inclusion of a few secondary topics might have rounded out the technical material with some *in-situ* context. For example, administrators of active collections will find that the authors’ treatment of managing design and construction records is, as implied by the title, limited to the inanimate materials produced rather than the humans producing them. (For the record, there is no chapter on “Wrangling Architects” nor does “Project Manager, Shake Down of” appear in the index.) The relationship between architects, subcontractors, and project managers has a direct impact on the creation of construction materials. Outreach by archivists to the design team on archivally appropriate close-out standards and even contributing specific language to the project contract are opportunities that should not be overlooked. The closer the relationship, the better the chances are that materials will be delivered to the archivist requiring minimal intervention aside from ordinary processing, enabling staff to spend time processing materials rather than chasing them down.

Analysis of hard copy materials in *Architectural Records* proportionally outweighs that of electronic files. Lowell and Nelb do report on the “state of the state” of archiving of CAD files, discussing, for example, Kristine Fallon’s significant study sponsored by the Chicago Art Institute (*Collecting, Archiving and Exhibiting Digital Design Data*); unfortunately, the state is such that the design and construction archival community is still in the early stages of establishing best practices and the authors simply did not have more on which to report. Recent developments too new for inclusion in this work such as the Massachusetts Institute of Technology’s Future-proofing Architectural Computer-Aided Design (FAÇADE) project and the Society of American Archivists’ 2007 Annual Conference Architectural Records Roundtable session “Constructing Sustainability: Real-World Implementations of Preservation Standards for Born-Digital Design Documentation,” which included representatives from both Autodesk and Adobe offer very exciting and will undoubtedly move the topic forward.

Another challenge mentioned but not covered in great detail is establishing and managing intellectual control over (e.g., cataloging) the diversity of architectural records. The authors discuss various metadata schema that may be used to describe collections (not only CAD files, but product samples, project records, and other related materials) and provide examples of how to inventory materials, but stop short of recommending specific software or programs by which to do so. Readers might have benefited from learning about the ingenious ways their colleagues have addressed this issue by cobbling together catalogs from File Maker Pro databases, typewritten inventories, the analog card catalog, special library-focused integrated library systems, and the various online repositories to which they contribute. Next to knowing the “right way” to do things, recognition of the fact that there is no one single “right way” would be helpful and reassuring.

Architectural Records is a vital resource for both actively growing and inherited closed collections. For those managing newly created materials, *Architectural Records* arms archivists with the awareness of the potentially unhappy ending for the architect's creative vision and institutional investment when not properly controlled and stored, compelling arguments for coercing architects and construction managers to comply with archiving and records management standards. (There is no proof of this benefit quite as convincing as finding the one warranty folder for a failed HVAC compressor out of thirty records boxes five years after the project has closed out.)

For inherited collections, *Architectural Records* helps inform managers and stakeholders which materials repositories should keep based on their mission and patron base. A sketch on a napkin may provide key insights to the academic researcher in understanding the architect's creative journey from initial design to final building, but this same sketch won't be of much use to the facilities manager who needs to fix a leak in the window casing after a nor'easter. Likewise, repositories acting as a plan room (providing drawings that show current conditions for use in facilities management) should ask themselves if valuable space needs to be given to mechanical, electrical, and plumbing schematics from obsolete systems that were swapped out decades earlier.

Having written many of the existing standards, the authors include their previous findings in this volume and expand on them through the evaluation of other notable works. Topics and recommendations presented originally as part of the seminal Committee for the Preservation of Architectural Records (COPAR) body of literature are synthesized throughout the book, bringing information generated over years by many contributors together into one resource. Nelb's chapter on common architectural drawing supports and media provides a useful summary of their physical makeup and underlying science, covered in much greater depth in Kissel and Vigneau's 1999 publication *Architectural Photoreproductions: A Manual for Identification and Care* (New Castle, Del.: Oak Knoll Press, 1999). Similarly, the authors provide useful discussion of Fallon's previously mentioned study on digital design media, as well as the National Park Service Museum Management Program's 2000 report, *Architectural Records: Preserving & Managing the Documentation of Our Built Environment*.

Lowell and Nelb have written this book for archivists, but its comprehensive and broad scope renders it an important resource for anyone who creates, manages, or simply appreciates design records.

