GUIDELINES FOR
ONLINE PUBLIC ACCESS CATALOGUE (OPAC) DISPLAYS

IFLA Task Force on Guidelines for OPAC Displays

[Draft]

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FOR WORLDWIDE REVIEW

TASK FORCE ON GUIDELINES FOR OPAC DISPLAYS

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INTRODUCTION

Background

Existing Online Public Access Catalogues (OPACs) demonstrate differences in the range and complexity of their functional features, terminology, and help facilities. While many libraries already have OPACs, there is a need to bring together, in the form of guidelines or recommendations, a corpus of good practice to assist libraries in designing or re-designing the displays for their OPACs, taking into consideration the needs of users.

Audience

The history of OPACs has been one of movement from centralized systems, designed and controlled by system designers and programmers, to more and more distributed and customizable systems. There are still a number of areas in which systems can be improved in terms of displays. The audience for these guidelines is librarians charged with customizing OPAC software and vendors and producers of this software.

The guidelines are mainly designed for general libraries containing works in the humanities, the social sciences, and the pure and applied sciences. The guidelines are not necessarily designed to serve the needs of highly specialized libraries. Since *OPAC* means *online public access catalogue*, recommendations are focused on displays for the public, not on displays to support specialized library tasks such as serials check-in, acquisitions, etc. However, all of the displays recommended in these guidelines should be made available to library staff as well; they should not be regarded as useful to the public alone.

History of the Project

The Task Force on Guidelines for OPAC Displays was formed by the Division of Bibliographic Control in 1997 at the conference of the International Federation of Library Associations and Institutions (IFLA) in Copenhagen, Denmark. The Section on Cataloguing is the lead section, with members of the Task Force drawn from the Section on Bibliography, the Section on Cataloguing, and the Section on Classification and Indexing of the Division of Bibliographic Control, and from the Section on Information Technology. Commentators from a number of other Sections and Round Tables were invited to participate.

In November of 1998, a draft of the guidelines was sent out for worldwide review, and much consideration was given to the comments received in finalizing the guidelines. Substantial revisions followed the 1998 worldwide review, necessitating a subsequent request for international comment in the Fall of 2003. With this current draft emanating from the IFLA 2003 meeting in Berlin, the Task Group has also ensured that the principles and recommendations articulated in this final set of guidelines both acknowledge and accommodate current developments in the design of OPAC systems

and displays that are compliant with the *Functional Requirements for Bibliographic Records* (FRBR) (Saur 1998).

Scope of the Guidelines

The guidelines are intended to apply to any type of catalogue, independently of the kind of interface and technology used (character or graphical user interfaces (GUIs), including web-based ones). The guidelines refrain from making concrete suggestions for using colour, icons, buttons, pull-down menus, and the like.

The focus of the guidelines is on the display of cataloguing information (as opposed to circulation, serials check-in, fund accounting, acquisitions, or bindery information). However, some general statements are made concerning the value of displaying to users information that is drawn from these other types of records. The guidelines do not attempt to cover HELP screens, searching commands, or command names and functions. Thus, the guidelines do not directly address the difference between menu-mode access and command-mode access.

The intent is to provide guidelines for a set of recommended minimum requirements for displays that catalogues should present, regardless of any other options that may be offered to the users. It is not the intent to restrict the creativity of system designers who want to build in further options beyond the minimum requirements to offer to advanced users, advanced users being those people who are willing to put some time into learning how to use the system in more sophisticated and complex ways. The goal for the displays recommended is ease of use, and providing users with information that will assist them in understanding the contents of the catalogue. An added benefit for such displays, if they are widely implemented, is that they could allow a user to transfer catalogue use skills acquired in one library to many other libraries. Now that so many library catalogues are available over the World Wide Web, this benefit is particularly attractive.

The Task Force is aware that many existing systems and/or catalogues are not capable of following all of the recommendations in this document. At the present time, for example, OPAC displays that accommodate the Work, Expression, and Manifestation hierarchies of the Functional Requirements for Bibliographic Records (FRBR) are in early release or under development. Nonetheless, we feel that the guidelines should be somewhat visionary, and should attempt to point out many areas in which there is room for significant improvement in existing OPACs. We hope that existing systems will attempt to work toward the implementation of the guidelines as they develop new versions of their software in the future.

Some examples are provided using information from the MARC 21 and UNIMARC formats in order to clarify the fields from which the content of the display may be extracted. We recognize that not all catalogues use MARC format records, and these Guidelines can apply to those also.

The content and structure of the records available for use in OPAC displays is determined by current cataloguing rules. The identification of the various types of data and records available is determined by the MARC formats. We take current cataloguing rules and current MARC formats as a given in this document, and try to suggest better ways to make use of existing records in OPAC displays. We do not try to suggest ways that actual changes in cataloguing rules might help to improve OPAC displays, although we recognize that some potential solutions to OPAC display problems lie in changes in cataloguing rules.

Organization of the Guidelines

The guidelines are divided into principles and recommendations. The principles are general statements of the goals of the guidelines and are intended to provide a context and a rationale for the recommendations. The recommendations are a detailed expansion for actual practice. In a sense, one could say that the principles address the *why* and the recommendations address the *how*. Wherever appropriate, examples are provided to illustrate a particular recommendation. Examples are given in a generic non-proprietary display format, and are not intended to endorse any particular system or to represent a specific library or other institution.

Even though these guidelines do not address searching directly, we advise that searching decisions be made in conjunction with display decisions and vice versa. The situation in which a piece of data that has been made searchable does not appear in any of the resultant displays should be avoided.

Functions of the Catalogue

OPAC displays must be designed to serve the functions of the catalogue, and, ultimately, to address the information needs of library users. First articulated formally by Charles Ammi Cutter in 1876, the objectives of catalogues have remained constant, even while the means of achieving them have changed with the evolution from book, to card, to online catalogues. Cutter's "objects" were largely adopted as the functional framework informing the set of cataloguing principles – the "Paris Principles" – that emerged from the International Conference on Cataloguing Principles in Paris in 1961. These early foundations defining the functions of the catalogue have been articulated more recently and broadly in the Functional Requirements for Bibliographic Records (FRBR). Serving as a conceptual model for the content and logical arrangement of constituent components or elements of the catalogue record, the FRBR gives as the four functions for the OPAC:

Find: to find entities that correspond to the user's stated search criteria (i.e., to locate either a single entity or a set of entities in a file or database as the result of a search using an attribute or relationship of the entity, e.g., in the context of a search for all documents on a given subject, or a search for a recording issued under a particular title);

Identify: to identify an entity (i.e., to confirm that the entity described corresponds to the entity sought, or to distinguish between two or more entities with similar characteristics,

e.g., to confirm that the document described in a record corresponds to the document sought by the user, or to distinguish between two texts or recordings that have the same title);

Select: to select an entity that is appropriate to the user's needs (i.e., to choose an entity that meets the user's requirements with respect to content, physical format, etc., or to reject an entity as being inappropriate to the user's needs, e.g., to select a text in a language that the user understands, or to choose a version of a computer program that is compatible with the hardware and operating system available to the user);

Obtain: to acquire or obtain access to the entity described (i.e., to acquire an entity through purchase, loan, etc., or to access an entity electronically through an online connection to a remote computer, e.g., to place a purchase order for a publication, to submit a request for the loan of a copy of a book in a library's collection, or to access online an electronic document on a remote computer).

