FRBR Training

Wichita State University Libraries

Other references:
- FRBR blog (http://www.frbr.org)
- If sources not listed, images in the slides are from Google and Bing search.
What is FRBR

- **FRBR**: Functional Requirements for Bibliographic Records
- A conceptual model designed for the bibliographic universe
- Developed by International Federation of Library Associations and Institutions (IFLA)
- First published in 1998, revised through 2009
- **Entity-relationship model**: define entities, relationships and attributes/metadata; use database modeling method; reduce ambiguity of terms (e.g. book)
- Mapping attributes and relationships to user tasks to find, identify, select and access an entity
Group 1 Entities: Work, Expression, Manifestation, Item

- **Group 1 entities:** the different aspects of user interests in the products of intellectual or artistic endeavor.

- **Work:** a distinct intellectual or artistic creation (an abstract entity)

- **Example:** how to identify new works
  - Novel, movie, graphic novel
Group 1 Entities: Work, Expression, Manifestation, Item

- **New works:** involves significant degree of independent intellectual or artistic effort

- **Example**
  - \(w_1\) L. Frank Baum’s *The Wizard of OZ*
  - \(w_2\) Victor Fleming’s movie *The Wizard of Oz*
  - \(w_3\) Michael Cavallaro’s graphic adaptation of Frank Baum’s *The Wizard of Oz*
  - …. 

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Work 1  
**The Wizard of OZ**

Work 2  
**The Wizard of OZ**

Work 3  
**The Wizard of OZ**
Work

- \( w_1 \) William Shakespeare’s *Romeo and Juliet*
- \( w_2 \) Franco Zeffirelli’s motion picture *Romeo and Juliet*
- \( w_3 \) The Broadway production of *The West Side Story*

*The selected images for Work do not represent the physical book or movie, but rather the “idea,” the “intellectual or artistic creation.”*
Expression

- **Expression**: the intellectual or artistic realization of a work in the form of alpha-numeric, musical, or choreographic notation, sound, image, object, movement, etc., or any combination of such forms. Another abstract entity.

- **Examples**:
  - $W_1$ Marilyn Stokstad’s *Art History*
    - $e_1$ text and illustrations for the second edition
    - $e_2$ text and illustrations for the third edition
    - ...

Expression 1

Expression 2
Expression

- $w_1$ J. S. Bach’s *The art of the fugue*
  - $e_1$ the composer’s score for organ
  - $e_2$ an *arrangement* for chamber orchestra by Anthony Lewis
  - ...

Expression 1

Expression 2
Expression

- \( w_1 \) *Jules et Jim*, the 1962 motion picture directed by François Truffaut
  - \( e_1 \) the original French *language* version
  - \( e_2 \) the original with English subtitles added
  - …

*The selected images for Expression do not represent the physical score, book or movie, but rather the “realization” of an “idea” (in certain forms).*
Manifestation

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

- **Examples:**
  - $w_1$ Harry Lindgren’s *Geometric dissections*
    - $e_1$ original text entitled *Geometric dissections*
    - $m_1$ the book published in 1964 by Van Nostrand
  - $e_2$ revised text entitled *Recreational problems in geometric dissections*
    - $m_1$ the book published in 1972 by Dover

*Note: The images do not represent the real entities.*
**Manifestation**

- **w₁** J.S. Bach’s *Six suites for unaccompanied cello*
  - **e₁** performances by Janos Starker recorded partly in 1963 and completed in 1965
    - **m₁** recordings released on 33 1/3 rpm sound discs in 1966 by Mercury
    - **m₂** recordings re-released on compact disc in 1991 by Mercury
  - **e₂** performances by Yo-Yo Ma recorded in 1983
    - **m₁** recordings released on 33 1/3 rpm *sound discs* in 1983 by CBS Records
    - **m₂** recordings re-released on *compact disc* in 1992 by CBS Records

* The sound disc and CD here represent any copy of that manifestation held in any library anywhere.
Item

- **Item**: a single exemplar of a *manifestation*.
- **Examples:**
  - *w₁* Ronald Hayman’s *Playback*
    - *e₁* the author’s *text* edited for publication
    - *m₁* the *book published* in 1973 by Davis-Poynter
      - *i₁* copy autographed by the author
  - *w₁* Allan Wakeman’s *Jabberwocky*
    - *e₁* the author’s *design* for the game and *text* for the notes
      - *m₁* the game and accompanying notes for teachers
        - *i₁* copy lacking notes for teachers
Group 1 Entities and Primary Relationships

