Cole, Timothy W. and Muriel Foulonneau. **Using the Open Archives Initiative Protocol for Metadata Harvesting.** Westport, CT: Libraries Unlimited, 2007. 208 pp. 45.00 USD. ISBN-10: 1-59158-280-6. ISBN-13: 978-1-59158-280-9. ∞

Using the Open Archive Initiative Protocol for Metadata Harvesting is much more than its title suggests. It is an impressively substantial work on the central mechanism of scholarly communication. It abounds with extensive insights and information, applicable to institutional archives, discipline-based aggregators and other new services.

The general structure of the book progresses in a helpful manner from general to specific and from theory to the basics of designing and implementing services using the Open Archive Initiative Protocol for Metadata Harvesting (OAI-PMH). The work is divided into three major sections: introduction and context; protocol implementation; and creating and using sharable metadata. The last two sections correspond largely to the roles of the OAI data provider and OAI service provider respectively.

In the introduction the authors advise the reader against deadly "feature bloat" as the killer of workable services. They credit the success of the protocol so far to the refusal to permit that condition, with the result that every effort has been made to keep the protocol simple and robust and thereby lower the technical barriers to its adoption. Success is measured by the rapid adoption of the protocol by library, archive, and museum communities.

They also warn against de-contextualizing collections. The context section includes a long history of the initiative through practice for the data and service provider to the end 2006. The authors allude to a predecessor system in the field of physics as "having a strong and robust history of preprints in print format." A very positive feature of the work is a brief section on "Building Community," which shows that marketing and developing relationships are recognized even in this mostly technical work as necessary steps in building relevant and technically superior services.

From the perspective of a technical reader, the book is very well constructed. For the non-technical reader the terminology used by the authors, is a big problem. Terminology at the first occurrence is italicized and defined. Thereafter, it appears as a term in plain text or as an acronym. The authors should not be blamed for the rapidly evolving technology and changing terminology in this field; however, the insertion of a glossary or a table of equivalents would have saved the reader some frustration when confirming the meaning of such terms. One rather helpful convention for displaying OAI and XML coding is the use of Courier font within the text.

The authors are rigorous in their use of internationally recognized acronyms, like OAI, and EAD, but unfortunately they also include a shower of lesser known nationally and regionally significant acronyms like LANL or CWDA--Lite.

Standards are quoted mostly in U.S. terms, such as NISO equivalents and Dublin Core (DC), without it being made clear that the standard in this case is for the United States. Instead of revealing the ISO connection with DC early on, it is done almost as an afterthought toward the end of the work. Had the authors made it clear that DCMES (Dublin Core Metadata Element Set) is one and the same as ISO 15386, a cloud of terminology surrounding Dublin Core, such as DC, DCMI, and DCMES could have been resolved for international readers. Likewise, that ISO 23950 "Information Retrieval: Application Service Definition and Protocol Specification" is NISO Z39.50 by any other name, since they are technically identical with minor editorial differences. Similarly use of ISO 2079, a data transmission standard, which librarians have adopted worldwide, could supplant MARC or variants, such as, MARC21.

Parts two and three can almost be used like a manual. There is an excellent chapter on the underlying technologies and the development of the protocol, which teaches the reader a great deal about the individual building blocks and how they fit together. The section is a primer on the standards on which the protocol depends: HTTP, XML, and DC.

In their concluding thoughts the authors demonstrate that the protocol is a fluid and rapidly moving work in progress. They confess their perplexity that the protocol "has not proven so technically lightweight as was originally hoped."

The work achieves its goal. It demands energy and effort from the reader who is rewarded with insights and a wealth of information. Somewhere in their laudatory history it would have been appropriate to include other precursors and visionaries. An acknowledgement that the folks attributed by the authors with the birth of the protocol were really part of a group of originators and inventors, who stand squarely on the shoulders of the giants of the library universe like Ranganathan and Avram would be salutary. There is a reverential tone and treatment accorded OCLC, whenever there is the slightest mention of the corporation, its products, or its software. The authors introduce "OCLC Online Computer Library Centre" as an acronym that is also a string of terms made into a proper name. Taken together, all the references to this and related entities, their products, services and software add up to a wonderful advertisement for that group of corporations.

There are certainly some shortcomings with this work, as it really needs better illustrations and graphics in general. The figures are inscrutable, while many tables are merely lists. Figures consisting of screeds of XML coding are almost unreadable. Presumably these figures work better in the coloured originals.

The notes are less than helpful, non-transparent and non-explanatory, being made up of a single link to a URL. When the reader finally correctly enters the address and has read the message, she or he is left to pick up clues.

Physical production is poor. Since the work is produced on alkali paper there is some expectation that the text is intended to last and to be of value in the future, however, the binding fell apart in the second reading.

This text is geared toward a technical audience and is an excellent resource for a protocol that is central to the modern library. It is well-organized and provides a comprehensive explanation of OAI-PMH and its related and supporting standards. There are certainly some shortcomings from U.S.-bias in represented standards, to misplaced reverence with respect to corporations over individuals, to requiring better graphs, tables and notes in order to better illustrate and explain the topic. There is certainly a mixed-message with respect to this publication: long-lasting, alkali paper with a poor binding. Nevertheless, there appear to be no other monographs on OAI-PMH and the authors should be lauded for their attempt to provide a comprehensive interpretation on the development of this protocol. Clearly a more energetic performance is required to coordinate standards internationally on the part of the library, archives and museum community. There are far too many standards that are too often ignored simply because there is no interpretive resource with which to begin. Though there are certainly shortcomings, it is a good starting point.

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