Table 6.1 of the *Functional Requirements for Bibliographic Records* (1998) provides a matrix mapping to each of the four functions or generic user tasks, described above, the attributes and relationships associated with each of the four primary entities of Work, Expression, Manifestation, and Item. This matrix also serves as the framework for recommendations regarding the content of records created by national bibliographic agencies. Tables 7.1 through 7.9 specify the data requirements for supporting basic user tasks and, like Table 6.1, can be useful in informing the content and arrangement of bibliographic records, and in designing FRBR-compliant OPAC displays.

While beyond the scope of these guidelines, the OPAC should function as a gateway to a variety of sources and destinations, regardless of their type or location. Consequently, the OPAC should support a navigation function, giving access, not only to information about or in the library, but also to other library catalogues, databases of special information, databases of journal articles, electronic resources, etc.

General comments on the guidelines

Different kinds of information needs should be fulfilled from the OPAC; therefore, different kinds of display should be available. Depending on the search situation and the context of the user's information need, the OPAC should offer the opportunity to search and sort the data on/from different criteria.

The fields of the record and the method of indexing have an impact on the searching possibilities.

Despite the fact that searching the OPAC is not the subject of this document, we must and do acknowledge that the displays are not independent of the search statement from which they result. Therefore we have to be aware of different types of searching which result in different displays.

The types of searching we distinguish include:
1. Within-whole-record-searching (i.e., in fields with authority control as well as in those without). Keyword searching is an example of this type of searching;
2. Specific-field-searching in a field with authority control. Examples are searching with the name of an author or a subject heading;
3. Specific-field-searching in a field without authority control. Examples are searching in titles or with years of publications;
4. Combinations of the types mentioned, above, or in more than one field at the same time. Examples are searching with authors' names plus titles words, or titles plus language.

Both types of specific-field-searching can further be divided in one-word searches or phrase-searches (a string of words, e.g. 'House on the prairie', 'James Joyce' or 'Joyce, James').

Searching and browsing can be done in bibliographic records, in authority records of different kinds, or in indexes. Therefore the results can be:
1. One or more bibliographic records;
2. One or more authority records;
3. A list from the index.

As an ideal, OPACs should be capable of summarizing, sorting, and displaying large retrievals of headings and records as well as small ones quickly and efficiently.

To facilitate searching the OPAC, authority records should be provided, where one form of heading is necessary throughout the catalogue or where additional information (e.g., see-and see-also-references, biographical information, classification numbers) has to be provided. Authority records are necessary e.g., for names of persons, names of corporate bodies, titles of works, genre terms, subject headings (thesauri) and classifications. Where authority records exist, indexes must be built, e.g., for fields where different spellings or forms are allowed, e.g., for titles or genre terms.

PRINCIPLES

The following section details recommendations concerning OPAC displays. Each of the numbered recommendations is expressed within the context of a guiding principle. This ensures that display guidelines are grounded within a framework that acknowledges:
(A) the overriding primacy of users needs;
(B) the importance of the content and arrangement of records to finding, identifying, selecting, and obtaining items;
(C) the requirement to follow accepted international standards for information content and structure.

A. USER PRINCIPLE

The needs of users should be considered in the design of OPAC displays. Implied by this principle is that the design of displays should be guided by:

1. General guidelines for good practice in display design and criteria for effective screen displays as these relate to legibility, clarity, understandability, and navigability;
2. The objectives of the catalogue, insofar as these represent a codification of user needs;
3. The language of catalogue users so that they can find what they want using the words, or other means of communication with which they are familiar;
4. The unique and different needs of individual users, including those with particular or special requirements.

B. CONTENT AND ARRANGEMENT PRINCIPLE

The content and arrangement of records in an OPAC should be responsive to the needs of users to find appropriate information, to be informed adequately about items in the library's collection, and to be directed in the effective use and navigation of the OPAC. Deriving from this principle, OPAC content and arrangement will:

5. Display what is asked for and needed for further action;
6. Display records in a meaningful, rather than a random order when several records are retrieved;
7. Support navigation from the displayed information to related information.

C. STANDARDIZATION PRINCIPLE

8. National and international standards and generally accepted recommendations affecting OPAC displays should be followed.

RECOMMENDATIONS

A.   USER NEEDS

1   *The design of displays should be guided by general guidelines for good practice in display design and criteria for effective screen displays as these relate to legibility, clarity, understandability and navigability*

1.1 Make the screen displays consistent

Make the screen displays consistent in wording, data format, layout, fonts, and colour.

1.2 Make clear to the user how the display was reached (*see Example 1*)

Make clear to the user in every display in an OPAC why and how the current display was reached, how to retrace one's steps, the options for subsequent actions or displays, and how to exit at any time.

Show in context and emphasize the search terms sought in the resultant displays, e.g., by highlighting.

1.3 Make clear to the user what is being displayed (*see Example 1*)

Show in every display the name of the catalogue and the owning library or other organization.

Use graphic features, such as fonts, upper and lower case, colour, icons, etc., in a meaningful way. The symbols used should be standard, if a standard exists, and as intuitive as possible.

Distinguish in displays between the use of the classification number for subject access and the use for shelf location.

1.4 Display textual data as entered, and expand coded data, and classification notation if displayed

Preserve punctuation and display textual data in upper and lower case as set by cataloguers. These may be necessary to avoid ambiguity of meaning, and may be useful in identifying sorting elements.

Examples of coded data that may be expanded include: form of publication (e.g., serial); type of publication (e.g., video); codes for intended audience (e.g., children's literature); level of treatment (e.g., scientific publication); and language (e.g., Russian).

Display a given classification number and its verbal equivalent if possible in the language bgbof the interface.

1.5 Provide help facilities

Provide help screens that are flexible and accommodate different user groups, different user needs, different interfaces, etc. Each help screen should be context sensitive, e.g., provide a specific explanation for the field the user wants to search; provide specific help for zero results; etc. Error messages should be clearly explained with a specific explanation as to how to proceed.

