

# *The FRBR and FRAD Conceptual Models*

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**Bibliothèque  
et Archives  
nationales**

**Québec** 

# Overview

- FRBR
  - user tasks
  - the model itself
- FRAD
  - user tasks
  - the model itself
- Relevance to RDA
- FRBR Review Group

# FRBR

- Functional Requirements for Bibliographic Records
- IFLA Cataloguing Section study group 1992-1997
- Published 1998

# FRBR Methodology

- An entity-relationship (E-R) model
- Define entities
- List their attributes
- Identify the relationships between the entities
- Map to user tasks

# Users in FRBR

- End-users of information retrieval systems
- Information workers assisting users
- Information workers maintaining databases

# FRBR User Tasks

- Find entities that correspond to the search criteria
- Identify an entity as being the one sought
- Select an appropriate entity
- Obtain access to the entity described

# Groups of Entities in FRBR

- Group 1: Products of intellectual or artistic endeavor
- Group 2: Responsible for group 1 entities
- Group 3: Subjects of works

# Group 1 Entities

- Focus of bibliographic records
- 2 abstract entities reflect content
  - work
  - expression
- 2 concrete entities reflect form/carrier
  - manifestation
  - item



# Definition: Item

- A single exemplar of a manifestation
- Concrete, usually physical, thing held in library collections
- A “copy” of a publication, may be made up of multiple parts (volumes in a set)

# Definition: Manifestation

- The physical embodiment of an expression of a work
- The set of all items bearing the same characteristics, both physical form and content
- Either a published edition, or a single unpublished item

# Definition: Expression

- The intellectual or artistic realization of a work
- The specific form a work takes when realized
- Specific sequence of words in a textual work, of notes in a musical work, etc.

# Definition: Work

- A distinct intellectual or artistic creation
- Abstraction of the commonality of content of its various expressions
- Does not correspond to any single physical thing

# What is a “book”?

I have lost my *book*.

We should order that  
*book*.

I'd like to read that *book*  
in English.

That movie is based on  
my favourite *book*.

- Item
- Manifestation
- Expression
- Work

# Group 1 Entities

WORK

*realized through*

EXPRESSION

*embodied in*

MANIFESTATION

*exemplified by*

ITEM

# Attributes: Work

- Title
  - Form
  - Date
  - etc.
- *L'avare*
  - Play
  - 1668

# Attributes: Expression

- Title
  - *The miser*
- Form
  - Text
- Date
  - 1987
- Language
  - English
- etc.



# Attributes: Manifestation

- Title
  - Responsibility
  - Place of publication
  - Publisher
  - Date
  - Type of material
  - Extent
  - Dimensions
  - Identifier
- *The miser : a comedy*
  - a new translation by Albert Bermel
  - New York, NY
  - Applause Theatre Book Publishers
  - 1987
  - Printed book
  - 126 p.
  - 19 cm
  - ISBN 0936839759

# Attributes: Item

- Identifier
- Provenance
- Annotations /  
Inscriptions
- etc.
- PQ1825 E5 1987b
- Purchase
- None

# Group 2 Entities

Definitions:

- **Person** (an individual)
- **Corporate Body** (an organization or a group of individuals and/or organizations acting as a unit)

# Attributes: Person

- Name
- Dates (birth, death, activity)
- Title (Duke, Sir, Prof., Dr.)
- Other designation (Saint, Jr., the Brave)

# Attributes: Corporate Body

- Name
- Number (of a meeting, conference, etc.)
- Place (located in, held in)
- Dates (when held, when active)
- Other designation (of legal status, qualifiers)

# Group 2 Entities

PERSON

CORPORATE BODY

*responsible for*

group 1 entities:

work

expression

manifestation

item

# Group 2 Entities

Those responsible for the:

- intellectual or artistic content of a work or expression
- physical production or distribution of a manifestation
- ownership of an item

# Group 2 Primary Relationships

Levels of responsibility:

- Item <is owned by>
- Manifestation <is produced by>
- Expression <is realized by>
- Work <is created by>

Example:

- McGill
- Applause Theatre  
Book Publishers
- Albert Bermel
- Molière



# Group 3 Entities

Serve as subjects of works:

- Concept
- Object
- Event
- Place

# Definition: Concept

- Abstract notion or idea
- Broad or narrow
- Such as: theories, processes, techniques, practices, etc.

# Definition: Object

- A material thing
- Animate or inanimate
- Human creations or naturally occurring
- Such as: buildings, ships, plants, etc.

# Definition: Event

- An action or occurrence
- Only events that are subjects are considered
- Such as: historical events, periods of time, etc.

