

# FRBR: From a Bibliographic Record Model to an Organizational Model?

by Agnese Galeffi

## The Italian Library “System”: A Brief Overview

The bibliographic configuration of Italy is characterized by a very wide dispersion of library patrimony over the entire national territory. As a matter of fact, in addition to a certain number of medium-sized historical libraries (medium-sized, that is, when compared to libraries found in other countries) that roughly tallies with those which were present in the various separate states prior to Italy’s Unification, many others exist which, despite being smaller, house a patrimony of great historical interest. It is no mere chance that, in this setting, the role of the National Bibliographical Agency is performed by two different institutions simultaneously: the BNCF (Biblioteca Nazionale Centrale di Firenze)<sup>1</sup> is concerned with the publication of the National Bibliography, while the Istituto Centrale per il Catalogo Unico (ICCU) coordinates issues relating to librarianship and maintains standards, in addition to, for around thirty years now, managing the Index of the Servizio Bibliotecario Nazionale – the most important library network in Italy.<sup>2</sup>

In a context of this kind, a hypothetical, highly centralized organization, such as those found in France or the United Kingdom, would not be easy to realize. This is because, notwithstanding their vast size, the collections held by the central libraries in Florence and Rome are not sufficiently comprehensive to provide exhaustive coverage of the country’s publishing history. In addition, the necessity to simultaneously manage multiple libraries means that it has not been possible, so far, to concentrate at the National Library in Florence an adequate number of highly qualified professionals able to carry out original and authoritative cataloguing work for the entire country, and to function, therefore, as a cataloguing source for other libraries.<sup>3</sup>

It was necessary to wait for the development and diffusion of SBN, which consists of a central index – i.e., a union catalogue – fed by numerous regional nodes, each

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1 Biblioteca nazionale centrale di Firenze, <<http://www.bncf.firenze.sbn.it/>>.

2 Servizio bibliotecario nazionale, <<http://www.iccu.sbn.it/genera.jsp?s=5&l=en>>.

3 «La debolezza delle strutture centrali del nostro sistema si ripercuote da sempre su tutte le biblioteche italiane, che non hanno mai potuto disporre di un’informazione completa e tempestiva sulla produzione editoriale, non hanno mai potuto usufruire in tempo utile di registrazioni a supporto della loro attività di catalogazione, non hanno mai potuto contare su un catalogo unico nazionale per localizzare i documenti e indirizzare le richieste di prestito interbibliotecario»: Giovanni Solimine, *Organizzazione dei servizi e cooperazione interbibliotecaria*, in: *Il nomos della biblioteca: Emanuele Casamassima e trent’anni dopo*, a cura di Roberto Cardini e Piero Innocenti, Firenze: Polistampa, 2008, p. 104.

composed of a number of libraries, in order to be able to provide an adequately exhaustive census of the patrimony, at least of current materials, held in Italian libraries.

The above-mentioned territorial nodes generally conform to a mixed configuration model, given the existence of libraries of different kinds (public and private, academic and community libraries, school libraries, church libraries, and so on). In order to create the nodes, the method followed was to group together the libraries located in a given geographical area; only in a few large metropolitan areas, such as Rome, were the right conditions present to allow the formation of nodes by grouping together institutions of similar kinds. Given the wide dispersion of bibliographic patrimony, it is obvious that among the advantages offered by mixed systems, there is that of guaranteeing readers a comprehensive panorama of the patrimony, which would otherwise be fragmented and inaccessible. Among other things, data provided by a node's collective catalogue can, in some cases, enable the virtual reconstruction of a collection, lost due to historical events linked to the suppression of ecclesiastical institutions, or the breaking up of private libraries. On the other hand, the presence of data from very different libraries within a single collective catalogue, has sometimes made it difficult to apply an indexing system – especially one of a semantic kind – suitable for all users, while in relation to modern library materials, the low level of overlapping among collections confirms the limited benefits to be gained from cooperative cataloguing.

