criterion is the good one. Rather, that should be up to FRBR implementers and, ideally, to users to decide" (193). It's unclear what this degree of freedom in interpreting FRBR would mean for interoperability and sharing bibliographic data among disparate systems.

The treatment of aggregated works—books containing multiple, separately authored pieces, or containing multiple works by the same author—is another theme addressed by several of the volume's authors. Le Boeuf's contribution, "Musical Works in the FRBR Model or 'Quasi la Stessa Cosa': Variations on a Theme by Umberto Eco," observes in reference to aggregate works that "what FRBR labels 'a work' may have little to do with what we are prone to regard as 'a work' in common speech," but "that FRBR *also* contains the 'traditional' notion of what a work is" (114). Le Boeuf proposes a distinction between "*bona fide works* and *fiat works*" (115), with the latter representing most aggregations. Albertsen and van Nuys offer a more elaborate analysis of seven classes of aggregated works (136–42). Thomas B. Hickey and Edward T. O'Neill argue against broadly defining all aggregations of an author's works as "the same work" (248), but acknowledge that defining aggregate works more narrowly poses serious problems in practice as well, based on their research into "FRBRizing" a set of OCLC records citing Tobias Smollett's novel *The Expedition of Humphry Clinker*.

Underlying these definitional issues is a certain ambiguity about the nature of the FRBR entitities themselves. While some cite the FRBR entities as "*real world* objects, not descriptions of objects" (129), Tom Delsey (as quoted by Glenn E. Patton in "Extending FRBR to Authorities") more finely observes that the FRBR entities "are bibliographic entities. They reflect intellectual constructs or concepts that are integral to the rules used to create library catalogs, and what is perceived as a specific instance of a particular entity type may vary from one set of rules to another" (42). This again points up the tension between the flexibility with which the FRBR model can be applied and the limits to its hoped-for ability to unify cataloging practices. The differences between cataloging rules and between the files of legacy records that they have created cannot be overcome simply by conceptual modeling.

The volume under review does a good job of bringing to the surface many of the issues being debated in the FRBR discussion. Other articles of particular interest are David Miller and Patrick Le Boeuf's provocative analysis of the work-like qualities of *mises-en-scene,* "'Such Stuff as Dreams Are Made On:' How Does FRBR Fit Performing Arts"; Jacqueline Radebaugh and Corey Keith's review of the XML-based FRBR Display Tool developed by the Library of Congress' Network Development and MARC Standards Office; and Stefan Gradmann's "rdfs: frbr—Towards an Implementation Model for Library Catalogs Using Semantic Web Technology," which sees FRBR as the key to greater exposure for the contents of library catalogs on the Web. Perhaps the best answer to the question posed in the volume's subtitle is that FRBR is neither hype nor cure-all, but still a work in progress.—*Stephen Hearn (s-hear@umn.edu), University of Minnesota, Minneapolis*

Reference

1. IFLA Study Group on the Functional Requirements for Bibliographic Records, *Functional Requirements for Bibliographic Records, Final Report* (München: K. G. Saur, 1998); also available at www.ifla.org/VII/s13/frbr/frbr.htm or www.ifla.org/VII/s13/frbr/frbr.pdf (accessed Apr. 16, 2006).

Library of Congress Subject Headings: Principles and Application. By Lois Mai Chan. 4th ed. Library and Information Science Text Series. Westport, Conn.: Libraries Unlimited, 2005. 549 p. $75 cloth (ISBN 1-59158-154-0); $55 paper (ISBN 1-59158-156-7).

The fourth edition of Lois Mai Chan's guide to the Library of Congress Subject Headings (LCSH) comes at a time when debates are raging over the cost and utility of a highly structured and controlled subject access system for information retrieval. When the third edition of Chan's work appeared in 1995, the library and information community did not yet know the affect the Internet and the Web would have on user behavior, or on new developments in access to and dissemination of information resources.[1] The introduction to the new edition acknowledges this change, but it also makes a case for broadening LCSH application beyond traditional library cataloging.

The format of the new edition closely parallels the previous edition. Part 1, "Principles, Form, and Structure," summarizes the history of subject cataloging and LCSH, and the principles on which LCSH is based. Chan discusses in depth the syntax and semantics of how the various types of subject headings are formed, the rules for the formation of subheadings, and subject authority control and maintenance. The organization is for the most part clear and logical, with useful headings and subheadings guiding the reader in locating a particular section, and an adequate number of examples to demonstrate the rules discussed as well as major exceptions to those rules. On occasion, however, examples confuse more than they enlighten. For example, on page 72, Chan uses the example *Lake George (N.Y. : Lake)* to illustrate the use of a generic qualifier to distinguish identical place names. However, on the previous page, instructions are given to invert place names that begin with a generic term. No explanation is given for why the heading is not *George, Lake (N.Y.)*.

