

WORKSHOP 5

FRBR (continued)

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Introduction

Many challenges are ahead of us if we want to implement FRBR in catalogues and it is the duty of librarians and information scientists to help design systems which will meet user needs associated with the use of various types of materials and the broad range of eventual new requirements for bibliographic records.

In 1998 the final report of the IFLA Study Group on the Functional Requirements for Bibliographic Records (FRBR) was published. The report consists of two parts: the first part (the chapters 3 – 6) gives an entity-relationship model of a bibliographical database; the second part (chapter 7) deals with the basic requirements for national bibliographic records. In many respects FRBR can be seen as the first document originating in the library world in which an attempt is made to answer the question: "how can the computer help to fulfil the main task of the library and documentation institutions to give access to information?" Too often the computer is seen only as a tool only to do exactly the same as we always did, with the same traditional restrictions in access as in the card catalogue.

The FRBR model defines an ontology with several groups and levels of abstract objects and is suited to represent the traditional bibliographic universe, but also complex relationships between numerous variants of electronic resources and multimedia materials, which flourish on the Internet.

Although we are still waiting for a major breakthrough in FRBR applications, several recent developments can be listed:

- INWECA 6. framework Expression of Interest
- OCLC research
- VTLIS application
- IFLA FRBR group
- further development of FRANAR

Earlier ELAG FRBR workshops

The series of FRBR workshops is planned to end this year. It seems therefore appropriate to summarise what has been done so far and give an overview of current developments.

Workshop Discussion Papers

After a series of workshops focused on the FRBR model itself and its appropriateness for description of library materials, FRBR workshops in 2001 and 2002 focused on implementation issues.

The INWECA 6. framework Expression of Interest was submitted as a direct consequence of the 2002 workshop, while other initiatives and projects have been more or less inspired by the workshop series.

Continuing topics

In the report from the 2002 workshop, several important tasks were identified. All of these were listed in the INWECA EOI. At the time of writing this paper, the process of preparing a 6. framework project proposal based on INWECA is unfinished. The topics remain however, and this years workshop should use this list as a basic agenda, with more or less direct reference to the INWECA work.

Definition of core data elements

The full implementation of the model would not be practical for prototyping. In addition the work on FRANAR (Functional Requirements and Numbering of Authority Records), which is essential to implement the model, has not been finished yet. It is therefore better to start prototyping with a limited data model. We have to agree on core attributes of all entities defined in the model.

Identifiers

Entity identifiers are essential both for maintaining data bases and for linking of related information. While some possible identifiers exist already (e.g. ISBN, ISSN, ISTC, ISWC etc.), they are not sufficient for all entities. Existing identifiers have to be reviewed (we have to check whether they match our needs or not, whether their scope overlaps with our "entities" or not) and additional identifiers have to be proposed.

User interface specification

This is the most important part from the user perspective. The (computer) catalogue is not seen as a sequence of bibliographic records and a replica of the traditional card catalogue, but rather as a network of connected entities, enabling the user to perform seamlessly all the necessary functions. The FRBR model promises to address many of the current issues related to traditional cataloguing, which is being challenged by the flood of new electronic resources, multimedia materials and more informal publishing practices on the Internet. But this also means that the searching functionality and presentation of information has to change completely.

Workshop Discussion Papers

Algorithms for automatic extraction of FRBR entities and relationships from existing catalogue records

When new catalogues are to be designed, we have to provide access to millions of existing bibliographic records, which in nearly all cases are "manifestation records". Some experience is beginning to appear regarding the feasibility of extracting other entity types, either for the purpose of data conversion or for the on the fly presentation using a "FRBR'ized" interface. Such efforts should be made an issue for cooperation, as the challenges are more or less the same for all of us. A success here requires a very close cooperation between the bibliographic experts and the programmers!

Exploration of linking services

As (if ...) FRBR entities are beginning to appear in the form of separate records, there is an immediate need to link them together, which means that the FRBR relationships have to be expressed by some sort of linking mechanism. Links may be implemented in many ways, and of special interest should be to build separate linking services, that could be cross-system accessible. Choice of identifiers and linking architectures are important issues here. The Web services technology is a possible framework for implementing FRBR links in an interoperable fashion.

Prototyping

The challenges that are encountered on the FRBR scene are often so complex that theoretical analysis and empirical studies and prototyping must walk hand in hand. Issues concerning user satisfaction could benefit from demonstrator sites, and the need for test data of sufficient quality and quantity might call for a special purpose testbed.

Prepared reports

As a supplement to the workshop discussions, we hope to have a number of prepared presentations. At the time of writing we are able to announce

- Thom Hickey on OCLC research
- Ole Husby on BIBSYS research
- Maja Žumer on IFLA FRBR group

Selected references

IFLA Study Group on the Functional Requirements for Bibliographic Records. **Functional requirements for bibliographic records: final report**
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Workshop Discussion Papers

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