FRBR

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http://techessence.info/frbr

Executive Summary

*Functional Requirements for Bibliographic Records* (FRBR) is a *conceptual model* of the bibliographic universe outlined in a 1998 report from the International Federation of Library Associations and Institutions (IFLA). The report uses entity-relationship analysis 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.” (FRBR Report, p. 7) The most influential parts of the FRBR report are the definitions of user tasks and bibliographic entities.

What It Is

*User tasks*

The FRBR report takes a user-centric approach to its analysis of the bibliographic universe. The FRBR model outlines the following “user tasks,” which drive the rest of the report. The user tasks are Find, Identify, Select, and Obtain, which are defined as follows:

- **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);
- **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);
- **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);
- **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).

*Group 1 entities*

The most well-known features of the FRBR report are the Group 1 entities, which represent “the products of intellectual or artistic endeavour that are named or described in bibliographic records.” The entities are *conceptual*—they are not necessarily intended to represent record types in a database, although implementations may choose such a model. The Group 1 entities are as follows:

- **Work**: a distinct intellectual or artistic creation
- **Expression**: the intellectual or artistic realization of a Work
- **Manifestation**: the physical embodiment of an Expression of a Work
- **Item**: a single exemplar of a Manifestation
A Work is an abstract concept, the “idea” of something, before it is fixed in any way. An Expression is that fixation, turning an idea into a representation such as words or musical notes, although this fixation is still conceptual, and not yet physical. A Work may have many Expressions, for example, in different languages. A Manifestation is a set of physical (yes, this does include publications issued only digitally) things containing Expressions of Works; it might be though of as a print run. A Manifestation may, and often does, contain multiple Expressions, as in the case of a CD containing multiple songs, each of which is an Expression of an individual Work. An Item is an individual copy of a Manifestation, whether a physical thing or a copy of a file.

Perhaps the most misunderstood part of the FRBR model is the relationship of Manifestations to Expressions. The misunderstanding has its roots in a shift in focus from the resource (Manifestation) in the MARC cataloging world to the Work in FRBR. A Manifestation may contain any number of Expressions of Works – a book of essays is a Manifestation, each individual essay is an Expression of a Work. Neither is more “important” than the other, however, a Manifestation and an Expression of a Work have different properties. Works in the FRBR model can be related to other Works; they can be parts of other Works, derived from other Works, or have any number of other relationships to other Works. A Work that has a whole-part relationship to other Works may often be expressed in a Manifestation in its entirety, for example, a book of poems, further adding to the confusion. In this case, each individual poem is a Work, and the grouping of poems together into a cohesive whole is also a Work, with a whole-part relationship to the individual poems. The publication of the book of poems is a Manifestation, which includes Expressions of the Work of the entire group of poems, and Expressions of each poem individually. A fine line exists between the collection of Works together in a Manifestation, and the creation of a new Work (with constituent parts) in the act of compilation.

If the most misunderstood aspect of FRBR is multiple Expressions on a single Manifestation, the most controversial aspect is the definition of the Expression entity. The FRBR report says a change to the text represents a new Expression, “no matter how minor the modification may be” (p. 19). However, the report goes on to state, “On a practical level, the degree to which bibliographic distinctions are made between variant Expressions of a Work will depend to some extent on the nature of the Work itself, and on the anticipated needs of users.” This lack of prescription is the most severe in the entire report, and has resulted in a great deal of discussion. Obviously, the changing of a single word in a text resulting in a new Expression is unsustainable in the library environment. The second provision from the FRBR report, focusing on the nature of the Work and user needs as factors to consider in the decision as to when a new Expression is created, provides an outlet against the first provision, relying on the well-known “cataloger’s judgment” to determine when a new Expression is warranted. This flexibility has resulted in high-profile debates over, for example, if a Braille version of a book is a new Expression, or a movie based on a novel is a new Expression or a new Work.

