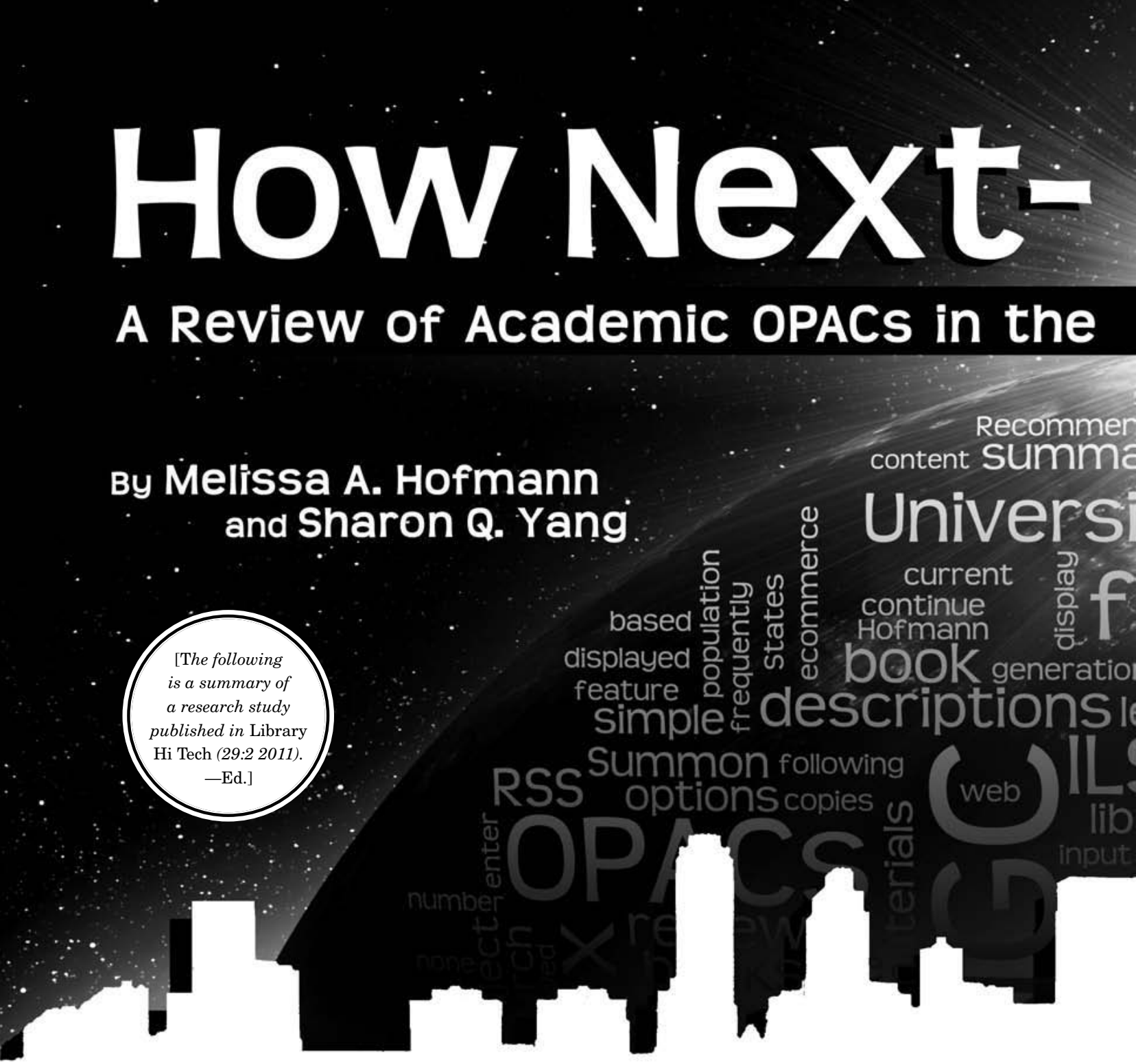
How Next-

A Review of Academic OPACs in the

By Melissa A. Hofmann and Sharon Q. Yang



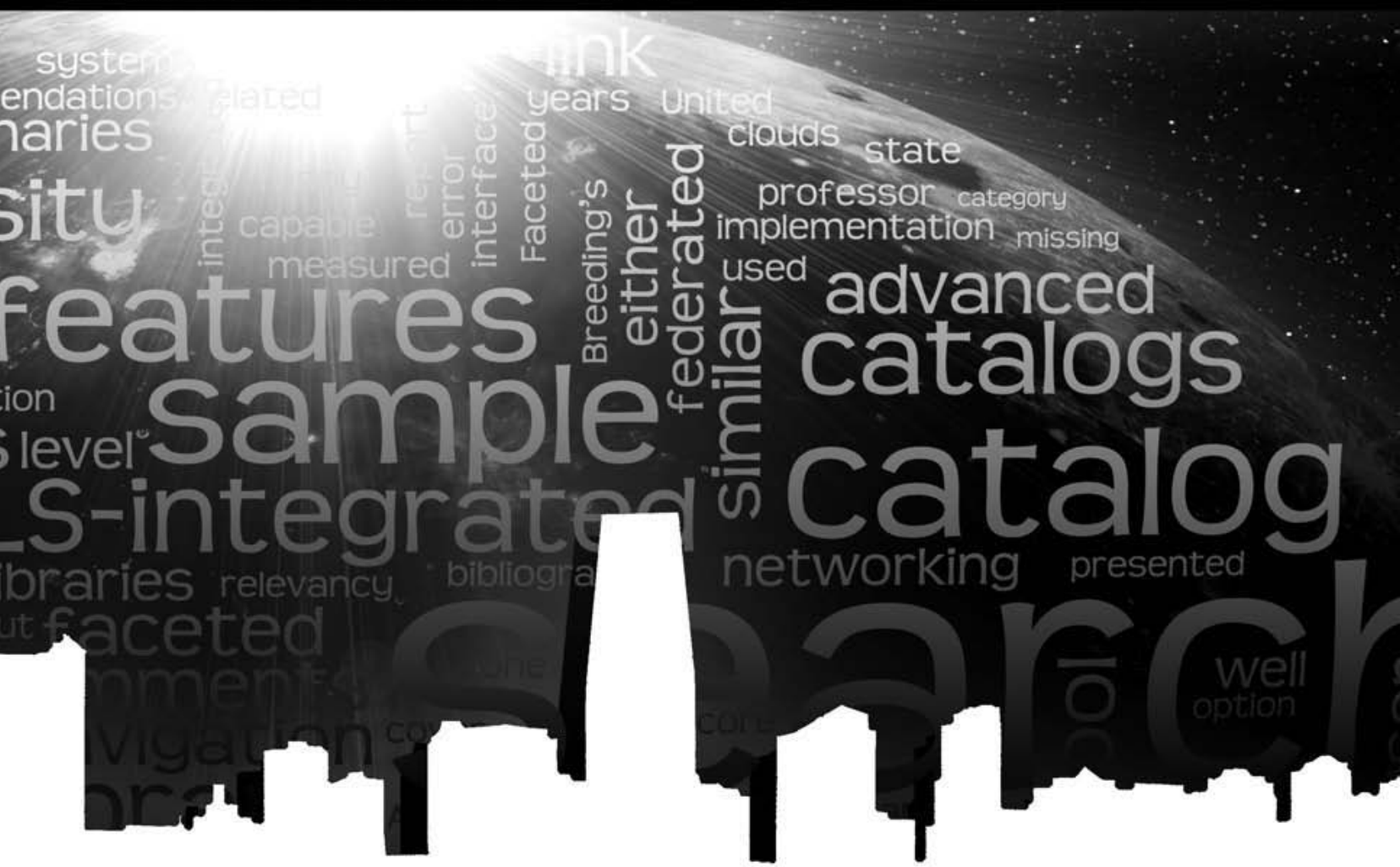
[*The following is a summary of a research study published in* Library Hi Tech *(29:2 2011).* —Ed.]

With vendors seeming to abandon their ILS-integrated OPACs in order to develop and promote their discovery tools, we were curious as to just what was the current state of affairs for academic libraries in the quest for the touted next-generation catalog.

As a concept, the next-generation catalog (NGC) is not new to librarians, who have been wishing for better OPAC interfaces for their integrated library systems (ILSs). The NGC has been the focus of discussion for more than 5 years now, from the 2006 report of the implementation of Endeca at North Carolina State University, to Marshall Breeding's 2007 issue of *Library Technical Reports* dedicated to the NGC, to Roy Tennant's repeated "lipstick on a pig" criticisms of superficial OPAC improvements. Several research articles have also been published that measured NGC features in online catalogs (including one of our own), but they have been limited in scope.

Gen R U?

United States and Canada



With vendors seeming to abandon their ILS-integrated OPACs in order to develop and promote their discovery tools, we were curious as to just what was the current state of affairs for academic libraries in the quest for the touted NGC. Using the 12 NGC features described later and compiled from both Breeding's report and a presentation by Peter Murray, we set out to measure on a large scale how individual OPACs measured up on these features.