When a graphical user interface is employed, make available a clear and concise textual caption for each symbol (e.g., signs or icons) that represents a command or function available to the user.

1.6. Do not assume users are acquainted with library terminology and standards

Do not assume users are acquainted with library terminology and standards, e.g., in menus, labels, punctuation, arrangement of records, and help screens. Avoid jargon.

2   ***The design of displays should be guided by the objectives of the catalogue, insofar as these represent a codification of users' needs.***

2.1 Enable users to locate and determine the document(s) wanted

Enable users to find, identify, select, and obtain documents, groups of documents or parts of documents by formulating a query using one attribute (e.g., the title of a work with all of its manifestations, or the name of a person or corporate body with all of his/her/its related works), a combination of attributes (e.g., name and title) or part of an attribute (e.g., words from a title, or a keyword search).

Give the relevant information for access to online resources (e.g., copyright statement, pay-per-view, password).

3   ***The design of displays should be guided by the language of, and means of communication employed by, users so that they can find what they want using the words they know.***

3.1.   Graphics, help screens, icons, symbols, home pages, or introductory screens of the OPAC should be appropriate to the intended audience.

All symbols, including icons, signs, labels, etc., should be standard, if possible, as intuitive as possible, and provided with captions, when necessary.

3.2.   For the interface, use official languages and other languages used in the community served. Provide interfaces in other languages as appropriate.

Language of the interface refers to menus, labels, help screens, display messages, navigation tools, expansion of codes and classification notations, etc., in contrast to the language of the catalogue which refers to elements provided by the catalogue (e.g., General material designation [gmd], and to the script of the record (original script or transcription).

For the interface, use the official language used in the community served. If there are several official languages, provide interfaces in all official languages, if appropriate. For international use, an option for the use of English and/or another major language if so commanded.

Where a catalogue contains records in more than one script, follow the standards of the layout of the particular scripts. Where different scripts are contained within the same record, prefer the order of sorting based on the language of the interface. Where

different scripts are contained in different records, display the records separately by script.

4 ***Displays should be sufficiently flexible to provide for different individual user needs, including users with special needs***

4.1. Provide alternative interfaces

Provide different interfaces to accommodate different user groups and/or different user needs. Graphical user interfaces, text-oriented interfaces, voice recognition-enabled interfaces, and touch-activated interfaces should be available, as appropriate, to the community of catalogue users.

Graphics such as pictures of book covers and selectable visual icons for popular subjects and genres, large type, and simple language can help to encourage children to enjoy consulting the OPAC in a children's library but the same graphics and language might be considered annoying or condescending in a university library.

In addition to a graphical user interface, a text-oriented interface should be available, e.g., for visually impaired users, or in case of slow network connections. Where a touch-activated interface is provided, an interface using a mouse and/or keyboard should also be available.

4.2. Enable users to choose language, format of record display, and search method

Provide the ability for each individual user to select the language of the interface, select the default single record display format, and specify the default search method if more methods are provided (e.g., command and form searching).

4.3. Same record in more than one language

In catalogues where the same record is recorded in more than one language, give users a choice concerning their preferred language.

B. CONTENT AND ARRANGEMENT PRINCIPLE

5 ***Display what is asked for and needed for further action***

5.1   Display bibliographic records, authority records or an index according to the type of search (*see Examples 2 and 3).*

Whether it is useful to show bibliographic records, authority file records, or indexes, depends on the nature of the query and the number of bibliographic records that result from the query. Allow the user to choose the type of result for display. Allow at any

stage the search for relevant authority records or indexes. As a default for the different kinds of searches, we recommend:

- for keyword-within-record search, display either a single bibliographic record or a brief display of bibliographic records in a meaningful order, allowing for selection of one, several, or all records;
- for specific-field-searching in a field with authority control, display either a single authority record or a brief display of authority records in a meaningful order. This allows a selection of one, several or all records, leading to a display of full authority records or of bibliographic records;
- for specific-field-searching in a field without authority control, display either a single bibliographic record or a brief display of bibliographic records in a meaningful order or an index of index terms to that field;
- for a search in a combination of different fields, display a single bibliographic record or a brief display of bibliographic records.

5.2   Provide for the option of displaying records in an order consistent with the FRBR model (*see Example 4*)

In a catalogue where the FRBR model is implemented, the result of a search could consist of bibliographic records representing bibliographic entities of different levels (works, expressions, manifestations, items).

In that case the display of multiple brief bibliographic records should consist only of entities at the same level. The level should correspond to the level of attributes[1] given in the query.   Tools that enable navigation between corresponding bibliographic entities of different levels have to be provided (e.g., from a work to all expressions of the work, etc.)

5.3   Display of records in a brief display (*see Example 5*)

A brief display should consist of records of the same type, i.e., bibliographic records, or authority records. Brief displays of records should provide the minimal set of data required for the user to distinguish between the elements of the set. Add the number of records retrieved to each element of the set. Possible data elements to include in the display will depend on the nature of the search, and the type of material retrieved.

5.4   Selection of records from the brief display (*see Examples 2, 3 and 5*)

Allow the user to select one, several, or all items from the brief display to be shown in a single record display, or to execute a search based on selected authority records or index entries.

5.5   Provide for displays of large retrieval sets

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[1] See FRBR for attributes applying to each category of entities.

Provide commands and functionality for dealing with displays when the number of records retrieved is large, including:

- summarizing a long headings display or a long brief display of bibliographic records by displaying every nth headings, e.g., every 5th , or every 10th , or every 15th, etc., record

- positioning anywhere in the list

- returning to the beginning of the list

- returning to a particular headings display

5.6 Display of a single record retrieved (*see Example 6*)

When only one record is retrieved as a result of a search, display it in the single record display format.

5.7 Single record display format (*see Example 6*)

A single record display should contain the data necessary to fulfill the functions of the catalogue, including data that enable the user to access/obtain the resource. In addition, the terms used in the query should be shown in text.

Arrange elements within a record in a meaningful order.

5.8 Content and structure of single record display of bibliographic records (*see Example 6*)

Offer several single record display formats from which the user can choose. At any time the user can select any of them as a setting for the entire session or for one action.

Use full displays for single bibliographic records (coded and non-coded fields that are necessary for the user) in the default single-record display. Include all fields prescribed by ISBD. Normally prefer a labeled display as the default with the data internal to each element displaying with ISBD format.

Offer shorter displays as an option in any type of library.

5.9 Content and structure of single record display of authority records (*see Examples 7 and 8*)

Give users the option of viewing the full authority record in order to benefit, for example, from any notes it might contain.

Give users the option of viewing all types of authority records.

