core Web collections in various broad subject areas. As good as these lists are, similar lists are available elsewhere. While the book's goal is to provide a single source for all aspects of electronic library collection development, including core collections, I wonder if the lists of resources could have been made available on the companion Web site so that the text could focus on the policy aspects. It might have made the book more affordable as well as being perhaps a more appropriate venue for ever-changing resources.

I also found the authors' definition of an e-library to be both overly broad and somewhat restrictive. I have already stated that I did not find the section on virtual reference to be relevant. Although document delivery is included in the definition, it is not discussed in the book. The resources contained in an e-library seem to be primarily Web sites, databases, and journals. There is almost no mention of electronic books or PDF documents and reports.

On the whole, however, I find half of the book—the half that helps develop the policies and criteria for collection development of electronic resources—an excellent resource that fills a real need in this area. As one cannot purchase half a book, I would recommend its purchase, even at its outrageous price.—*Betty Landesman (landesb@mail. nih.gov), National Institutes of Health Library, Bethesda, Md.*

Reference

1. Diane Kovacs, *Building Electronic Library Collections: The Essential Guide to Selection Criteria and Core Subject Collections* (New York: Neal-Schuman, 2000).

Cataloging the Web: Metadata, AACR, and MARC 21. Ed. Wayne Jones, Judith R. Ahronheim, and Josephine Crawford. Lanham, Md.: Scarecrow, 2002. 199p. $39.50 paper (ISBN 0-8108-4143-6).

Cataloging the Web is an excellent collection of short papers addressing many issues relating to the cataloging of Web-based resources. These papers were originally presented at the Association for Library Collections & Technical Services Preconference on Metadata for Web Resources in July 2000, and this volume is an excellent substitute for those who were unable to attend the preconference.

The editors, Wayne Jones, Judith Ahronheim, and Josephine Crawford, organized the book into six sections. The first section is an introductory article by Jennifer Younger, "Metadata and Libraries: What's It All About?" Younger provides an overview of the current state of metadata in libraries by addressing the role of metadata in resource discovery and access, catalogs and gateways, and a scholars' portal as well as the role of metadata librarians, and partnerships between libraries.

The second section of the book, "Cataloging the Web: AACR and MARC 21," addresses how libraries are attempting to provide bibliographic access to Web documents through the traditional means of cataloging: the Anglo-American Cataloguing Rules (AACR2) and MARC 21. Brian Schottlaender provides a thoughtful overview of some recent reviews of AACR2, and summarizes some of the issues that Tom Delsey identified in *Logical Structure of the Anglo-American Cataloguing Rules* as needing to be addressed.[1] Matthew Beacom discusses the topic of how to catalog Web resources by presenting ten questions that should be considered, such as "What do I catalog?" and "One record or two?" Sheila Intner looks at alternative approaches to standard cataloging procedures to meet users' needs. She points out that users do not generally search for an entire electronic serial; rather, they are looking for information at the article level, and we need to take that into consideration when we are deciding how to provide access to electronic

resources. Jean Hirons recounts the changes to AACR2 with regard to serials cataloging, and reviews the definitions of such concepts as continuing and integrating resources. She follows that with a discussion of the changes' impact on library cataloging. Regina Reynolds discusses the International Standard Serial Number (ISSN) as a link to metadata, and the ISSN's relationship with other standard numbers, such as the Uniform Resource Name (URN) and the Serial Item and Contribution Identifier (SICI). In the last article in this section, Rebecca Guenther discusses MARC21, Dublin Core, and the development of metadata crosswalks.

The third section of the book, "Cataloging the Web: Other Approaches, Other Standards," looks at how libraries are using less traditional methods to provide access to Web resources. Norm Medeiros discusses the benefits of the OCLC Cooperative Online Resource Catalog (CORC) implementation at New York University's Ehrman Medical Library, including better selection of Web resources, increased efficiency, and the development of higher levels of expertise among those participating. Other papers in this section address the use of Text Encoding Initiative (TEF) headers, eXtensible Markup Language (XML), and Encoded Archival Description (EAD) to provide bibliographic access to Web resources.

In the fourth section of the book, "Tools for Cataloging the Web," two products for providing access to Web resources are discussed: MARCit software, and the INFOMINE project. Laura Bayard describes how MARCit software is used to select a Web resource and create a basic cataloging record using the metadata already inherent in the resource (such as the title) and allow editing of that information in a template. Juan Carlos Rodriguez discusses the development of INFOMINE, an online Web finding tool for public domain scholarly

resources (it currently includes almost 90,000). This is a useful discussion of a project that has resulted in a helpful resource for researchers.

