Implementing "Find Articles": A low-altitude view of metasearching

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DLF 2004 Spring Forum, New Orleans, LA

Implementation decision points 1

- Positioning the metasearch service to promote its use
- Configuring the interface and retrieval-set limits to optimize performance
- Establishing Z39.50 connections to enable similar searches
- Configuring the search-results screen to normalize heterogeneous data

Implementation decision points 2

- Configuring the single-record screen to feature reference linking
- Parsing A&I-vendor metadata to maximize OpenURL connections
- Interpreting user transactions to improve performance

History of CUL gateways

- Mann Library Gateway (1991)
- Cornell University Library Gateway (1998)
- E-Reference Collection (2001)
- Find Articles/Find Databases/Find e-Journals (2003-)

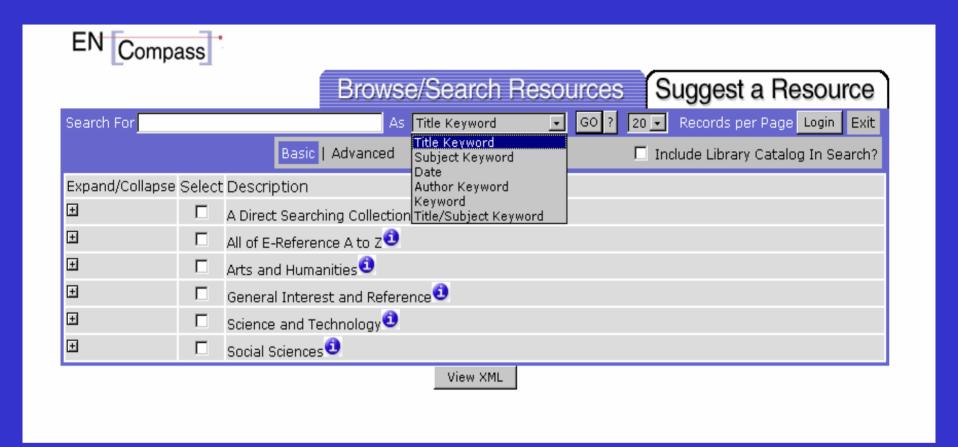
Service enhancements

Existing functions

- Search gateway metadata
- Go to database from search results
- Browse by subject
- Navigate to other CUL resources
- Authenticate users for restricted resources

Added features

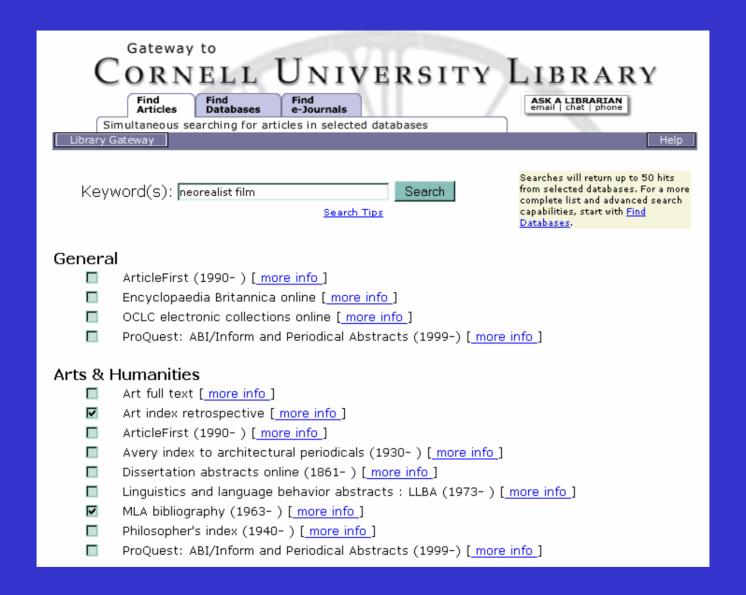
- Search at article level
- Simultaneous search across multiple databases
- Reference linking
- Search for all e-journal titles



We tried to put metasearching in a single interface with existing database-metadata search and browse functions

Gateway to UNIVERSITY LIBRARY ORNELL Find Find Find ASK A LIBRARIAN email | chat | phone Articles Databases e-Journals Search for indexes and other reference resources in your subject area Library Gateway Help Find Databases has replaced the e-Reference Collection The e-Reference Collection has migrated to a new system, Find Articles/Find Databases, Find Databases (this page) functions in a similar fashion to the e-Reference Collection, while Find Articles incorporates new functionality. When searching on this page, use general rather than specific words (e.g., Search : Keyword(s) lcensus "philosophy" instead of "plato") in order to identify and connect to online reference O Phrase. Search Tips resources and periodical indexes such as Agricola, Proguest, or the MLA Bibliography. Numbers | A-B | C-D | E-F | G-H | I-J | K-L | M-N | O-P | Q-R | S-T | U-V | W-X | Y-Z General Interest and Reference Almanacs, Dictionaries and Library Catalogs Encyclopedias Newspapers, Magazines and Current Biographies Events Publishers Catalogs Directories Grants and Foundations Statistical Information Greatest Hits Arts and Humanities Art and Architecture Music History Philosophy and Religion

