The Library's Catalog: From Cards to Databases

First, Some Definitions

call number: A call number is an arrangement of letters and numbers assigned to an item located in a library's collection in order to provide a library user with an easy way to locate the item on the shelf. Most library systems assign call numbers based on the subject matter covered in the item. A Library of Congress call number will look like this: PT2635.E68I625 1983. A Dewey Decimal call number will look like this: 833.912 REMARQUE.

card catalog: An organized index to library materials consisting of cabinets filled with cards that describe and locate materials in the library. A typical card catalog would list items by author, title, and subject or might combine all three into one alphabetically arranged system.

database: A computerized system for indexing and retrieving information. A database might allow searching by multiple means. For example, in the case of a library database, that would include searching by any word, by subject, by title, by author, by date, etc.

**Catalogs at Yale.
Computers at UNF.**

OPAC (online public access catalog): A library's computerized catalog. OPACs are based on the previously used card catalogs and include all of the information that was available on the cards and, in many cases, additional information, such as book tables of contents.

subject heading: Most libraries arrange materials on the shelves into subject arrangements. This is accomplished by the use of subject categories or headings that are predefined according to the classification system used by the library. Most public and school libraries use the Dewey Decimal System. Most academic research libraries use the Library of Congress System.

Library Catalogs: the Card Catalog

The key to finding information in a library is its catalog. Over the history of libraries, the catalog has taken on numerous forms, from book format, to microfiche, to cards, to online. By far the most common format until the advent of computers and computerized catalogs, the card catalog provided library users with a means for locating materials held in the library's collections in a variety of ways, but usually by author, by title, or by subject. Users looking for a specific book by Ernest Hemingway, for example, would go to the title card catalog and look up the book by its title. Users looking for books by J.R.R. Tolkien would go to the author catalog and look up available materials by author's last name. Researchers looking to find any information in the library's collections dealing with the topic "fantasy literature" would go to the library's subject catalog and look for that subject or cross-references to that subject.
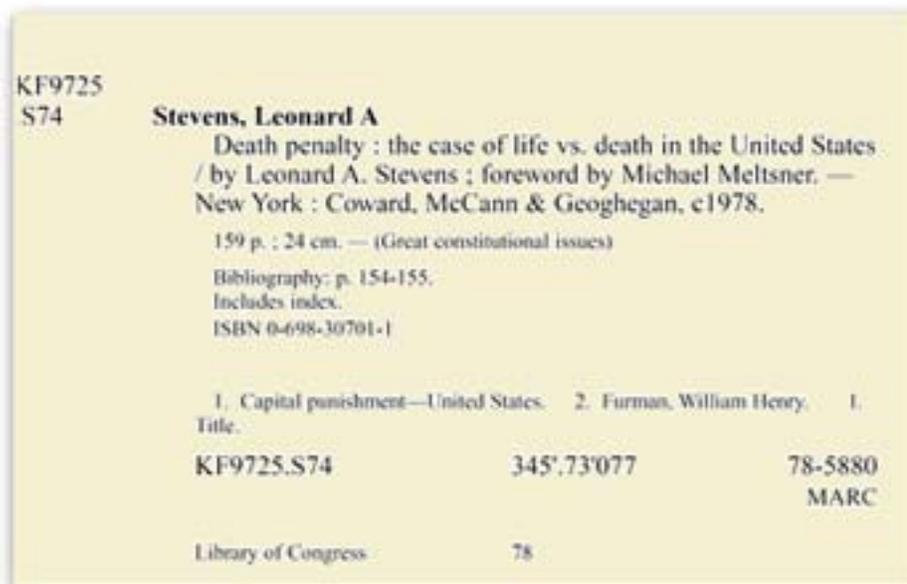
A typical card in the catalog would provide complete bibliographic information on the item. In the case of books, that would include author, title, place of publication, publisher, and date of publication. It would also provide a physical description of the item that might include number of pages, size of the book, and any special features such as illustrations, photographs, etc. Most items would also be assigned subject headings chosen by library catalogers to help classify the items into subject areas in the

library's collections and call numbers that would lead the researcher to the correct shelf locations in the library. This information would also be located on the card in the library's catalog. Each individual item in the library's collections might have numerous cards in the catalog to provide a library researcher with multiple ways for finding the item. For example, a book on fantasy literature might have an author card, a title card, and several subject cards, depending on how many subject headings were assigned to the book. The whole idea behind cataloging and catalog cards and the card catalog was to provide a library with means for organizing its collections in a logical method and for helping library users to find those materials by logical means.