### New generation catalogues

In this setting an important change could be achieved by introducing new generation catalogues, consisting of platforms prevailing over the traditional OPAC. These platforms would include all or part of the bibliographical data. These data would then be linked to other data, coming from resources external to the catalogue, such as electronic journals, institutional archives, digital libraries and so on. These would also be aggregated by means of collecting procedures, or federated search. OPAC,<sup>4</sup> as a portal, reflects the ultimate goal of supplying the reader with a series of high added value services, as compared to a simple bibliographical search, and at the same time accomplishes the integration of heterogeneous sources that the catalogue alone, because of its historical form, could not otherwise satisfy. This new generation catalogue would also entail new forms of indexing (for example, search facets) and, in accordance with criteria for Web 2.0, the personalization of bibliographical services for library users, with an increased involvement of the latter in the organization of search tools (tag clouds, for example).<sup>5</sup>

This idea of OPAC as a portal, suggests the basic concept which lies behind a “variable configuration” catalogue, meaning a tool which enables a library to be part of a territorial network that shares software and various services (e.g. lending services), and at the same time shares with other institutions, belonging to other networks, a range of services targeted at well defined library users, involving, for

<sup>4</sup> Paul Gabriele Weston – Salvatore Vassallo, “... e il navigar m' è dolce in questo mare”: linee di sviluppo e personalizzazione dei cataloghi, in: *La biblioteca su misura: verso la personalizzazione del servizio*, a cura di Claudio Gamba e Maria Laura Trapletti, Milano: Editrice Bibliografica, 2007, p. 130-167. Paul Gabriele Weston, *Caratteristiche degli opac e strategie delle biblioteche*, «Bibliotime», 11 (2008), n. 1, <<http://didattica.spbo.unibo.it/bibliotime/num-xi-1/weston.htm>>.

<sup>5</sup> Andrea Marchitelli, *Le biblioteca nella percezione degli utenti: i risultati di tre indagini di OCLC*, «AIB notizie», 20 (2008), n. 4, p. 13-14. Andrea Marchitelli – Tessa Piazzini, *OPAC, SOPAC e social networking: cataloghi di biblioteca 2.0*, «Biblioteche oggi», 26 (2008), n. 2, p. 82-92.

example, the adoption of semantic indexing languages and integration with resources aiming at achieving the aforementioned target. The existence of these portals does not in any way act as a substitute for the actual catalogue, inasmuch as access to, and the use of individual documents is achieved through consultation of the OPAC of the library where the document in question is held.

Portal-like OPACs and Web 2.0 figure among the elements that help us to understand just how much, in recent years, the organization of bibliographic systems has been impacted by high technology, and how much, in the presence of new media and new work tools in libraries, cataloguing criteria, devised at least twenty years ago, prove to be inadequate. Indeed, the necessity to devise and develop electronic catalogues in the mid 1990s led to the writing of the FRBR Report,<sup>6</sup> the publication of which also resulted in a total rethinking of all cataloguing standards, both in Italy and elsewhere in the world. In English-speaking countries this has been effected by means of a revision of AACR2, and the decision to abandon plans to publish AACR3, in favour of a more radical approach consisting of the development of RDA.<sup>7</sup> In the Italian context, the last few years have seen an intensification of work being carried out for the revision of RICA<sup>8</sup> by a specifically appointed commission, which is currently in the process of concluding its work with the publication of REICAT.<sup>9</sup> Meanwhile, a committee of expert librarians, under the auspices of IFLA, has revised the Paris Principles, by submitting the various national codes to a very thorough comparative analysis, from which new international cataloguing principles have emerged.<sup>10</sup> On the other hand, ISBDs have also undergone a thorough revision aimed at eliminating inconsistencies generated by a proliferation of schemas developed over the years in order to respond to evolving descriptive requirements. A preliminary consolidated edition was published upon the completion of this process.<sup>11</sup>

### Application of the FRBR model

In the FRBR Report it is stated more than once that the document is intended only as a conceptual model, «a framework that would provide a clear, precisely stated, and commonly shared understanding of what it is that the bibliographic record

6 FRBR bibliography, <<http://www.ifla.org/en/node/881>>. IFLA Study Group on the Functional Requirements for Bibliographic Records, *Functional Requirements for Bibliographic Records: Final Report*, München: Saur, 1998, <<http://www.ifla.org/en/publications/functional-requirements-for-bibliographic-records>>. IFLA Study Group on the Functional Requirements for Bibliographic Record, *Requisiti funzionali per record bibliografici: rapporto conclusivo*, Roma: ICCU, 2000.