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The Book Thief: The True Crimes of Daniel Spiegelman

By Travis McDade. Westport, Conn.: Praeger Publishers, 2006. xiv, 181 pp. Bibliographical references. Index. \$49.95. ISBN 0-275-99331-0.

In 1994, a petty criminal and Russian immigrant named Daniel Spiegelman pulled off a series of thefts at Columbia University's Baker Library, walking away with hundreds of invaluable materials created in the fifteenth through the twentieth centuries. It was an enormously cold act of greed: Spiegelman, no bibliophile, repeatedly sneaked into the inner sanctum of Baker Library's Rare Books and Manuscript Library like someone out of an archivist's or librarian's nightmare, wielding razor and duffle bag. In his wake, the thief left not only items missing but others destroyed, including multiple Bleau atlases created in the seventeenth century. By the time the staff at the Rare Books and Manuscript Library noticed, Spiegelman was already off to Europe to unload Columbia goods he had crammed into storage lockers all across New York City.

Lawyer and librarian Travis McDade uses Spiegelman's theft and the ensuing events in *The Book Thief: The True Crimes of Daniel Spiegelman* to frame an impassioned if flawed discussion of book and manuscript theft, arguably one of the most insidious and harmful threats facing American libraries and archival collections today. That Spiegelman had no association with the collection from which he stole is somewhat unusual in the unseemly world of manuscript thievery, but McDade gives the reader glimpses into enough other thefts—booklovers' covetous crimes of the heart, inside jobs committed out of an assortment of selfish impulses—to make us feel as if all kinds of theft from library and archival collections might be epidemic. And, while McDade raises the question of balancing freedom of access with the security of unique and rare items, preventing theft at the repository level is not the author's focus. Rather, his interests lie in how the legal establishment—and by extension the world outside of archives and libraries and the researchers that use them—perceive such crimes against scholarship and collective memory. McDade seems repeatedly shocked by the leniency given such criminals, and no doubt readers will share his frustration at a legal institution that appears to treat rare books and manuscripts largely as if they had no discernible value outside the fluctuations of the marketplace.

But, however sympathetic we are to McDade's arguments, reading his prose can be a bit of a challenge. As assistant professor of Library Studies at the College of Law at the University of Illinois at Champaign-Urbana, McDade knows well where the legal and the special collections worlds intersect, and, unfortunately, he takes the subjects on with what quickly begins to sound like a fanatic's attention to detail. The depth and length of his discussion on Federal Sentencing Guidelines (which do play a central role in Spiegelman's legal saga) may be

beyond the patience of those readers not excited by the intricacies of the law. More than half the book takes place in the courtroom, where Spiegelman's colorful and wince-inducing legal team endlessly irritates the book's heroes, notably Judge Lewis Kaplan (whom the author thanks in his acknowledgments for "getting it right") and Jean Ashton, the director of Columbia's Rare Books and Manuscript Library at the time of the theft, who fought hard to convince the court to give Spiegelman a sentence fitting the true nature of his crimes. Thankfully, the proceedings that McDade reveals here are full of drama and debate, of intelligent people grappling with questions about the worth of unique texts. *The Book Thief* is at its best at these moments, when McDade steps away from the story and lets the characters speak for themselves.

However, readers who naturally expect from the title that McDade's book belongs to the "true crime" genre will be especially disappointed by *The Book Thief*. Not that Spiegelman's international tale lacks suspense or intrigue (some people, though not McDade, still connect his theft to the terrorist attack on the Alfred P. Murrah Federal Building in Oklahoma City); it contains plenty of meaty material. Unfortunately, McDade is unwilling or unable to handle it. As a first-time author, he struggles to keep an even pace, and in many places *The Book Thief* drags when it could so easily engross. The fatal flaw of *The Book Thief* is that the book thief himself isn't really a character here. We learn so little about Spiegelman that the fact he is "unpleasant to be around" is about the closest we get to a vivid detail. McDade admits in the epilogue that he felt no need to track down Spiegelman as part of writing about his crimes. This seems a huge mistake, as if McDade believes that what the trial revealed about Spiegelman is enough, and McDade would grant Spiegelman an unearned privilege by giving him a voice, a brain, a heart, however damaged. Defending his decision not to seek information from Spiegelman, McDade seems to anger at the thought of listening to Spiegelman's "lies." Even attempting to learn more about Spiegelman could have added so much to McDade's exploration, and to the reader's enjoyment of this book, which makes McDade's decision heartbreaking. Manuscripts and the laws and repositories that seek to protect them are solid, sound subjects, but when they take precedence over human behavior and psychology, where is the story? And without the story, how can we grapple with this phenomenon that threatens to steal our most precious texts out from under our noses?