We gathered data from 260 libraries in the United States and Canada—about 10% of the population—randomly selected from Peterson's *Four-Year Colleges,* 2010 edition. Accounting for consortial catalogs and multiple interfaces in use simultaneously (i.e., when the "classic" ILS-integrated OPAC and a discovery tool were both presented as the library catalog), there was a potential for 273 catalog interfaces. With missing data from 40 institutions (15% of the sample)—these comprised instances where no OPAC was available from the institution's website, as was the case with many for-profit institutions; rabbinical colleges with no web presence; and OPACs that consistently timed out—233 unique interfaces were analyzed. From September 2009 through July 2010, we examined each interface individually, based on its own merit and local implementation, to see how it ranked. With a confidence level of 95%, our numbers

can be extrapolated to the whole population with a margin of error of ±3.

An interesting and unexpected result of the research was discovering the concurrent use of ILS-integrated OPACs and discovery tools. For example, Michigan's Grand Valley State University offers three options to search its library catalog: Summon, Encore, and its classic III catalog, with the Summon search box offered on every library webpage. Out of 260 institutions, 179 (69%) offered only their ILS-integrated OPAC. Thirty-five (14%) offered a discovery tool plus their "classic" catalog. Only six (2%) presented a discovery tool as the only option. Our research suggests that those offering a discovery tool either find it expedient or necessary to continue access to their legacy catalog. In fact, some discovery tools, such as Innovative Interfaces, Inc.'s Encore, *require* the legacy catalog for anything but a simple keyword search.

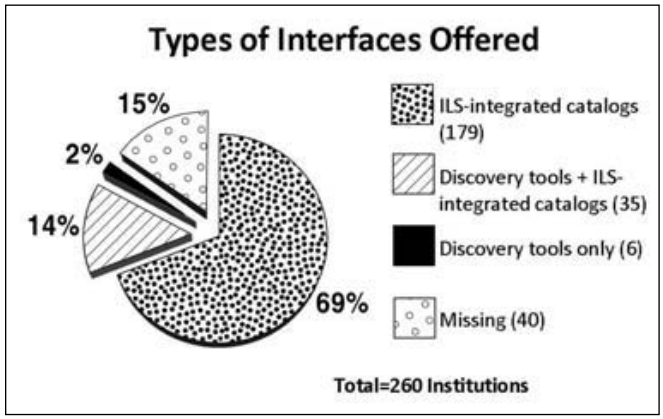


Figure 1: Types of interfaces offered

Figure 2: Grand Valley State University Libraries catalog search page

The 12 NGC Features

1. Single point of entry for all library resources. The library catalog should be a single search or federated search for all library materials, including pointers to the articles in electronic databases, as well as records of books and digital collections.

Only 4% of catalog interfaces included article-level access. Only 3% included access to full text at the article level and journal-title level as well as ebooks. As a feature, federated search is still largely missing.

2. State-of-the-art web interface. Library catalogs should have a modern design similar to ecommerce sites, such as Google, Netflix, and Amazon.com.

We determined that only 50% of the interfaces could be considered state of the art.

3. Enriched content. Library catalogs should include book cover images and user-driven input such as comments, descriptions, ratings, and tag clouds. The enriched content can be from either library patrons, commercial sources, or both.

About 46% of the interfaces had cover images displayed. Nearly one-third of the interfaces offered reviews, extended summaries, tables of contents, and excerpts. Twelve percent had tags and tag clouds, 10% had ratings/rankings, 3% had descriptions, and 2% had comments.

4. Faceted navigation. Library catalogs should be able to display the search results as sets of categories, such as subject terms, dates, languages, availability, formats, locations, etc. Faceted navigation is the ability to narrow down a search by choosing from these categories.

Only 13% of interfaces offered faceted navigation; 83% of these were discovery tools.

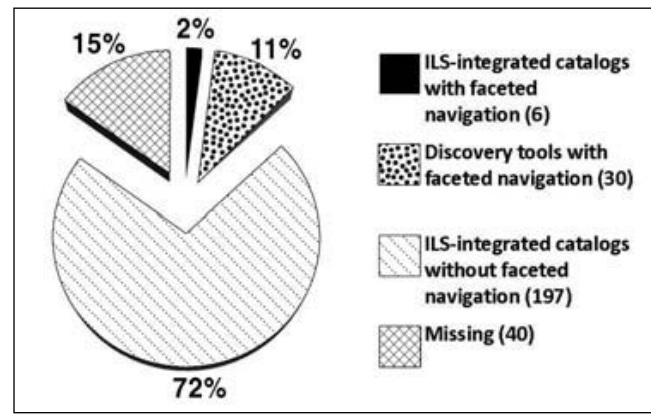


Figure 3: Faceted navigation

5. Simple keyword search box, with a link to advanced search on every page. The NGC starts with a simple keyword search box that looks like that of Google or Amazon. A link to the advanced search should be present. This simple box should appear on every page of the OPAC.

