

Media Finders: Improving the Browsability of Media Collections via the OPAC

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ABSTRACT. The Ball State University Libraries' collections of audiovisual materials are unclassified and kept in closed stacks. Users must search the OPAC to find these materials, which is difficult for users who don't know what sorts of searching options are available or what materials the libraries have. The libraries have developed a series of Web forms that provide guided search options for various types of media, including feature films, non-classical music, and spoken recordings. The Media Finders provide better exposure for and more convenient searching of subsets of library materials. This article describes the development of the Media Finders, their benefits and drawbacks, and background information on the technical elements and searching strategies used by the Media Finders.

KEYWORDS. OPACs, online catalogs, library catalogs, usability, browsability, browsing access, cataloging, audiovisual media, video recordings, motion pictures

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INTRODUCTION

The Ball State University Libraries have a long history of collecting media in many formats. The Educational Resources Center's collection includes films, videos, audiobooks, educational software, posters, educational kits and games, models and other three-dimensional artifacts, and children's books, among other formats. The Music Listening Center's collection contains compact discs, LPs, and a few audiocassettes of music of all types, including classical, jazz, pop, rock, and world music. All of this material has been cataloged with a greater or lesser degree of completeness (some of the older materials have fairly minimal records) and is accessible through the libraries' Sirsi iLink OPAC interface. However, due to space limitations, most of the non-book materials are kept in closed stacks and have been shelved by accession number. Because the materials are not classified and are not on open shelving, users *must* search the OPAC to locate these materials. This usually works reasonably well for known-item searching and searches for material related to specific topics (or at least is not markedly worse than the level of service provided via the OPAC for other materials). However, it fails to provide effective browsing access to general topics (e.g. "What philosophy videos do you have?") or to items such as feature films where attributes that are important to many users lie outside of traditional bibliographic access points and are not easily searchable by the uninitiated or perhaps are not in the bibliographic record at all. In order to improve access to some of these materials, Ball State University Libraries have developed a series of Web forms, called Media Finders, which provide guided search options that enhance the ability of users to browse specific types of media and search by media-specific characteristics. The Media Finders can be found at <http://cms.bsu.edu/Academics/Libraries/ResearchTools/MediaFinders.aspx>.

THE PROBLEM OF BROWSING ACCESS IN THE OPAC

Andrew Pace (2004) has famously bemoaned the current state of OPACs and begged, “please, please someone just give me an OPAC with better indexing and searching.” There has recently been renewed interest in improving the OPAC’s user interface (Pace 2005; Tennant 2005), as well as some discussion of the importance of browsing access (Dempsey 2005). Some experimental user interfaces that attempt to improve browsability in bibliographic databases include RLG’s RedLightGreen (<http://www.redlightgreen.com>), OCLC’s Fiction Finder (<http://www.oclc.org/research/projects/frbr/fictionfinder.htm>), OCLC’s DeweyBrowser (<http://www.oclc.org/research/researchworks/ddc/browser.htm>), and Medialab Solutions’ AquaBrowser (<http://www.medialab.nl/>). Certainly, North Carolina State University’s recent release of their new online catalog using Endeca’s facet-based navigation represents a big step for OPAC usability and browsability. There has also been discussion of the possible role of the International Federation of Library Associations (IFLA)’s Functional Requirements for Bibliographic Records (FRBR) in improving the usability of OPACs, particularly in terms of display of and navigation within result sets for prolific authors and their works (Bowen 2005; Yee 2005). VTLIS was the first library vendor to implement a FRBR-inspired OPAC display (<http://web.archive.org/web/20071027125029/http://www.vtls.com/Corporate/FRBR.shtml>).

OPACs have not generally done a good job of providing browsing access. As Borgman (1996) notes, OPACs are based on “query design models” in which the user is presented with a box and forced to construct a query. She points out that “query matching is effective only when the search is specific, the searcher knows precisely what he or she wants, and the request can be expressed adequately in the language of the system (e.g. author, title, subject headings, descriptors, dates).” With physical materials in a collection with open stacks, lack of browsing

access through the OPAC is somewhat compensated for by arrangement of materials via a classification scheme. Physical, classified arrangements do have some limitations. The placement of physical items in a classified arrangement requires that each item go in only one place and that each topic can have no more than two neighbors; therefore, some choices have to be made, especially for interdisciplinary works. Multi-dimensional access to materials in a classified arrangement is possible through a classified catalog, but these are not common in North America. Although typical classified arrangements can help with topical browsing and sometimes with genre or author browsing, they do not help with multi-dimensional browsing nor with browsing via most non-topical characteristics -- what Doty and Bishop (1994) referred to as the "tyranny of topic." A virtual browsing interface does not have these limitations and is capable of providing access to multiple characteristics simultaneously.