Give all relevant information in a labeled display

5.10 Display source of subject heading, or notation

Indicate clearly the subject access system or classification from which a subject heading or notation is taken. (e.g., LCSH, RAMEAU, SWD, DDC, UDC)

5.11 Display of terms with subdivisions from an authority file

If headings in an authority file have subdivisions, display them level by level, if appropriate.

5.12 Give users the option of requesting a fully encoded record display (*see Example 6*)

Give users the option of requesting a fully encoded record display (e.g., UNIMARC; CCF; MARC21) that underlies any particular single-record display, including bibliographic, holdings and authority record displays. MARC records have great potential for allowing knowledgeable users increased ability to format single-record displays however they would like, including or dropping any type of field, or putting fields in a desired order.

5.13   Provide a Zero-results display (*see Example 9*)

In cases where no records are retrieved by a search, give the user advice as to how to proceed, and make it easy to reformulate a search. When the user's search retrieves no results, this may be because the library does not contain the work, author or corporate body sought, or does not contain works on the subject sought. However, it may also be that the user needs help formulating the search. When the user has done an exact-beginning search, place the failed search in the context of the index as a whole. If the user has done a keyword-in-heading, keyword-in-record or phrase search, show the user the search that failed, along with the message that it did not retrieve any records. Ask the user to check the search for any typographical errors or misspellings. Show the user the number of records that matched each keyword and suggest other kinds of search and various kinds of HELP messages that are available.

6   *Display records in a meaningful, rather than a random, order when several records are retrieved*

6.1   Display results in a meaningful arrangement

Display results of a search in a meaningful arrangement that can be achieved, for example, by sorting algorithms, by relevance ranking, or by a combination of different methods. Sorting algorithms include alphabetical, numerical, chronological and classified ordering of data.

If a search retrieves records in more than one language, display the records by order of arrangement based on the language of the interface. National or regional arrangement should be followed where these exist.

Where a catalogue contains records in more than one script, or where different scripts are contained within the same records, prefer the order of arrangement based on the language of the interface.

If a search retrieves records in more than one script, display the records separately by script.

6.2 Provide options for user selection of order of arrangement (*see Example 10*)

Give users the option to sort on the elements they wish and to determine the content they wish to have included.

Give users the option of resorting records from any display by other means, e.g., by chronological order of publication, or by title, etc., if the display is not already in title order.

6.3 Order of arrangement for brief displays

Arrange headings by the first element of the heading in all brief displays. Use the second element of the heading (if it exists) only to subarrange headings that begin with the same first element. Do the same for additional elements.

Display the items in a numbered series in volume number order.

6.4 Order of arrangement for single record displays

As the default arrangement order for the display of a set of records, use the arrangement order of the brief display from which the records were selected.

7   *The display should support navigation from parts of the displayed information to related information.*

7.1 Provide for navigation through the records

Enable users to navigate from a single record display through all the relationships provided in the record, i.e., from:
    Bibliographic record to bibliographic record
    Bibliographic record to authority record
    Authority record to authority record
    Authority record to bibliographic record
    Level to level within hierarchically structured files (i.e., Tree relations)
    Works about and works by

7.2 Navigation from bibliographic record to bibliographic record

Enable users to navigate to records that are directly related to a bibliographic record. Many different relationships of this type are possible, e.g., whole/part relationship (series and parts of the series, journal and articles, multi-volume publication and parts), earlier title an new title of a journal etc. Display the relation between two or more records clearly.

If the FRBR model is implemented in the catalogue, these relationships can be further extended to all relationships between instances of the same entity type (e. g., work and its related works; manifestation and its reproduction; expression and its supplement) and relationships between instances of different entity types (e.g., work and all its expressions; expression and all its manifestations).

7.3 Navigation from bibliographic record to authority record

Enable users to navigate from a single record display to all authority records connected to that record.

7.4 Navigation from authority record to authority record

Enable users to navigate from one authority record to other authority records if necessary. Such links may be provided, for example, from the name of person to the titles of his/her works, from the old to the new name of a corporate body, from a subject heading to subject headings related by see-also-references. Display the relations clearly and in both directions.

7.5 Navigation from authority record to bibliographic record

Enable users to navigate from an authority record display to all bibliographic records to which it is connected.

7.6 Navigation from level to level within hierarchically structured files (i.e., Tree relations)

If an authority file has a hierarchical structure (e.g., subject headings, corporate body names), enable browsing following the hierarchical links between authority records. Representing such relationships as trees in a graphic interface is appropriate.

7.7 Navigation from works about and works by

If possible, enable users to navigate from works by a person or corporate body to works about them, from a work itself to works about that work, from a work of a particular genre or form to works about that genre or form.

7.8 Provide links to information external to the catalogue

Provide, where possible, appropriate links from displayed information to other related information external to the catalogue. Such links might include information about the library, e.g., address, situation, opening hours, where a specific item is located, links to Web resources through URLs, from electronic journals to content pages and from content pages to full text articles, to other library catalogues, to community information, to full-text images of title pages and tables of contents, etc. Provide an obvious means for linking back to the internal catalogue.

C. STANDARDIZATION PRINCIPLE

8. *National and international standards and generally accepted recommendations affecting OPAC displays should be followed.*

Examples of national and international standards affecting OPAC displays include, but are not limited to:

> Machine-readable formats
> Cataloguing rules
> Transcription and transliteration
> Subject access systems
> Character sets
> International standard numbers
> International codes
> Display formats
> Filing rules
> Protocols

International, national or regional standards for sorting should be followed where these exist.

EXAMPLES

Example 1:

Illustrates recommendation 1.2: Make clear to the user how the display was reached.
Illustrates recommendation 1.3: Make clear to the user what is being displayed

First screen seen by the user:

```
University of XXX Library. Online Catalog
Author searched: Coffin, Tristram

Line no.          Name:                              No. of records:
[available
for selection]

    1.    Coffin, Tristram, 1912-                        5
    2.    Coffin, Tristram Potter, 1922-                 7
    3.    Coffin, Tristram R.                            1
```

Second screen result of choice of line 2 above:

```
University of XXX Library. Online Catalog
Author searched: Coffin, Tristram

Name                              Title                          Date

Coffin, Tristram Potter, 1922-
    1.   The British traditional ballad in North America.     c1977.
    2.   The female hero in folklore and legend.              1975.
    3.   Folklore from the working folk of America.    1973.
    4.   Folksong & folksong scholarship.                     1964.
    5.   Indian tales of North America : an anthology for the reader.  1961.
    6.   Our living traditions : an introduction to American folklore.  1968.
    7.   The proper book of sexual folklore.           1978.
```

Example 2:

Illustrates recommendation 5.1: Display bibliographic records, authority records or an index according to the type of search.