- From Babara Tillett: What is FRBR: A Conceptual Model for the Bibliographic Universe
Group 1 Entities and Primary Relationships with Examples

- **Work**: J. S. Bach’s *Six suites for unaccompanied cello*
  - is realized through
  - **Expression**: Yo Yo Ma’s interpretation
    - is embodied in
    - **Manifestation**: recordings released on 33 1/3 rpm sound discs in 1983 by CBS Records; recordings re-released on compact disc in 1992 by CBS Records
      - is exemplified by
      - **Item**: sound discs and CDs in libraries

Recursive:
- one
- Many
Group 2 Entities: Person, Corporate Body

- Group 2 Entities: Those responsible for the intellectual or artistic content.
- **Person**: an individual.
- **Examples:**
  - $p_1$ Chopin, Frédéric, 1810-1849.
  - $p_2$ Ma, Yo-Yo, 1955-
  - $p_3$ Goldbarth, Albert
  - $p_4$ Parks, Gordon
  - ...

How about Cartoon characters? Pseudonyms? Unsettled yet?
Corporate body

- **Corporate body**: an organization or group of individuals and/or organizations acting as a unit.

- **Examples:**
  - \( \text{cb}_1 \) Art Institute of Chicago
  - \( \text{cb}_2 \) Kansas City Symphony
  - \( \text{cb}_3 \) Symposium on 21st Art

*Is Kauffman Center for The Performing Art a CB, or an object?*
Group 2 Entities and “Responsibility” Relationships

- From Babara Tillett: What is FRBR: A Conceptual Model for the Bibliographic Universe
Group 2 Entities and “Responsibility” Relationships with Examples

- Work
- Expression
- Manifestation
- Item
- Person
- Corporate body

- is owned by
- is produced by
- is realized by
- is created by

Many
Group 3 Entities: Concept, Object, Event, Place

- **Group 3 Entities**: the subjects of works

- **Concept**: an abstract notion or idea.

  “Encompasses a comprehensive range of abstractions that may be the subject of a work: fields of knowledge, disciplines, schools of thought (philosophies, religions, political ideologies, etc.), theories, processes, techniques, practices, etc.”

- **Examples**:
  - $c_1$ Suites (Violoncello)
  - $c_2$ Expressionism
  - $c_3$ Hillside gardening
  - $c_4$ Supply-side economics
  - …
Object

- **Object**: a material thing.
- Can be objects in nature, in history, or by human creation…
- **Examples**:
  - $o_1$ Apollo 11
  - $o_2$ Noah’s ark
  - $o_3$ The Eiffel Tower
  - $o_4$ The Lusitania
  - …
Event

- **Event**: an action or occurrence.
- Can be historical events, epochs, periods of time…
- **Examples**:
  - $e_1$ The Garment Workers’ Strike
  - $e_2$ The Battle of Hastings
  - $e_3$ The Age of Enlightenment
  - $e_4$ The Nineteenth Century
  - …
Place

- **Place**: a location.
- “Terrestrial and extra-terrestrial; historical and contemporary; geographic features and geo-political jurisdictions.”

- **Examples:**
  - $\text{pl}_1$ Köthen (Germany : Landkreis)
  - $\text{pl}_2$ The Alacran Reef
  - $\text{pl}_3$ Morey Peak Wilderness Study Area
  - $\text{pl}_4$ Bristol
  - …
Group 3 Entities and “Subject” Relationships

- From Babara Tillett: What is FRBR: A Conceptual Model for the Bibliographic Universe
Group 3 Entities and “Subject” Relationships

- Work
  - Expression
  - Manifestation
  - Item
  - Person
    - Corporate body
  - Concept
    - Object
    - Event
    - Place

- Many

Suites (Violoncello)
Köthen (Germany : Landkreis)
Attributes

- **Attributes:**
  - A set of characteristics of the entity (metadata);
  - “The attributes of the entity serve as the means by which users formulate queries and interpret responses when seeking information about a particular entity.”

- **Two categories:**
  - “inherent in an entity”
  - “externally imputed”
Attributes of a Work

- Attributes of a Work
  - Title, form, date, other distinguishing characteristic, intended termination, intended audience, context for the work
  - (Musical work) medium of performance, numeric designation, key
  - (Cartographic work) coordinates, equinox

J.S. Bach’s Cello Suite No. 1 in G major, BWV 1007
Attributes of Other Entities

- Attributes of expression
  - Title, form, date, language, revisability...