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The Restoration of Engravings, Drawings, Books, and Other Works on Paper

By Max Schweidler. Trans. Roy Perkinson. Los Angeles: The Getty Conservation Institute, 2006. xiii, 302 pp. Paper, \$50.00. ISBN-13: 978-0-89236-835-8.

The volume under review here is Roy Perkinson's translation of Max Schweidler's *Die Instandsetzung von Kupferstichen, Zeichnungen, Büchern, usw.*, the author's attempt to set down what he knew about the restoration of paper-based items. The 1938 first edition in German was superseded by a second edition in 1950, the version Perkinson used for his translation.

In its day, this book stood alone for the breadth and depth of treatment of the subject. Schweidler, a print dealer who became an expert restorer, studied the scant literature of his day and, through his own work, became quite adept at repairing damaged paper materials. The translator is equally distinguished, having "published widely in the fields of paper conservation and fine art" (blurb, p. 302); he has headed the conservation laboratory at the Boston Museum of Fine Arts for more than thirty years.

Perkinson's introduction to the translation discusses Schweidler's older brother Carl, who, apparently, gave Max much of the information he imparts in his book. In fact, this translation was done from a copy of the book with Carl's annotations in the margins, which comment upon and often correct his brother. Perkinson says that some people think Carl was the better restorer (p. 2), and he comments on the possible animosity between the brothers.

The word *restorer* is telling. When the text was written, the notion of restoration was the primary aim of book, paper, and print repairers. Their goal was to mend items in such a way as to bring them back to pristine condition. If they could accomplish this with no trace of the damage they were fixing, they were purely successful. More on this later.

All this family relationship and source information aside, Perkinson points out the importance of the present volume in light of the "dearth before the 1950s of substantial publications dealing with conservation of prints and drawings" (p. 3). In this respect, Schweidler's book anticipates the explosion of interest in conservation and preservation from the 1960s on.

Introducing the volume, Perkinson bluntly discusses the essentially deceptive nature of what Schweidler writes about, saying, "Schweidler often seems to the modern reader to go too far in carrying out a desire to make a treated object look untreated" (p. 6). He notes that dishonesty could be the goal (p. 7), and he asks, "where does one draw the line between skillful repair and deception?" (p. 7). This, of course, must be on the mind of Schweidler's readers, for if we are to learn from him, will we learn techniques that would not be used today because they could deceive? Schweidler admits his aim is "preserving cultural treasures" (p. 27). He acknowledges that in his first edition he adopted

a “somewhat patronizing, urgent, and pedantically repetitious presentation” (p. 28). This recognition did not stop him from producing—in this second edition—a text that slogs along with a verbose and “superior” tone now and then. And the author’s interjected comments certainly do not further the teaching of his techniques.

The text is remarkably thorough and detailed. The table of contents alone runs to four pages in six-point type (pp. 29–32). Schweidler begins with a section on the poor practices of framers and then discusses what a good studio should look like. His understanding of paper—its properties and proper handling—is more informed than is his muddled and inaccurate knowledge of its history and manufacture (pp. 41 ff.). Fortunately for the reader—here and elsewhere—Perkinson is on hand to clarify and explain and correct, in excellent notes at the end of the text. So, while the original text has its weaknesses, most of this volume is quite useful if one reads all the translator’s notes.

Much of the advice in the text comes from what seems to be a good deal of experience—as with how to remove prints from backing (pp. 58–63), the use of bleaching agents (pp. 67–71), and the cleaning of colored prints (pp. 72–80). Schweidler wants us to trust him, so he mentions that much of his advice comes from his “fifty years of professional life” (p. 204). Since this edition was published in 1950, this would mean that Schweidler—born in 1885—was already in a “professional life” when he was fifteen. Such statements, coupled with all of the translator’s warning and corrective notes, Carl’s marginal comments, and the fact that this book came out more than fifty years ago, make us take what the author says with much caution.

More than once in his introduction Perkinson remarks on Schweidler’s attitude—partly of superiority over those he thinks cannot do as good a job as he does; and partly in his almost egocentric forcefulness as if speaking with absolute authority. His brother’s marginal comments undercut this attitude, however, as do his own incorrect statements. For instance, he says that darkening on paper (as with foxing) “is caused by light” (p. 82).

