2014

MARC Isn't Dying Fast Enough

Lori Bowen Ayre
Galecia Group, lori.ayre@galecia.com

MARC Isn't Dying Fast Enough

Lori Bowen Ayre (lori.ayre@galecia.com)
The Galecia Group

In 2002, Roy Tennant wrote a *Library Journal* article entitled "MARC Must Die." Sadly, the article remains relevant today. We are still saddled with MARC and we are still operating in a technological backwash when it comes to our library systems. And worse, we are isolated technologically because our attachment to MARC makes it impossible to participate in a meaningful way with the rest of the interconnected, web-based world.

One might have the impression that we'd stepped into the current century when we began being offered "library service platforms" instead of the traditional "integrated library system." But, in truth, these new platforms are faster horses more than they are cars (to paraphrase Henry Ford).

> *"If I had asked people what they wanted, they would have said faster horses.*
> *-Henry Ford*

In Tennant's 2002 article, he explained some of the problems with MARC as a syntax as well as the MARC data elements themselves, and he suggests that the path forward is to begin with the requirements of bibliographic description (e.g. replacing the Anglo-American Cataloging Rules) and then create an encoding standard that provides more flexibility. Well, that's pretty much what is happening. It's just happening very slowly. It's definitely not happening in Internet-time.

In 1998, IFLA was developing FRBR (Functional Requirements for Bibliographic Records). FRBR is a conceptual model. The idea was to come up with a way to think about bibliographic description that focused more on the user's needs and then use that conceptual model to come up with a plan for replacing whatever needs replacing. RDA (Resource Description and Access) is the cataloging standard that is based on this conceptual model.

FRBR focuses on relationships. Prior to FRBR, a book was described both in terms of its content (author, publisher, year published) and its physical attributes (size, format, length). But that makes for a lot of duplication in our catalogs because there are many instances of things by the same author, publisher, and date (for example). It also doesn't take into account the relationships of things. And those relationships increasingly matter.

FRBR distinguishes between entities, attributes and relationships among entities. For example, George Eliot and Mary Ann Evans are entities and Middlemarch (the book, DVD, and ebook) are also entities. And all three of these entities have relationships that can be described with FRBR. Describing all these entities and relationships helps the user find related things, eliminates a lot of duplicate effort and creates a growing web of related resources instead of a clunky database full of single bibliographic records and their associated item records.

The conceptual framework of FRBR is much like the conceptual framework of the Semantic Web and Linked Data. Tim Berners-Lee describes the Semantic Web as "a web of data that can be processed directly and indirectly by machines" and Linked Data is the way to get to the Semantic Web. Berners-Lee proposes three simple rules behind the idea of Linked Data which I have simplified as:

1. Use URLs to name things.
2. When someone looks up a URL, provide useful information (using broadly adopted standards)
3. Include links to other URLs so they can discover more things.

My point is that the Semantic Web and Linked Data are also all about relationships. So, while we librarians are working on FRBR and RDA, the World Wide Web Consortium (W3C) is working on Resource Description Framework (RDF) which is one of the standards that could make the Semantic Web a reality. The fact that we are all focusing on relationships is good news. We appear to be on the right track.

However, while we are developing our new, state-of-the-art approach to bibliographic description, we are still using MARC in our integrated library systems and library service platforms. The web, in the meantime, has moved on to XML because it is a markup language that is both human-readable and machine-readable. With XML, it is actually possible to describe the relationships between things living on the web. XML is the way forward for the Semantic Web and it is also the way forward for libraries.

Enter BIBFRAME. Per the Library of Congress (LoC), "The BIBFRAME Initiative is the foundation for the future of bibliographic description that happens on the web and in the networked world." The goal of the Initiative is not only to replace the MARC format but also to take all aspects of bibliographic description, as well as data creation and exchange, into account as they do so. In other words, there are working on getting away from MARC by using FRBR/RDA. As long as the LoC aligns their work with the rest of the World Wide Web, we may have a positive path forward.

Even so, BIBFRAME has a long way to go and the process of getting from our MARC-based systems to a system that bears some relationship to the rest of the computing world will take some time. My experience of the library system marketplace is that it is a big ship that doesn't move easily. I'd like to think that library system vendors are following the BIBFRAME Initiative and eagerly planning all the great things that they'll make possible once there is an alternative to MARC. But sadly, I doubt this is the case. Library system vendors have a captive market. No other industry knows how to deal with MARC (and no one else wants to) so there is some advantage to the vendors of keeping it that way.

But let's think positively. What might happen if we were aligned with the rest of the world using RDA and RDF and XML and we're all about relationship – just like everyone else!

Our patrons could become another "entity" with relationships to our resources and our spaces and our staff. We might also have information in our library systems about our community entities. Our job might be to help weave together the relationships between various community resources, library resources, patrons and staff. The great libraries are increasingly engaging with the community. This goes beyond "outreach" where we take our physical "stuff" to people or try to lure them inside to use our "stuff." Community engagement is about creating relationships and connecting resources of various formats and types and our library system might actually - someday - facilitate what we are already starting to do.

In the meantime, we operate in disconnected worlds. We use the web. We use our catalogs. We engage our communities. But our work on the web and with our catalogs and in our communities isn't integrated. Plus, we are marginalized from the rest of the networked world. The longer this situation goes on, the less efficient we are, and the harder it will be to build relationships between our resources and the resources already available out there on the web.

We need software tools that make sense for our needs today while simultaneously connecting us and leveraging the capabilities of the web. We need to start focusing more on relationships and become part of the great weaving together of stuff based on those relationships. The more time we spend fussing with MARC records that no one else can use, the farther behind we get. The work of the librarian is to connect the user to the thing they need, and yet ironically, we are completely disconnected from the vast majority of things out there.

So let's agitate for library systems that leave MARC behind. Ask for support for BIBFRAME in your next ILS procurement and keep abreast of BIBFRAME development, attend webinars, and provide feedback. Let's make sure the process to replace MARC doesn't take another dec-

ade, and that, when it is done, we end up with something that really will help us do our jobs and participate with the rest of the online community.

Recommended Resources

Bartlett, Sarah. February 23, 2015. "Is there a library-sized hole in the internet?" [Interview with David Weinberger]. Available: http://www.researchinformation.info/news/news_story.php?news_id=1847.

Berners-Lee, Tim. 2006. Linked Data. Available: http://www.w3.org/DesignIssues/LinkedData.html.

Breeding, Marshall. 2015. Future of Library Resources Discovery [NISO White Paper]. Available: http://www.niso.org/apps/group_public/download.php/14487/future_library_resource_discovery.pdf.

Library of Congress. Bibliographic Framework Initiative. FAQ and other useful information available from http://www.loc.gov/bibframe/.

Lorenz, Andrea. (2011). FRBR simplified. This nine-minute YouTube video by Andrea Lorenz is a good starting point for learning more about FRBR. Available: https://www.youtube.com/watch?v=LPBpP0wbWTg.

Tillett, Barbara. (2011). "Keeping Libraries Relevant in the Semantic Web with RDA: Resource Description and Access." First appeared in *Serials*, Vol. 24, no. 3. (Nov. 2011).

Tennant, Roy. (2002). MARC Must Die. Available: http://lj.libraryjournal.com/2002/10/ljarchives/marc-must-die/#_