EVOLUTION OF BALL STATE'S "FICTION" VIDEO FINDER

Although most of the videos in Ball State's collection are documentaries and educational programs (approximately 12,500 titles), we do have a small collection of feature films and television programs (approximately 2,500 titles). The first Media Finder was developed as a means to make it easier for average users to find appropriate videos from this collection when they do not have specific titles or names in mind. The naïve patron who wants to browse our OPAC for a video to watch on Friday night is likely to have a rough time of it. Certainly, the user can search by title and by name, and by genre if the movie is in a genre that has an authorized subject heading, the heading has been assigned correctly to the right set of records, and the user can figure out the right heading or headings. Does the user want "children's films," "television programs for children," or "video recordings for children," or all of these and how easy is it for a user who finds one of these subject headings to infer that the others exist? Although the Library

of Congress' *Subject Cataloging Manual: Subject Headings* (1996) requires the use of the subject heading "feature films" on all fiction films over 40 minutes in length and use of this search term is sometimes recommended to patrons as a way to get at popular movies, this is often of limited usefulness. Even if the library has consistently used this heading (and many of our oldest records for feature films did not; some even lacked any subject headings, as with traditional records for fiction), it is not easy for the average patron to intuit this usage. In any case, if the library's feature film collection is of any size, searching just the heading "feature films" without any additional search terms or limiters is likely to leave the user with a larger-than-desired result set to wade through and no useful way to organize or narrow the hit list.

Ball State's first Media Finder (Figure 1) attempts to help users find fiction videos more easily. It provides a number of guided search options within the set of all fiction videos, as defined by a background search for the subject headings "feature films" (which we have applied somewhat more broadly than it is often construed in order to include fiction television programs in our results) and "short films" (which we have used only for fictional or artistic works) and a limiter to the videorecording format. A search box is included, but the strength of the search interface lies in the easy access it provides to predefined search options as building blocks for browsing. Checkboxes are provided for the major genres for which Library of Congress subject headings (LCSH) exist. Although many minor genres are not included, the form provides an easy way for users to access the most commonly sought genres. The behind-the-scenes search collocates film and television headings, i.e. checking comedy searches both "comedy films" and "television comedies." It also provides a category for crime films, which does not have its own subject heading, by bringing together the terms that LCSH uses instead, such as "police films," "gangster films," and "film noir." Options are provided for limiting the search to videos that are

captioned or audio-described, are in a specific format (DVD, VHS), have won a specific award, were originally released in a given range of years, were produced in a certain country, or are set in a certain place or time period.

The screenshot displays a search interface for fiction video media. At the top, there are two buttons: "Find Videos" and "Clear Form". Below these are checkboxes for "Captioned" and "Audio-described". The "Release Date" is set to a dropdown menu showing "2000-2004". To the right, there are dropdown menus for "Format" (set to "DVD only"), "Awards" (set to "None selected"), and "Origin" (set to "Any country").

The "Genre/Form" section is a large grey box containing a grid of checkboxes. The checked options are "Animation" and "Foreign". Other options include Action & adventure, Adaptations, Avant-garde, Biographical, Black & white, Children/Family, Comedy, Crime, Epic, Fantasy, Historical, Horror, Musical, Mystery, Romantic comedy, Science fiction, Shorts, Silent, Sports, Spy, Thriller, TV series/movies, War, and Western.

The "Setting" section includes dropdown menus for "Place" (set to "Anywhere") and "Time" (set to "Any").

At the bottom, there is a "Search for:" label followed by an empty text input field, the word "as", and a dropdown menu set to "Keyword".

[FIGURE 1 Fiction Video Media Finder sample search]

As previously noted, OPACs generally do not provide good support for browsing nor for structured searching by potential access points other than the traditional author, title, and subject, and publication dates. In part this is because not all of the data is consistently entered or the data is not entered in a way that is amenable to easy retrieval. For example, because the standard data in a library catalog record emphasizes the date of publication of the item in hand, this is the date that is required and is generally available for searching and sorting in a standard OPAC interface.