In his day, Schweidler did not have access to—or simply did not use—the Japanese and German repair tissues we now have. To repair a tear, he shaved down the paper around the edges of the tear, graduating from the thickness of the paper to extreme thinness at the tear. A complementary piece of mending paper, cut to the shape of the tear, was similarly shaved down, so that when this little mending strip was placed over the tear, all parts of the two pieces of paper (i.e., the two surfaces on each side of the tear plus the mending strip) would be exactly as thick as all the paper around them (pp. 112–14). This was enormously difficult, of course, and the mend could be detected. “There may be shiny places along the perimeter of the repair. Buckling of either the original or the mend, or both, may occur. The reflectance, gloss, or texture of a mend may differ from the original. Traces of dirt along a tear may be unnoticeable until after the

repair has been completed,” notes Perkinson (p. 10). Today we use an abundance of high-quality archival mending tissues for conservation. They are strong, long-lasting, and easy to affix to the sheet, and they are so thin as to be undetectable once the adhesive they are applied with dries. A modern conservator would not use Schweidler’s old method, but its description here informs us of past practices.

The translator raises another issue crucial to today’s conservators: “The ethical consideration of whether it is permissible to remove any part of the original at all in order to effect a repair that is virtually unnoticeable” (p. 10). Schweidler was clearly aiming to hide the original defect completely. In fact, throughout the book, one cannot avoid Schweidler’s emphasis on *restoring* the artwork. Most modern book and paper conservators shy away from this notion since *restoration* implies bringing an item back to such pristine condition that the restorations are invisible—yielding a final product that could be passed off as being like new and never treated. The modern focus on *conservation* reinforces our views that repairs should not be purposely hidden and that the conservator’s primary aim is to prolong the useful life of the object.

Schweidler does not consider a basic principle of modern conservation—that of *reversibility* (that all repairs or treatments should be reversible if possible), but this is not surprising since it hadn’t yet been formulated when Schweidler was writing. This kind of gap in the text (observable to those who have a more modern knowledge), however, undercuts the usefulness of this volume for a young conservator hoping to learn about the profession.

One section of Schweidler’s text is particularly surprising. In *How to Obtain Old Paper* (pp. 46–47), the author advises us to buy old prints and books and cannibalize the margins and endleaves. The notion of destroying or mutilating one historical artifact to repair others is considerably at odds with modern views. Schweidler’s own often-stated aim is “preserving cultural treasures” (p. 27), “transmitting . . . treasures . . . to future generations” (p. 27), and preserving “the few treasures that have been handed down to us from past times” (p. 205). In this light, how can he presume to know what books and prints are dispensable?

The book covers a wide array of topics—cleaning, bleaching, mending, examining damaged pieces, removing varnish, making and using paste, stretching and dyeing papers and parchments, and so forth. A reader approaching this text with a modern sensibility about the preservation of cultural artifacts and with recent knowledge of treatments, theories, and materials, and a careful reading of the translator’s notes, can learn a good deal from this wide-ranging book. As an important document in the history of conservation, this is an essential text.

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Women in Utah History: Paradigm or Paradox?

Edited by Patricia Lyn Scott and Linda Thatcher. Logan: Utah State University Press, 2005. ISBN-13: 978-0-87421-625-7 (paper) \$19.95; 978-0-87421-624-0 (cloth) \$34.95.

This anthology comprises twelve essays, some co-authored, representing a generation of research on Utah women's history. Local history projects often permit rich collaboration between academic and public historians, as in this case. The editors of *Women in Utah History* are both archivists: Scott is the records analysis section manager at the Utah State Archives, and Thatcher is the historic collections coordinator for the Utah State Historical Society. Other contributors have experience in secondary school teaching, professional editing, libraries, research institutes, and publishing as well as in higher education. Several are both university professors and archivists.