# Definition: Place

- A location
- Historical or contemporary
- Geographical features
- On Earth or not
- Such as: cities, rivers, mountain ranges, planets, etc.

# Attributes: Group 3

- Not detailed in FRBR
- Only one attribute: “term for”
- Referred to FRSAR: *Functional Requirements of Subject Authority Records*

# Group 3 Entities

CONCEPT

OBJECT

EVENT

PLACE

+ group 1 and 2 entities

*subject relationships to*

group 1 entity:  
work

# Relationships in the Catalogue

- Provide structure
- Collocation
  - Enables the user tasks Find and Identify
- Allow navigation



# Bibliographic Relationships between Group 1 Entities

- Types of relationships characterized by:
  - entities involved
  - Referential or Autonomous
  - Dependent part or Independent part

# Work or Expression Level

- Work-to-Work
- Expression-to-Expression (between expressions of different works)
- Expression-to-Work (expression to a different work)

# Work or Expression Level

- Successor
- Supplement
- Complement
- Summarization
- Adaptation
- Transformation
- Imitation

# Whole/Part: Work or Expression

- Dependent part
  - Chapter, section, part, etc.
  - Volume/issue of serial
  - Part of multipart work
  - Illustration for a text
  - Sound track for a film
- Independent part
  - Monograph in series
  - Journal article
  - Part of multipart work

# Expression-to-Expression of same Work

- Abridgement
- Revision
- Translation
- Arrangement (music)

# Manifestation or Item Level

- Manifestation-to-Manifestation (of same expression)
- Manifestation-to-Item (of a different manifestation of the same expression)
- Item-to-Item

# Manifestation-to-Manifestation

- Reproduction
  - reproduction
  - microreproduction
  - reprint
  - facsimile
  - mirror site
- Alternate
  - alternate format
  - simultaneous edition

# Whole/Part: Manifestation

- Volume of multivolume manifestation
- Soundtrack for a film
  
- parts of a kit
- part may be physically separate or not



# Item-to-Item

- Reconfiguration
  - bound with
  - split into
  - extracted from
- Reproduction
  - reproduction
  - microreproduction
  - facsimile

# Whole/Part: Item

- Physical component of copy
  - integral, such as: a page
  - discrete, such as: a volume
- Binding of a book

# FRANAR, FRAR or FRAD?

- FRANAR: Functional Requirements and Numbering of Authority Records
- An IFLA Working Group
- Created by Division of Bibliographic Control
- Chairs:
  - Françoise Bourdon (1999-2001)
  - Glenn Patton (2002-)

# FRANAR Terms of Reference

- Defining functional requirements of authority records
- Studying the feasibility of an international authority data number
- Liaising with other interested groups

# Functional Requirements for Authority Data (FRAD)

- A report fulfilling FRANAR's first task
- Method is entity-relationship modeling
- Conceptual model of the kind of authority data required to support authority control
- To facilitate international sharing of authority data

# CAUTION!

*The following is based on the  
April 2007 DRAFT  
issued for world-wide review.*

*Modifications, improvements  
will certainly be made prior to  
final publication.*

# Scope of FRAD

- Data needed in authority control
- All types of headings at a high level
- Details only for name, name-title, or uniform title headings
- Includes entities involved in creating headings

# Not in Scope

- Further breakdown of attributes of Group 3 entities
- Relationships among Group 3 entities (concept, object, event, place)
- In other words, subject authorities
- Referred to FRSAR WG started in 2005



# Not in Scope

- Relationships between Group 2 and Group 1 entities (relator terms)
- Series treatment data
- Authority record management data

# Users in FRAD

- Information workers who create, maintain and use authority files directly
- End-users who interact with authority data
  - maybe directly
  - but usually indirectly through controlled access points in bibliographic records

# FRAD User Tasks

- Find entities corresponding to stated criteria, *or explore the universe of bibliographic entities*
- Identify an entity as being the one sought, *or to validate the form of name to be used as a controlled access point*
- Contextualize
- Justify

# FRAD User Task: Contextualize

- Place a person, corporate body, work, etc. in context
- clarify the relationship between two or more persons, corporate bodies, works, etc.
- clarify the relationship between a person, corporate body, etc., and a name by which that person, corporate body, etc., is known

# FRAD User Task: Justify

- Document the authority data creator's reason for choosing the name or form of name on which a controlled access point is based

# Entities in FRAD

- Bibliographic entities (defined in FRBR):
  - person, family, corporate body
  - work, expression, manifestation, item
  - concept, object, event, place
- These entities are the focus of authority records
- “Authority” entities refer to them

# Definition: Person

- An individual or a *persona* established or adopted by an individual or a group (*FRAD*)
- A bibliographic person, may not be a real individual
- Consider joint pseudonyms, multiple pseudonyms used by one real person