The example shows the results for a specific-field-search in a field without authority control. It also allows to select one, several, or all items in a brief display list (recommendation 5.4).

University of XXX Libray. Online Catalog

Search results: 50 Item(s)   **Sort options:**   Year Author Title
Searched: **Title= american scholar (Phrase)**

1 Full Record	**Uniform Title**	[American Scholar.]
	Title	American scholar forum: communism and academic freedom.
	Publisher	[New York, N.Y., United Chapters of Phi Beta Kappa, 1949]
	Format	Book
2 Full Record	**Author**	Emerson, Ralph Waldo, 1803-1882.
	Title	The American scholar.
	Format	Book
		Government document
3 Full Record	**Author**	Emerson, Ralph Waldo, 1803-1882.
	Title	The American scholar; an address, delivered by Ralph Waldo Emerson before the [Phi] B K society, at Cambridge, August, 1837.
	Publisher	New York, The Laurentian press, 1901.
	Format	Book
4 Full Record	**Author**	Leighton, Cecil Donald.
	Title	Native American scholar database project / Cecil D. Leighton.
	Publisher	Los Angeles : University of California, Los Angeles. American Indian Studies Center, 1990?
	Format	Book
5 Full Record	**Author**	Nash, Ray, 1905-1982.
	Title	The American scholar-printer / by Ray Nash.
	Publisher	[S.l. : s.n., 1960]
6 Full Record	**Author**	Parker, Theodore, 1810-1860.
	Title	The American scholar [microform] / by Theodore Parker ; edited with notes by George Willis Cooke.
	Publisher	Boston : American Unitarian Association, c1907.
	Format	Book

Example 3:

Illustrates recommendation 5.1: Display bibliographic records, authority records or an index according to the type of search.

The example shows the results for a specific-field-search in a field with authority control. It also allows to select one, several, or all items in a brief display list (recommendation 5.4).

```
Bibliothèque de la Université de XXX. Catalogue en ligne
Subject searched:   Stratigraphie

Line no.          Sujet:                                                   Notices

   1. Stratigraphie                                                           6
   2. Stratigraphie -- Afrique -- Congrès                                     1
   3. Stratigraphie -- Afrique du Nord                                        1
   4. Stratigraphie -- Afrique occidentale -- Congrès                         2
   5. Stratigraphie -- Afrique occidentale -- Nomenclature                    1
   6. Stratigraphie -- Afrique occidentale – Précambrien                      1
   7. Stratigraphie -- Algérie -- Tin-Seririne, Bassin de (Algérie)
      -- Paléozoïque                                                          1
   8. Stratigraphie -- Algérie -- Tindouf , Bassin de (Algérie)
      -- Paléozoïque                                                          1
   9. Stratigraphie Algonkien
          Aller voir à : Protérozoïque
  10. Stratigraphie -- Allemagne -- Alpes (Allemagne)                         1
  11. Stratigraphie -- Amérique latine -- Congrès                             1
  12. Stratigraphie -- Antilles , Mer des                                     1
  13. Stratigraphie -- Arabie -- Permo-Trias                                  1
  14. Stratigraphie Archéen
          Aller voir à : Archée
```

Example 4:

Illustrates recommendation 5.2: Provide for the option of displaying records in an order consistent wit the FRBR model.

Display in two stages; useful display of the expressions and manifestations of a work. The following initial results display should result whenever the Shakespeare heading has been selected:

University of XXX Library. Online Catalog
Author searched: Shakespeare, William

Shakespeare, William, 1564-1616.
Information about this name   [hyperlink to authority record]

Line no.	Title:	No. of records:
1.	All's well that ends well.	29
2.	Antony and Cleopatra.	84
3.	As you like it.	68
4.	Comedy of errors.	35
5.	Coriolanus.	61
6.	Cymbeline.	40
7.	Hamlet.	529
8.	Henry V.	99
9.	Henry VI.	58

Work(s) about Shakespeare, William, 1564-1616   [hyperlink to works about]

When the user chooses line 3 from the title display, for *As You Like It*, the following display could result:

University of XXX Library. Online Catalog
Author searched: Shakespeare, William

Shakespeare, William, 1564-1616. As you like it.
Work 3 of 9

1. As you like it / by William Shakespeare ; translated into modern English with analysis and commentary by Gary S. Michael. 1991.
2. As you like it / literary consultant, John Wilders. 1978.
3. As you like it / edited by Richard Knowles ; with a survey of criticism by Evelyn Joseph Mattern. 1977.
4. As you like it / William Shakespeare ; edited by Agnes Latham. 1975.
5. As you like it : an old-spelling and old-meaning edition, prepared by Christine Trautvetter. 1972.
6. As you like it / edited by Arthur Quiller-Couch & John Dover Wilson. 1957.
7. As you like it / by William Shakespeare ; a facsimile of the first folio text,

---

with an introduction by J. Dover Wilson, and a list of modern readings. 1929.

8. As you like it : a comedy / by Mr. William Shakespear. 1734.

French & English:

9. *Comme il vous plaira = As you like it / Shakespeare ; introd. traduction et notes par J.-J. Mayoux. 1956.*

Frisian:

10. As jiemme it lije meie : in blijspul / uut it Ingels fen William Shakspeare [sic] ; forfryske in mei forkleerjende noten forsjoen troch R. Posthumus. 1842.

Slovenian:

11. Kakor vam drago ; Kar hocete ; Hamlet / W. Shakespeare ; [poslovenil Oton Zupancic ; prevod pregledal in opombe napisal Janko Moder]. 1968.

Spanish:

12. Como gustéis ; Noche de Reyes / William Shakespeare ; prólogo de Ezequiel Martínez Estrada. 2002.

Work(s) about *As you like it.*
Other work(s) related to *As you like it.*
Performance(s) on sound recording
Performance(s) on videorecording
Film(s) based on *As you like it*

Example 5:

Illustrates recommendation 5.3: Display of records in a brief display.
Illustrates recommendation 5.4: Selection of records from the brief display.