With its chapters originally outlined in the mid-1980s, when the Utah Women's History Association first envisioned the anthology, the collection remains firmly entrenched in a social history methodology. It aims to challenge a view of women in Utah as thoroughly distinct from women elsewhere in the United States and as culturally homogenous because of the prevalence of the Church of Latter Day Saints (LDS) in the state. Many of the essays directly confront the best-known aspects of Utah women's history: plural marriage, which to outside observers seemed to "enslave" Mormon women; and the fact that women had notably greater legal rights in Utah than anywhere else in nineteenth-century America. As Lisa Madsen Pearson and Carol Cornwall Madsen show, Utah territory granted property rights to married women and allowed relatively liberal grounds for divorce. Kathryn L. MacKay notes that the LDS gave women a voice in congregational voting but at its core defined women "as helpmeets . . . not as equal partners and not as autonomous individuals" (p. 363). The Mormon majority took up the enfranchisement of women as a strategy for establishing a theocracy. Utah was the second territory in the United States to extend suffrage to women (in 1870, just one month after Wyoming did so). Yet, as John Sillito notes, "the clash between Mormon and Gentile, particularly over polygamy, was the single most important feature of nineteenth-century Utah life" (p. 83). The passionate national controversy over the Mormon principle of plural marriage led to federal passage of the antipolygamist Edmunds-Tucker Act, which disenfranchised all women in Utah. Utah women did not regain suffrage until after the LDS publicly renounced plural marriage (1890) and Utah achieved statehood (1896).

The weight of LDS influence in Utah makes it difficult for this volume to fulfill its self-stated goal: "to appraise Utah women of all religions, ethnicities, and social classes . . . [in order to] move the history of Utah's women into the

academic mainstream" (p. x). The late Helen Z. Papanikolas's chapter, "Ethnic Women," does the most to paint a portrait of diversity among Utah women and thus to challenge preconceptions. Papanikolas uses census data and oral history to trace the daily lives and cultures of Native American, African American, and European immigrant women in Utah in the first half of the twentieth century.

Other contributors are clearly attuned to the heterogeneity of Utah women. Jill Mulvay Derr carefully notes that the women's Zionist organization, Hadassah, held its golden jubilee conference in Salt Lake City in 1962. Miriam B. Murphy vividly employs a variety of statistical reports along with other sources to sketch the broad range of "Gainfully Employed Women" who entered the Utah workforce after 1880. Mary R. Clark and Patricia Lyn Scott examine the significant role women played in developing public education. "The schools were an early battleground to end Mormon control of daily life in Utah," they write (p. 223); the history of education thus encompasses the efforts of "Gentile" missionaries and other outsiders as well as Mormons. Gary Topping's account of women authors considers diversity of a different sort: a broad range of literary production, from fiction to nature writing, and poetry to history.

These essayists stress commonalities rather than exceptions, even among Mormons. In their study, Jessie L. Embry and Lois Kelley conclude that polygamous and monogamous Mormon women shared more similarities than differences. This may have been because plural marriage existed for too short a time within the United States to establish its own cultural forms; instead, Mormons adapted traditional family structures. Sillito's analysis of "Women in Churches" finds that after the settlement of the polygamy question, a perhaps startling cooperation developed among women of different religious persuasions in Utah (p. 118). Jill Mulvay Derr also offers evidence of increasing affiliation between Mormon and non-Mormon women in women's clubs (p. 285).

Of greatest interest to historians and archivists elsewhere are the connections drawn between Utah women's historical experiences and those of American women in other places, especially in the West. In the closing essay, Jessie L. Embry argues that "Utah women were not greatly different from their sisters across the nation"; as for other women, the stages of "birth, marriage, maternity, widowhood, and death" largely shaped their lives until World War II opened new employment opportunities (pp. 394–95). Women's clubs and associations in Utah followed the same patterns as women's clubs elsewhere and even affiliated themselves with national organizations (as did the LDS Relief Society with the National Council of Women from 1891 to 1987, and with the International Council of Women from 1888 to 1987). Patriotic and war relief organizations were prominent in the twentieth century, as were women's groups concerned with children's health and education. In one of the strongest chapters, "The Professionalization of Farm Women," Cynthia Sturgis traces the modernization of rural homemaking as federal experts and educators attempted to

introduce “scientific” training and technology to mirror consumer-oriented urban households. Farm women paid for a “higher life-style” with “decreasing autonomy” of their own (p. 154). World War II emerges (along with statehood) as a significant turning point in this history, as it does from the national perspective.