The fifth section of the book, "Digital Libraries: Practical Applications of the Standards," turns to practical uses of metadata to provide access to Web materials. In a useful discussion Diane Boehr relates the development of the use of metadata at the National Library of Medicine, covering issues such as implementation strategies and Web resource selection criteria. Stanley Blum presents another aspect of the use of metadata in his discussion of how biological specimens are cataloged in museums. Brad Eden discusses a lesser-known metadata standard, the Instructional Management System (IMS). This article describes the development of IMS to support learning and compares it to other metadata standards. Wendy Treadwell discusses the development by the Data Documentation Initiative of a metadata standard to provide better access to data files, resources that are often neglected. Finally, Beth Picknally Camden describes the efforts by the University of Virginia to apply Dublin Core to digital video clips. These practical applications of metadata to projects at libraries and museums are useful resources to others who are contemplating digital projects of their own.

The concluding section is titled "Where Are We? Where Are We Going?" and includes articles by Michael Gorman and Clifford Lynch. Gorman discusses the wide variety of resources available on the Internet and reminds us that we have to be as selective with Web resources as we are with more traditional resources. He also points out that one should not forget the issues of preservation; it won't matter whether we catalog something if it disappears into oblivion. Lynch cautions against the idea that there is a platonic ideal of metadata. He maintains that we need to think about

metadata not just as being for description and classification, but we also need to think of how it is used for the retrieval of information and resources, and he explores that context throughout his discussion.

Overall, this book is an outstanding collection of articles presenting the state of the art of metadata in 2000, the year of the preconference where the papers were first presented. There is some slight overlap in content with *Electronic Cataloging: AACR2 and Metadata for Serials and Monographs,* which includes the proceedings of subsequent regional institutes that grew out of this preconference.[2] However, the volumes complement each other more than they overlap, as the presentations and resulting articles from the regional institutes were much lengthier and substantive than those at the preconference, and the speakers were fewer in number. While some of the information has changed in the subsequent years, and some of the articles are outdated, it is a useful resource for any cataloging librarian who wants to keep up with developments in the field.—*Rebecca L. Mugridge (rlm31@psu.edu), Pennsylvania State University, University Park*

References

1. Tom Delsey, *The Logical Structure of the Anglo-American Catologuing Rules.* Accessed Jan. 8, 2005, www.collectionscanada.ca/jsc/docs.hmtl.
2. Sheila S. Intner, Sally C. Tseng, and Mary Lynette Larsgaard, eds. *Electronic Cataloging: AACR2 and Metadata for Serials and Monographs* (New York: Haworth, 2003).

Information Architecture: Designing Information Environments for Purpose. Eds. Alan Gilchrist and Barry Mahon. New York: Neal-Schuman, 2004. 266p. $75 Hardcover (ISBN 1-55570-493-X).

This volume covers four broad areas—design environment, software environments, managing metadata (including taxonomies and controlled

vocabularies), and user interface—in seventeen chapters, five of which are case studies. Each chapter is written by a different expert in the field, following introductory material by the editors. The editors do a fine job of placing the four sections into context, not just in library and information science but also within database architecture, Web history, and other appropriate contexts. This allows the reader to see the bigger picture when it might be easy to become mired in the detail of a case study. The book has an academic approach, clearly aimed for an educated audience.

While there is a library science bent, some of the authors speak to practitioners in other disciplines, such as Web managers and database engineers. Audiences for this work, according to chapter emphasis, seem to be: system designers (information modelers) (Part 1), software purchasers (Part 2), metadata appliers (Part 3.1), taxonomists (Part 3.2), and usability testers (Part 4).

Peter Morley's foreword starts the book off with a brief, and admittedly personal, history of information architecture. I found this quite useful and rather disarming. It softens the academia inherent in the topics and shows the field to be young, still forming, and variously defined.

The chapters present several aspects, aimed at both government entities and corporate sites: case studies; practical information and approaches; demystification; definitions; methodologies; standards; and legalities. In addition, the book has a global perspective, although centered on Europe (the United Kingdom in particular).

The order of the parts and chapters within them roughly follow the chronology of information architecture development. For example, if the information architect is starting from scratch, an information model is a good beginning point. Following that is an emphasis on the business