- Attributes of manifestation:
  - Title, statement of responsibility, edition, place, publisher, date, form, extent of the carrier, terms of availability...

- Attributes of item:
  - ID, provenance, marks/inscriptions, condition...

- See appendix for the full list of attributes for all entities.
Relationships

- **Relationships in the High Level Diagrams:**
  - Relationships Between Work, Expression, Manifestation, and Item ("realized through", "embodied in", "exemplified by")
  - Relationships to Persons and Corporate Bodies ("created by", "realized by", "produced by", "owned by")
  - Subject relationships ("has a subject")
Other Relationships Between Group 1 Entities

- **Work-to-Work**
  - Successor, Supplement, Complement, Summarization, Adaptation, Transformation, Imitation
  - Whole/Part relationship at the work level (has part…, is a part of…)

- **Expression-to-Expression**
  - **Between expressions of the same work:** Abridgement, Revision, Translation, Arrangement (music)
  - **Between expressions of different works:** Successor, Supplement, Complement, Summarization, Adaptation, Transformation, Imitation
  - Whole/Part relationship at the expression level
Other Relationships Between Group 1 Entities (Cont.)

- **Expression-to-Work**
  - Successor, Supplement, Complement, Summarization, Adaptation, Transformation, Imitation

- **Manifestation-to-Manifestation**
  - Reproduction, Alternate (format…)
  - Whole/Part relationship at the manifestation level

- **Manifestation-to-Item**
  - Reproduction

- **Item-to-Item Relationships**
  - Reconfiguration, Reproduction
  - Whole/Part relationship at the item level
Family of Works

- **Equivalent**
  - Microform reproduction
  - Copy
  - Exact reproduction
  - Facsimile
  - Reprint

- **Derivative**
  - Simultaneous "publication"
  - Editions
  - Revision
  - Translation
  - Expurgated edition
  - Arrangement
  - Variations or versions
  - Slight modifications

- **Descriptive**
  - Review
  - Casebook
  - Criticism
  - Evaluation
  - Annotated edition
  - Commentary

- **New Work**

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From Babara Tillett: What is FRBR: A Conceptual Model for the Bibliographic Universe
User Tasks

- Objectives of the catalog:
  - Finding and Collocating function (Charles Ammi Cutter, 1876; Seymour Lubetzky, 1960)
  - Adopted by the 1961 Paris Principle
  - FRBR entities take a new perspective to meet the objective by looking at “User Tasks”

- FRBR Mapping Attributes and Relationships to User Tasks to:
  - Find an entity
  - Identify an entity
  - Select an entity
  - Acquire or obtain access to the entity described
Implementation Cases

- Variations/FRBR project at Indiana University (http://vfrbr.info)
  - Scherzo: Variations/FRBR test catalogue (http://webapp1.dlib.indiana.edu/scherzo/)
    - Search results grouped by works, recordings/scores
    - Browse results by:
      - Instrumentation
      - Creator/Composer
      - Performer/Conductor or Arranger/Editor
      - Publication Date, Performance Date
“FRBR-ized” display?! 

- Result display for Keyword search: “Chopin nocturne”
“FRBR-ized” display?! 

- Selected 1 work: “Nocturnes, piano, op. 62…”
What will happen if I choose “Instrumentation-harpsichord”?

“FRBR-ized” display?!

- Confusing result?
“FRBR-ized” display!

- CastAlbumCollector website (http://www.castalbumcollector.com)
- FRBR-ized display of a much smaller and simpler collection
“FRBR-ized” display!

- Browse by Show (=Work)

Shows with the Most Covered Songs
- West Side Story (89)
- My Fair Lady (88)
- South Pacific (79)
- The Phantom Of The Opera (73)
- Carousel (73)
- Company (72)
- The King and I (69)
- Follies (69)
- A Little Night Music (64)
- Les Misérables (63)
- Babes in Arms (62)
- Oklahoma! (61)
- Guys and Dolls (57)
- Gypsy (57)
- Porgy and Bess (53)
- Into the Woods (53)
- Merrily We Roll Along (52)
- Show Boat (51)
- Girl Crazy (50)
- Kiss Me, Kate (49)

Shows | Recording | People | Songs | Labels
Database | Forums | Blog | Users | Contribute

- More CD debuts for London Cast Recordings coming
- First CD release of Original London Cast recording of PROMISES, PROMISES fr
“FRBR-ized” display!

