



FRBR Functional Requirements for Bibliographic Records

What is FRBR and why is it important?

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What is FRBR?

- final report of the IFLA Study Group on the Functional Requirements for Bibliographic Records
- approved by the Standing Committee of the IFLA Section on Cataloguing, Sept. 1997; published in 1998 by K.G. Saur
- freely available on the Web:
<http://www.ifla.org/VII/s13/frbr/frbr.htm>
<http://www.ifla.org/VII/s13/frbr/frbr.pdf>

IFLA = International Federation of Library Associations and Institutions

Canadian connection: your keynote speaker, Tom Delsey, was part of the team that produced FRBR. He is regarded internationally as one of the FRBR experts, and is sought after to continue working on FRBR and its applications.

What is it really?

- the report had 2 purposes:
 1. to provide a clearly defined, structured framework for relating the data that are recorded in bibliographic records to the needs of the users of those records
 2. to recommend a basic level of functionality for records created by national bibliographic agencies (*FRBR 1.1*)
- report describes an entity-relationship model resulting from an analysis of the data in bibliographic records

Developed in response to this charge:

“to produce a framework that would provide a clear, precisely stated, and commonly shared understanding of what it is that the bibliographic record aims to provide information about, and what it is that we expect the record to achieve in terms of answering user needs” *FRBR 1.1*

Conceptual model

Purpose of the FRBR model

- user-focused approach to the bibliographic record (i.e. metadata)
- analyze which parts of the bibliographic record are used to respond to which user task
- ensure that bibliographic record carries the right amount of information to respond to user needs efficiently

Make sure that minimal records and core records are not cutting out essentials while trying to streamline and cut costs.

FRBR → conceptual model

- IFLA but not tied to ISBD
- not just for “library users”
- concepts and framework are applicable to any metadata about a product of intellectual and/or artistic endeavour

“For the purposes of the study, the users of bibliographic records are seen to encompass a broad spectrum, including not only library clients and staff, but also publishers, distributors, retailers, and the providers and users of information services outside traditional library settings. The study also takes into account the wide range of applications in which bibliographic records are used: in the context of purchasing or acquisitions, cataloguing, inventory management, circulation and interlibrary loan, and preservation, as well as for reference and information retrieval. As a result, the attributes and relationships identified in the study reflect the breadth of use that is made of bibliographic information, and the importance to users of aspects of both content and form of the materials described in bibliographic records.”

FRBR 1.1

User needs

- Find
- Identify
- Select
- Obtain

add? manage, navigate

relate, attribute royalties to, preserve

find
search criteria

find materials that correspond to the user's stated

identify 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 appropriate to the user's needs

obtain order, borrow a book, access an online journal, etc.

Some people also suggest adding the tasks: manage, navigate

B. Tillett also adds: relate, attribute royalties to, preserve

FRBR model

- entities
 - in bibliographic records
 - important to the user
 - divided into 3 groups
- attributes of the entities
- relationships
between the entities

Group 1 entities



products of intellectual or artistic endeavour

- work
- expression
- manifestation
- item

definitions from FRBR:

Work is an abstract entity; there is no single material object one can point to as the *work*. We recognize the *work* through individual realizations or *expressions* of the *work*, but the *work* itself exists only in the commonality of content between and among the various *expressions* of the *work*.

Expression: the intellectual or artistic realization of a work in the form of alphanumeric, musical, or choreographic notation, sound, image, object, movement, etc., or any combination of such forms.

Manifestation: physical embodiment of an *expression* of a *work*.

Item: a single exemplar of a *manifestation*.

Group 1 entities:

work

is realized through

expression

is embodied in

manifestation

is exemplified by

item

FRBR 3.1.1

Group 1 entities (AND ONLY Group 1 entities) are a hierarchy

item is exemplar of a manifestation

manifestation embodies an expression

an expression is a realization of the work

work and expression -- abstract, content

manifestation and item – physical recording of content

BUT every item is a work, an expression, and a manifestation

Group 2 entities



those responsible for creating, producing, etc., the entities in group 1

- person
- corporate body

those responsible for the intellectual or artistic content, the physical production and dissemination, or the custodianship of the entities in the 1st group

Responsibility may only apply to a manifestation, or to a single expression, or it may apply at the work level, and so apply also to all expressions, manifestations, and items of that work.

Group 3 entities

➡ subjects of works

- concept
- object
- event
- place

group 1 and 2 entities can also be subjects

subject is at the work level – applies to all expressions, all manifestations, all items of the same work

Attributes

- each entity has a set of characteristics or attributes (similar to data elements)
- attributes can be inherent or externally imputed

inherent

e.g. physical characteristics, statements on title pages, covers, containers; discover inherent characteristic by examining item

externally imputed: assigned identifiers e.g. thematic catalog numbers

Examples of attributes

(group 1)

work: title, form or genre, date, medium of performance, coordinates (map) ...

expression: title of the expression, form of the expression, language of the expression, type of score ...

manifestation: title of the manifestation, publisher, date of publication, form of carrier, dimensions, terms of availability...

item: identifier (e.g. location and call no., barcode), provenance, condition, inscriptions ...