However, most patrons are probably more interested in the fact that the movie *Casablanca* was originally released in 1942 than that the particular DVD version that the library has was published in 2003. Most full cataloging records would include the date of the original production in a note, but the information is not required in the way that a date of publication is required and the original release date of a movie is usually not readily available for limiting or sorting of results. Through the Media Finders, users can easily take advantage of a librarian-constructed search that looks for a year in combination with certain other phrases, such as the “motion” in motion picture, in specific note fields in order to limit their search to recent releases or early films. In most OPACs, it is not very easy to do this kind of search, but from the Media Finder interface, choosing 2004-2005 under the release date option brings up recent productions without bringing up 2005 video re-releases of older productions.

The little recent research (Ho 2001; Hume 1995) on what users want to be able to search for in video records suggests that users are interested in access points beyond titles, authors, and topical subjects. Both studies also found that many users did not realize that they could search for film genres in the OPAC’s subject index. For feature films and television programs, potentially important access points that are not titles, authors, or topical subjects include the genre, the year of original production, theatrical release or broadcast, the country of production, the original language, and physical characteristics such as VHS, DVD, widescreen, and full-screen. Except for genres, which have traditionally been included as subject headings on film and video records, none of these are generally accessible as controlled access points in the OPAC. The inadequacy of browsing access is also caused by general deficiencies in most OPAC searching interfaces and displays, which are not good at helping users refine searches and do not

provide much guidance on improving searches, such as including authority file cross-references in keyword searches in a useful way.

Many libraries have found that OPACs do not provide good access to feature film collections or many characteristics of audiovisual materials in general. Numerous libraries provide instructions on their Web sites for searching the OPAC using the subject heading “feature films” or other genre headings, as well as format limiters. However, it is likely that users would prefer an interface that did not require them to read instructions or learn specifics of library cataloging procedures. Some libraries provide links which produce a list of “feature films” or other videos with some characteristic in their catalog. These are convenient, but one-dimensional. Some libraries add general categories or broad subject headings to their non-fiction videos to increase browsability. Some libraries appear to maintain databases of media materials separate from the OPAC, sometimes using data extracted from the catalog, which is accessed via a separate locally-developed interface. For example, Bowen (2005) describes a FRBR-inspired interface for browsing videos (available at <http://library.rochester.edu/index.cfm?page=videos>) and Cummins (2006) notes that Lewis and Clark College has developed a Web application for browsing videos (available at <http://library.lclark.edu/dynamic/videoscds/videos.htm>). This approach gives more flexibility in interface design, but if data is also maintained in the OPAC, it can potentially increase maintenance time and lead to data synchronization problems. This approach also requires more resources for development and maintenance.

Ball State’s Media Finders go a step beyond a hard-coded, one-dimensional search hyperlink without requiring the additional steps of maintaining the data in more than one place or developing a new interface to display search results. The Media Finders use the existing, and therefore always current, data in the library catalog to dynamically generate search results, which

appear in our normal OPAC interface (Figure 2). Using exported data in a separate database with a customized interface is a potentially more powerful solution than the Media Finders, but the Media Finder solution requires less technical expertise, as well as less development time. The Media Finders were inspired by a summer 2003 posting on the Sirsi Web forums by Steve Hunt of Santa Monica Community College. He posted a link to a Web form and its supporting PERL code that he had developed in order to easily generate hard-coded dynamic search links that could be placed in librarian-created Web pages. The author realized that the same process could be used to create a form for end users that would immediately run a dynamic search in the OPAC rather than generating a link for later use. The Media Finders are essentially dynamic pathfinders that provide easy access to what seemed to be the most commonly desired search options for which searchable data existed in our records or for which relevant data could be identified and added with a reasonable amount of effort.

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Search Results

"((feature OR short) films{su} AND ((foreign) (films OR television){su}) AND animated (films OR television){su} AND (2000 OR 2001 OR 2002 OR 2003 OR 2004) (motion OR broadcast OR television){500 518}) NOT (^183 AND video visual{su})" search found 2 titles.