The illustration below is a typical catalog card assigned to a book held in a library that uses the Library of Congress call numbering system. In this particular example, cards for this book are filed under the subjects "capital punishment -- United States" and "Furman, William Henry." These subjects are listed toward the bottom of the card and there would be two subject cards in the catalog that would lead to this book. The book would also have author and title cards in the library's catalog, thus providing a total of four different ways to locate the book in the catalog. Notice that the description of the book begins with the author (Stevens, Leonard A.), followed by the title (Death penalty: the case of life vs. death in the United States), followed by the author's name and by the writer of the book's forward, and followed by the publishing information (New York: Coward, McCann & Geoghegan, 1978). Additionally the book description tells us that it is 159 pages long and that it has both a bibliography and an index. Of consequence to the library user who wants to find the book is the call number, in this case KF9725.S74. Some library catalogs might also include an additional card for the title of the book series of which this book is a part. Notice next to the page information, in parentheses, the title "Great Constitutional Issues." This is the title of a series of books dealing with constitutional issues.


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KF9725
S74      Stevens, Leonard A
              Death penalty : the case of life vs. death in the United States
           / by Leonard A. Stevens ; foreword by Michael Meltsner. —
           New York : Coward, McCann & Geoghegan, c1978.

              159 p. : 24 cm. — (Great constitutional issues)

              Bibliography: p. 154-155.
              Includes index.
              ISBN 0-698-30701-1


              1. Capital punishment—United States.   2. Furman, William Henry.   I.
           Title.

           KF9725.S74                    345'.73'077                    78-5880
                                                                        MARC

           Library of Congress              78
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Obviously, the process of finding materials in a library using a card catalog was labor- and time-intensive. For the researcher looking for a specific book by title or a specific book or books by a certain author, the process was fairly simple. However, for the researcher looking for materials on a particular subject, the search would begin under one subject heading, for example "capital punishment" and then proceed to related subject headings, perhaps "death penalty" or "execution" or "gas chamber" or "firing squad." A researcher would sit down with a drawer from the catalog, go through card after card under a particular subject, write down the call numbers and locations for items of interest, and then go

physically to the prescribed locations in the library's collections. This might sometimes involve going to several different physical locations within a single building or in several buildings, as in the case of large universities that might have multiple libraries instead of a single library. This would not be the end of the search, either. Once the researcher located materials on a particular subject, those materials, in turn, might lead the researcher back to the catalog to look under additional subjects. Bibliographies in any of the located materials might also lead the researcher back to the catalog to look up individual authors or specific titles.

In short, the process of researching a library's collections was by no means quick. Of course, now the process has changed dramatically because of the advances made possible by computer technology.

Library Catalogs: the Online Catalog

Libraries have actually been preparing to use the computer as a research tool for quite some time now. Even before the advent of a searchable online public catalog, librarians were using computer systems to "catalog" items and to build library databases that could be used to keep track of materials in their collections. Once software and technology were available to make these online catalogs "friendly" enough for the general public to use, libraries began rolling out their online catalogs, providing their users with computers to access them, and getting rid of their card catalogs. This process took quite some time. For example, when the UNF Library relocated to its new facility in 1980, it was still using card catalogs to help locate materials in its collections. Its first online catalog ran under a commercially available computer system designed by the company CLSI. This was followed by a system called NOTIS that was customized by the Florida Center for Library Automation, and ultimately by the library's current online system, ALEPH. The public access catalogs for NOTIS and ALEPH were called, respectively, LUIS and Mango. With each ensuing change in automation, library users were able to do more and search more deeply through the information about the library's collections.

A library's online catalog (database) provides users with a system for retrieving information about items located in any of the library's collections. The UNF Library's database has been built over many years and continues to be added to as the library receives additional materials for its collections. As each item is received, it is examined by catalogers, compared to a national database of item descriptions (cataloging records), and then added to the library's database. ALEPH is the name of the system software that allows catalogers to add items to the database and that sits behind the library's catalog. Like most systems, it has a variety of access points by which users can query the system for information, including author, title, subject, and keywords anywhere. These are only a few of the access points, though. Following is a sample "record" from the library's online catalog. This is the online record for the same book shown in the catalog card example above. Notice that the same information shown on the catalog card is also shown on the online record: the author, title, publishing information, physical description, subject headings, and call number. Additionally, the online record shows on which floor of the building to locate the item and includes a link to additional information from Google.

