Reference

1. John Godfrey Saxe, "The Blind Men and the Elephant," www.wordfocus.com/word-act-blindmen.html (accessed Jan. 16, 2006).

Putting XML to Work in the Library: Tools for Improving Access and Management. By Dick R. Miller and Kevin S. Clarke. Chicago: ALA, 2004. 205p. $45 ($40.50 ALA members) paper (ISBN 0-8389-0863-2).

Extensible Mark-up Language (XML) has been at the heart of many discussions for ten years and was sometimes introduced as a kind of miraculous panacea in outbursts of enthusiasm verging on the irrational. XML was not primarily designed for librarians, but quite early some librarians—especially those who had been considering replacing MARC formats with SGML-based formats—saw the potential it has for the profession. Some commentators, however, also expressed reservations about XML's ability to deal with huge amounts of bibliographic data. The authors are both aware of XML's limitations and convinced that XML can do a lot for us: "While XML cannot solve all of our problems, it does offer foundational tools to help transform the way libraries do business" (36). Indeed, it is almost a matter of survival, as the new environment—the Web environment—has profoundly transformed libraries' role and place within the society: "'Library information,' especially that in time-honored MARC formats and in proprietary integrated library system formats, has been segregated too long from mainstream Web resources. Having an online library catalog isn't good enough anymore" (37) and "Conditions for libraries have changed! . . . With instant information everywhere, libraries need to reassess their role and focus on strategies for thriving under the new circumstances" (96). Obsolescence and growing isolation are the major threats impending on libraries and librarians. The authors regard XML as a way to escape both.

This book (written in 2002, published in 2004, and reviewed in 2005 for this 2006 issue of *LRTS*—it is important to keep that time aspect in mind) can be regarded as comprising two distinct sections. The first one (chapters 1 and 2) is a presentation of XML itself and XML-related technologies (validation tools, linking tools, display tools, and so on), a kind of XML manual for librarians who are not acquainted with the mark-up language. The second one (chapters 3 to 5) is more library-specific and exposes how to develop—and put into practice—an XML-based metadata schema, with the potential to solve the many flaws that cataloging rules and MARC formats are fraught with.

Librarians who seek guidance for the development of their first XML Document Type Definition (DTD) or XML schema will find a step-by-step methodology that will prove extremely helpful on pages 94–96. Perhaps more importantly, this section offers the authors an opportunity to express what they think of MARC21 and the Anglo-American Cataloguing Rules—and they do not think good things, to say the least. They develop seven arguments in favor of XML's superiority over MARC: coded values in fixed-length fields could be replaced with the flexible authority control enabled by XML; the inconsistent way dates are expressed in MARC could be unified in XML; redundancy and inconsistency in entering similar types of information could be avoided; MARC does not clearly separate information elements and information about them, which XML would make possible; relationships could be expressed in a unified way; MARC's complexity could be replaced with a core XML schema to which specialized information elements could be added for certain types of materials (e.g., music, maps); and the MARC-8 character encoding system could be replaced with Unicode. According to the authors, XML could also help solve some of the problems posed by AACR: no clear identification of works; no consistent treatment of relationships; too much emphasis on transcription and description; use of mixed-language headings, which impedes internationalization; inconsistent treatment of initial articles in titles, and so on.

The authors then introduce the XML-based metadata structure that they have developed at the Lane Medical Library, the XML Organic Bibliographic Information Schema (XOBIS)—in my opinion the biggest revolution in the cataloging world since Cutter's time. XOBIS blurs the traditional—and cumbersome—border between bibliographic and authority records. It enables consistent treatment of bibliographic relationships and controlled use of qualifiers within headings. The authors insist, however, that XOBIS is "experimental," and that "it should not be interpreted as minimizing the problems such an undertaking [i.e., the replacement of MARC with a Web-oriented schema] would entail" (144). It would be fascinating to see what a large-scale bibliographic database in XOBIS might look like.

Unfortunately Chapter 4, which is devoted to the software and practical tools that would enable daring librarians to "put XML to work" in their library, is a bit disappointing. Not that it is not helpful, but it focuses almost exclusively on open source software that perform the following functions: edit XML documents; transform XML into other formats; display; store and index; or any combination of the above. Of course, such a publication could not and should not turn to a collection of advertisements for commercial systems and the vendors who supply them, but it is not always possible to find the qualified staff able to adapt open source software for a library's specific needs, and one has to be completely informed to make the good decision and the good choice.

The fifth and final chapter, devoted to XML's potential for the future, shows a number of the Lane Medical Library's achievements that were made possible thanks to XML. Among other realizations, they maintain an online serials list from their catalog, they use XML "to assist with

the retrieval of information that sometimes gets buried in, or omitted from, the MARC format" (183), and they locate journal articles and so on.