- Browse by Recording (=Expression)

### Shows
**The Sound Of Music**
- 105 Recordings
- 42 Cover Albums
- 36 Songs
- 2 Links
- 0 Topics

### Show Details
- **Music**: Richard Rodgers (962)
- **Lyrics**: Oscar Hammerstein II (639)
- **Book**: Russell Crouse (6), Howard Lindsay (11)
- **Additional Lyrics**: Richard Rodgers (962)

### Audio Recordings

<table>
<thead>
<tr>
<th>Audio Recordings</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Sound Of Music</td>
<td>1959</td>
<td>Original Broadway Cast</td>
</tr>
<tr>
<td>The Sound Of Music</td>
<td>1959</td>
<td>Studio Cast</td>
</tr>
<tr>
<td>The Sound Of Music</td>
<td>1959</td>
<td>Pete King Chorale</td>
</tr>
<tr>
<td>The Sound Of Music</td>
<td>1959</td>
<td>Benny Goodman And His Orchestra</td>
</tr>
</tbody>
</table>

* Recordings of the work “The Sound of Music”
“FRBR-ized” display!

- Browse by Release (=Manifestation)

**Recordings**

The Sound Of Music » Original Broadway Cast

- 13 Releases | 0 Links | 0 Topics | 401 Collectors | 28 Wishers | « | »

**Show Details**

- **Show:** The Sound Of Music (105)
- **Music:** Richard Rodgers (962)
- **Lyrics:** Oscar Hammerstein II (639)
- **Book:** Russell Crouse (6), Howard Lindsay (11)

*Releases of the “1959 original Broadway cast”*

**Recording Details**

- **Date:** 1959-11-22
- **Type:** Audio / Stage Cast
- **Language:** English
- **Location:** US / NY / New York
- **Conductors:** Frederick Dvonch (14)
- **Music Directors:** Frederick Dvonch (14)
- **Orchestrations:** Robert Russell Bennett (154)
- **Vocal Arrangements:** Trude Rittman (53)
- **Producers:** Goddard Lieberson (77)
- **Liner Notes:** Mort Goode (24)
- **Performers:**
  - Theodore Bikel (17), Joanne Birks, Patricia Brooks (2), June Card, Dorothy Dallas, Brian Davies (6), Celi Dally, Cleo Fry, Barbara George, Joey Heatherton, Lucas Hoving, Elizabeth Howell, Kurt Kaszner (10),
“FRBR-ized” display!

- Browse by Release (=Manifestation)

Tracks also appear on these releases / recordings

**Releases (13)**

- **Format:** CD
- **Label:** Sony SK 60583
- **Released:** 1993-09-15
- **Barcode:** 007466058329
- **Buy From:** Amazon.com

**Added by:** hitormiss

**Tracks:**
1. Preceding
2. The Sound of Music
3. Maria [3:24]

**Notes:**
Includes 2 bonus tracks: Do-Re-Mi (Mitch Miller)

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* 13 Releases of “1959 original Broadway cast”

**Notes:**
* 13 Releases of “1959 original Broadway cast”

**Added by:** frontrowcentre Geoconno

**Format:** CD
**Label:** Sony Broadway SK 53537
**Released:** 1993
**Audio:** Stereo
**Search for:**

**Notes:** Reissued as part of The Columbia Treasury

**Added by:** frontrowcentre

**Format:** LP
**Label:** Columbia S 32601
**Released:** 1973
**Search for:**

**Notes:**
1st release is in a gatefold jacket with drawings of children on the back and original notes.
Search results display

Search
sound of music

Shows (1)
- The Sound Of Music (105) -- Rodgers

Recordings (103)
- Alfred Newman Conducts Selections from Fiorello! & The Sound of Music -- 1959 Alfred Newman
- Best from The Sound of Music & Fiorello!, The -- 1960 Florence Henderson
- Best Of The Sound Of Music & West Side Story, The -- Scarborough Strings & Orchestra
- Broadway's Best: Fiddler on the Roof, South Pacific, And the Sound of Music -- 1992 Paul Freeman & Orchestra of the Americas
- Dance To The Sound Of Music -- 1967 Phil Tate and His Orchestra
- Dance To The Sound Of Music and to the Other "Sound Of Music" Of Richard Rodgers -- Tommy Kinsman And His Orchestra
- Favorite Songs From The Sound Of Music And Songs Of The Great American West And Favorites Of The Deep South -- 1966 Sound Stage Chorus
- Forever Sound of Music -- 2007 Lora Munro
- Groovy Sound Of Music, The -- 1965 Gary Burton
- Hits From The Sound Of Music, My Fair Lady, Camelot and Others -- Les Brown and His Band Of Renown

