

Discuss the relationship between authority control and the functions of a library catalog.  
(Dr. Karpuk's comments: Essay 1: Excellent. Great examples. 100%)

Library catalogs are designed to perform four different functions: identifying a work in the catalog when the title, author, or subject is known; aggregating or grouping together similar works by author, subject, or versions of a title; discriminating or selecting a particular work out of a group of similar works; and enabling bibliographic information such as catalog records to be shared among libraries. These four functions together make up bibliographic control.

In order to carry out these functions of the bibliographic control accurately and efficiently, librarians and catalogers must perform authority control on various areas of a library catalog's record. Authority control provides a systematic and organized way of assuring that, for every library catalog adhering to AACR2R, all instances of a particular work are identified, grouped, selected, and shared in exactly the same way. The areas of a record that require authority control are the points at which a record is searched. These entry points into a catalog, which enable the records to be identified, selected, grouped, and shared, are called access points. Access points require authority control because users of the catalog need to use the same terms that the records use in order to access them. To ensure this Agreed upon terms have already been determined for every access point in every catalog record. These agreed upon terms are called the authoritative term or authorized term and are located in authority files, which have been created and are managed by major libraries and bibliographic utilities such as the Library of Congress and OCLC. Authority control is the standard that controls the access points into the library catalog. The authoritative and variant forms have been carefully researched and are documented.

The points at which users enter a catalog, or access points, are the title, author, and subject fields. Authority files exist for each of these fields. Name authority files provide the authoritative or authorized version of a personal or family name and all variations of that name that are not authorized, with See references that direct the user to the authorized name. Names of corporate bodies, meetings and conferences, and geographic regions exist in authorized and variant forms. Names of people associated with creating a work, like editors, illustrators, translators, and collaborators, come under authority control exist in their variant and authorized forms in name authority files. Librarians and catalogers are required to make sure that each of their local records is in agreement with the standardized form and direct users from nonstandard forms so that users can be confident that their search is accurate. If a user types a variant form in a search, the catalog will direct her to the authorized form in a See reference or make the change automatically. For example: When a user from China who knows of Thoreau as So Lo, types Lo So into the library's catalog, either a See reference will appear directing the user to use instead Thoreau, Henry David, or the catalog will automatically redirect the search as though the user had entered the correct term.

To understand the necessity for authority control observe this illustration: Over her life as poet, author of Science and Health, publisher of the Christian Science Monitor and other periodicals, and founder of a church, Mary Baker Eddy published under the name Mary Baker Eddy, M.B.G. Eddy, Mary Baker, Mary Baker Glover, Mary Baker G. Eddy, Mary Baker Patterson, Mary Baker G. Patterson. Name authority control determines that every instance of Mrs. Eddy as

author is uniform throughout all library catalogs in the world. Therefore, the identification of works by Mrs. Eddy functions efficient and accurately for users even if they do not know which version of her name to use. Users can gather together all works by Mrs. Eddy held by that library in one author search and then select the individual work they desire from that group. Libraries can share bibliographic records pertaining to Mrs. Eddy, author, easily and efficiently without having to change any portion of their records.

Title authority files provide standardized, uniform titles for works that have collective authors, works that have unknown authors, works that have multiple versions, works that have foreign titles, works of individual titles and authors that have series titles, and collections or selections of works by one author. Examples in the order given are: the Bible, Beowulf, King Lear, The Nutcracker Suite, Cambridge Textbooks in Linguistics, Selected Poems of Walt Whitman.

Title authority control performs aggregating and discriminating functions. Uniform titles enable searchers to collect all versions of the Bible under a single title search and then select the Wycliffe, King James, De Bibel, the Good News Bible, or the Moffat Bible translation. Title authority control assures that a catalog will aggregate all versions of King Lear so that users can select the King Lear in the original Middle English, a modern English version, or the Pelican Books imprint. Title authority control assures that a user can select the video production of the Nutcracker Suite in which their favorite dancer performed as well as all other ballets in which this dancer performed.

Subjects have to be uniform too so that the subject headings assigned to one book are the same as those assigned to other books on the same topic. Subject authority files provide standardized, uniform subject headings. If I'm searching for automobile maintenance I have to know what exact subject heading is being used. I also want to be sure that my search for automobile maintenance will aggregate all the books about that subject and that if I search on a nonused subject heading, like car maintenance, automobile repairs, or auto body maintenance, I will be redirected to authorized subject heading and other terms related to my subject. Authority control ensures that each variant name will lead the user to the official name decided for this subject and to related subjects, much like the telephone yellow page lists the recognized subject headings and See references and See Also references.

Another aggregating and identifying function of subject authority control is determining where in the stacks the book will be placed by way of the classification number. Classification numbers are directly related to subject headings. Authority control works to aggregate or group all those versions of King Lear together and all the books about automobile maintenance together in the catalog and on the library shelves.

All standards are designed to ensure uniformity for an orderly and efficient transfer of information. Library catalogs rely on the standards set by MARC and authority control in order for users to know what to expect and for librarians to know how to prepare their records. Authority control enables libraries to share resources because a standardized system permits records to move seamlessly from one catalog or utility to another and from one version of a library's catalog to an upgraded version without any loss of data, eliminating the need to redo the records for each book.