The following display should result whenever the Cummings heading has been selected:

University of XXX Library. Online Catalog

Cummings, E. E. (Edward Estlin), 1894-1962.
Work(s) by:

Line no.	Title:	No. of records:
1.	1/20	1
2.	1 x 1	2
3.	50 poems	1
4.	73 poems	1
5.	5 poems	1
6.	Anthropos	1
7.	Bal negre	1
8.	By E.E. Cummings	1
9.	Chaire	2
10.	Christmas tree	1
11.	CIOPW	1
12.	Eimi	4
13.	The enormous room	6
14.	Him	2
15.	Hist whist	2
16.	The house that ate mosquito pie	1
17.	I	1
18.	Is 5	1
19.	Kaminguzu shishu	1
20.	Little tree	1
21.	No thanks	3
22.	Puella mea	1
23.	Santa Claus	2
24.	Tom	1
25.	Tulips & chimneys	3
26.	W	2

Work(s) about Cummings, E. E. (Edward Estlin), 1894-1962

When the hyperlink "<u>Work(s) about Cummings, E. E. (Edward Estlin), 1894-1962</u>" is chosen, the following display would result:

University of XXX Library. Online Catalog

Cummings, E. E. (Edward Estlin), 1894-1962.
Work(s) about Cummings, E. E. (Edward Estlin), 1894-1962:

1. <u>Adams, Robert Martin, 1915-</u>
   <u>Grasshopper's waltz : the poetry of E.E. Cummings.</u>   1947.
2. <u>Attaway, Kenneth R.</u>
   <u>E.E. Cummings' aloofness : an underlying theme in his poetry.</u>   1969.
3. <u>E.E. Cummings : a collection of critical essays.</u>   1972.
4. <u>Friedman, Norman.</u>
   <u>E.E. Cummings : the art of his poetry.</u>   1960.
5. <u>Kennedy, Richard S.</u>
   <u>Dreams in the mirror : a biography of E.E. Cummings.</u>   1980.
6. <u>Norman, Charles, 1904-</u>
   <u>E.E. Cummings : the magic-maker.</u>   1964.
7. <u>Whicher, Stephen E.</u>
   <u>The art of poetry : Cummings, Williams, Stevens.</u>   1982.

Example 6:

Illustrates recommendation 5.6: Display of a single record retrieved.
Illustrates recommendation 5.7: Single record display format.
Illustrates recommendation 5.8: Content and structure of a single record display of
bibliographic records.
Illustrates recommendation 5.12: Give users the option of requesting a fully encoded
record display.

XXX Public Library. Online Catalog

Search results: 1 Item(s)   **Display:**   Short
MARC
Searched: **Title (Exact)= "defensa de la cultura"**

Author	Gide, André, 1869-1951.
Title	Defensa de la cultura. Traducción de Julio Gómez de la Serna. Seguida de un comentario y dos cartas de José Bergamín y Arturo Serrano Plaja.
Publisher	Madrid [S. Aguirre] 1936.
Description	87 p.
Note	"Discurso pronunciado..en el Congreso Internacional de Escritores de París el día 22 de Junio de 1935."
Language	Spanish
Subject	Literature and society. Communism and literature.
Added Entry	Bergamín, José, 1895- Serrano Plaja, Arturo.
Format	Book

Example 7:

Illustrates recommendation 5.9: Content and structure of a single record display of authority records.

The following display could be shown to anyone who selected <u>Information about this term</u> in a previous display.

YYY Public Library. Online Catalog

Labor

Term used in this catalogue: **Labor**

Synonym(s) for this term: Labor and laboring classes

Broader subject(s): Manpower

Narrower subject(s): Labor service
National socialism and labor
Semiskilled labor
Skilled labor
Unskilled labor

Related subject(s): Work
Working class

Note(s): Here are entered works on the collective human activities involved in the production and distribution of goods and services. Works on the physical and mental exertion of individuals to produce or accomplish something are entered under Work.

Example 8:

Illustrates recommendation 5.9: Content and structure of a single record display of authority records

The single display of authority record can be obtain selecting <u>Info about heading</u> in a previous display

---

YYY Public Library. Online Catalog

Author browse = Highsmith, Patricia

#	Hits	Headings (Select to View Titles)		Type of Heading
[1]	86	Highsmith, Patricia, 1921-	[Info about heading]	personal name
[2]	2	Highsmith, Phillip E.		personal name
[3]	1	Highsmith Press		corporate name
[5]	17	Highsmith, Richard Morgan, 1920-	[Info about heading]	personal name
[7]	4	Highsmith, Robert.		personal name

YYY Public Library. Online Catalog

Highsmith, Patricia, 1921-1995.

      Name used in this catalogue: Highsmith, Patricia, 1921-1995.

      Name(s) not used: Highsmith, Mary Patricia, 1921-1995

      Other name(s) used in this catalogue: Morgan, Claire, 1921-1995

      Note(s):
          Contemp. auth. new rev., v. 20 (Highsmith, (Mary) Patricia, b. 1/19/21; pseud.: Claire Morgan)
          Washington Post 02-06-95 (Patricia Highsmith, crime writer, d. Feb. 4, 1995, Locarno, Switzerland, of leukemia)

Example 9:

The following is an example of a failed exact-beginning subject search on *chaos theory* placed in the context of alphabetically close subject headings.

University XXX Library. Online Catalog

Line no.	Subject:	No. of records:
1.	Chaos, Deterministic (term used in this catalogue: Deterministic chaos)	3
2.	Chaos in systems (term used in this catalogue: Chaotic behavior in systems)	266
3.	Chaos, Quantum (term used in this catalogue: Quantum chaos)	9

CHAOS THEORY IS NOT USED IN OUR CATALOGUE; COULD ONE OF THESE NEARBY SUBJECTS SATISFY YOUR QUERY?

4.	Chaotic behavior in systems Information about this term 7 subjects related to Chaotic behavior in systems	266
5.	Chaotic behavior in systems in literature	1
6.	Chaotic motion in systems (term used in this catalogue: Chaotic behavior in systems)	266
7.	Chaouia (Berber people) Information about this term 3 subjects related to Chaouia (Berber people)	2

Example 10:

Illustrates recommendation 6.2: Provide options for user selection of order of arrangement.

Library XXX. Online Catalog
YOU SEARCHED: Author/Creator browse = Bibliotheque nationale

| Add limits to search results |

SEARCH RESULTS: Displaying 26 through 50 of 63.

| Previous 1   26 51   Next }

Sort results by: Full title
Main author/Creator
Date (ascending)
Date (descending)http://catalog.loc.gov/cgi-bin/Pwebrecon.cgi?ti=51,0&Search_Arg=biblioth%E8que+nationale&Search_Code=NAME_&PID=6673&CNT=25&

#	Name heading	Name: Main Author; Creator, etc.	Title
[26]	Bibliothèque nationale de France	Bakhoum, Soheir.	Alexandrie : Auguste-Trajan monnaies, médailles et antiq Soheir Bakhoum ; photograp nationale de France].
	ACCESS: Main Reading Room CALL NUMBER: CJ737.A44 B35 1998		
[27]	Bibliothèque nationale de France	Beaumont-Maillet, Laure.	France au Grand Siècle : che collection Gaignières / Laure
	ACCESS: Main Reading Room CALL NUMBER: NC246 .B34 1997 fol.		
[28]	Bibliothèque nationale de France	Bellmer, Hans, 1902-1975.	Bellmer graveur : 1902-1975
	ACCESS: Main Reading Room CALL NUMBER: NE654.B47 A4 1997		
[29]	Bibliothèque nationale de France	Bibliothèque nationale de France.	Brouillons d'écrivains / Bibli France ; sous la direction de de Danièle Thibault.
	ACCESS: Main Reading Room CALL NUMBER: Z6611.L7 B53 2001.		
[30]	Bibliothèque nationale de France	Bibliothèque nationale de France.	Catalogue des incunables / B de France.
	SELECT TITLE FOR HOLDINGS INFORMATION		
....	....		