More Recordings

Songs (3)
- The Sound Of Music (Reprise) (4) -- from Sound Of Music, The
- The Sound of Music (51) -- from Sound Of Music, The
- The Sound Of Music: A Symphonic Picture For Orchestra (1) -- from Sound Of Music, The

* Search results displayed by shows (=works), recordings (=expressions)
Implementation Cases

- Cases from FRBR blog (http://www.frbr.org)

- OCLC FictionFinder (http://www.oclc.org/research/activities/fictionfinder/default.htm)
  - Search and browse by genres, characters (real & fictional), settings (real & imaginary) and literary awards;
  - Search results are organized by works and ranked by holdings;
  - Both work and manifestation records are linked to WorldCat to enable users to find items of interest.

- LibraryThing
  - “LibraryThing gets work-to-work relationships” (e.g. contains, is a student’s study guide to, is a supplement to…)

- VTLS Virtua
Resource Description and Access (RDA)

- RDA is based on IFLA’s international conceptual models:
  - Functional Requirements for Bibliographic Records (FRBR; 1998)
  - Functional Requirements for Authority Data (FRAD; 2009)
  - Statement of International Cataloguing Principles (ICP; 2009)
  - For more information, refer to RDA training materials.
Appendix: Attributes of Entities

- Attributes of an Expression
  - Title, form, date, language, other distinguishing characteristic, extensibility, revisability, extent, summarization of content, context, critical response, use restrictions
  - (Serial) sequencing pattern, expected regularity of issue, expected frequency of issue
  - (Musical notation) type of score, medium of performance (musical notation or recorded sound)
  - (Cartographic image/object) scale, projection, presentation technique, representation of relief, geodetic, grid, and vertical measurement
  - (Remote sensing image) recording technique, special characteristic
  - (Graphic or projected image) technique
Appendix: Attributes of Entities

- **Attributes of a Manifestation**
  - Title, statement of responsibility, edition/issue designation, place of publication/distribution, publisher/distributor, date of publication/distribution, fabricator/manufacturer, series statement, form of carrier, extent of the carrier, physical medium, capture mode, dimensions of the carrier, manifestation identifier, source for acquisition/access authorization, terms of availability, access restrictions on the manifestation
  - *(Printed book)* typeface, type size
  - *(Hand-printed book)* foliation, collation
  - *(Serial)* publication status, numbering
  - *(Sound recording)* playing speed, groove width
  - *(Sound recording)* kind of cutting, tape configuration, kind of sound, special reproduction characteristic
  - *(Image)* colour
  - *(Microform)* reduction ratio
  - *(Microform or visual projection)* polarity
  - *(Microform or visual projection)* generation
  - *(Visual projection)* presentation format
  - *(Electronic resource)* system requirements, file characteristics
  - *(Remote access electronic resource)* mode of access, access address
Appendix: Attributes of Entities

- **Attributes of an Item**
  - Item identifier, fingerprint, provenance of the item, marks/inscriptions, exhibition history, condition of the item, treatment history, scheduled treatment, access restrictions on the item

- **Attributes of a Person**
  - Name, dates and title of a person
  - Other designation associated with the person

- **Attributes of a Corporate Body**
  - Name of the corporate body
  - Number, place, date associated with the corporate body
  - Other designation associated with the corporate body
Appendix: Attributes of Entities

- **Attributes of a Concept**
  - Term for the concept (e.g., existentialism, radioactivity)

- **Attributes of an Object**
  - Term for the object (e.g., Noah’s ark, The Lusitania)

- **Attributes of an Event**
  - Term for the event (e.g., Battle of Hastings, Tour de France)

- **Attributes of a Place**
  - Term for the place (e.g., London, St. Lawrence River)
Training materials created and compiled by Sai Deng, Metadata Cataloger, Wichita State University Libraries.

Thanks Nancy Deyoe, Assistant Dean for Technical Services, for providing suggestions and guidance.

Thank you!