# Definition: Family

- Two or more persons related by birth, marriage, adoption, or similar legal status, or who otherwise present themselves as a family
- From ISAAR(CPF)
- Would belong to FRBR Group 2 (and next edition of FRBR will include it)



# Definition: Corporate Body

- An organization or group of individuals and/or organizations acting as a unit
- As long as the group is named
- Includes meetings, congresses
- Includes governments

# Group 2 Entities

PERSON

FAMILY

CORPORATE BODY

*responsible for*

group 1 entities:

work

expression

manifestation

item

# FRAD Entities

- Name
- Identifier
- Controlled access point
- These are the heart of the authority data

# Definition: Name

- A character or group of words and/or characters by which an entity is known
- The basic name or term itself
- As found in the “real” world

# Definition: Identifier

- A number, code, word, phrase, logo, device, etc. that is uniquely associated with an entity, and serves to differentiate that entity from other entities within the domain in which the identifier is assigned
- Not only bibliographic identifiers

# Definition: Controlled Access Point

- A name, term, code, etc. under which a bibliographic or authority record or reference will be found
- Includes established or authorized headings
- and variant headings or references

# Basic FRAD Model

BIBLIOGRAPHIC ENTITIES

*known by*

NAMES and / or IDENTIFIERS

*basis for*

CONTROLLED ACCESS POINTS

# Definition: Rules

- A set of instructions relating to the formulation and/or recording of controlled access points



# Definition: Agency

- An organization responsible for creating or modifying a controlled access point
- and for the application and interpretation of the rules it uses

# Authority Relationships

- Between different Persons, Families, Corporate bodies, Works
- Between Names and the entities they name
- Between different Controlled Access Points for the same entity

# Impact of FRBR

- « 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 »
- common framework and terminology facilitates ongoing research
- renewed interest for bibliographic research

# Impact of FRBR on Cataloguing Standards

- On ISBDs : mandatory data elements
- IME ICC and *Statement of International Cataloguing Principles*
- On cataloguing codes: AACR2 => RDA
- RDA = Resource Description and Access

# RDA and FRBR/FRAD

- FRBR and FRAD concepts are integrated into the basic structure and philosophy of RDA
- RDA's organization:
  - Recording Attributes (of the 11 bibliographic entities)
  - Recording Relationships (by groups of entities)
- FRBR and FRAD User tasks
- Separation between a Name and a Controlled Access Point

# FRBR Review Group

- 2003-
- Review and maintain the FRBR model
- Develop and make available guidelines and interpretative documents
- Promote the model and maintain links with relevant groups

# Current Projects

- Amendment to the expression entity
- Working Group on Aggregates
- Namespace declaration for FRBR entities

# FRSAR

- FRSAR: Functional Requirements for Subject Authority Records
  - 2005-
  - Chair: Marcia Lei Zeng (Kent State University, Ohio)
- FRBR + FRAD + FRSAR = complete model of the bibliographic universe



# FRBR/CRM Working Group

- 2003-
- Co-chairs of the joint working group:
  - Martin Doerr for the ICOM CIDOC CRM SIG
  - Patrick LeBoeuf for the IFLA FRBR RG
- CRM = CIDOC's Conceptual Reference Model
- FRBRoo version 0.9 in January 2008

# FRBR/CRM Working Group

- To express the FRBR model with the concepts, tools, mechanisms, and notation conventions provided by the CIDOC CRM (creating an object-oriented FRBR known as FRBRoo)
- Enrich FRBR with concepts from CRM
- To contribute to semantic interoperability between the documentation structures used for library and museum information

# FRBRoo and CIDOC CRM

- More information on the joint working group:  
[http://www.ifla.org/VII/s13/wgfrbr/FRBR-CRMdialogue\\_wg.htm](http://www.ifla.org/VII/s13/wgfrbr/FRBR-CRMdialogue_wg.htm)  
[http://cidoc.ics.forth.gr/frbr\\_intro.html](http://cidoc.ics.forth.gr/frbr_intro.html)
- Drafts for public discussion  
[http://cidoc.ics.forth.gr/frbr\\_drafts.html](http://cidoc.ics.forth.gr/frbr_drafts.html)
- CIDOC CRM  
<http://cidoc.ics.forth.gr/index.html>

# More Information

- On IFLANET:

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

<http://www.ifla.org/VII/d4/wg-franar.htm>

<http://www.ifla.org/VII/s29/wgfrsar.htm>

- Join the FRBR discussion list:

<http://infoserv.inist.fr/wwwsympa.fcgi/info/frbr>

- Read the FRBR blog:

<http://www.frbr.org/>

# Thank you!

## Any questions?

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