Describe how a cataloger uses AACR2R (the code) and MARC encoding to make a descriptive record retrievable. Provide examples.

(Dr. Karpuk's comments: Essay 2: Nice discussion. See comments. 100%)

AACR2R (the code) is a rule-bound system for organizing disparate pieces of information acquired from a book's title page and verso title page, or the label of an audio or video cassette tape or CD. This information is organized into a format that is structured according to the rules set out in the code. The outcome is called a cataloging record, which, in the days before computers, was printed or typed out onto a catalog card and stored in drawers in shelves for public use. People desiring to locate items in the library would go to the catalog shelves and look up their item, by title, by author, or by subject, with each area containing a card for each individual item. This necessitated the existence of three different sets of the catalog, each organized alphabetically. one by title, another by author, and another by subject. These three sets of cards were the three different access, or entry, points into the library's catalog. In other words, the catalog was designed to retrieve books by title, author, and subject.

Eventually the catalog became automated, and the bibliographic information that had been printing out onto a card was now displayed on a computer screen. Instead of having three sets of cards for each item in the library, and more if the item had more than one subject heading, the computerized catalog had only one version of the catalog. Users still searched the automated catalog by way of the same three access points: the title, author, and subject, to which a fourth was added, keyword. If a system was designed to read natural language, some automated systems allowed for keyword searching of areas that are not recognized retrieval points, such as notes area that provide a book's table of contents.

Not all automated catalogs are able to read the natural language text that the notes areas consist of. But every automated catalog is designed to read the encoded language that translates the card record into a machine-readable catalog record. This language is called MARC-machine readable cataloging. MARC records contain the same information that the card catalog record contained, the disparate pieces of information that the cataloger located on the on the book's title page and reverse title page and the label of tapes and CDs. The cataloger uses these disparate pieces of information to describe the book according to the AACR2R, just as (s)he did to create the card catalog record. In the case of creating the MARC record, the cataloger completes certain encoded fields that only make sense to a machine and that enable the machine to locate the item for retrieval. The end result for the library user searching the catalog is the same, except that the user types the title, the author, or the subject into a search box on a computer screen instead of going to the drawers in the catalog card shelves to search for the title, author, or subject. The user still has to record the items classification number, the number by which the book is organized on the library's shelves, and locate the book. Often however, the automated system can tell the user in advance whether or not the book is on the shelf, and if it is currently on loan when it will be returned, and how many copies the library owns.

The cataloger uses MARC encoding to make an item retrievable. Just as in cataloging bibliographic information onto cards, librarians catalog the same information into machine-readable form. This descriptive information identifies the book and is taken from the book or item itself: the title and subtitle, author and other individuals or groups responsible for the book's contents, the agency that published the book, the place and date of publication, the edition if

there is one, the physical size of the book and number of pages, illustrations if present and the number of illustrations if numbered, the name of the series the book may belong to and its volume number, notes about the book that describe it further such as a summary of contents, a table of contents, information about publishing and printing, and physical contents such as indexes and bibliographies. All this information is carefully encoded into the MARC record according to AACR2R governing descriptive cataloging and MARC 21 rules governing the machine encoded aspects. Subject heading assignment, which is subjective cataloging, is governed by Library of Congress Subject Headings and other classification systems, and outside the realm of AACR2R.

The machine encoding system is organized around “signposts” that inform its retrieval and storage processes. MARC records are divided into fields that are equal to the individual sentences in the card catalog records. MARC fields have identifiers consisting of three-digit tags, two single-digit indicators and subfield tags preceded by particular symbols called delimiters that act as separators. Tags and indicators tell the system what and how to search the record. When a search is initiated by a cataloger user, only certain tags and indicators are searched. For instance in a title search, the system will search the title field, the 245 tag, according to the indicators. In the following example the tag 245 is followed by a 1, which tells the system that what follows is a title, and a 4, which tells the system to start searching 4 spaces from the start of the sentence. The system starts searching the at “h” and not “t.” The example shows the “a” title, “b” subtitle, and “c” statement of responsibility subfields proceeded by the delimiter symbol \$.

245 14 \$a The history of apple trees in America \$b Johnny Appleseed on the loose / \$c by Kristin Yiotis, with photographs by Sam Adams and full page illustrations by Samantha Adams.

Searchable fields require authority control, a controlled vocabulary that is uniform to every library catalog that follows AACR2R and MARC 21. Searchable fields, or access points, are called headings and consist of the main heading and added entry headings. The main heading consists of the name of the main source of responsibility for the work, with the names of other collaborators appearing as added entries. In the following example the 100 tag signals a personal name main heading with the 1 digit indicating a searchable field; the 700 tags signal personal names added entries that are also searchable.

100 1b \$a Yiotis, Kristin (Main heading)  
700 1b \$a Adams, Sam (Added entry for photographer)  
700 1b \$a Adams, Samantha (Added entry for illustrator)