patenting practices just enough to show potential individual inventors the size and color of the competition, without discouraging those who are diligent and disciplined enough to work their way through the process. The book does not cover "workplace issues" of providing patent services to the public, such as what options and resources are available beyond the search tools he mentions, or common pitfalls or areas of caution service providers might encounter.

The trademark section is a fine textbook-like treatment of basic concepts such as trademark infringement, along with some searching tips. Librarians who read the sections on patents and trademarks will definitely improve their skills for conducting reference interviews and ultimately guiding library users to the information they.

Copyright issues in the workplace are of major concern to librarians, and Wherry accordingly switches his emphasis in this section away from copyright searching techniques, although he does give instructions as well as some background for creators seeking copyright protection. Rights of copyright holders and the concept of fair use are thoroughly explained, but ambitious attempts to address practical workplace issues are sometimes confusing or even misleading because of recent changes in the law. Although the book makes no claim to be the final word on workplace practices, it strays into that realm with a table that stakes out various situations as "fair use" and others as "illegal"—the table, however, is less clear than the preceding discussion. Given that the book doesn't mention the Technology, Education and Copyright Harmonization (TEACH) Act, which was under discussion shortly before the book was published (it was enacted in November 2002), many of the discussions touching on distance education are dated. The history provided is selective, and it's not clear why some topics are

omitted—for example, in the discussion of court cases and copyright, the Tasini case (*New York Times Co., Inc., et al. v. Tasini et al.*), and the Texaco case (*American Geophysical Union v. Texaco*) are not mentioned. Perhaps a more segmented approach would be useful for this changing environment, one that separately presents issues for Internet service providers, for distance education, and for librarians handling interlibrary loan or e-reserves. In that way, problems that weren't settled in the law at the time of publication could at least be clearly described. Although Wherry highlights one of the problems for newcomers to the discussion—a plethora of Web sites that detail current controversies using technical or legal jargon, and which consequently don't invite beginners into the discussion—he hasn't entirely managed to make sense of that daunting profusion of information.

The book ends with appendixes, including a question-and-answer section that could have been more helpful if split into separate sections for copyright, patents, and trademarks, and a collection of Web sites focused on intellectual property, which would have been more useful had it been annotated. The index is extremely thorough and can even be used to locate the anecdotes that Wherry uses to illustrate his points.

Overall, the best section is the one covering patent searching, and the main strength of the book is its one-stop-shopping approach that delineates the areas within intellectual property and provides a good introductory overview for just a few solid hours of pleasant reading.—*Karrie Peterson (karrie_peterson@ncsu.edu), North Carolina State University, Raleigh*

Metadata Fundamentals for All Librarians. By Priscilla Caplan. Chicago: ALA, 2003. 224p. $42; $37.80 members (ISBN 0-8389-0847-0).
Metadata and Organizing Educa-
tional Resources on the Internet. Edited by Jane Greenberg. Binghamton, N.Y.: Haworth Pr., 2000. 302p. $69.95 cloth (ISBN 0-7890-1178-6); $39.95 paper (ISBN 0-7890-1179-4). Also published as *Journal of Internet Cataloging* 3, nos. 1 and 2/3.

With the wealth of information on metadata available, it is a wonder that new material on the topic continues to proliferate. And a book! There is something antithetical about a book on a format designed primarily for electronic documents and information transfer. Yet here is *Metadata Fundamentals for All Librarians*, a very well-organized and researched treatise on the topic. Only last year a colleague said, "One of these days I am going to have to learn what metadata is." While rather shocked at the admission that my colleague didn't understand the most basic definition of metadata, it showed me that there is still a need for a text that can explain the basics of this rather far-ranging toolset used to describe resources.

Priscilla Caplan starts out simply and approachably with a definition of metadata, types of metadata, and metadata schemes. These "metadata basics" (chapter 1) alone are a welcome addition to the literature, because the chapter is easy to read and digest. So what is metadata? Many of us are familiar with the hackneyed "data about data" (2) definition, which always seem to miss the point, in my opinion. Caplan's definition as used in current parlance that metadata describes "information objects on the network" (2) gets closer to it, but still the purpose is missing. She does eventually arrive at this toward the end of the definition section, where she goes into not what metadata is but rather what it does.