7 «Underlying RDA are the conceptual models FRBR (*Functional Requirements for Bibliographic Records*) and FRAD (*Functional Requirements for Authority Data*)», Joint Steering Committee for Development of RDA. *RDA: Resource Description and Access*, <<http://www.rdaonline.org>>.

8 *Regole italiane di catalogazione per autori*, Roma: Istituto centrale per il catalogo unico delle biblioteche italiane e per le informazioni bibliografiche, 1979.

9 The RICA Commission, <<http://www.iccu.sbn.it/genera.jsp?id=94&l=en>>.

10 IFLA Cataloguing Section, *Statement of International Cataloguing Principles*, <<http://www.ifla.org/en/publications/statement-of-international-cataloguing-principles>>.

11 *International standard bibliographic description (ISBD)*, recommended by the ISBD Review Group; approved by the Standing Committee of the IFLA Cataloguing Section. Preliminary consolidated ed., München: Saur, 2007, <<http://www.ifla.org/en/publications/international-standard-bibliographic-description>>.

aims to provide information about, and what it is that we expect the record to achieve in terms of answering user needs. [...] It is hoped, however, that the model itself will serve as a useful starting point for a number of follow-up studies of interest to those involved with designing cataloguing codes and systems to support the creation, management, and use of bibliographic data.»<sup>12</sup> In fact, the role of FRBR has changed over time while, little by little, theoretical reasoning has resulted in the implementation of ever larger parts of a logical model of this kind within bibliographical systems. An early application was aimed at improving OPAC displays (and therefore the better comprehension of the intermediate results on the users' part) by means of clustering of work titles. The mapping of the FRBR model, based on elements of the MARC format, made it possible to develop algorithms that the OPAC uses in organizing the index display, without FRBR interference to the catalogue's structure. A product developed by the Library of Congress – FRBR Display Tool – represents an example of this approach.<sup>13</sup> Libraries can opt to adopt it over their own OPAC so that it functions only upon request by users, and is limited to those sections of the catalogue for which clustered results might represent an advantage. One important factor that greatly impacts the usefulness of this tool is the consistency of the bibliographic data. Inconsistent headings or typos reduce the usefulness of the display because they prevent accurate and consistent collocation of data.

In reality, when we find ourselves in the presence of systems that cluster bibliographic data under title headings, this is not always due to the effective application of FRBR criteria. Frequently one is dealing with FRBR-like presentations, in which the aggregated data does not appear under the standard title of a work, but it rather appears under the title of the first or the most popular edition within that catalogue. In this way the mechanism simulates the upper hierarchical layer of group 1 Entities. By applying it to the publication (on the Web) of OCLC's union catalogue, Worldcat has solved the problems – both in terms of insufficient consultability and general confusion – arising from the duplication of entries and the dispersion of records when one is dealing with very widely distributed works, or those existing in numerous editions and translations.<sup>14</sup>

There are one or two examples of applications that are effectively FRBR compliant; for example, systems built on a database structure patterned after the complete FRBR model, in which to each entity of group 1 corresponds a distinct record. In order to

**12** IFLA Study Group on the Functional Requirements for Bibliographic Records, *Functional Requirements for Bibliographic Records: Final Report*, München: Saur, 1998, p. 2.

**13** In 2001, the Network Development and MARC Standards Office released the publication, *Displays for Multiple Versions from MARC 21 and FRBR*, which outlined how the FRBR model can be used to cluster bibliographic records retrieved via a search in more meaningful displays to assist users in selecting items from bibliographic collections. The FRBR Display Tool, based on the above analysis, is an XSLT program that transforms the bibliographic data found in MARC record retrieval files into meaningful displays by grouping the bibliographic data into the “Work,” “Expression” and “Manifestation” FRBR entities. Bibliographic record sets are sorted and arranged using algorithms based on the FRBR model. Useful hierarchical displays of these record sets containing works that consist of multiple expressions and manifestations are thus generated: *FRBR Display Tool. Version 2.0*, <<http://www.loc.gov/marc/marc-functional-analysis/tool.html>>.

