from being paper-based to using a comprehensive information system in great breadth, although generally not in depth, making this a useful survey. However, this wide-ranging approach is a drawback because the focus and coverage is not consistent throughout the book. In some sections, "digitization" appears to mean the "computerization" (15) of collections information, yet at other times "digitization" refers to digital imaging and preservation of digital files, such as in chapter 7. Although data automation and digital imaging may go together, each has its own set of requirements that bear separate and detailed consideration before being linked together. This book might have benefitted from focusing more tightly on the information systems aspects of museum automation. Nevertheless, Kupietzky raises important issues and provides a roadmap for decision making, and her bibliography provides many leads for the in-depth study on specific aspects of museum collection records automation. *Subject Access to a Multilingual Museum Database* should be read by museum automation project managers and serves as a good overview of the complexities and potential rewards of museum collection management systems for professionals involved with object collections.—*Morag Boyd (boyd.402@osu.edu), The Ohio State University, Columbus.*

UNIMARC and Friends: Charting the New Landscape of Library Standards: Proceedings of the International Conference Held in Lisbon, 20–21 March 2006. Ed. Marie-France Plassard. Munich: K. G. Saur, 2007. 133p. $95.00 (IFLA members $67.00); hardbound (ISBN 3-598-24279-4). IFLA Series on Bibliographic Control 30.

This volume brings together the texts of papers delivered at a special 2006 International Federation of Library Associations and Institutions (IFLA) conference, "to actively contribute to [the] important discussion on challenges and future directions of bibliographic standards, thus following IFLA strategic directions" (10). Twelve papers appear in these proceedings—although the preface claims "eleven excellent papers were presented" (11)—describing current and evolving activities in IFLA, national libraries, and affiliated institutions related to resource description.

The welcome address by José Afonso Furtado of the Calouste Gulbenkian Foundation, co-sponsor of the conference, sets the stage appropriately by stating, "The international agenda involving library standards encompasses more than just the latest topics of IT related standards," but also "a much larger wave of activity is taking place, in rethinking the conceptual and normative foundations of libraries" (13).

The proceedings are divided into three sections. The first, "Cataloguing Standards: Challenges and Future Directions," contains five papers. The first paper in this section, by John D. Byrum, chair of the International Standard for Bibliographic Description (ISBD) Review Group, describes work to revise and consolidate the individual, format-specific ISBDs. This entry describes the history and review process of the ISBDs in great detail, but is woefully short on detail regarding how ISBD is thought of as relating to content standards and data structure standards in use in libraries. The need to clarify the relationship of ISBD to the IFLA Functional Requirements for Bibliographic Records (FRBR) is referenced, but the only tangible result of this need described is a separate ISBD/FRBR mapping document, rather than any effect on the revised ISBD itself. Similarly, Resource Description and Access (RDA), the new Anglo-American cataloging code under development, is mentioned as likely to not require ISBD punctuation, but no effects of RDA development on ISBD are discussed, nor is the underlying issue of why ISBD would continue to prescribe punctuation at all in the current technological environment in which it is standard practice to separate data from its presentation. The second paper in this section, by Barbara Tillett, describes the activity of the IFLA Meeting of Experts on an International Cataloging Code (IME ICC) to develop a "code for code makers" (31), provides an overview of the FRBR model, and summarizes work to date on RDA. Tillett discusses how FRBR concepts and terminology fed into work on the IME ICC, but strangely does not indicate to what degree the IME ICC activity informed work on RDA, beyond stating that RDA will "refer to" IME ICC (37). The next paper, from Patrick Le Boeuf of the Bibliothèque nationale, describes FRBR and related initiatives, along with other conceptual models arising from the cultural heritage community. The final two contributions to this section, by Glenn Patton and Mirna Willer, describe the FRBR follow-on activity of the Functional Requirements and Numbering of Authority Records (FRANAR) Working Group, including the release of a draft report titled *Functional Requirements for Authority Records (FRAR)*, and changes to the UNIMARC Authorities format suggested by the *FRAR* draft.

