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Perspective on Catalogs

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My first experience with an electronic library catalog was a "dumb" terminal at the local library. I searched for the book The Wizard of Oz, and while I knew the author's name and the title, it remained frustratingly elusive in the catalog. With some experimentation, I discovered that my title search failed because I excluded "The" as the first word. And my author search should have been, "Baum, L. Frank" instead of "L. Frank Baum." At the time, I thought these were truly "dumb" computers with rules that were too stringent; I wondered how many people gave up in sheer frustration for not being able to find what they wanted.

Fortunately, our electronic catalogs have improved considerably since then, yet there is still room for improvement. For the next generation of catalogs, one thing is paramount: they need to be increasingly flexible to meet the changing needs of their communities.

Library catalogs should help patrons become better searchers. They need to predict errors, anticipate the needs of patrons, and offer alternative search strategies that yield additional and higher quality information. One way is to make the search process more interactive. It can be very difficult to articulate a complex question, which is often where librarians trump technology. A reference interview allows for quick feedback to occur between a librarian and patron, as clarifying questions and answers are shared. Catalogs could unobtrusively ask follow-up questions to help clarify the search, such as "did you mean this author or year?" As the search unfolds, any new search algorithm employed should be clearly labeled for patrons to view. In the process, patrons learn what information is useful and how search strategies are "phrased" through their search history.

Another good way for people and computers to learn is through mistakes. Some systems anticipate failed searches through spell check technology. A good example of a failed search is a query that has too many terms and would yield nothing, in which case the Boolean search automatically changes from "AND" to "OR" to broaden the results. While catalogs continue to evolve and failed searches are monitored, the technology should consistently analyze the results to learn about common problems. As data are compiled on recurrently failed searches, patterns emerge, and alternative search strategies could be recommended while the patron types. Some Web browsers, like Firefox 3.0, already use this technology.

As our languages and cultures change over time, it is important to include new words and phrases that our societies commonly use. Social tagging is one way to accommodate these changes in language. Social tagging can be a powerful resource for the library and an incredible way to include patrons. BiblioCommons (http://bibliocommons.com), is a new library-oriented "social discovery system" that allows patrons to tag records with keywords and comment on library materials. Similarly, LibraryThing (http://www.librarything.com) encourages users to tag books in their own collections and explore tags utilized by other people to discover new books. The new Orbis Cascade Alliance catalog (http://summit.worldcat.org) is another example that takes advantage of social tagging, in addition to allowing patrons to write book reviews.

Reviews by patrons may not seem important at first glance, but including them is an ingenious way to get patrons involved in your library and to gain valuable qualitative feedback about your collections. Since librar-
ies have traditionally relied on usage statistics for collection development, this kind of information from patrons should be coveted. Patrons may see reviews as an invitation, that libraries value their opinions and want their feedback. They may also see reviewing as a way to give back to society, to help others locate quality information. Book reviews will probably be more popular with public libraries whose patrons tend to read for entertainment, rather than academic library patrons that tend to read out of necessity.

Technology should unobtrusively suggest other materials, much like an electronic reader’s advisory. It should lead users to other books of interest. The catalog could list a few books from similar subject headings, nearby call numbers, or even commonly checked out library materials. For example, within the catalog record for “Harry Potter and the Goblet of Fire,” five specific magic or fantasy titles could be displayed as suggestions, not unlike Amazon.com. Catalogs already do this in a sense with subject headings; they efficiently groups hundreds of similar items together. Unfortunately, most users are overwhelmed by lists of subject headings. Casual users only want a few specific titles.

Much like an electronic reader’s advisory, patrons need improved current awareness systems to track their favorite authors and genres. It would be wonderful if patrons could login to their library account, identify their favorite authors/book series, and automatically be placed on a notification list when new books are published. This type of service would be another way to encourage patrons to participate in collection development.

Privacy issues arise as libraries make reader’s advisory and reviews available for patron use. In both cases, patrons could leave a trail of personal information about themselves. The New York Times recently ran a story on an upcoming study from the Carnegie Mellon University about people’s attitudes towards privacy (Stone 2008). It suggests that while people cherish the idea of privacy, they often let their guard down and provide information about themselves freely online. Libraries will need to consider what patrons want, in conjunction with privacy concerns, as these new technologies develop.

Libraries will also need to accommodate small mobile technologies, such as cell phones and personal digital assistants (PDAs). According to the 2007 Pew Internet Research Project survey, 62 percent of U.S. residents are a part of a “wireless, mobile population that participates in digital [non-voice data] activities away from home or work” (Horrigan 2008). Some technologies today, such as smart phones, provide full-featured Web browser that are much more interactive than the clunkier cell phone Web browsers. Software applications for these mobile devices are being released at an incredibly fast rate, including WorldCat.org’s recently-released WorldCat Mobile application (www.worldcat.org/mobile). Libraries should explore how a catalog interface can be built to make searching faster and easier to use with these on-the-go technologies. We also need to anticipate the type of digital content that

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people will want with these new devices, such as audio and streamed video.

Within shared consortial catalogs, it is common to run across a list of identical titles with slightly varying editions, media formats, special notes about donors, etc. It can be confusing for patrons to figure out which item they want. Let’s simplify the results for our patrons by consolidating local metadata into one general record that can be shared among consortia members, with the option of displaying local metadata at the click of a button.

Then there is the issue of searching for an author. Most catalogs still use the rigid format of last name, first name and middle initial. Catalogers use the strict standards for consistency, but it seems reasonable for a catalog to include the natural language form of an author’s name, such as “Joe A. Smith” in addition to “Smith, Joe A.” Some catalogs are capable of searching both forms, but this feature is often buried. Why not make this the standard author search, and make the traditional (stricter) author search the advanced option?

Patrons want a convenient one-stop center that allows them to search for a variety of information and to access it quickly either electronically or in print. Traditional catalogs have been wedded to the book, but patrons want to search for everything a library has to offer. One should be able to search for not only books, but for movies, journal articles, current news, and more through one interface. WorldCat.org for example is able to search for an increasing array of formats such as articles and Internet resources, but has issues with limiting to local collections.

These features are a step in the right direction, yet there is still a long way to go for all catalogs. It is exciting to see many of these issues being addressed in the latest platform releases. By becoming more interactive, catalogs can adapt more fluidly to the changing needs of patrons. Let’s meet the patrons where they are (on-the-go), accommodate how they search, utilize the language they commonly use, and provide the formats they need.

**Bibliography**