# 1	DVD VIDEO 787	2003
<input type="button" value="Details"/>	Belleville rendez-vous [videorecording] = The triplets of Belleville	
	Brunner, Didier.	
<input type="button" value="Mark"/>	Educational Resources Center, Bracken Lower Level West	
# 2	DVD VIDEO 373 DISC 1/2	2003
<input type="button" value="Details"/>	Spirited away [videorecording]	
	Miyazaki, Hayao, 1941-	
<input type="button" value="Mark"/>	Educational Resources Center, Bracken Lower Level West	

[FIGURE 2. Fiction Video Media Finder sample search results]

BENEFITS OF THE MEDIA FINDERS

The Media Finders provide a number of benefits to users.

1. Help with the “blank screen problem”

Most OPACs present users with a search box and require users to type in search terms in order to find anything. If users are not quite sure what they want or what the library might have, that can be a barrier. The Media Finders give users some idea of what the library has. The user doesn't have to come up with search terms out of thin air nor do users have to understand cataloging rules and standards.

2. Improved browsing access

The Media Finders release the user from the tyranny of the linear. No physical browsing arrangement allows multi-dimensional browsing, but the Media Finders make it easier to browse by multiple aspects of an item, e.g. a 1956 foreign comedy can be browsed as part of the category of foreign comedies released during the 1950s.

3. Better access to targeted subsets of materials in the OPAC

Because the category or categories of materials the finder will search is set up in advance, the user is guaranteed to get higher retrieval and precision. It is true that in most OPACs, a user can set some limits, such as by format, but the Media Finders can set more complex and accurate boundaries than those likely to be constructed by average users. The Media Finders are also able to more easily incorporate search options and limiters, such as captioning of videos, that are specific to a given format.

4. Fuller use of the information in catalog record

There is a lot of information in the bibliographic record that could be useful for searching, but most users do not have either the search skills or the inside knowledge necessary

to construct the search strings to pull this information out. Through the Media Finders, we can make such information into access points that are easy for users to take advantage of.

5. Automation of complicated or lengthy searches

Long searches, such as a search for Latin music subject headings

“(latin jazz OR salsa OR merengues OR mambos OR tejano OR tangos OR reggae OR (popular (caribbean OR america))){SU}”

or complicated searches, such as this search for 2000-2004 film and video productions

“(feature OR short) films{su} AND (2000 OR 2001 OR 2002 OR 2003 OR 2004) (motion OR broadcast OR television){500 518}”

are programmed in advance for the user, who only has to check a box or select an option from a drop-down menu. Even for librarians who are familiar with the data to be searched and comfortable constructing complicated Boolean searches, these kinds of search strings are tedious to produce.

DRAWBACKS TO THE MEDIA FINDERS

On the other hand, the Media Finder approach does have several significant disadvantages.

1. Frequency of empty result sets

Although the ability to combine facets is a strength of the Media Finders, the lack of ability to iteratively refine and manipulate search results and the high likelihood of getting zero search results if too many options are selected are major weaknesses. Making fuller use of facets based on structured metadata in combination with appropriate interfaces is one way to improve the effectiveness of online browsing in bibliographic databases. With the Media Finders, users have to guess at what combinations of options actually lead to results and there are many combinations that produce zero results. A good example of the possibilities of iterative, faceted

browsing is the Flamenco Search Interface Project (School of Information Management and Systems, University of California, Berkeley). In this interface, users are able to see their options up front and they are prevented from retrieving zero result sets because they choose options sequentially and cannot choose a particular combination of options that does not exist in the dataset. In this approach, the categories are also dynamically maintained, whereas with the Media Finder approach, only the data is automatically updated and it is necessary to manually add search categories when these first occur in the library's database and to remove them when they are no longer applicable.

2. Limitations of Web forms

Some things are difficult to express in terms of a Web form. For example, it is not always clear to users whether checking multiple genre boxes is going to generate a Boolean AND or an OR search. Most of the finders default to an AND search (and this is made explicit in the instructions, should any users actually read them), as this seems to work better in most cases. However, with the Non-Classical Music Finder, we ran into significant situations in which the better choice varied. If users want Christian rap, they need to search for Christian AND rap; however, if users want gospel and soul, they probably want gospel OR soul, not just those few CDs that happen to have both subject headings. We ended up giving users the option to use either the Boolean operator AND or the operator OR for the non-classical music genre search and tried our best to make the option clear by phrasing it in terms of looking for items that include ALL or ANY of the selected genres. In general, the more complex the search options provided, the more difficult it is to express them clearly in a Web form.