APPENDIX 1

A Selected List of International Standards, Cataloguing Rules, Formats, etc.

Anglo-American cataloguing rules. 2nd ed. 2002 rev. Ottawa; Chicago: Canadian Library Association; American Library Association, 1 v. (loose-leaf), 2002-

Functional requirements for bibliographic records (FRBR). IFLA Study Group on the Functional Requirements for Bibliographic Records. Munich: K.G. Saur, 1998. Available on the Web at: http://www.ifla.org/VII/s13/frbr/frbr.pdf   Accessed 29/08/03

Guidelines for authority and reference entries (GARE). London: IFLA International Programme for UBC, 1984.

Guidelines for authority records and references (GARR). 2nd ed., revised by the IFLA Working Group on GARE Revision. Munich: K.G. Saur, 2001.
Available on the Web at: http://www.ifla.org/VII/s13/garr/garr.pdf   Accessed 29/08/03

Guidelines for subject authority and reference entries (GSARE). Munich: K.G. Saur, 1993.

International Conference on Cataloguing Principles, 1961, *Report*. Paris. Hamden, Conn.: reprinted and published on behalf of IFLA by Archon Books, c1963, 1969. *Statement of principles*. Annotated ed. with commentary and examples by Eva Verona. London: IFLA Committee on Cataloguing, 1971 (Paris Principles)

ISBD(A): International Standard Bibliographic Description for Older Monographic Publications (Antiquarian). 2nd rev. ed. Munich ; New York: K.G.Saur, 1991.
Available on the Web at: http://www.ifla.org/VII/s13/pubs/isbda.htm Accessed 29/08/03

ISBD(CM): International Standard Bibliographic Description for Cartographic Materials. rev. ed. London: IFLA Universal Bibliographic Control and International MARC Programme, 1987.

ISBD(CR): International Standard Bibliographic Description for Serials and Other Continuing Resources. Revised from the *ISBD(S): International Standard Bibliographic Description for Serials.* Munich: K.G. Saur, 2002.
Available on the Web at: http://www.ifla.org/VII/s13/pubs/isbdcr-final.pdf
Accessed 29/08/03

ISBD(G): General International Standard Bibliographic Description. annotated text, rev. ed. Munich; New York: K.G. Saur, 1992.
Available on the Web at: http://www.ifla.org/VII/s13/pubs/isbdg.htm
Accessed 29/08/03

ISBD(M): International Standard Bibliographic Description for Monographic Publications. 2002 ed. – in PDF format, only.
Available on the Web at: http://www.ifla.org/VII/s13/pubs/isbd_m0602.pdf
Accessed 29/08/03

ISBD(NBM): International Standard Bibliographic Description for Non-Book Materials. rev. ed. London: IFLA Universal Bibliographic Control and International MARC Programme, 1987.

ISBD(PM): International Standard Bibliographic Description for Printed Music. 2nd rev. ed. New York: K.G. Saur, 1991.

MARC 21 concise formats available on the World Wide Web at:
http://www.loc.gov/marc/   Accessed 29/08/03
Includes:

- *MARC 21 Concise Format for Bibliographic Data*, 2002 concise ed. Available on the Web at: http://www.ifla.org/VII/s13/pubs/isbd_m0602.pdf   Accessed 29/08/03
- *MARC 21 Concise Format for Authority Data*, 2002 concise ed. Available on the Web at: http://www.loc.gov/marc/authority/ecadhome.html   Accessed 29/08/03
- *MARC 21 Concise Format for Holdings Data*, 2002 concise ed. Available on the Web at: http://www.loc.gov/marc/holdings/echdhome.html   Accessed 29/08/03
- *MARC 21 Concise Format for Classification Data*, 2002 concise ed. Available on the Web at: http://www.loc.gov/marc/classification/eccdhome.html   Accessed 29/08/03
- *MARC 21 Concise Format for Community Information*, 2002 concise ed. Available on the Web at: http://www.loc.gov/marc/community/eccihome.html Accessed 29/08/03

MARC 21 format for authority data, including guidelines for content designation. 1999 ed. Washington, D.C.: Library of Congress Cataloging Distribution Service, 1999-

MARC 21 format for bibliographic data, including guidelines for content designation. 1999 ed. Washington, D.C.: Library of Congress Cataloging Distribution Service, 1999-

MARC 21 format for classification data, including guidelines for content designation. 2000 ed. Washington, D.C.: Library of Congress Cataloging Distribution Service, 2000-

MARC 21 format for community information, including guidelines for content designation. 2000 ed. Washington, D.C.: Library of Congress Cataloging Distribution Service, 2000-

MARC 21 format for holdings data, including guidelines for content designation. 2000 ed. Washington, D.C.: Library of Congress Cataloging Distribution Service, 2000-

Regeln für den Schlagwortkatalog: RSWK. Erarb. von der Expertengruppe RSWK des Deutschen Bibliotheksinstituts auf der Grundlage der von der Kommission des Deutschen

Bibliotheksinstituts für Sacherschließung bearb. 2. Aufl. (1991). Hrsg. von der Konferenz für Regelwerksfragen beim Deutschen Bibliotheksinstitut. Red. Bearb.: Hans-Jürgen Schubert. Berlin: Dt. Bibliotheksinst. Grundwerk. 3., überarb. und erw. Aufl. 1998. (RSWK)

Regeln für die alphabetische Katalogisierung in wissenschaftlichen Bibliotheken: RAK-WB. Erarb. von der Kommission des Deutschen Bibliotheksinstituts für Alphabetische Katalogisierung (bis 1990) und der Expertengruppe RAK des Deutschen Bibliotheksinstituts (seit 1991). Red. Bearb.: Hans Popst]. 2. überarb. Ausg. Berlin: Dt. Bibliotheksinst. Losebl.-Ausg. 1. Ausg. geb. Ausg. Erg.-Lfg. 3 (1998) (RAK) 4.Erg. 2002 Available on the Web at: http://www.ddb.de/professionell/pdf/rak_4_erg.pdf Accessed 29/08/03

UNIMARC concise authorities format. 2001 ed. Available on the Web at: http://ifla.queenslibrary.org/VI/3/p2001/guideright.htm Accessed 29/08/03

UNIMARC concise bibliographic format. 1 March 2002 ed. Available on the Web at: http://www.ifla.org/VI/3/p1996-1/concise2.pdf Accessed 29/08/03

UNIMARC manual: authorities format. 2nd rev. enlarged ed., 2001. Munich: K.G. Saur, 2001.