Author, etc.:	Stevens, Leonard A.
Title:	Death penalty : the case of life vs. death in the United States by Leonard A. Stevens ; foreword by Michael Meltsner.
Published:	New York : Coward, McCann & Geoghegan, c1978.
Description:	159 p. ; 24 cm.
Series note:	Great constitutional issues
Notes:	Includes index.
	Bibliography: p. 154-155.
	"Second impression. "
ISBN:	0698307011
	0698307011 :
Subjects, general:	Capital punishment -- United States
	Capital punishment -- United States -- Juvenile literature
	Furman, William Henry
	Furman, William Henry -- Juvenile literature
Format:	Book

DEATH PENALTY

more info @ Google

| Location: | Media - 1st floor Curriculum Collection -- YC420.S74D42 Floor map |
| | Detailed Holdings |

Media - 1st floor - Curriculum Collection

Description	Call Number	Item Status	Due Date	Note
	YC420.S74 D42	Regular Loan (curriculum)	Not Checked Out	

The amount of information available through a library's online catalog will vary from item to item. Some items might include the table of contents, while some might actually have a brief synopsis. This will vary according to who did the original cataloging and how much "customizing" the library does with the records that it uses. Library catalogs typically do not have full text, so the most information a researcher will find is item descriptions and location information.

Online library catalogs greatly speed up the process of finding information. Instead of the slow, painstaking process of flipping through individual cards in a card catalog, a researcher can quickly scan descriptions of the library's entire collection using keywords, author names, titles, subjects, nearly any type of information that is available in the library's database. An added advantage: multiple library catalogs can be searched all at the same time through various online catalog systems. Most notably, the UNF Library has access to the *WorldCat* system, which provides access to library databases worldwide.

Search Options in the UNF Library's Catalog

Basic Search is the default search "mode" in the library's catalog. This provides a researcher with the ability to quickly scan the library's database for any entered keywords. Searches can be performed across the entire database by matching entered words anywhere or by matching words within specific "fields" in the database records. Currently available basic search capabilities include searching for keywords in any of the following record locations:

anywhere
title
journal title

author
subject heading
series
ISBN, ISSN, OCLC, or other standard number
call number

While most researchers will find the basic search screen adequate, the catalog also accommodates more advanced searching options.

Advanced Search provides researchers with additional means for fine-tuning a search strategy, including using Boolean search operators (AND, OR, NOT), limiting to a particular library collection (Media, Special Collections, Documents, etc.), and limiting to a specific type of material (video, CD, books, etc.). One of the most noticeable options in the Advanced Search is the ability to enter up to three keywords or phrases easily into the Boolean search grid. To the left of the second and third input boxes are the Boolean selection options, where a researcher can choose the AND, OR, or NOT connector to build the logic of the search strategy. Most search systems default to AND (which is the same as matching all entered keywords), so the default selection in Mango is AND.

To the right of the keyword search input boxes are pull-down options for selecting where the system should search for the entered words. The options include the same options as the Basic Search:

anywhere
title
journal title
author
subject heading
series
ISBN, ISSN, OCLC, or other standard number
call number

Searches can also be limited by Location, by Format, by Language, and by Publication Date. *Tables 1 -2* provide all the options for limiting by location and by format. A researcher can also select to limit by any of over 120 languages.

Table 1: Location Limits

ALL
General Collections
Government Documents
Media
New Books
Periodicals
Reference
Reserves
Special Collections
Technical Services

Table 2: Format Limits

2D Nonprojectable Graphic	Map
3D Artifact	Media
Analytic	Microform
Archival Control	Mixed Material
Audiocassette	Music
Biography, Autobiography	Musical Score
Book	Newspaper
Braille	Online Resource
CD	Projected Medium
Collection	Serial
Fiction	Slide
Film	Sound Recording
Globe	Streaming Video
Govt Publication	Video (Beta)
Integrating Resource	Video (Blu-Ray)
Journal	Video (DVD)
Kit	Video (Laserdisc)
LP	Video (Umatic)
Large Print	Video (VHS)
Looseleaf	Video (all formats)
Manuscript	

Without the library's database, finding out specific information on library materials would be tedious, if not next to impossible, without actually going to the shelves and retrieving the material. Herein lies the real beauty of databases: a user of the database can have access to hundreds and thousands of bits of information in a matter of seconds.

Reading by Jim Alderman. Updated March 2014.