## Reviews

Muriel Foulonneau and Jenn Riley. 2008 Metadata for Digital Resources: Implementation, Systems Design and Interoperability. Chandos Publishing (Oxford) Ltd



Metadata, as many of us understand it, is data **about data.** An example is the old card in the library card catalog that contains basic data about a book or other library material. To the extent that cataloging is similar to indexing (at least database indexing), we indexers may be interested in metadata. But metadata goes beyond cataloging. In the digital world, metadata has become especially important in making data retrievable as the both the volume of data and the expectations of rapid complex retrieval have grown. Indexers who are interested in expending the application of their skills to web indexing, taxonomy work, and database indexing, would find it very valuable to understand how to make the most of metadata.

The connection between metadata and databasestyle indexing is as follows. Each document, file, or record has multiple types of structured metadata fields describing it, such as: title, author, date created, format, language, audience, original source, subjects, and names. Subject and names, the descriptive "aboutness," are fields of metadata that are filled in with index terms that the indexer chooses as most appropriate, ideally from a controlled vocabulary. The other metadata fields are much simpler fill in. Thus, if you can index, you can complete the metadata for a document. But perhaps you want to take on more analytical work and actually design the metadata fields and requirements. This is where reading up on the subject would be useful.

The use of metadata also brings together the two rival methods of making information findable: human indexing and automated "indexing" or search. The human designs the metadata and usually also manually indexes with terms assigned to specific metadata fields. The computer then completes the automated search based on the metadata.

There are a number of books recently published about metadata. In fact, there are more books dedicated to metadata than there are on taxonomies. another related area of interest to indexers. The new metadata book I chose to review, Metadata for Digital Resources: Implementation, Systems Design and Interoperabilty, is from the same publisher, Chandos Publishing, as the book on taxonomies that I reviewed last year, so I figured it would be a worthwhile book, and I was not disappointed. Chandos is a leading international publisher of books on library and information science, knowledge management, the Internet, and a few other subject areas.

Although a British publisher, one of the authors, Jenn Riley, is American and the other, Muriel Foulonneau, is French but has worked in the United States. Riley is the Metadata Librarian with the Digital Library Program at Indiana University, Bloomington. Foulonneau works on the archive of scientific publications at the Centre pour la Communication Scientifique Directe. She is also co-chair of the Dublin Core Collection Working Group of the Dublin Core Metadata Initiative.

The book is well organized and thoroughly covers all areas of metadata design and implementation. Reflecting its sub-title, the chapters are grouped together within four main parts: 1) Introduction, 2) Implementation of metadata creation activities, 3) Systems design, and 4) Metadata interoperability.

The introductory chapter "What is metadata?" provides a solid background and scope. Even though we may have a general idea of what it is, exact definitions vary. For example, metadata may or may not be limited to digital media. For the scope of this book: "Metadata is structured information about a digital resource and its properties." The focus of the book is also restricted to the application of metadata in the "cultural heritage" sphere, such as libraries, museums, archives, and historical societies. Thus, metadata on web HTML pages is not a subject that is covered, but then again, that metadata is so simple it would probably not require more than a couple pages anyway. The requirements of institutional metadata projects, on the other hand, are much more demanding, and this book does a good job addressing those requirements

The next section, on implementing metadata, opens with factors in choosing a metadata standard. Depending on your library science background, some of these acronyms for standards may or may not be familiar: MARC, AACR2, PREMIS, and SKOS. The decision in choosing a metadata standard is not quite the same as choosing an editorial style standard for indexing, because the various Metadata standards have differences in their scope of Submissions and suggestions for reviews should be submitted to the Editor, keywords@asindexing.org.

coverage, so some may be totally unsuitable for a given project. There may be none that are completely suitable, but rather a combination of two or more standards may be used, and even then they may be used as only a basis with modifications. As stated in the text, "There is no monolithic, one-size-fits-all metadata record." It's the metadata usage guidelines that are more akin to any indexing style policies, and there is in fact an entire chapter just on how to create the metadata usage guidelines. It quickly becomes apparent, therefore, that designing metadata involves coming up with your own editorial policy. (This could be fun.) Other topics include designing the workflow, metadata creation user interface, and managing quality control.