Part 2, "Application," guides the reader in applying LCSH. Here and elsewhere, Chan openly acknowledges the difficulty of application consistency when using a large, com-

plex subject heading system. Even the same cataloger might interpret the subject of a given work differently on different days. However, a review of Chapter 8, "Assigning Subject Headings," and the subsequent chapters on assigning headings for particular formats of material and subject disciplines, might help even experienced catalogers to be more thorough and consistent in their own cataloging. The often thorny areas of literature, music, fine art, religion, law, history and genealogy, and archaeology are given particular focus.

There are important changes and updates to this edition. Chapter 5, "Subdivisions," adds a discussion on the distinction between form and topical subdivisions. Chapter 7, "Subject Authority Control and Maintenance," now discusses authority control headings for subdivisions. Chapter 9, "Subject Cataloging of Special Types of Materials," has undergone some reorganization to better reflect the scope of materials being cataloged in today's libraries. Formerly a two-page subsection under the section "Nonprint Materials," electronic resources now warrant their own section, encompassing computer software, databases, computer and video games, and Internet or Web resources. Electronic serials are discussed separately in the "Serial Publications" section. Cartographic materials also have their own section rather than being placed inappropriately under "Nonprint Materials." That section now covers films, non-music sound recordings, and interactive multimedia, but perhaps would be better dissolved altogether. Because so many library resources now cross over the traditional format lines and are well-established in our collections, the concept of "nonprint cataloging" seems a bit quaint in today's world, and serves no real purpose in the book under discussion.

While addressed briefly in the sections on subject cataloging of literature and film, a more in-depth discussion of form and genre headings would have been welcome. This topic is important in digital resource cataloging as well as in the rare books and archives communities. Although LCSH is one of the major thesauri recommended in standards for describing the form or genre of a resource, conceptualizing the use of the terms for this purpose rather than the "aboutness" of subject access requires a different thought process, one that warrants further discussion.

The most significant change in the new edition is the substantially reworked Part 3, "Current and Future Prospects" (called simply "Future Prospects" in the third edition). Here Chan asks whether LCSH has a role to play in today's information environment. She argues that LCSH is widely accepted worldwide and has been adopted beyond the traditional library setting. However, to gain wider acceptance it will need to adapt so that it can be used by a wider variety of people at varying levels of skill and training. She follows this discussion with a new chapter on the Faceted Application of Subject Terminology (FAST) schema, developed by OCLC Online Computer Library Center (OCLC)

for use with Dublin Core records for electronic resources. FAST is an adaptation of LCSH that simplifies its structure and application by relying on postcoordination rather than precoordinated subject strings to identify the subject facets of an item. FAST identifies eight distinct facets: topical, geographic name, personal name, corporate name, form, chronological, title as subject, and meeting name. It is too early to tell whether FAST will gain wide use and acceptance. For the purposes of Chan's book, it functions as a concrete example of how LCSH can remain relevant in the new information environment, but it must be rethought as the information-seeking behavior of our users changes.

The new edition of *Library of Congress Subject Headings: Principles and Application* will fulfill the same multiple purposes of its previous editions: as a textbook in library and information science graduate programs; as a hands-on training tool, and as a handy reference for staff in cataloging departments.—*Christine DeZelar-Tiedman (dezel002@umn.edu), University of Minnesota Libraries, Minneapolis*

Reference

1. Lois Mai Chan, *Library of Congress Subject Headings: Principles and Application,* 3rd ed. (Englewood, Colo.: Libraries Unlimited, 1995).

Metadata for Information Management and Retrieval. By David Haynes. London: Facet Publ., 2004. 186p. $75 cloth (1-85604-489-0).

There is much to recommend in David Haynes' *Metadata for Information Management and Retrieval.* As he writes in the preface "the intention of this book is to help specialists who manage information resources to become easily conversant with this important and rapidly developing area" (xi). The specialists addressed are those seeking to "develop their knowledge and skills in order to manage metadata effectively," and those "faced with strategic decisions about adoption of IT [information technology] applications that use metadata" (xi). When read as a whole, the book serves an additional purpose of reminding its audience of the many and varied types of metadata that need to be considered by information professionals. Readers who will find this book useful include librarians and IT professionals, as well as those interested in pursuing these careers.

The book is organized into ten chapters intended for either individual consultation or to be read as a whole. The first chapter provides an historical overview of the development of metadata from its originations more than two thousand years ago in the Alexandria Library, to the modern conception of the term. An analysis of the purposes of metadata leads Haynes to propose a new, five-point model for considering the purposes of metadata: Purpose 1, Describing information resources; Purpose 2, Enhancing