Editorial

Metadata and librarianship: will MARC survive?

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Abstract

Metadata schema and standards are now a part of the information landscape. Librarianship has slowly realized that MARC is only one of a proliferation of metadata standards, and that MARC has many pros and cons related to its age, original conception, and biases. Should librarianship continue to promote the MARC standard? Are there better metadata standards out there that are more robust, user-friendly, and dynamic in the organization and presentation of information? This special issue examines current initiatives that are actively incorporating MARC standards and concepts into new metadata schemata, while also predicting a future where MARC may not be the metadata schema of choice for the organization and description of information.

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The recent proliferation of metadata standards and schemata is part of the information explosion that has occurred in the past ten years. The appearance of the Internet and the World Wide Web, the ease-of-use and affordability of computers and e-mail at home and at work, the rapid pace at which scholarship and research can now take place due to technology and e-collegiality, and the rise in the number and complexity of formats in which information can be contained and stored, have meant that numerous communities and individuals are challenged to find ways to effectively send, store, preserve, exchange, and migrate information in the electronic environment.

While libraries have usually led the way regarding presentation and storage of information with regard to the print environment, their place in this new electronic age has yet to be determined and measured. The development of the MARC format for the exchange of information between and among computers in the early 1970s, along with the development of AACR to standardize the use of MARC, helped libraries to take advantage of the power of computers to access and organize information, and to electronically present and display information to their public. In this new environment of CDs, DVDs, aggregator databases, full-text, data sets, PDFs, jpgs, tiffs, OCRs, and streaming media (just to name a few), and with scholarly and commercial entities constructing their own information/metadata standards to deal with the challenges and problems of electronic interchange and storage, libraries are often left out of the loop, if not totally forgotten.

Does the MARC format have a place in this new information age? Is it outdated, archaic, too based on the print/card catalog era? Is it robust and dynamic enough to describe and document the current information explosion of formats, containers, data, hypertext, and media, as well as future technological information packages? Are libraries and librarians exploring and experimenting with the MARC format, in order to make it more viable, usable, and interoperable for today’s information needs? This Library Hi Tech issue presents case studies, experiments, and opinions of the MARC format by a variety of individuals and organizations. In some cases, MARC has been
retooled and revamped for specific projects; in others, MARC has been transformed into something more dynamic and usable for the foreseeable future.

The first section (articles 1-4) deals with expanding the current uses of MARC by transforming it towards the needs of a particular project or group of users. Jacobs et al. describe the construction of a Perl program to add vernacular Russian (Cyrillic) characters to existing MARC records. Carini and Shepherd present a case study of how MARC and Encoded Archival Description (EAD) have been used to address challenges in the archival area. Smith et al. discuss the evolution of MARC into a particular brand they call ENC MARC, to assist them with the challenges of cataloging materials for the Eisenhower National Clearing-house. Andresen describes the development of the danMARC2 format, as well as the future of MARC in an XML world.

The second section (articles 5-7) discusses the development and uses of the Metadata Encoding and Transmission Standard (METS) at the Library of Congress. Cundiff provides an overview of the development and uses of METS, as well as a short primer and relevant issues for the future. Proffitt discusses the current uses of METS at the Research Libraries Group. Yee and Beaubien describe the challenges of converting METS-encoded content for use in educational technology environments, through the instructional management system-content package (IMS-CP).

The third section (articles 8 and 9) discusses the development and uses of the Metadata Object Description Standard (MODS) at the Library of Congress. McCallum provides an introduction to MODS, a MARC21-compatible XML schema for descriptive metadata. Guenther discusses how to apply MODS as a metadata schema, as well as guidelines and current applications of the standard.

Section four (articles 10 and 11), which for space reasons will be published in the next issue of Library Hi Tech along with sections five and six, presents information on MARCXML and the use of XML to transform the MARC standard for future use. Keith describes the development of the MARCXML schema, and the toolkit and tutorial developed at the Library of Congress for its use. Carvalho et al. provide details regarding the transformation of MARC into an XML structure, its advantages, and how it can be a part of a more complete bibliographic framework.

Section five (articles 12-14) presents case studies and discussions of repurposing or re-examining the MARC format in light of metadata management and workflow. Lubas et al. discuss the metadata practices developed at MIT for the OpenCourseWare Project. Farb and Riggio present information on the challenges of constructing a metadata schema for managing electronic resources. Kurth et al. provide interesting documentation regarding the mapping, transformation, and manipulation of metadata in digital collections at Cornell University.

Finally, section six (articles 15-16) presents opinions on the future of the MARC format, and what is really needed in terms of a metadata standard for information organization and description in the future. Coyle performs a “thought experiment” on the concept of a bibliographic record based on the Functional Requirements for Bibliographic Records (FRBR) within the context of a flexible, functional library systems record structure. Tennant, a well-known futurist and writer on the complexities and failings of the MARC format, discusses what he envisions as the new kind of metadata infrastructure needed by libraries in the future.

Will MARC be a viable metadata format for the future? In terms of its continued use and availability in library OPACs throughout the world, yes; in terms of its future competing against the likes of Dublin Core (DC), EAD, text encoding initiative (TEI), instructional management system (IMS), and the scores of other current and developing metadata standards, perhaps. As this special issue illustrates, the development of METS, MODS, and MARCXML is meant to transform the advantages of the MARC format into the digital environment. Whether they are used or accepted by the library community will depend on marketing, instruction, training, and their eventual use in library digital projects. In other words, the success of these MARC-based metadata schemata is dependent on libraries and librarians themselves. In that sense, the “ball is in our court”.