Other parts of the FRBR report

While the Group 1 entities are the most talked-about section of the FRBR report. Group 2 entities are defined as “those responsible for the intellectual or artistic content, the physical production and dissemination, or the custodianship of the entities in the first group.” The FRBR report lists only two Group 2 entities, Person and Corporate Body, although subsequent Work indicates Family should be added as a third Group 2 entity. Each of the Group 2 entities can have responsibility for any of the Group 1 entities, i.e., and author is the creator of a Work, a translator realizes an Expression, a publisher produces a Manifestation, and a library owns an Item. The Group 3 entities are defined as the
subjects of Works. Any Group 1 or Group 2 entity falls in this category, as do the additional entities Concept, Object, Event, and Place.

The FRBR report also includes two sections that have been largely overlooked to date. The first builds on relevant research in the field of library and information science to define relationships between entities, both implied by the definitions of the entities, and those that may exist between two entities of the same type. The second defines the primary user tasks for national bibliographic records, defines logical attributes and relationships that should be reflected, and lists data elements necessary to support those tasks.

**What Can Be Done With It**

The FRBR report outlines a *conceptual model*, rather than a concrete data model. It therefore is subject to many different implementation decisions, so different implementations may represent very different functionalities. It isn’t difficult, however, to imagine the sorts of functionality possible (or easier) with a system implementing FRBR principles. Circulation functions such as holds or inter-library loan requests could be placed at the Manifestation, Expression, or Work level, then tracked at the Item level once the request is fulfilled. Library catalogs using FRBR principles could more easily group search results and provide disambiguation steps to give users more control over their search. A list of all Works by a creator could be presented, then Expressions of a given Work could appear grouped by format, language (for textual works), performer (for musical works), director (for films), or any number of other attributes relevant to a given search. These features, along with the ability to more robustly record relationships between the various entities, present the potential for transforming our library catalogs from *finding* systems into true *research* systems, recording and making available to users interpretive information previously only documented in articles and books, or present in a researcher’s mind.

The obvious question springs to mind: “How will we pay for this?” FRBRized records will likely be more expensive to create than our current MARC bibliographic and authority records, and our current systems are being questioned for their cost in relationship to their benefits. If libraries are to capitalize on the potential benefits of FRBR, we must find ways of making the creation of these records more cost-effective. Simply devoting more resources to creating records by humans is no longer a reasonable option. Libraries must investigate other means to generate this data, while ensuring the data we end up with can be used to provide the services we envision. Techniques such as better methods to identify FRBR Works and Expressions from existing MARC records; improving the effectiveness of cooperative cataloging models; making use of metadata from publishers, vendors, and other commercial sources; and harnessing the expertise of our users could all be used together to create the records that will provide extended benefits to users. Whether or not these methods will result in costs that library administrators can justify in relationship to their benefits remains to be seen.

**Examples**

*FRBR Implementations*
- OCLC's FictionFinder
- AustLit Gateway
- ILSs including FRBR support include VTLS and III Millenium
Related Models
RLG’s RedLightGreen
Indiana University’s Variations2

Who Should Be Using It

From one point of view, all libraries. FRBR is an analysis of the entire bibliographic universe, and, as such, applies to all resources libraries own or manage. The next version of the AACR2, called Resource Description and Access (RDA), will be using FRBR terminology, further pushing FRBR concepts into day-to-day library work. However, OCLC studies have shown many works don’t benefit from FRBR treatment (see the Bennett article under More Information, below). Among OCLC’s findings:

- Average work has 1.5 manifestations
- 78% of works have a single manifestation
- ~99% of all works in WorldCat have seven manifestations or less
- ~30,000, or ~1% have more than 20 manifestations

Works in fields like literature and music, that appear in multiple versions over time, will benefit the most from systems that implement FRBR principles. Libraries must develop cataloging interfaces that make it easy to create records for single-manifestation works, while still allowing for the creation of complex relationships when they are warranted.

Related Technologies

- FRBRization algorithms from OCLC and the Library of Congress
- Entity-relationship modeling

More Information