We settled on a 3-tab, 3-service structure



"Find Articles" became the metasearch service

Z39.50 connection parameters

- "Keyword" use attributes varied: 1016 (OCLC, ProQuest, RLG, WebSPIRS); 1017 (RLG); 1035 (EBSCO, Wilson); 4 (EBO—title only)
- Structure attributes were tricky: phrase (Wilson); unspecified (EBSCO, PQ); word list (EBO, OCLC, RLG, WebSPIRS)



We normalized heterogeneous search results

Search results XML 1

```
<B1>A Touch of the Neorealist: An Interview with David Gordon Green</B1>
<B2>Lucia, Cynthia</B2>
<B5>0009-7004(200123)26:4&lt;13:ATOTNA&gt;2.0.TX;2-V</B5>
<B5>2001360916</B5>
<B5>26</B5>
<B5>0009-7004</B5>
<B5>4</B5>
<B5>13</B5>
<B5>20010998</B5>
<B5>13-17</B5>
<B5>Cineaste</B5>
<B6>Cineaste: America's Leading Magazine on the Art and Politics of the Cinema</B6>
<B6>26, no. 4 (2001 Fall): p. 13-17</B6>
<B8>journal article</B8>
<DBC>MLABIB</DBC>
<DBN>MLA Bibliography/DBN>
```

Search results XML 2

- <B1>A touch of the neorealist: an interview with David Gordon Green</B1>
- <B2>Lucia, Cynthia</B2>
- <B4>George Washington is the first feature film by David Gordon Green. Green claims to be influenced by American filmmakers of the 1970s, but his film has much in common with Italian Neorealist and contemporary Iranian filmmakers, in terms of such elements as its </B4>
- <B5>0009-7004</B5>
- <B5>Cineaste\$bCineaste\$c26\$d4\$fFall\$gFall\$h23\$j2001\$k13\$l17</B5>
- <B6>Cineaste v. 26 no. 4 (Fall 2001) p. 13-17</B6>
- <DBC>ARTFULL</DBC>
- <DBN>Art Full Text</DBN>



Single-record display with OpenURL link

Find It At Cornell

Offers searches of library catalog for electronic and print journals and books. Links to online full text when available.

Help

Citation Information

Edit Citation

Article Title: A Touch of the Neorealist: An Interview with David Gordon Green

Source: Cineaste: America's Leading Magazine on the Art and Politics of the Cinema (0009-7004); Volume: 26; Issue: 4; Date: 2001

Cornell University Online Catalog

Find this Journal at Cornell (by ISSN) Find this Journal at Cornell (by Title)

Links to Full Text, Abstracts, Journals, etc.

article Periodical Abstracts Research II

"Find It At Cornell" display

Z39.50 citation metadata used to build the OpenURL

```
<MR773t>Cineaste: America's Leading Magazine on the Art and
    Politics of the Cinema</MR773t>
<MR773p>Cineaste</MR773p>
<MR773g>26, no. 4 (2001 Fall): p. 13-17</MR773g>
<MR773x>0009-7004</MR773x>

<MR949a>26

<MR949b>4
/MR949b>
<MR949c>13-17
/MR949c>
```

<MR949e>2001 Fall</MR949e>

<MR949g>20010998</MR949g>

<MR949f>13</MR949f>

Common OpenURL elements

- aulast -- first author's last name
- issn -- ISSN number
- title -- title of a bundle (journal)
- atitle -- title of an individual item (article)
- volume -- volume of a bundle
- issue -- issue of a bundle
- spage -- start page of an item in a bundle
- date -- publication date of the item or bundle

Resulting OpenURL

http://128.84.158.87:8888/lfp/LinkFinder Plus/Display?&aulast=Lucia&atitle=A+T ouch+of+the+Neorealist%3A+An+Interv iew+with+David+Gordon+Green&title=C ineaste%3A+America%27s+Leading+M agazine+on+the+Art+and+Politics+of+t he+Cinema&volume=26&issn=0009-7004&issue=4&spage=13&date=2001& pages=13-17&stitle=Cineaste

Compare this citation metadata to the previous

<MR773t>Journal-of-the-Acoustical-Society-of-America; 1995, 97, 4, Apr, 2511-2524.