The second section of this volume focuses on "MARC Portability and Reuse in the Open Web Environment." Michel Bottin introduces the BiblioML/AuthoritiesML languages, although does not comment on their obvious similarity to the Library of Congress's Metadata Object Description Schema (MODS) and Metadata Authority Description Schema (MADS). Vladimir Skvortsov's contribution describes the MarcXchange XML format (ISO25577), which provides for the embedding of fields allowed in UNIMARC but not in MARC21, and therefore expands upon MARCXML. The next entry, from representatives of the National Library of Portugal, sum-

marizes the Library's use of XML for encoding UNIMARC records, managing UNIMARC documentation, and preserving and sharing UNIMARC records. This paper presents an ironic twist for a volume devoted to information standardization, when describing their decision to develop a new XML markup language for UNIMARC documentation rather than adopting an existing standard technology. The final paper in this section presents OPAC software built on open-source tools and using UNIMARC records in XML. While this system is built on open-source tools, it does not appear itself to have been released as open source, a pity.

The third and final section in this volume is "Evolving Standards for Bibliographic Data Handling: The IFLA's Role." Sally McCallum of the Library of Congress outlines her library's activities related to "MARC 21 and its derivatives, metadata, search protocols, and identifiers" (110) as they relate to the IFLA-CDNL Alliance for Bibliographic Standards (ICABS) work agenda. Renate Gömpel expands on the work of ICABS, describing specific contributions of its various partners and how the coordination of their activities relates to IFLA initiatives. The final paper of the conference, by Alan Hopkinson, chair of the Permanent UNIMARC Committee, looks forward

to the future of UNIMARC, thinking about keeping current with evolving technologies, providing documentation in multiple languages, and sharing of records. The tone of this paper is unfortunately somewhat reactive, however, taking the approach of keeping up with change rather than being its agent.

As with most conference proceedings compiled and published following the conference rather than in advance of it, this volume suffers from the delay introduced as part of the publishing process. At the time of this writing, more than two years after the conference, already much of the information presented is out of date. For example, the consolidated ISBD was published in 2007, the IME ICC was released as a draft for review in 2008, the proposed structure and timeline for the development of RDA have been significantly revised, and the *FRAR* report was reissued in a second draft in April 2007 known as *Functional Requirements for Authority Data (FRAD)*.[1]

While the purpose of this volume is to document the papers that were presented at the conference, to an American audience more interpretation of the topics presented and their relationship to U.S.–based initiatives would be beneficial. A brief preface from the director of the UNIMARC Core Activity within IFLA introduces

the papers, providing context for the conference theme. A similar and parallel wrap up following the papers and tying them together would have been a welcome addition to this volume, responding to the call in the conference's welcome address to not just consider the technological issues involved but also those related to the core missions of libraries.—Jenn Riley (*jenlrile@indiana.edu*), Indiana University, Bloomington.

REFERENCE

1. International Federation of Library Associations and Institutions, *International Standard Bibliographic Description (ISBD)*, IFLA Series on Bibliographic Control, v. 31 (Munich: K. G. Saur, 1997), www.ifla.org/VII/s13/pubs/ISBD_consolidated_2007.pdf (accessed Aug. 24, 2008); International Federation of Library Associations and Institutions, *Statement of International Cataloguing Principles* (Apr. 10, 2008), www.ifla.org/VII/s13/icc/imeicc-statement_of_principles-2008.pdf (accessed Aug. 24, 2008); IFLA Working Group on Functional Requirements and Numbering of Authority Records (FRANAR), *Functional Requirements for Authority Data: A Conceptual Model: Draft* (Apr. 1, 2007), www.ifla.org/VII/d4/FRANAR-ConceptualModel-2ndReview.pdf (accessed Aug. 24, 2008).