**14** FRBR Work-Set Algorithm, <<http://www.oclc.org/research/software/frbr/>>.

facilitate the application of the new logic to the previous catalogue, the cataloguer can execute the 'FRBRization' of individual records whenever this is considered desirable. Whilst the impact of FRBR on the catalogue in this case is greater, readers are presented with a well-structured system that is easily searchable and sufficiently homogeneous.

The appearance of FRBR also had the effect of reviving the theoretical debate on cataloguing, in addition to exerting an influence on the structure of new cataloguing codes. In the Italian context, REICAT marked, in relation to the previous RICA norms, a clear change in the organization of the catalogue. If, in fact, the acronym RICA stood for *Regole italiane di catalogazione per autori* (Italian Cataloguing Rules by Author), the new REICAT (Italian Cataloguing Rules) rules assume as their main organizing element the work, identified not only by its title (the original or the most popular one), but a combination of this and the author's name. There are also other changes in REICAT which are of no small account. These changes are above all related to the organization of a level, not defined in the existing catalogue structure, corresponding to the expression. The FRBR logic structure also applies to RDA, albeit by means of a logic completely different to that used in REICAT and traditional cataloguing practices applied until the present day.

When our thoughts turn towards the realization of a new generation of bibliographical systems, such as those referred to earlier on, the application of FRBR's logical structure can favour the segmentation of records into a number of levels that correspond to the group 1 Entities (the same reasoning applies to the treatment of authors' names and institutional bodies) by employing FRAD.<sup>15</sup> A segmentation of this kind is useful when one needs to transfer from catalogues to portals not entire records, but only the information relevant to works and expressions, i.e. the information required in order to provide readers with preliminary bibliographical references. Search routings and other tools are then created by integrating these elements with metadata deriving from other archives, which may be different depending on their structures or places of origin.

### The Italian scenario

When referring to the current Italian situation, it should be remarked that the original SBN multi-level structure in some way anticipated, albeit only in terms of its similarity, rather than for an effective structuring of elements, the logic of FRBR. Each catalogue record is the result of the bringing together of several distinct records – one relating to the author, one for the description, one for the subject, and so on – some of which are structured internally as clusters (for example, a name with all its variant forms). Moreover, in Vinay and Boisset's preliminary design, the Index<sup>16</sup> should only perform the harvesting of data and consider them as access points – names, for example – or to carry out selection functions (i.e. the title and its characteristics in terms of expression). If the initial model was not realized in favour of a union catalogue of full descriptions fed by the nodes, this was probably due to the inadequacy of telecommunications infrastructures. The quantity of interactions and exchange of data between the index and libraries necessary to carry out a search were identified as a critical factor. Instead, the availability of the entire bibliographic body of data in a central database implied a reduced number of interactions, since the user was able to connect directly with the index, hence taking immediate advantage of the complete set of bibliographic information that he/she required.

<sup>15</sup> IFLA Working Group on Functional Requirements and Numbering of Authority Records (FRANAR), <<http://www.ifla.org/en/about-the-division-of-bibliographic-control>>.

<sup>16</sup> Hence the name.

A very extensive bibliography exists on SBN.<sup>17</sup> Despite the fact that expectations have not always been fulfilled, it cannot be denied that SBN has, on the whole, contributed to improve the quality of Italian librarianship, and has brought to light many collections held in small institutions and in rather obscure places in the country, which otherwise suffered from a low level of visibility. We have already mentioned that access to SBN enables library users to become aware of the country's publishing output, with much more rapid updating than the *Bibliografia nazionale italiana* could ever offer.

In recent times, two important events have taken place in relation to the organization of the nation's library patrimony. To begin with, an upgraded version of the SBN index was launched (the so-called Index 2), which has made it possible to for non-SBN native applications (whose data are not compliant with the proprietary SBN format, but use UNIMARC or MARC21), to exchange information to-and-from the Index, and to share, with libraries already using SBN, services such as interlibrary lending and document delivery. This situation should allow the participation of subjects, above all university libraries, for which membership to a proprietary system – that does not provide for the exchange of data with international bibliographical partners – was considered, up until the current, unattractive, if not a downright impediment to the growth of the catalogue, chiefly in relation to foreign publications. One of the most complex problems, for which a solution has not been found yet, is the absence of a *real* national library system. Alongside the libraries that joined SBN, and those that have given rise to independent networks, there are others, including important ones, that struggle or are reluctant to join (and therefore to contribute their services), conform to quality standards, participate in digitizing projects, or make a full record of their holdings available through the national library database.