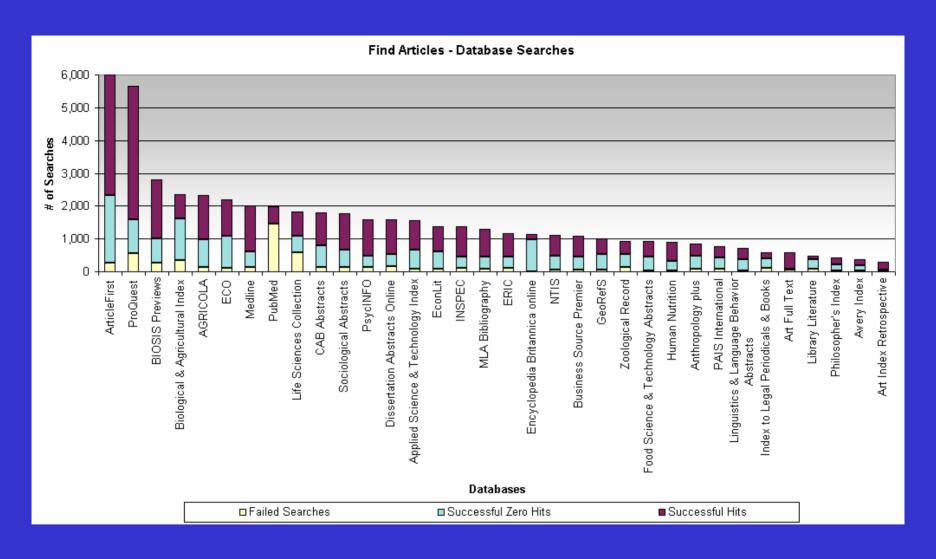
<MR773t>Cadernos-de-Lingua; 2001, 1(23), 53-67.</MR773t>

Another variable: OpenURL requirements of target site

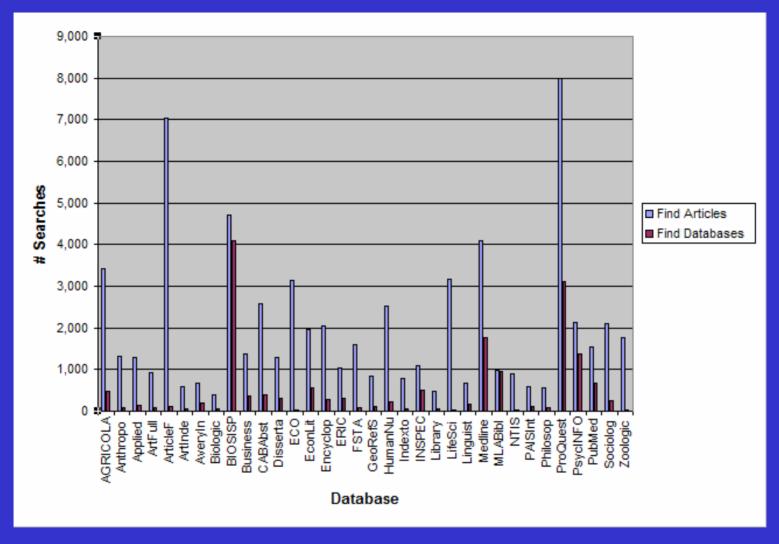


Sources of OpenURL connection failures

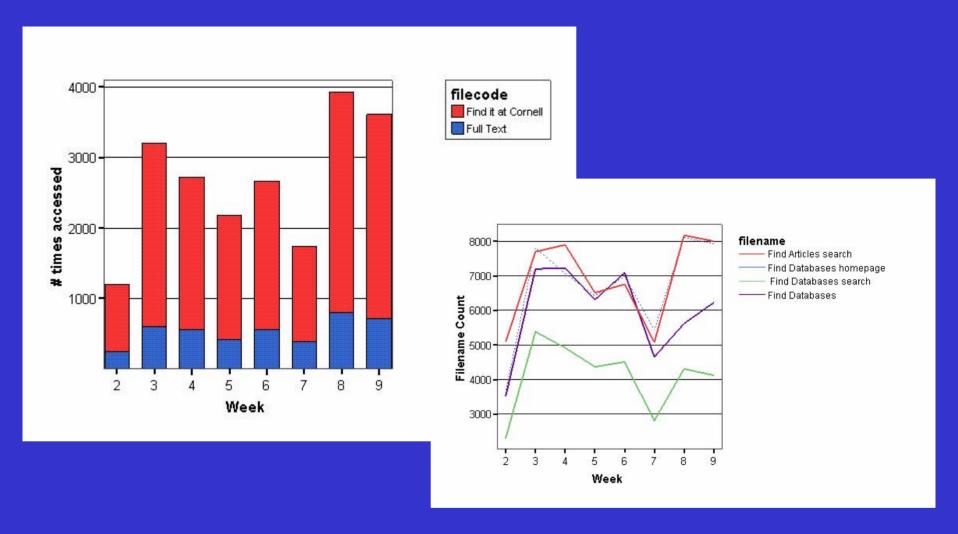
- Lack of granularity in A&I vendor metadata
- Ambiguous captioning in citations
- Variation in citation practice over time
- Journal-by-journal variation in citation elements
- Mismatch between citation metadata and target site requirements



Find Articles search activity, including connection failures



Databases searched via Find Articles versus Find Databases



Find it at Cornell usage

Next steps

- Another round of connection testing and implementation
- Additional services on "Find It At Cornell" page
- User studies to learn more about reference linking use