While the sheer amount of information here makes Utah women more visible to a deservedly broader readership, the book has its flaws. The collection suffers from an unevenness in quality. Some essays are weak in analysis and argumentation; very few incorporate truly current scholarship on women’s history. The cohort including Barbara Welter and Germaine Greer produced cutting-edge work when this project began, but concepts like true womanhood have undergone much revision and debate in the generation since. Some of the authors here pointedly reject hagiography (like Clark and Scott regarding early teachers in Utah, p. 227), but many chapters have an antiquarian veneer. Women’s history need not be merely compensatory any more than local history need be insular. The many wonderful photographs are underutilized as mere illustrations, not considered as primary evidence in their own right. Photographs, if interrogated, can illuminate women who may otherwise have left behind no individual records.

Most puzzlingly and disappointingly for a collaborative venture between archivists and historians, references to classic archival records—manuscript collections, correspondence, government documents, and so on—are sparse. Most contributors rely much more heavily instead on early published histories of Utah. Esteemed historian Laurel Thatcher Ulrich reminisces in the documentary *A Midwife’s Tale* that in her own research on colonial New England women’s history, archivists told her, “You won’t find much,” and adds that they were correct. If women, of all religions and ethnicities, are similarly invisible in Utah’s written records, historians would do well to expose and examine that circumstance. As valuable as knowledge of underappreciated individuals is, it would be more useful still to ponder the remaining gaps and silences. Material objects, popular representations, and the other preoccupations of historians since the “cultural turn” deserve further application in the studies of women in Utah history that one hopes may build on this one.

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WEB REVIEWS

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Ohio Memory: An Online Scrapbook of Ohio, <http://www.ohiomemory.org>. Accessed 6 June 2007.

Ohio Memory: An Online Scrapbook of Ohio History makes available 26,000 digital images of over 5,100 individual items from 330 archives, historical societies, libraries, and museums across the state. Planning for the project was initiated in 1995 with a broad spectrum of stakeholders in celebration of the state's bicentennial, and, in 2000, the Ohio Historical Society received a grant from the Ohio Public Library Information Network to launch Phase One of the project. Phase One concluded with the state's bicentennial in 2002; an additional phase, which ran through October of 2003, was funded by the Ohio Bicentennial Commission and the Institute for Museum and Library Services (IMLS), awarded by the State Library of Ohio. Since 2003, the project has been accepting submissions but has not been able to provide any financial support for contributing institutions to digitize materials. The focus of the project has shifted to issues of sustainability and preservation of the existing content, as well as of evaluation of the existing site.

The intended audience and goal for the project is a broad one, as outlined in the introduction by Dr. Andrew Cayton:

The Ohio Memory Online Scrapbook allows people of all backgrounds to experience history as a process rather than receive it as a product. No longer are the primary sources of history locked away in repositories with access limited to those with the resources and energy to seek them out. . . . [It] brings together raw materials into a huge scrapbook, a virtual attic of the state's past. Now anyone with internet access can access the past. You can experience for yourself the excitement of deciphering handwriting, interpreting the images on a photograph, or humming the melody of a song from tattered sheet music. You can get to know people from the past on their own terms. You can meet them yourself. And, most important, you can ask your own questions of them. You don't need historians any more to tell you what to think. You can do it yourself.

The project certainly succeeds in bringing together objects from a wide variety of repositories across Ohio and in providing a diversity of forms and objects that document the state's history across an exceptionally long time-line. In browsing items related to Williams County, for example, the user finds an image of a giant beaver skull from the Ice Age, an image of an Etch-A-Sketch from 1975, and twenty-two items in between. Users may search or browse the

collections; view online exhibits (or virtual “scrapbooks”); or use learning resources. They may also create their own scrapbooks by saving and annotating items, or send one of six electronic postcards from the online collections.

In keeping with its focus on history at the state and local level, the site has strong capabilities for locating materials geographically. Users may browse items by all geographic headings, select a county from a pull-down list and browse items related to that county, or click on a county on a map of the state and see all associated items.

All the items in the collection have been grouped into five broad categories by formats/media types: audiovisual material; historical objects, artifacts, buildings, or sites; natural history specimens; published material; and unpublished material (archives/manuscripts). These categories can be somewhat confusing, since items with the same physical format might be found in different categories depending on their purpose (photographs of buildings may be found in both “audiovisual materials” and in “historical objects,” etc.), whether or not they have been published. Additional granularity of formats is sometimes provided in the subject headings (which may also be browsed), but this information is not consistently applied. For example, maps can be found by browsing by subject, but letters and stereoscopes cannot. The Ohio Bicentennial Commission created twenty-two broad subject categories—such as Daily Life, Climate and Weather, and Education—into which, presumably, each item must fall. These categories would be a useful means of browsing, but they are mixed in with the more specific subject headings in the general “Browse by Subject” feature. Providing the capability for users to browse easily through the broad categories alone would be a useful enhancement for the next version of the site.