The second important change that has occurred in the organization of the country's library infrastructure has to do with the new situation with regard to legal deposit.<sup>18</sup> Innovations include the assignment, to a number of regional and local libraries, of the responsibility to preserve all material published on their respective territories. To this preservation function one could, or even better, one *should* link the creation of bibliographic descriptions, as to feed what could be described as an archive of regional publishing. Such a reorganization, if well performed, could transform the role of the National Library in Florence from that of the sole creator of records for the National Bibliography into a validator of records produced by regional entities. Already in 1969, during a speech given at the Higher Council of Academies and Libraries, Emanuele Casamassima, Director of the National Library in Florence at the time, expressed his desire that the central institutes be assigned coordination, inspection and validation responsibilities, beyond simply creating data, while entrusting to regional systems and individual libraries – public, specialised and academic – the creation of effective research tools that meet the specific needs of the users of each type of library.<sup>19</sup>

17 SBN bibliography, <<http://www.iccu.sbn.it/genera.jsp?s=62&l=it>>.

18 Paola Puglisi, *Deposito legale, la bicicletta nuova*, «Bollettino AIB», 47 (2007), n. 1-2, p. 11-41. *Legal deposit, the new bicycle* (English abstract), <<http://www.aib.it/aib/boll/2007/0701042.htm>>.

19 Paul Gabriele Weston, *La catalogazione bibliografica: dal formato MARC a FRBR*, in: *Il nomos della biblioteca: Emanuele Casamassima e trent'anni dopo*, a cura di Roberto Cardini e Piero Innocenti, Firenze: Polistampa, 2008, p. 163.

### Organizational model of a bibliographic system

All this leads us to venture a hypothesis on the applicability of FRBR logic not only to the structure of individual catalogue records or the OPAC itself, but also to a complex bibliographical system of the kind that may be adopted by countries with similar characteristics to those seen in the Italian setting. In the case of SBN, descriptive cataloguing is carried out by virtually all participating libraries, irrespective of their different levels of ability, thereby resulting in an elevated number of duplications in the collective catalogue (Index), which generates a lot of noise during the search, and also makes it difficult for readers to understand the results that have been generated. At the same time, the creation of authority records is entirely entrusted to the bibliographical agency which, needless to say, is not able to keep up with the demands of current cataloguing, and furthermore is engaged on specific projects, such as the twentieth-century Italian authors authority file.

The model that FRBR suggests can be understood not only as a system for differentiating between records (of authority, manifestation, item, etc.), but also as a way of redistributing roles among bibliographical agencies, regional archives, specialized or historical libraries, and local libraries. In order to better describe the organizational model implicit in FRBR, it may be helpful to refer to the first two scenarios outlined by Tillett (Figs. 1 and 2),<sup>20</sup> in which the change in cataloguing procedures that the adoption of FRBR logic entails, is presented schematically. Two elements stand out in the application of the second scenario. On one hand, this segmentation of the cataloguing procedure results in a greater number of steps as compared to the first scenario, which could give the impression that the overall workload imposed on the cataloguer is increased. On the other hand, however, this segmentation results in the elimination of a number of redundancies during the input of data, which tend to increase in relation to the size of the archive (i.e. the larger the archive, the greater the number of redundancies).

The works and expressions of FRBR are, in fact, normally represented by authority records, or are in any case subject to some kind of certification procedure. As with authority files relating to names, it is only logical, and indeed desirable, that the creation of records relating to the work and expressions occurs only once, in an authoritative form, and that this operation is carried out on behalf of all libraries, both Italian and foreign. The same need for caution applies to updating, particularly in relation to expressions. Each record should be the result of a series of thorough checks aimed at guaranteeing the uniformity of headings and the reliability of relationships. These authority records for standardized titles and their responsibility statements, in accordance also with REICAT requirements, assume a large number of checks to be carried out by the cataloguer, in addition to the availability of a series of reference tools – all factors that require a well-coordinated and at the same time unitary working method. It does not make sense for different libraries to carry out the same checks, and sometimes even to come up with different results, thereby increasing uncertainty and wasting precious time. The semantic system used for content descriptions, which can be expressed in different ways (classification schema, subject heading lists, thesauri), should also be directly linked to the work's record and not, as it happens today, to every single record of the manifestation. The manifestation-level, on the other hand, is the description of the publication in terms