3. Usability issues

Some usability issues stem from the lack of integration of the Media Finders and the OPAC. When users run a Media Finder search, the results are presented entirely in our standard OPAC interface. We have chosen to open a new browser window to display the search results. In order to go back to the Media Finder to do another search, the user has to close the search results window. The alternative would be to present the results in the same window as the Media Finders. However, as users are likely to look at various individual records or browse to different pages in the results set, they would likely have to hit the back button quite a few times or go back a number of pages in their search history to return to the Media Finder search page. There is a way to click from a link to “other resources” in our OPAC to the Media Finder home page, but this is not likely to be obvious to many users and still requires a number of clicks. Another advantage of using a new window to present the search results is that when users return to their initial search page, they can modify their current search as well as clear the form and start over. It seemed to us that the ability to modify existing searches was important, especially because one of the most annoying things about our Sirsi OPAC, especially for users who frequently use limiters, is that the interface automatically clears the limiters after each search and users have to reselect their limiters over and over. However, because the search results do not behave the way users expect standard search results pages to behave, this does cause confusion for some users.

Frames could provide a way to better integrate the Media Finder search page and the OPAC results page. By having a top frame with options to perform a new Media Finder search or modify an existing one while presenting the search results in the OPAC interface in the bottom frame, the results could be presented in the same browser window and users would have clear-cut navigational options.

TECHNICAL CONSTRUCTION OF BALL STATE'S MEDIA FINDERS

The Media Finders are comprised of three elements.

1. Web form

This is an ordinary HTML Web form constructed of standard elements such as drop-down menus, check boxes, radio buttons, and text boxes. The Web form provides the user with a set of predefined options, as well as a free text search box.

2. CGI script

This is a short program which takes the output from the Web form and converts it into a search URL. The Web form only outputs a series of variables and values such as “movie genre=‘western’” and “captioned=‘yes.’” The CGI script performs basic text processing to string the user’s chosen search terms together with the right Boolean operators and correctly-placed parentheses to construct a URL that will execute the desired search. The CGI script could be written in a variety of programming languages. Ball State’s Media Finders currently use ASP, but the early drafts used PERL scripts. A simplified example of Ball State’s Fiction Video Media Finder HTML form and ASP script can be found at <http://pages.uoregon.edu/kelley/mf/>.

3. Search URL

This is a dynamic URL that will search the OPAC using the search options and terms that the user has selected. For example, a URL that would search Ball State’s OPAC for captioned Westerns is:

```
http://liblink.bsu.edu/uhtbin/cgiirsi/x/SIRSI/0/5?searchdata1=((feature+OR+short)+films{su})+AND+((western)+(films+OR+television){su})+AND+(video+hearing){su})&item_2cat=VIDEO&sort_by=TI
```

In the URL, the part before the question mark stays the same for all searches and includes the location of Ball State's OPAC server, as well as the fact that the following search will be a keyword search. The part following the question mark communicates the options that the user has chosen, as well as some standard limiters and options that are included in all searches from a given Media Finder. In this case, the standard parts of the search limit the results to videos that have either the subject heading "feature films" or the heading "short films." Some older browsers truncate URLs at the first space, which would prevent the complete search from being read if spaces were included between the search terms. Therefore, these spaces are replaced with "+" symbols in the search URL. When the URL is opened, the "+" symbols will be interpreted as spaces. The "{}" notation is part of Sirsi's syntax for specific keyword indexes. In the example above, {su} is the general subject keyword index, but in other searches we also make extensive use of the ability to limit our search to specific MARC fields e.g. {500} for searching a note in a 500 field.

SEARCH STRATEGIES FOR DEVELOPING MEDIA FINDERS

In order to set up the search options, it is necessary to be familiar with the collection being searched, the characteristics that users are interested in, where and how that information appears in the bibliographic record, and standard and local cataloging policies, both past and current. It is also necessary to understand effective search strategies and Boolean searching. Familiarity with indexing policies and search strategies in the local OPAC is essential. For example, Sirsi has an implicit SAME operator so in our searches, when there is no operator between terms, it is implied that the terms will be in the same MARC field. It is also necessary to know the syntax for constructing a URL that will search the OPAC.