Metadata schemes are discussed in full in the second part of the book and include library cataloging, Text Encoding Initiative headers, Dublin Core, Encoded Archival Description,

and nine more metadata initiatives primarily geared to specific user groups. The author strikes a balance between the overview many readers will want to set the stage and the details—which can be prodigious—of metadata schemes. Librarians will mostly whiz through the chapter on library cataloging. While it is useful to hear that we have been applying metadata for centuries in the guise of cataloging, any further exploration into the specifics of MAchine Readable Cataloging (MARC), Anglo-American Cataloguing Rules (AACR2), and Cutter are perhaps handled better in another publication. Yet it's a comforting foundation for librarians to anchor metadata knowledge and makes the succeeding metadata schemes follow more logically. This structure works well when Caplan builds on the AACR2/MARC discussion in the "Metadata for Education" chapter, which focuses on the Gateway to Education Materials (GEM) project.

The Dublin Core (DC) Metadata Element Set is perhaps the most well-known and widely applied of the metadata schemes discussed. As an applier of DC metadata, I am surprised that the chapter goes into so much detail about syntaxes and extensible Markup Language (XML) coding, when the most basic application of DC into a Hypertext Markup Language (HTML) Web page provides a much more easily digested understanding of its power. Caplan does offer a succinct explanation of Dublin Core Qualifiers (see p. 78), which helps explain how its simplicity can be leveraged to offer more complex information about a resource, or indeed about the metadata elements themselves.

Metadata schemes for specialized audiences include art and architecture metadata such as Visual Resources Association Core Categories and Categories for the Description of Works of Art. The former is AACR2/MARC-based, as well as DC-based, and the latter comes out of the muse-um tradition. A different specialized audience, government information, has the Government Information Locator Service scheme. Caplan discusses the federal initiative responsible for this as well as the state government adaptation such as WA-GILS, Washington State's version for state access to government information.

The choice to discuss Guidelines for ONline Information exchange is perhaps driven by the library audience for this book. It is primarily used by the publishing industry, with tangential interest to the Library of Congress.

Geospatial metadata is quite advanced, due to the detailed digital data collected by Geographic Information Systems users. The federal standard, Content Standard for Digital Geospatial Metadata, has ten types of information, each with further breakdowns that add up to 300 elements. Compared to DC's basic fifteen, that seems excessive. Yet the geospatial community utilizes a great number of them for parsing information in ways that would not be possible with the raw data. Caplan does not discuss state and local government applications that rely on geospatial metadata, which would be an interesting addition.

The other specialized metadata schemes that are treated in the book include the Data Documentation Initiative, focused on social science research; administrative metadata, intended to manage resources; structural metadata, used to describe the physical and logical structure of files; and rights metadata, which attends to information on digital rights management.

Caplan takes a sweeping look at metadata types that she thinks are of interest to librarians and hits the mark. Her approach of providing an overview plus some of the details works, for the most part, and gives a good strong foundation to understanding the many types of metadata. While the book isn't illustrated, she does include a number of coded examples that give the flavor of the type of scheme described. I would have liked more concrete examples of projects, such as the GEM project, which rely on the specific type of metadata. Her bibliographic notes show a breadth of research and good choices for further exploration.

On the other hand, when looking at a book on metadata published three years ago, one is naturally skeptical due to the need for currency in an evolving field. In the case of *Metadata and Organizing Education Resources on the Internet*, this skepticism is not fully justified. Education is a field as old as human culture; how that field organizes its material is nearly that old. There is much to be learned from a book that looks at the many facets of educational materials and their organization, no matter what the latest coding techniques might be.

This book is a series of eighteen articles written by professionals from differing areas of education. These include library faculty, administrators, and catalogers; educational researchers and project managers; and metadata technical specialists.

Several of the articles go into depth about specific projects in the field, such as Adult Learning Documentation and Information Network, GEM, and National Engineering Education Delivery System. These articles offer overviews, research information, cataloging issues, case studies, and future strategies. This last topic helps save the book from being out-of-date. Other articles focus on traditional library cataloging of electronic resources or metadata schemes, such as ARIADNE, designed for specific materials. School libraries are included in the cataloging articles, higher education in the more research-oriented projects. Finally, there are articles on the topic of metadata itself, such as structure, architecture, interoperability, and specific schemes.