One of the many lessons that this highly valuable book has to offer is that lazy solutions consisting in just transferring MARC fields into XML tags are not the best ones and do not put librarians in a position to envision the future with serenity. "Rather than just attempting to translate existing knowledge structures directly into XML, we have a strategic opportunity to redefine these structures in order to support future information systems. . . . We advocate the need for fundamental changes in order to achieve a viable replacement schema" (92, 93). Is the profession ready to follow pioneers and to invest time, thinking, and money in the XML revolution?—*Patrick Le Boeuf (patrick.le-boeuf@bnf.fr), Bibliothèque nationale de France, Paris*

Who Wants Yesterday's Papers?: Essays on the Research Value of Printed Materials in the Digital Age. Yvonne Carignan et al., eds. Lanham, Md.: Scarecrow, 2005. 224p. $48 paper (ISBN 0-8108-5119-9).

Have you ever noticed that when an issue comes to one's attention, permutations of it seem to arise at every turn? Recently, while listening during my daily commute to a CD educational series on classical music, I heard the instructor bemoan the belief of some scholars that fully 40 percent of the musical works of Johann Sebastian Bach—that would be in the range of 400 works—has been lost, and that the paper they were written on was likely used to wrap cheese or to provide insulation for the roots of plants and trees.[1] During the same period, in preparation for a family move, I sorted through the entire kindergarten through twelfth-grade academic output of my two offspring and decided what among the hundreds of pages of math worksheets and other busywork could be kept and what discarded. As I composed this review, I reflected that loss and preservation are hardly new or unusual issues, but ones that have long pervaded both the public and private spheres.

In 2001 Nicholson Baker, through the publication of his provocative *Double Fold: Libraries and the Assault on Paper*, created a flurry of attention on libraries' decisions to replace fragile or deteriorating collections of newspapers with microfilm.[2] Although *Double Fold* and its author have been widely criticized for arguably oversimplifying or obscuring the issues, they have served a valuable purpose by fostering a great deal of professional and public discussion of the issues surrounding the preservation of original materials in an increasingly digital age. Among the responses to Baker was a symposium organized by University of Maryland librarians and graduate students from the university's college of information studies.

While *Double Fold* focused on newspapers (and library card catalogs), the symposium's organizers had a far more ambitious objective, to address "the whole question of what original materials should be saved more broadly" (ix). The organizers' strategy, culminating in the publication of *Who Wants Yesterday's Papers?* was to promote a dialog between researchers from a range of academic disciplines—including humanities and the social and physical sciences—and the librarians and preservationists who face the daunting task of short-term decision-making and long-term planning in these areas. The book contains both the symposium presentations and further essays added to provide a more complete overview of various aspects of the issue. The result provides a useful introduction to the complexities of the topic of the greatly differing research needs of varying disciplines. However, it also accomplishes much more by providing both a historical perspective on library preservation (primarily in part one, "The Race against Time") and an introduction to the technical and other problems associated with digital preservation. Many of the essays are extensively footnoted, and the book also contains an annotated bibliography of sources for further research. Although there are current issues not explicitly dealt with due to the fact that the symposium took place in 2002, such as developments in the area of government documents and depository libraries and the Google digital initiatives, *Who Wants Yesterday's Papers?* provides an excellent springboard for further exploration of the topic.

Part two, titled "Digital Demand vs. Paper Pleas," explores the importance of original paper documents from the perspectives of University of Maryland professors in various disciplines. These scholars were asked what types of materials they used in their research; how important paper materials were, as opposed to microfilmed or digital materials; and whether and how their reliance on original materials had recently changed or would change in the foreseeable future. Science historian Stephen G. Brush's argument that old science textbooks, far from being outdated and useless, are crucially important takes on particular forces, considering the ongoing debate over the teaching of evolution and intelligent design; it's difficult to imagine a better illustration of how textbooks as "social artifacts" (40) provide insight into the values and convictions of their respective eras. By contrast, physicist Jordan Goodman and archivist Kara M. McClurken explore the advent of online scholarly publishing, extolling its potential for rapid publication of scientific research results and enhanced methods of peer review, while touching upon copyright and preservation issues. They also address the problems reliance upon digital information pose for the researcher, describing how historian Michael Bellesiles was stripped of his academic position and awards after being unable to reproduce some of the research data used in writing his book *Arming America: The Origins of a National Gun Culture*.[3] John E. Newhagen's essay "Above the Fold: The Value of Paper Newspapers" presents several cogent examples of how "the preservation of the physical