<sup>20</sup> Barbara B. Tillett, *FRBR and Cataloging Rules: Impact on IFLA's Statement of Principles and AACR3*, <[http://www.oclc.org/research/events/frbr-workshop/presentations/tillett/FRBR\\_and\\_cat\\_rules.ppt](http://www.oclc.org/research/events/frbr-workshop/presentations/tillett/FRBR_and_cat_rules.ppt)>.

of its formal characteristics and corresponds, broadly speaking, to the full block of the ISBD elements. This being the case, its creation should tally with the compilation of the national bibliography – i.e. with the descriptions generated by agencies specifically designated to manage the regional publication database. If, as desirable, the two bibliographical services operate jointly, the descriptions produced by the regional archives could constitute the core of the descriptions (duly verified and, if necessary, integrated) produced by the National Agency to nourish the national bibliography. On the other hand, it is at the item-level that individual libraries focus their attention when they manage reading and lending services, as well as when they insert notes referred to the specific characteristics of the items, their state of preservation, and any other relevant data. Occasionally, it could also be necessary to provide links to the item itself, with entries corresponding to names and titles.

If the above represents the configuration of a record modelled on FRBR, one could make some significant organizational modifications to the structure of catalogues, above all in order to prevent the existence of identical records (which obviously causes replication), in all catalogues that hold at least one copy of the same publication. Today, in fact, one and the same record can be found in the SBN Index, the node catalogues, within the National Bibliography and in individual OPACs libraries, with some added data in the form of descriptive information (e.g. the place of publication) or semantic data (often present in the node catalogue, but not at the Index level).

Based on the above background information regarding the application of FRBR's logic model, let us now see how one might perform a search by means of portalized OPAC. The reader, directed to the specialized portal relevant to his/her interests from a Virtual Reference Desk, first of all carries out a search, taking as a starting point the data regarding the works he/she is looking for. By means of the characteristics of the various expressions associated with the desired work, the reader can then narrow his/her search to a group of manifestations which, should they happen to be numerous, can be viewed according to the number of copies held by libraries, or otherwise based on other relevant criteria. Within the portal, in addition to strictly catalographic paths, it will be possible to view recommendations or links deriving from blogs, institutional repositories, encyclopedias, digital resources and non-bibliographic sources, or tags inserted by other readers.

In order to select any potentially interesting manifestations, the user, in the clearest possible way, will be directed to a unique archive of manifestations, which contains both records from the National Bibliography and those generated during the course of ongoing cataloguing activity. Within the above-mentioned archive, bibliographical enrichment and accompanying elements will assist the reader in making a selection. Once the publication has been selected, the user can then decide whether to purchase it on the Web, or to obtain a copy directly from a library, through interlibrary loan or document delivery. Gaining access to information on the item contained in the individual OPAC where the document is located, gives the user the possibility to verify its availability and take advantage of any related services.

### **Restrictions and possibilities**

The first restriction that the adoption of the proposed model imposes, is the existence of a system of links and pointers for the unambiguous identification of records.<sup>21</sup>

<sup>21</sup> Emma Tonkin, *Persistent identifiers: considering the options*, «Ariadne», 56 (2008), <<http://www.ariadne.ac.uk/issue56/tonkin/>>. Emmanuelle Bermès, *Des identifiants pérennes pour les*

This scenario implies the existence of one or more agencies that create and maintain the relevant codes, and which execute all the necessary functions as to guarantee, also with respect to modifications, accurate and reliable linking.