The range of topics makes this collection of articles worth reading. For one interested in only certain aspects

of educational materials organization, the specificity of the articles offers a narrower view. All are well-written and edited for ease of understanding.—*Eileen Quam (eileen.quam@state.mn. us), Minnesota Department of Administration, Office of Technology, Saint Paul*

The Audiovisual Cataloging Current. Edited by Sandra K. Roe. Binghamton, N.Y.: Haworth Information Pr., 2001. 370p. $79.95 cloth (ISBN 0-7890-1403-3); $49.95 paper (ISBN 0-7890-1404-1). Published simultaneously as *Cataloging & Classification Quarterly* 31, nos. 2 and 3/4.

The editor has divided this compilation of articles regarding the cataloging of audiovisual materials into four sections. The first section, "Cataloging Audiovisual Formats," contains chapters devoted to issues related to the cataloging of specific audiovisual formats (or categories of those formats). Authors were selected to cover popular music recordings (e.g., rock, country, rap, jazz, blues, and similar or related styles), non-musical sound recordings, video recordings, remote-access electronic resources, three-dimensional artifacts and realia, and kits. Audiovisual formats not specifically covered in this section include graphic materials, maps, and microforms. (Although there is a chapter on microcomputer software in this section, the article is focused less on cataloging than on the historical development of related cataloging rules, which is discussed more thoroughly in section 2.)

The chapters in the first section focus primarily on descriptive cataloging issues related to the format, identifying the distinctive aspects for each format such as general material designations (GMDs), sources of information, notes common to the format, as well as access points. Although several of the essays identify or address "problems" related to cataloging the

format, sometimes these problems are merely "differences" found in cataloging these materials rather than real problems. Rule citations to the appropriate chapters in the Anglo-American Cataloguing Rules, 2d ed. rev. (AACR2) and related Library of Congress Rule Interpretations (LCRIs) are found throughout, as are examples illustrating the use of MARC 21 content designation. Catalogers using this book for instructional purposes should be especially pleased to find full-record examples with MARC coding in several chapters.

The clear standout in this section is the chapter "Videorecording Cataloging: Problems and Pointers" by Jay Weitz. Given his role as the video-recording specialist at OCLC, where he handles database cleanup, problem reports, e-mails from catalogers, and so on, and his experience giving workshops related to video-recording cataloging, Weitz's understanding of the issues and real challenges related to cataloging this format are clearly evident as he addresses the trickiest issues, not only related to *AACR2* chapter 7 (the Archival Moving Image Materials rules used by many film archives are not addressed), but also problematic issues such as when to input a new record and topics raised by the "notorious misbehavior of publishers" (68).

One of the risks of presenting up-to-date discussions of cataloging issues is that they are sometimes in such a state of flux that they become outdated soon after publication, by no fault of the authors or editor. The best example found in this volume is Nancy Olson's chapter on "Cataloging Remote Electronic Resources." Although still an interesting read, changes to both chapters 9 and 12 of AACR2 subsequent to the publication of this book will require additional investigation by catalogers requiring current information.

The second section of the book is devoted to the "History of Audiovisual Cataloging." Although the edi-

tor included only one article in this section, Jean Weihs's "A Somewhat Personal History of Nonbook Cataloging," the article on "The Microcomputer Revolution" by Ann Sandberg-Fox found in section one might be considered more appropriate in this second section instead. Both are historical surveys by true pioneers in the field of audiovisual cataloging, made all the more interesting by the inclusion of personal reminiscences of the authors during their many decades of involvement in the development of cataloging rules at the local, national, and international levels. Although the title of this book focuses on the "current," these two historical entries are valuable additions.

Section three is devoted to subject access issues related to audiovisual cataloging. The first is an excellent article on the history, use, and future of the *Thesaurus for Graphic Materials (TGM)*, one of the major thesauruses used for indexing visual materials. Valuable for its information on the development and use of *TGM*, this article is also a must read for anyone contemplating developing a new specialized thesaurus in order to understand the scope of issues involved in such an undertaking. Lian Ruan's article on "Providing Better Subject Access to Nonprint Fire Emergency Materials for Illinois Firefighters" will be informative to those cataloging agencies where, due to a level of collection specialization not covered by general subject lists such as the Library of Congress Subject Headings (LCSH), a multithesaural approach is required, incorporating and integrating terms from established thesauruses and locally developed terms into a single system. Martha Yee's contribution is the final one in this section, in which she compares two different genre and form lists (LCSH and *Moving Image Genre-Form Guide*) as to their suitability for moving image and broadcast materials, complemented by comparisons to a third