In order to construct an effective Media Finder, it is necessary to identify a subset of the catalog that could benefit from this type of browsing access and to come up with a broad limiter that is an accurate search string that can be used to limit all searches to the desired subset of materials. It is also necessary to identify the characteristics that are most commonly wanted by users and find out if the data is in the catalog and is in a form that is sufficiently consistent and accessible for use in information retrieval. If the data is already in the catalog in retrievable form, construct the searches. If the data is not already in the catalog in retrievable form, it will be necessary to decide if it makes sense and is practical to add the data, to modify existing data, or to change the catalog's indexing policies to make the data retrievable.

OVERVIEW OF BALL STATE'S MEDIA FINDERS

Eight Media Finders have been created at Ball State University Libraries and more are in development. Those that probably have the widest applicability are the Media Finders for "fiction" videos and non-classical music, as these materials are held by many libraries and they are also relatively easy to implement with existing data if the cataloging has been reasonably good in the past. The first Media Finder we created was for features and dramas on video. This category was chosen because there were a number of obvious ways to provide enhanced access to information that was not easily accessible through our standard OPAC interface. Most of the information that this Media Finder retrieves against was already in our existing records. We did do some targeted enhancement and clean-up of records. For example, we added information on the country of origin to records for non-U.S. productions. We also added a general "foreign films" subject heading to these videos in order to create a check box for searching all foreign films, as this was the most commonly requested enhancement to our original form.

The Non-Classical Music Finder (Figure 3) works entirely off of standard Library of Congress subject headings and our OPAC's format limiters. Most of the options are musical genres, such as rock, pop, country, and jazz, which are searchable by decade where this option is included in LCSH. Some topical searches, such as wedding music or drinking songs, as well as the ability to search world music by country, are also provided. These searches are for the most part easier to conduct in the regular OPAC interface than many of the searches run by the finder for videos, as they are primarily subject keyword searches. However, the Media Finder provides an easy overview of the most popular options, eliminates the need to determine the correct LCSH term (i.e. it is not necessary to know that the LCSH for movie soundtracks is "motion picture music"), and brings together some similar subjects in a single category (e.g. various subject headings for musicals and show tunes are grouped together in one search option).

Format: All sound recordings

Search for items containing **ALL** **ANY** of the selected genres.

Rock: <input type="button" value="Select decade"/> <input type="button" value="v"/>	Jazz: <input type="button" value="Select decade"/> <input type="button" value="v"/>
Pop: <input type="button" value="Select decade"/> <input type="button" value="v"/>	Country: <input type="button" value="Select decade"/> <input type="button" value="v"/>

<input type="checkbox"/> Big band	<input type="checkbox"/> Heavy metal	<input type="checkbox"/> Ragtime
<input type="checkbox"/> Bluegrass	<input type="checkbox"/> Hymns	<input type="checkbox"/> Rap
<input type="checkbox"/> Blues	<input type="checkbox"/> Jazz vocals	<input type="checkbox"/> Rhythm & blues
<input type="checkbox"/> Chants	<input type="checkbox"/> Latin pop	<input type="checkbox"/> Show tunes/Musicals
<input type="checkbox"/> Children's	<input type="checkbox"/> Movie soundtracks	<input type="checkbox"/> Soul
<input type="checkbox"/> Christian contemporary	<input type="checkbox"/> New Age	<input type="checkbox"/> Spirituals
<input type="checkbox"/> Folk (American)	<input type="checkbox"/> Patriotic	<input type="checkbox"/> Swing
<input type="checkbox"/> Gospel	Topical: <input type="button" value="None selected"/> <input type="button" value="v"/>	
World: <input type="button" value="No country selected"/> <input type="button" value="v"/>	Other genres: <input type="button" value="None selected"/> <input type="button" value="v"/>	

Search for: **as**

Sort results by Main performer/group Title Year of publication

[FIGURE 3. Non-Classical Music Media Finder search page]

Other Media Finders in use at Ball State search spoken recordings, sounds and sound effects, selected fiction and literature, software and electronic games, world music resources, and all videos. Most of these required some sort of enhancement or manipulation of existing data, either manually or through automated processes, because the necessary data was not in the records or was not accessible through Sirsi's indexing capabilities.