The “Browse by Subject” feature highlights the detailed—if perhaps somewhat inconsistent—cataloging done by the institutions submitting the images, and it indicates how successful the project was in collecting images reflecting the diverse history of the state. Under M, for example, are images relating to milkmen and milkwomen, milkweed butterflies, millinery, mine accidents, mineral waters, minks, the Miss America Pageant, mobile homes, and modern dance.

The metadata provided for each item is limited to essential fields (based on Dublin Core), such as title, rights, and contact information, but each item is described in a narrative paragraph that provides historical context for it. In many cases, the narrative also describes what portion of the total item or collection is available online—commonly only a selection of pages for longer published and unpublished works. Measurements are also generally provided in the narrative. Transcripts of the handwritten items are also provided—although this feature could be more prominent.

The capability of registered users to bookmark and annotate items in their own virtual scrapbooks is a helpful one. Scrapbooks can be personalized, shared with others, and printed out—although only title information and one image

(and any user-created description) is included for each item when scrapbooks are viewed or printed. It would probably be worthwhile to allow users the option to include more metadata and all available images for items in both the online and printed scrapbooks.

The scrapbook motif is continued visually throughout the site and provides a cohesive theme. Overall, navigation is clear and consistent. Given the site's mission to function as a "virtual attic" of items related to Ohio's history and to serve a broad general audience, the project is certainly a success. Hopefully, future phases will allow for expansion of the browse by subject capabilities, better traceability back to the contributing institutions' collections, and more options for the personal scrapbook displays, as well as the targeted acquisition of items on the project's "Most Wanted" list (available in the "About the Project" section)—another good example of the project's clear definition of its focus.

Picturing the Cayuse, Walla Walla, and Umatilla Tribes,

<http://boundless.uoregon.edu/digcol/mh/index.html>. Accessed 6 June 2007.

The University of Oregon's Libraries have partnered with the Tamástslikt Cultural Institute (TCI) of the Confederated Tribes of the Umatilla Indian Reservation, combining their expertise to digitize and make available a sample of a fascinating collection of glass-plate negatives from the university's collection that documents the lives of the Cayuse, Walla Walla, and Umatilla tribes. Major Lee Moorhouse, an Indian agent for the Umatilla Indian Reservation and a photographer, created the images. Between 1888 and 1916, Moorhouse produced over 9,000 images—more than 7,000 of which have been collected in the University of Oregon's Special Collections and University Library. The project began with the efforts of the Tamástslikt Cultural Institute to digitize and describe images of its people. Representatives from the institute approached the university library to discuss improving access to its collections and sharing their expertise about the collections' subjects. In April 2002, the Northwest Academic Computing Consortium (NWACC) awarded a grant to create a partnership "between the UO Libraries, owner of the images, with TCI, an organization uniquely suited to interpret and describe them, and the Western Interstate Commission for Higher Education (WICHE), an organization committed to helping educators reach underserved communities through the use of technology."

The project's purpose was to make the images accessible to distant communities, but to do so in a way that provided "the tribal people the opportunity to describe their cultural record in their own words by creating descriptions of images from the Moorhouse collection." According to the project website, as of October 2003, approximately 200 images had been digitized and cataloged.

The university's Digital Library Collections portal provides access to the online collection using CONTENTdm, making robust metadata available for

each image. Users have multiple options for browsing—by name, place, subject, or by image. Browsing by subject reveals how the extensive cataloging of the images by subject matter experts results in a resource that is undoubtedly highly useful to students of these tribes. For example, one portrait photograph was indexed with the following terms: “Man,” “Vest, Beaded—Floral,” “Necklace, Loop,” “Fur—Hair Wraps,” “Pipe, Hatchet Style,” “Choker,” “Blanket, Pendleton,” “Blanket,” “Bandoleer, Hairbone,” “Leggings, Buckskin—Beaded—Geometric,” and “Back Drop.”

The site’s functionalities support close study of the images. Each image may be zoomed and panned, enabling detailed examination; images may be saved to a user’s favorites for later study. Technical metadata about the original image and its condition can be displayed or turned off for each image. Users may share their knowledge or comment on any item via a convenient feedback form.

