## R John Robertson. Book Review for Library Review

## Metadata in practice

Diane I. Hillmann and Elaine L Westbrooks & American Library Association American Library Association Chicago 2004 304 pp ISBN 0-8389-0882-9 \$50.00 (softcover)

## Metadata for information management and retrieval

David Haynes Facet London. 2004 200 pp ISBN 1-85694-474-2 £39.95 (hardback)

## Metadata fundamentals for all librarians

Priscilla Caplan American Library Association Chicago 2003 224 pp ISBN 0-8389-0847-0 \$42.00 (softcover)

Despite the growing importance of collections of digital objects within Library and Information Science there are relatively few books published on the topic of metadata. Metadata is the information about the object which supports its retrieval, management, and use. This may be because as a field of study 'metadata' is relatively new, is changing quickly and lends itself to journal or online publishing. There are however, a few books available and as books do they provide a more comprehensive and seasoned take on parts of the topic. This review examines three of the books currently available, contrasts them and suggests a target audience each of them.

*Metadata in Practice* is a collection of sixteen short articles about metadata; eleven of them are concerned with real-life examples of the use of metadata and the other five more broadly tackle key issues for the future use of metadata. The articles drawing on projects' experiences provide the reader with the opportunity to learn from the problems and successes of some of the early endeavours in building digital libraries. In particular many of the experiential articles address the initial assumptions each project made and show how managers then had to revisit and revise in light of the expectations or abilities of the communities they served or as underlying tensions within their metadata appeared as collections grew. The collection of experiential articles includes contributions from well-known projects such as: the Alexandria Digital Library, the Internet Scout Project, and Cancore. The articles with a broader remit examine the topics of community-based content control; the role of Open Archives Initiative (OAI) and Dublin Core (DC) (to build a community of practice and to deal with mixed content types); the question of metadata quality; and the question of semantic interoperability.

Although the majority of the contributing projects are American, the lessons learned and reported are of interest to a wider audience - the most significant difference for readers outside of North America may be that even when the projects described take place outside of the library and without the immediate involvement of librarians, some form of input from them is assumed. The division between the two sections of *Metadata in Practice* is not totally clear as some of the articles in the first part, "Project-Based Implementations", are quite visionary and some of those in the second part, "The Future of Metadata Development and Practice", are quite developmental. In this collection there will be something for any developer, something for most project librarians, learning technologists, and managers but it may not be accessible until the reader has encountered some of the problems the writers have faced. In this light a more extensive introductory section might have helped but that isn't the intended focus or the point of the book.

Metadata for information management and retrieval is a general introduction to metadata – its history, context and purpose. In his book Havnes introduces the development and use of metadata by relating it to the history of cataloguing more generally and then exploring the context of recent developments in metadata. With this context established, Haynes concisely explores the role of data models and standards in the development of metadata. This exploration includes the concepts of ontologies, the Functional Requirements for Bibliographic Records (FRBR) model, the Open Archive Information System (OAIS) model, and a selection of the key standards in given stakeholder communities: libraries, archives, government, ecommerce, learning technology. Five purposes of metadata are then set out: "1 Resource description; 2 Information retrieval; 3 Management of information resources; 4 Documenting ownership and authenticity of digital resources; 5 Interoperability." These are then developed into five chapters which form the core content of the book. He then concludes with a chapter on the wider issues in applying and managing metadata and a chapter on future directions. Each chapter finishes with a bibliography for further reading.

*Metadata for information management and retrieval* is the first book in the "Become an expert" series to be published and consequently suffers somewhat from what one can only assume to have been a marketing decision. The series title promises expertise, but this book is explicitly not written for this purpose and readers seeking to progress to an expert level will be disappointed. Haynes provides a good accessible introduction to metadata and locates its developments in a wider picture. He encapsulates current trends and knowledge explaining them clearly and illustrating them comprehensively both by example and through clear illustrations. As a result though the difficulties of some topics are often elided and he occasionally opts to provide simple answers rather than leave unresolved problems. For example, the discussion of identifiers and the treatment of the rights management problem respectively.

*Metadata fundamentals for all librarians* is a two-part book. The first part provides a brief introduction to the use of metadata and the second a comprehensive introduction and overview to the nature and use of specific standards. The initial part, the first five chapters, examines issues in the use of metadata. After a brief introduction, this section provides an overview of the major issues in metadata: Syntax, Creation, and Storage; Vocabularies, Classification, and Identifiers; Interoperability; and the Web. It examines some of the tensions these issues raise in the use of metadata, and makes some suggestions about their resolution. The second part serves as an introduction to a selection of commonly used standards in thirteen fields or areas of interest. The areas are: 'Library Cataloging; The TEI [Text Encoding Initiative] Header; The Dublin Core; Archival Description and the EAD [Encoded Archival Description]; Metadata for Art and Architecture; GILS [Government Information Locator Service] and Government Information; Metadata for Education; ONIX International [Guidelines for ONline Information eXchange]; Metadata for Geospatial and Environmental Resources; The Data Documentation Initiative; Administrative Metadata; Structural Metadata; Rights Metadata'. For each field it describes the most commonly used standards in that area and provides an overview of their features and use, and supplies examples or partial examples of their implementation. It finishes with the inclusion of a comprehensive glossary. Each chapter also finishes with a bibliography for further reading.

The first section of this *Metadata fundamentals for all librarians* provides a rapid introduction to metadata and its use, and as part of this assumes a degree of understanding of the difficulties and issues inherent in cataloguing and some degree of technical knowledge as well. As a result of this, although it is introductory, Caplan is able to point out the difficulties inherent in particular issues or applications of standards without trying to resolve them. In the second part she provides enough information to help one grasp the shape of the differences in metadata standards in different domains but doesn't swamp the reader with unnecessary details. As such she is able to provide a quick comparison of metadata in different domains or to serve as a ready reference when trying to understand the use of metadata in a different field. Given the authors experience in using multiple standards or working in cross-domain projects what seems missing from this final reference section is an extension of the earlier chapter on interoperability into a discussion about standards in cross-domain projects or the use of multiple standards within one project.

Comparing and assessing these books together is an interesting task as although they all deal with metadata they have different target audiences - Metadata in practice is a book for developers and implementers, Metadata for information management and retrieval is for the novice or non-specialist project manager, and Metadata fundamentals for all librarians is for those with some understanding of cataloguing and the use of standards but who are new to metadata, or for the library reference shelf. Although there are many other useful differences between these books for someone trying to buy a book on metadata, without the ability to browse through them, this breakdown of audience is perhaps the best way to decide between them. Another difference between the three books is how quickly they will age Metadata fundamentals for all librarians will perhaps age the quickest as standards evolve and mature rapidly and its comprehensive examples and efforts to describe the use of standards in different domains make it vulnerable to change. The lessons learnt by the projects described in *Metadata in practice* will most likely remain pertinent for the longest as they often involve human factors or features of metadata that are not dependent on specific syntax or standards. Metadata for information management and retrieval falls somewhere between the other two providing background and context that will not date but offering overview solutions that may age quickly.

All in all three very different books for distinct audiences, all of them a welcome contribution to the literature and a hopeful sign the field is beginning to mature.

R. John Robertson