The third section, on systems design, starts off with a chapter on the functions performed by a "digital library system." Basically, in order to design the metadata you need to understand how it will be used. This could include search/browse for information, digital object management, data preservation, and/or supporting functions of another system. I found it interesting that the book uses language of the broader Web world than that of library science, such as function of "discovery" instead of "literature retrieval." There is also emphasis on the importance of being centered on users and having user studies. Another chapter includes screenshots of possible website user interfaces including browse hierarchies, facets, and even a tag cloud. This section also discusses "indexes" and "indexing," but in the context of

what a search engine does to full text. So, be

The final section, on interoperability, begins with an explanation of why resource sharing is important. Too often creators of metadata think only of their own organization's internal needs without considering expanded use through third parties, such as other institutions or commercial companies, or through other applications such as search engines and web portals. Interoperability needs to consider sharing of both content and technology. For sharing of content, determining the degree of equivalence between two sets of metadata may be required. This is known as "mapping," and something I have done before with controlled vocabularies. For metadata, the term "crosswalk" is also used to mean mapping. Some aspects of interoperability can get a little technical, as the aptly title chapter "Technical interoperability" explains.

The concluding chapter, "The future of metadata," explores such topics of automated metadata exploration, Web 2.0, and "mashups." While such an up-to-date book is great, the rapidly changing world of online information calls into question the length of time that this book will be relevant before it needs a revision.

The book is definitely a practical "how-to," rather than being theoretical. As such, it is probably most useful if you have an actual metadata project to plan from start to finish. If you are looking for a general overview introduction to the subject, you might consider one of the other books on metadata, especially if it costs less. This book is rather dense on information and is certainly not a light read. Many readers may choose not to initially read it from beginning to end, but rather to consider certain chapters for their immediate needs. Even if you have a project that is not even defined as "metadata" but involves planning and arranging for database indexing from scratch, this book would be very valuable.

While this book could be used as a reference, it is very unfortunate that its index is so poor. Like the other Chandos Publishing book I had reviewed, the index lacks any subentries and over-arching topics such as standards, guidelines, interoperability, software, etc. I don't know if it was author-indexed, but I have my suspicions.

It should be understood that, even though it is a "how-to" book, neither this nor any book on metadata can give you all the answers you need, because each metadata project is unique in its content, requirements, users, etc. In many cases, the book presents merely the types of questions one should address, rather than giving all the answers. Questions include deciding which if any standards to use, which categories should be preserved as search options, or what level of detail (granularity) to cover. Fraught with decision-making at every step of the way, metadata design is thus again similar to indexing. I hope I'll have a metadata project some day to put some of this book's wealth of advice to good use.

— Heather Hedden 🥟



## Macrex Workshop and More

Be sure to join *Gale Rhoades* on Saturday and Sunday, March 21 and 22, 2009 in San Francisco for an in depth workshop on Macrex **software.** The two-day session is packed with information beginning on Saturday at 8:00 a.m. with a Macrex v.8 update, followed at 1 p.m. with Tech support questions and issues. Although the first day wraps up at 5:00 p.m., the event continues with "The Gathering" from 5:30 to 7:30 p.m., where additional networking opportunities will be available for all. The Gathering (Saturday evening, March 21, 2009, 5:30 p.m. to 7:30 p.m.) is free to all comers but you should RSVP by March 12, 2009 to ensure food and drink for all. Do Mi Stauber will be present at The Gathering and will have a few copies of Facing the Text for sale if anyone is interested. Bring your checkbook to save the cost of shipping and to get an autographed copy of the book! (Send an e-mail to dmstauber@gmail.com if you are interested.)

On Sunday, you'll start out at 7:00 a.m. with a hearty breakfast and networking, and then at 8:00 a.m. participate in a Q&A session. At 10 a.m., you'll learn about HTML and XML embedded indexes as used for CD distribution of materials, for indexing websites, Microsoft TIM, etc. This is followed at noon with a buffet lunch, and then at 1:00 p.m. you'll discuss Definition Files; configuring client-specific "quick files, shortcuts, dealing with complex page shifts and conversions to or from Sky or Cindex.

Both days include your breakfast and buffet lunch with an opportunity to network. For details regarding cost and accommodations, please contact macrex@wisebytes.biz or call 888-348-4292 (sales) or 650-756-0821 (support)

Bring a notebook computer for practicing the weekend's tips. A few (older) loaner systems are available on a first come, first served basis. Windows XP or Vista is required for Macrex 8.

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