CONCLUSION

Libraries need to take better advantage of the full, structured metadata that we expend great effort to create. One factor that significantly affects the usability of our metadata is the quality of the interface. Guided search interfaces such as the Media Finders will not solve all users' information needs, but they can make common searches easier and expose search options that would otherwise be hidden or too complicated for average users. Through the Media Finders, Ball State University Libraries have attempted to make finding some types of items in our library catalog less complicated by creating better search interfaces and by targeted enhancement of the information in bibliographic records. The Media Finder approach is one way to improve the usability of collections of materials within library catalogs or similar databases, such as digital libraries, without a major investment in interface design.

APPENDIX

Sample Media Finder Searches

Movies and TV Programs:

- Recent foreign animated films (check *foreign* and *animation* and select 2000-2004 under **Release Date**)
- Japanese anime (check *animation* and select *Japan* under **Origin**)

- Disney animated films (check *animation* and type *Disney* into the search box)
- Movies set in the Pacific theater during WWII (select *Asia & Pacific Islands* under **Place** and *World War II* under **Time**)
- Silent comedies on DVD (check *silent* and *comedy* and select *DVD* under **Format**)
- Science fiction novels and stories adapted to film (check *adaptations* and *science fiction*)

Music (Other Than Classical):

- Rock music of the 1970s (select *1970s* under **Rock**)
- Brazilian music (select *Brazil* under **World**)
- Wedding music on CD (select *wedding music* under **Topical** and *compact discs* under **Format**)
- Christian rap (check *Christian contemporary* and *rap*; choose to include *all* of the selected genres)
- Gospel or spirituals (check *gospel* and *spirituals*; choose to include *any* of the selected genres)

REFERENCES

Ball State University Libraries. Media Finders.

<http://cms.bsu.edu/Academics/Libraries/ResearchTools/MediaFinders.aspx>.

Borgman Christine L. 1996. Why are online catalogs *still* hard to use? *Journal of the American Society for Information Science* 47 (7): 493-503.

Bowen, Jennifer. 2005. FRBR: Coming soon to your library? *LRTS* 49 (3): 175-88.

Cataloging Policy and Support Office, Library of Congress. 1996. Visual materials and non-music sound recordings. In *Subject Cataloging Manual: Subject Headings*, 5th ed., Section H2230. Washington, D.C.: Library of Congress.

- Cummins, Caroline. 2006. Below the surface. *Library Journal* netConnect Suppl. (Winter): 12-14.
- Dempsey, Lorcan. 2005. Rich browsing. *Lorcan Dempsey's Weblog: On Libraries, Services and Networks*. May 11. <http://orweblog.oclc.org/archives/000662.html>.
- Doty, Philip, and Ann P. Bishop. 1994. The national information infrastructure and electronic publishing: A reflective essay. *Journal of the American Society for Information Science* 45 (10): 785-99.
- Ho, Jeannette. 2001. Faculty and graduate student search patterns and perceptions of videos in the online catalog. *Cataloging & Classification Quarterly* 33 (2): 69-88.
- Hume, Margaret. 1995. Searching for media in the online catalog: A qualitative study of users. *MC Journal: The Journal of Academic Media Librarianship* 3 (1), <http://wings.buffalo.edu/publications/mcjrnl/v3n1/hume.html>.
- International Federation of Library Associations (IFLA) Study Group on the Functional Requirements for Bibliographic Records. 1998. *Functional requirements for bibliographic records: Final report*. Munich, K.G. Saur. <http://www.ifla.org/VII/s13/frbr/frbr.pdf>.
- North Carolina State University Libraries. Endeca at the NCSU Libraries, <http://www.lib.ncsu.edu/endeca/>.
- Pace, Andrew K. 2004. Whither library automation? *American Libraries* 35 (11) Dec.: 64-65.
- . 2005. My kingdom for an OPAC. *American Libraries* 36 (2) Feb: 48-49.
- School of Information Management and Systems, University of California, Berkeley, Flamenco Search Interface Project, <http://bailando.sims.berkeley.edu/flamenco.html>.
- Tennant, Roy. 2005. Lipstick on a pig. *Library Journal* 130 (7):34.

Yee, Martha M. 2005. FRBRization: A method for turning online public finding lists into online public catalogs. *Information Technology and Libraries* 24 (3): 77-95.