The site provides thorough documentation of the project—including background information about its development, the standards used, and the project workflow. This information is particularly valuable since this site offers a model for close collaborations between archives and stakeholder groups. In this project, the stakeholder group (TCI) selected the images for digitization, described the content, and created subject and class terms for indexing.

This site will please the casual browser, with its striking images and thoughtful descriptions, and it undoubtedly serves its intended audience well—Native Americans who now have increased access to images of their history, scholars of the period, and the tribes themselves, for whom the website provides high-quality images, detailed metadata, and a useful toolset.

The Presidential Timeline of the Twentieth Century,

<http://www.presidentialtimeline.org>. Accessed 6 June 2007.

The Presidential Timeline project provides an excellent example of an online resource with a topical focus that presents a wide variety of materials from many sources for a broad general audience. The Presidential Timeline was designed and developed by the Learning Technology Center in the University of Texas at Austin College of Education, in conjunction with the Presidential Libraries and Terra Incognita Productions, and it was made possible through a grant from the National Endowment for the Humanities with additional support from the Lyndon Baines Johnson Foundation and the University of Texas Libraries. The site clearly aims at students and educators, although the “About the Site” section includes nothing about the site’s mission or any additional background information.

The timeline project presents several different ways for users to access materials about the twelve American presidents who have presidential libraries supported by the National Archives. Users can browse the timeline structure, view

online exhibits focused on a specific event in a president's administration, or search 718 digitized resources in the gallery. The project has digitized images of 9 artifacts, 3 maps and charts, 404 photographs and other graphic materials, and 248 textual records, as well as 22 digitized moving images and 32 sound recordings. Each resource is both used in a timeline and available to be searched or browsed in the gallery. (Note that Flash 9 is required to access the timeline and its features.)

Using the timeline tool, events in each president's life can be viewed in a timeline format and seen in relationship to the timelines of other presidents and selected information, such as timelines showing the president's approval ratings or critical events in the civil rights movement. For each president, digital resources represent some events on the timeline. The timeline interface has a crisp clean look, but here and elsewhere on the site some navigational cues are almost too subtle. It takes some exploration to determine what can be done on each page, but once discovered, the navigation is easy to follow.

In the exhibits section, currently one online exhibit is devoted to a topic relevant to the president—such as “The Peace Corps” for Kennedy and “The End of the Vietnam War” for Ford. Each exhibit contains five or six screens of information—each screen with a few paragraphs of text and several digital resources (or segments of digital resources) that can be clicked on and expanded. This technique allows a greater number of images to be used on each page and is quite successful at providing rich information in a consistent, simple format.

In the gallery section, users may search across the metadata for all the digital images by keyword, and/or filter by the presidential library source, format, or date range (filters may be combined). Search results are presented as thumbnails, with no option for changing to a list format. As the collection of digital resources expands, and the results sets become larger, it may be desirable to add this functionality. Clicking on the thumbnail provides the full record for the resource. This complete information is also available when the materials are used in other parts of the site. The information provided is minimal, but adequate, and includes a clean printable version as well.

The site offers resources for teachers, including educational activities, additional audio and visual resources for download, and a discussion board. The discussion boards have only very recently gone live, and so there is no evidence upon which to judge how they will be used. But archivists with collections that contain materials related to these presidents might want to keep an eye on these boards and consider posting information about their own online resources for educators and students.

Overall, the site has an elegant look and feel. It allows users to explore a limited amount of information using several different techniques. It can give students and educators an introductory sense of the relationships among the events

in the lives of these presidents, and it can help in presenting the materials that document the key events in their lives. The site might be expanded in several ways to better meet the needs of a secondary audience, archivists and more advanced researchers. For example, very little background information is given about the project or the standards used for the descriptive information, and no technical metadata about the images appears. The information provided for an item makes it difficult to trace it back to its archival description in NARA's online catalog, ARC, or to finding aid information on the sites of the various presidential libraries, which makes it hard to place an item within its archival context. Perhaps in the next iteration, NARA's unique identifier for its archival descriptions (the ARC ID) could be added to the metadata to help users make the connection to NARA's other holdings.

That said, the intended audience for this site will probably not miss the depth of information many archivists might want to see. Additions of more exhibits and more digital resources for each president are planned now that the structure is in place. This site does what it set out to do in a well-designed way, and archivists should take a look at it as a model.

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