In this scenario, the proliferation of records relating to the same publication in different catalogues would be reduced. OPACs are the most redundant digital objects on the Web; while other remote electronic resources facilitate access and create links (with the exception of mirror sites created to guarantee access to widely scattered users), every catalogue duplicates derived data, thereby running the risk of increasing inconsistencies.<sup>22</sup> This being the case, it seems reasonable to think in terms of creating just one archive of manifestations (a sort of Index, but one that only contains bibliographical records), to which records of works and expressions from above would be directed, and from below records of copies held in the catalogues of various libraries. Thanks to the “connective tissue” provided by the identifiers, this complex architecture would provide, amongst other things, the possibility of presenting the same object, even within a single library, in different contexts and using different vocabularies. The links that express the relationships between objects and search paths could be well managed by superimposed structures, such as, for example, topic maps. Furthermore, libraries could begin to differentiate among services based on territory (above all reading and lending services), whilst with respect to catalogues, descriptive work could be shared by libraries located far apart from each other, but identified by a common mission and similar features. The collaboration between these institutions could be extended to specialized reference activities, made accessible by means of a portal, the products of which would most likely increase the variety of bibliographical suggestions made to users. In order to consult the entire national patrimony in the same way in which one currently searches the SBN Index, a master portal would be necessary. It seems that this kind of set up could be perceived as a loss of identity on the part of individual libraries; however, as it appears to be already possible in a few union catalogues – ACNP,<sup>23</sup> for example – the portal could furnish the reader with a “personalization” of individual library collections, in addition to the possibility of viewing specific OPACs.

Another possible concern is that the cataloguer could feel that his/her work is less important. On the contrary, the above-mentioned way of organizing would result in an enhancement of the quality of data, because it would lead, on one side, to the setting up of authority files and other tools for verifying the consistency of input data, and on the other, the implementation of semantic content. The latter, which so far has not been sufficiently evaluated, is the one which constitutes, for the majority of Web users, the search strategy most frequently adopted. In recent times there has been a spread of the tendency, on OPACs’ part, to display very minimalist search interfaces (like Google’s), leaving it up to users to specifically request a more complex search interface divided into fields (search keys), typical of

*ressources numériques: l’expérience de la BnF*, «International Preservation News», 40 (2006), December, p. 16-21. Hans-Werner Hilse – Jochen Kothe, *Implementing persistent identifiers: overview of concepts, guidelines and recommendations*, [London, Amsterdam]: Consortium of European Research Libraries and European Commission on Preservation and Access, 2006. <<http://www.knaw.nl/ecpa/publ/pdf/2732.pdf>>.

**22** Looking to the future, this problem is destined to worsen: included among the new functions of the SBN Index we find, in fact, the possibility for nodes to opt out of aligning local records with those of the Index in cases where modifications are made at a central level.

**23** Italian Union Catalogue of Serials (ACNP), <<http://acnp.cib.unibo.it/cgi-ser/start/en/cnr/fp.html>>.

those which one might find in a traditional catalogue. In relation to the catalogue's structure (or syntax), this Google-like search corresponds to a keyword search, whilst for the reader it corresponds to an approach which is predominantly of a semantic type. A truly Google-like catalogue should therefore pay particular attention to providing semantic access to the document, as compared to that of a descriptive nature, which up until the present day has, in the majority of libraries, constituted the chief concern of cataloguers. Above all that has been said, a particular concept emerges, namely: mesh up. A portalized OPAC is created by combining heterogeneous resources and integrating among them, in a dynamic way, segments of data that are structured differently and hosted by autonomous archives. These components are produced to fulfill different aims by agencies, publishers, libraries and research bodies etc., each of which is responsible for the quality and regular updating of its data. In this way the bibliographic system outlined earlier, easily finds its place in the conceptual and organizational horizon known as the Semantic Web.<sup>24</sup>

**24** «Despite some doubts regarding the ability to create unique identifiers, FRBR is proving a key concept for creating possible intersections between the Semantic Web and library systems and catalogs. Lars. G. Svensson of the Deutsche National Bibliothek (DNB) [...] believes that the FRBR model will be play an important role in helping libraries move their data to the Semantic Web»: Alison Babeu, *Building a "FRBR-Inspired" Catalog: The Perseus Digital Library Experience*, <<http://www.perseus.tufts.edu/~ababeu/PerseusFRBRExperiment.pdf>>, p. 28-29. As an example of tool and techniques used to make a union catalogue part of the semantic web as well as creating links between records of the same work, see Martin Malmsten, *Making a Library Catalogue Part of the Semantic Web*, Paper presented at the International Conference on Dublin Core and Metadata Applications – Metadata for Semantic and Social Applications, Berlin, 22-26 September 2008, <<http://www.kb.se/dokument/Libris/artiklar/Project%20report-final.pdf>>.