UNIMARC manual: bibliographic format. 2nd ed., 1994; update 4, 2002. Munich: K.G. Saur, 2002.

GLOSSARY

Access point: A name, term, code, etc., under which a bibliographic or authority record may be searched.

Attribute: Characteristics associated with an entity that serve as the means by which users formulate queries and interpret results when seeking information about a particular entity.

Authority record: A record for which the first area is the uniform heading for a person, corporate body, work, topical subject, or geographic place, as established by the cataloguing agency responsible. In addition to the uniform heading, the record contains, as applicable: information notes; a record of all variant and related headings from which references have been made (tracings); notes recording sources consulted, etc.; an identification of the cataloguing agency responsible for the entry; and an authority data number.   The authority record may be combined with reference entries to include references to related headings as well as tracings for references from related headings.

Bibliographic description: A set of bibliographic data comprised of entities that describe or identify one or more works, expressions, manifestations, or items.

Bibliographic record: A record that incorporates the access points, bibliographic description, and location information for one or more works, expressions, manifestations, or items.

Brief display: A display that lists in a logical order and with a limited number of attributes, all of the bibliographic or authority records under a single heading or all of the bibliographic or authority records matched on a keyword search of bibliographic or authority records. Alternatives: Brief record display; Short display; Summary display; List display; Overview display. *See also* Detailed display.

Button: A point-and-click device in a graphical user interface, used to select an option or choose a function.

Caption: A short explanation of an icon, label, button, etc., which appears in a little window when the cursor is placed upon it.

Call number: The set of letters and/or numbers identifying a particular item in a library collection indicating its location. Often includes a **Classification number** and a **Shelfmark**.

Classification number: The set of letters and/or numbers taken from a classification scheme such as the Library of Congress Classification, the Universal Decimal Classification or the Dewey Decimal Classification, and used to denote a particular subject area in that classification scheme.

Coded data: Data in a field or subfield for which the value is represented by a code, not natural language; coded data may be prescribed by the bibliographic format (e.g., UNIMARC; MARC), or other sources (e.g., classification codes).

Detailed display: A display that shows all attributes from a bibliographic or authority record that are necessary to fulfil a particular function.
Alternatives: Extensive display; Full record display; Full display. *See also* Brief display.

Entity: represents the key objects or different aspects of interest to users of bibliographic data or records. As outlined in the *Functional Requirements for Bibliographic Records (FRBR)*, entities may (1) comprise the products of intellectual or artistic endeavour named or described in the bibliographic record (i.e., work, expression, manifestation, or item – *see also* FRBR 3.1.1), (2) represent those responsible for the intellectual or artistic content, the physical production and dissemination, or the custodianship of the work, expression, manifestation, or item (*see also* FRBR 3.1.2), or (3) represent an additional set of entities that serve as the subjects of works (i.e., concept, object, event, or place – *see also* FRBR 3.1.3).

Expression: The specific intellectual or artistic form that a *work* takes each time it is 'realised' in the form of alpha-numeric, musical, or choreographic notation, sound, image, object, movement, etc., or any combination of such forms – (*See also* FRBR 3.2.1)

Font: Size, form, and appearance of elements of the character set when displayed or printed

Frequency: A number that displays next to a heading when an index is displayed and represents the number of bibliographic records linked to that particular heading (Also known as Posting)

Heading: The form in which a name for a person, corporate body, concept, object, event, or place appears in authority files and/or indexes. Alternative: Uniform heading.

Hit: A record from a bibliographic or authority file that is the result – alone or with other records – of a search or query.

Icon: A graphical representation of an option or a function.

Index: A list arranged in a logical order consisting of values for specific attributes (e.g., names, titles, subjects) that can be searched and that point to bibliographic or authority record(s).

Item: A single exemplar of a *manifestatio*n – (*See also* FRBR 3.2.4)

Keyword: A sequence of characters bounded by spaces on either side (e.g., a word or a number).

Keyword searching: A search for the specified keyword within one or several fields, or the whole record.

Layout: The way in which data are presented on the screen

Limit: A restriction placed on a search statement that causes a subset of the results to be retrieved, based, for example, on categories such as language, date, publication type, or physical format. (Also known as Filter.)

Manifestation: The physical embodiment of an *expression* of a *work* – (*See also* FRBR 3.2.3)

Phrase searching: A search in which the user enters several keywords that the system matches against attribute values in the exact order as entered.

Relationship: A connection between the entity found and other entities that are related to that entity – (*See also* FRBR Chapter 5)

Scroll: To move continuously up or down a display without encountering a page or screen break.

Search: Matching a user's input term(s) against the database. (Also known as Query or Request.)

Shelfmark: The combination of letters and/or numbers in a call number that creates a unique number for a particular item in a library collection, differentiating it from other items.

Single-record display: A display of a single bibliographic or authority record.

Sorting key: A string of characters within a record that determines the ordering of the records.

Work: A distinct intellectual or artistic creation; it is an abstract entity – (*See also* FRBR 3.2.1)

BIBLIOGRAPHY

The following is a *selected list* of catalogue and record use studies, and of evaluations of OPAC and WebPAC content and displays. The list is by no means exhaustive, but does reflect a representative sample of the key literature dealing with the content, structure, presentation, and use of bibliographic (and authority) records, and the catalogues that contain and display them. As OPACs and WebPACs continue to evolve, so do the publications that assess them. Thus, while this Bibliography captures a cross section of past and relatively current empirical research, reflection, and opinion, it is merely a beginning and an invitation for timely, relevant additions in the future.

Ayres, Fred H., and Mick. Ridley. "Guidelines to OPAC Display: A Critical Appraisal." [1998?] Available at:
http://www.bopac2.comp.brad.ac.uk/~bopac2/htdocs/Guidelines_OPAC_Display.html
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Babu, B.R., and A. O'Brien. "Web OPAC Interfaces: An Overview. *The Electronic Library* 18 (5): 316-327 (2000).

Borgman, Christine L., Sandra G. Hirsh, Virginia A. Walter, and Andrea L. Gallagher. "Children's Searching Behavior on Browsing and Keyword Online Catalogs: the Science Library Catalog Project." *Journal of the American Society for Information Science* 46: 663-684 (1995).

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http://www.fis.utoronto.ca/research/programs/displays/juliana.htm
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