Hierarchy

so characteristics of the work belong to all expressions, all manifestations, all items
characteristics (or attributes) are inherited by all lower levels of the hierarchy

Examples of attributes

(groups 2 + 3)

person: names, dates, titles ...

corporate body: name, number, place ...

concept: term (i.e. word, phrase, or group of characters used to name or designate)

e.g. economics

object: term

e.g. ships

event: term

e.g. Battle of Hastings

place: term

e.g. Ottawa

Relationships

- links between entities
- collocation
- assist the user to navigate through the catalogue or database
 - relationships between entities of the different groups
 - relationships between entities of the same group (esp between group 1 entities)

Examples of relationships

(between groups)

person/work	created by
person/expression	realized by (as in performance)
corporate body/manifestation	produced by
corporate body/item	owned by
concept/work	is subject of
object/work	is subject of

Examples of relationships

(within group 1)

➡ between entities / same work

➡ between entities /
different works

Example of a “family” or hierarchy of Group 1 entities:

work	expressions	manifest.	item
Hamlet	original text	London, 1603	RBD
		New York, 1998	MCL BIRK
	French trans. (Gide)	Paris, 1946	EDUC
		Neuchatel, 1949	MCL
	(Bonneyfoy)	Paris, 1978	MACD
	German trans.	Hamburg, 1834	MUSIC
	audio-book	Paris, 1983	REDP

Example of relationships among the group 1 entities for one work

last example is made-up (to illustrate)

audio-book = reading of the text, NOT a dramatization

Example of work to work relationships

Shakespeare, William, 1564-1616. Hamlet.

subject

Modern Hamlets & their soliloquies

Critical responses to Hamlet, 1600-1900

imitation

Hamlet travestie

transformation

Hamlet : opéra en cinq actes / musique de
Ambroise Thomas ; paroles de Michel Carré
et Jules Barbier

adaptation

Hamlet : the young reader's Shakespeare :
a retelling / by Adam McKeown

Examples of relationships

(within group 1)

work to work

successor

supplement

complement

summarization

adaptation

transformation

imitation

work to work: whole/part

Examples of relationships

(within group 1)

expression to expression (same work)

abridgement

revision

translation

arrangement (music)

expression to expression (between
different works)

successor, supplement, etc.

expression to work

Examples of relationships

(within group 1)

manifestation to manifestation

reproduction

alternate

whole/part

manifestation to item

reproduction

item to item

reconfiguration

reproduction

alternate= simultaneously released edition

alternate format

Why is the model useful?

- maps attributes and relationships to user tasks
- enables a better understanding of the components of the bibliographic record and their function and value to the user
- looks at the bibliographic record within the context of large databases
- broadens focus beyond manifestations

current catalogues are focused primarily on manifestations

Impact beyond original charge (record user)

- improve navigation
 - focus on collocation
 - reintroduce logical indexing vs. purely mechanical filing
- improve the display of information to the user
 - improve index, sort and display in OPAC
 - make relationships between resources explicit

Impact beyond original charge (record user) con't

- organize information to suit a range of user needs

does user need a particular manifestation? a particular expression? or does user want to see all expressions, all related works?

- improve response to user expectations

user services in the OPAC at the level of specificity that user requires, e.g. holds

Impact beyond original charge (record creator)

- focuses attention on where cataloguing codes need to be strengthened
 - collocation (esp. indexed headings)
 - information about relationships
 - recording information in ways that allow the retrieval of appropriate sets of records
 - ensure records carry information of value to the user

Impact beyond original charge (record creator) con't

- model puts some longstanding problems in perspective
 - e.g. content vs. carrier (or format variation)
- different but how different
 - where is carrier in the hierarchy?
- separation into abstract entities and physical embodiment entities
 - 1 physical item — 4 entities
(and 4 sets of attributes)

e.g. treatment of online journals

Some current OPAC projects

- AustLIT (gateway for Australian literature)
- VTLIS Virtua (FRBR-ized OPAC)
- VisualCat
(Danish cataloguing client (XML/RDF))
- Variations 2 (Indiana University Digital Music Library Project)
- OCLC
 - Fiction Finder
 - experiments to redesign WorldCat

Some projects to improve cataloguing rules

- ISBD community
 - international cataloguing code for bibliographic description and access
- AACR community
 - introduce FRBR terminology into AACR
 - expression-level collocation (JSC Format Variation Working Group)
 - resolve content versus carrier issues (reconceptualize chapter 9 (electronic resources), examine GMDs)
 - improve information about relationships (increase use of relator terms)

FRBR's benefits

- aims to get the user to the resource efficiently
- clarifies what is important in a bibliographic record
- clarifies organizing principles for structuring the display of large sets of records or metadata
- emphasizes the importance of relationships between resources

not to say that it answers all problems

what is a work? when should something be considered a new work?

e.g. is a resource made up of several works a new work or a collection of works?

what constitutes a new expression?

how much difference makes it a new expression?

FRBR's benefits

- generated a re-examination of practices and rules
- presents a conceptual framework for this revision work which should increase clarity for users and maintain coherence and consistency in cataloguing rules
- a model to be maintained, expanded

More information

FRBR Working Group:

<http://www.ifla.org/VII/s13/wgfrbr/wgfrbr.htm>

Bibliography at FRBR WG site:

<http://www.ifla.org/VII/s13/wgfrbr/bibliography.rtf>