Only 26 interfaces (9%) started with a Google-like search box and maintained it throughout. Two hundred seven interfaces

(76%) offered a variety of options, such as starting with either a basic or advanced search, dropping the search box on later screens, and/or providing search options next to the search box.

6. Relevancy. Circulation statistics and books with multiple copies should join the relevancy results criteria. More frequently circulated books indicate popularity and usefulness, and they should be ranked higher on the top of the display.

No OPACs or discovery tools in our sample appeared to incorporate circulation statistics or multiple copies into relevancy ranking.

7. Did you mean ... When an error appears in the search, the OPAC should spell-check—that is, it should pop up the query with the correct spelling or suggest a list of similar terms so that users can simply click on one of them to get the search results.

Only 33% of interfaces provided spell-checking; 41% did not, leaving users with no assistance. However, 11% used language to elucidate dropping a user into a list of headings or titles to browse, such as "Item not found—perhaps the following list will help" or "No matches found: The closest subject match appears below."

8. Recommendations/related materials. The NGC should recommend books for readers in a similar manner as Amazon or other ecommerce sites, based on transaction logs. This should take the form of "Readers who borrowed this book also borrowed the following …" or as a link to "Recommended Readings."

No interfaces were found to have this feature. However, 34% used patron-friendly language with existing functionalities, such as hyperlinked name and subject headings in records (searches and browses) and call number browses: "Browse similar item"; "Find more about this author or topic"; "Nearby items on shelf"; "More like this."

9. User contributions. User input includes descriptions, summaries, reviews, criticism, comments, rating and ranking, and tagging or folksonomies.

About 14% of the OPACs in the sample allowed users to contribute to the content. To be more specific, 11% of interfaces allowed user tagging, 7% allowed user reviews, and 4% allowed user rating/ranking. Only 1% allowed users to enter "comments," while none allowed users to enter "descriptions" or "summaries." Perhaps these categories are subsumed under the category of "reviews."

10. RSS feeds. Really Simple Syndication (RSS) is a way to brief users about frequently updated content on a website. RSS feeds can be configured to send things such as new book lists, top-circulating book lists, or news to users who subscribe.

Only 3% of interfaces provided RSS feeds.

11. Integration with social networking sites. When a library's catalog is integrated with social networking sites, patrons can share links to library items with their friends on social networks such as Twitter, Facebook, and Delicious.

Only 8% of interfaces allowed for social networking.

12. Persistent links. NGC records contain a stable URL capable of being copied and pasted and serving as a permanent link to that record.

Only 23% (63 interfaces) displayed persistent links to bibliographic records.

Conclusion

Our study confirms that the NGC features in legacy OPACs are cosmetic and minor. No ILS-integrated OPAC or discovery tool possessed all 12 NGC features, as none was capable of No. 6 (Relevancy) or No. 8 (Recommendations/related materials). Only 3% of the interfaces in the sample had seven or more features of the NGC, and these were all discovery tools, with instances of WorldCat Local and Summon—both of which provide some degree of federated searching—having the most features. Discovery tools also won in the category of faceted navigation: 83% of the faceted interfaces in our sample were discovery tools. The only ILS-integrated OPACs in our sample that offered faceted browsing were Koha, Auto-Graphics, and Polaris.

At the time of our study, only 16% of our sample was using discovery tools. This number appears to be increasing: While recently spot-checking our sample for updates, we found new implementations of discovery tools. We plan to follow up on this data, as well as chart how many continue to use their discovery tools along with their classic catalogs, whether out of necessity for advanced searching or as a transitional option.

For more details, please refer to our article: Yang, S.Q. & Hofmann, M.A. (2011). "Next generation or current generation? A study of the OPACs of 260 academic libraries in the United States and Canada." *Library Hi Tech* 29.2 (forthcoming). ●

Melissa A. Hofmann, *assistant professor i-librarian, is bibliographic control librarian at Rider University, where she is also the liaison to the English Department and the Gender & Sexuality Studies Program. She can be reached at mhofmann@rider.edu.*

Sharon Q. Yang *(yangs@rider.edu) is associate professor and systems librarian at Rider University Libraries. She received her M.S. in 1988 and D.L.S. in 1997, both from the School of Library Service, Columbia University. She has been working in the library automation field for 21 years.*