# FRBR: Da un modello di record bibliografico a un modello organizzativo?

by Agnese Galeffi

Il rapporto FRBR si presenta come una riflessione soltanto teorica e non intende in alcun modo costituire lo studio di fattibilità di un nuovo applicativo di catalogazione e tanto meno uno standard catalografico; in realtà, il ruolo di FRBR nel tempo si è evoluto, man mano che i sistemi bibliografici hanno accolto al proprio interno parti sempre più rilevanti del suo modello logico. In un primo momento, l'applicazione è stata finalizzata al miglioramento della visualizzazione dei risultati negli opac, attraverso l'aggregazione per titoli delle opere, ottenuta mappando il modello FRBR sugli elementi del formato MARC, senza quindi incidere sulla struttura del catalogo. Solo successivamente sono stati creati alcuni applicativi modellati effettivamente su FRBR, che creano un catalogo nel quale i record relativi alle entità del primo gruppo sono collegati tra di loro.

La pubblicazione di FRBR ha anche avuto numerose conseguenze sul dibattito teorico attorno al catalogo, influenzando la struttura dei nuovi codici di catalogazione. Per quello che riguarda l'Italia, REICAT segna, rispetto alle precedenti norme RICA, una precisa svolta, riscontrabile anche nel cambiamento dell'acronimo (RICA stava, infatti, per Regole Italiane di Catalogazione per Autori). Il nuovo codice assume infatti l'opera come principale elemento organizzativo del catalogo e definisce un nuovo livello, corrispondente all'espressione. Anche RDA, seppure con criteri completamente diversi, recepisce la struttura logica di FRBR.

Pensando alla realizzazione di sistemi bibliografici di nuova generazione, l'applicazione di FRBR è funzionale anche alla trasformazione dell'opac in portale, processo che genera il cosiddetto opac "ad assetto variabile". Quest'ultimo permette ad una biblioteca di appartenere ad una rete territoriale condividendone il software ed alcuni servizi, come ad esempio il prestito, e contemporaneamente di condividere con istituzioni appartenenti ad altre reti, servizi diversi, rivolti ad un pubblico specializzato, che implicano l'adozione di linguaggi di indicizzazione semantica specifici e l'integrazione con risorse utili a quella fascia di utilizzatori. L'esistenza di questi strumenti, accessibili mediante portali, non è in alcun modo sostitutiva del catalogo vero e proprio; l'accesso e la fruizione del singolo documento passa comunque per la consultazione dell'opac della biblioteca nella quale esso è localizzato. In questa prospettiva, l'applicazione di FRBR può favorire la segmentazione del record su più livelli – corrispondenti alle entità del primo gruppo – utile per trasferire le informazioni ai cataloghi portalizzati.

L'articolo formula quindi un'ipotesi circa l'applicabilità della logica di FRBR non soltanto alla struttura del catalogo o del singolo record, ma ad un sistema bibliografi-

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co complesso come quello italiano: in SBN, infatti, la catalogazione descrittiva viene effettuata da tutte le biblioteche aderenti, sia pur con livelli di abilitazione differenti, mentre la creazione dei record di autorità è svolta totalmente a livello centralizzato.

La differenziazione tra i record (di autorità, di manifestazione, di esemplare ecc.), insita nel modello FRBR, potrebbe essere anche finalizzata ad una redistribuzione dei ruoli tra l'agenzia bibliografica, gli archivi regionali (identificati dal deposito legale), le biblioteche specializzate o storiche e quelle locali.

Alla stessa riorganizzazione potrebbe far seguito una rinnovata architettura del sistema bibliografico, che preveda una sensibile riduzione delle ridondanze attraverso l'istituzione di un archivio unico delle manifestazioni. A tale archivio si accederebbe attraverso i cataloghi portalizzati ed altri strumenti di ricerca, ossia tramite i livelli alti di opera ed espressione. I record in esso contenuti, relativi alle manifestazioni, sarebbero inoltre collegati ai record di esemplare presenti negli opac locali.

In conclusione vengono analizzate alcune conseguenze e possibili criticità di tale modello organizzativo.