

## Letters to the Editor

January 8, 2006

In November I received the October 2005 (49, no. 4) issue of *LRTS*, and after reading your glowing remarks about the editorial board and how this is a carefully refereed journal, I launched into the article by Ed Jones about the Functional Requirements for Bibliographic Records (FRBR) titled “The FRBR Model As Applied to Continuing Resources” (p. 227–42). I was disappointed to find so many errors and information presented in a misleading fashion that could have so well been addressed through editorial review working with the author. Mr. Jones has an excellent message about our being at a great time of opportunity, and he points to the inconsistencies and varying practices that have evolved over the years for continuing resources through our cataloging rules, rule interpretation, and practices and the MARC format. Using FRBR for such analysis is precisely what that conceptual model is for. I just wish the statements had been clearer about what is really Mr. Jones’ opinion and what FRBR states. There are also the distracting errors of fact that I am disappointed the reviewers did not catch.

Let me just state the problems that perhaps can be corrected for future readers. The very first sentence refers to the 1997 IFLA conference declaring it was in New Delhi—it was in Copenhagen, Denmark.

In the second paragraph he calls the FRBR model an “entity-analysis model”—it is an “entity-relationship” model or “E-R” model. The relationships are a key component of this type of model, and E-R models were one of the leading models for computer system design when the IFLA Study Group began its work on FRBR. Later object-oriented models appeared (which Mr. Jones mentions at the end of his article), but entity-relationship models are still being used.

At the end of the second paragraph, he gives his own parenthetical definitions for the FRBR “Group 1” entities for bibliographic resources, saying that FRBR posits the four levels of abstraction. A casual reader might assume these are from FRBR, when in fact they are his own spin. He should have told the reader so. For example, he attributes *manifestations* as being “the totality of *items* that together constitute a single publication.” The *manifestation* in FRBR is the “physical embodiment of an *expression* of a *work*.” A *manifestation* is not limited to “publications” nor sets of *items*. Mr. Jones’ perspective is very interesting, but not that of the model itself.

In the third paragraph, he states “FRBR does not explicitly distinguish *expressions* from *works*, noting that the conceptual boundary between these entities is culturally determined.” What I gather he intended was that the model allows a lot of flexibility in the boundaries between *works* and *expressions*, but the definitions and entities themselves are certainly explicitly distinguished in FRBR. According to FRBR, a *work* is “an intellectual or artistic creation,” and the model purposefully allows flexibility for applications to determine boundaries between *works* and between *works* and *expressions*, depending on the needs of the application. If it is applied to archival collections, their culture has a slightly different view of what is considered a *work* than what libraries consider *works*. FRBR explains, “The concept of what constitutes a *work* and where the line of demarcation lies between one *work* and another may in fact be viewed differently from one culture to another.” An *expression* in FRBR is the realization of the *work* through some notation (alpha-numeric, musical, choreographic, etc.), sound, image, object, movement, etc., or any combination of such forms,” which also includes performances. I like to think of a *work* as the ideas, and an *expres-*

sion as the way we express those ideas. As FRBR explains, “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”—but certainly FRBR distinguishes between *work* and *expression*. Some applications may choose to meld the two, what Patrick LeBoeuf has called a *workspression*, so there is a single abstract entity, but again this will depend on the needs of the application and the nature of the entities themselves.

Mr. Jones then sets the stage that continuing resources “may not fit well into the FRBR model, both because of the multiplicity of relationships in which such resources may be involved and because these relationships may obtain at multiple levels within the Group 1 hierarchy.” This makes no sense to me, as the model doesn’t care how complex or simple the relationships are, it merely indicates there are relationships and those can be among any of the entities. To me, continuing resources fit very well into the model. Perhaps Mr. Jones intended to say future systems built on the FRBR model might find it difficult to include the existing bibliographic records for continuing resources, due to our past practices. He certainly gets to this at the end of his article.

He states “Continuing resources have been conspicuously absent from these early experiments, primarily because they have proved to be problematic” (p. 228). On that same page he also declares there was a “reluctance to include bibliographic records for CR in early FRBR-ization experiments.” VTLIS was one of the very first integrated library systems to provide a FRBR-ization of their system, and serials and other continuing resources are very much present and are nicely handled. VTLIS has demonstrated that using FRBR enables the collocation of the various related serials to help the user find what they need in ways that our cataloging rule divisions of serials into new “works” at every title change does not. I think the problem Mr. Jones is describing has more to do with the way we have cataloged these materials in the past and the MARC format limitations. FRBR allows us to step away from the baggage of cataloging rules and MARC format to see what’s going on and hopefully design better systems in the future.

Mr. Jones seems to imply that CR were intentionally omitted from FRBR. In fact, serials were specifically included—the term “continuing resources” didn’t appear until after FRBR, but that mode of issuance is certainly well-represented. This unfortunate misconception also has shown up in other recent articles, such as Kristin Anteman’s “Identifying the Serial Work As a Bibliographic Entity” in the October 2004 issue of *LRTS* (49, no. 4), when, in fact, serials have been in the FRBR model from the start. There are numerous references to serials and examples for serials in FRBR as follows.

When describing the *entities*, continuing resources are used in the examples for *work*: the *work* titled “Wall Street Journal” with two *expressions* for the Eastern edition and the Western edition (p. 22), which Mr. Jones himself uses to demonstrate further interesting complexities that need to be addressed for other editions; also FRBR has the example of the map series, “The Ordnance Survey’s 1:50 000 Landranger series” to show aggregates and components and *works* within *works* (p. 29).

In the FRBR sections describing attributes, the attributes for *work*, *expression*, *manifestation*, and *item* all have applicability for continuing resources. The particular mode of issuance isn’t a factor to be specifically separated out. At the *work* level, FRBR includes uniform titles, etc. (p. 32–35); under attributes of *expression*, the added specific attributes that are unique to serials are indicated, such as the attribute of “extensibility of expression” and “sequencing patterns (serial),” “expected regularity of issue (serial),” and “expected frequency of issue (serial)” (p. 35–40); for attributes of *manifestations* (p. 40–48), that FRBR provides the special addition of attributes unique to serials, such as “publication status (serial)” and “numbering (serial)”; the *item* attributes (p. 48–50) also are general and can apply to continuing resources; and the specific attributes unique to serials appear in the tables of attributes mapped to user tasks (p. 88–96).

For relationships, continuing resources are certainly included in FRBR, such as in the *work-to-work* relationships table (p. 65) and the *work* relationship examples of “The British journal of social and clinical psychology” and the “Annual report of the Librarian of Congress” (both on p. 67); also in the whole/part *work-to-work* relationships discussing dependent parts and independent parts or *works* (issues of serials and intellectual parts of multipart works, monographs in series, journal articles, etc.) (p. 69); and under *expression-to-expression* relationships (translations, etc., p. 71; and supplements, p. 72) and whole/part *expression-to-expression* relationships (p. 74) for volumes/issues of serial and journal articles; *expression-to-work* relationships for supplements (p. 75); and *manifestation-to-manifestation* relationships for reproductions and alternate formats/simultaneously released editions (p. 76)—all of which apply to serials and other continuing resources; and whole/part *manifestation-to-manifestation* relationships for a volume of a multivolume *manifestation* (p. 77); and *manifestation-to-item* relationships for reproductions (p. 79); and *item-to-item* relationships (p. 79) and whole/part *item-to-item* relationships (physical components of a copy) (p. 80).

The user tasks in FRBR apply to continuing resources as much as to any other mode of issuance.

Even in the FRBR listing of basic level bibliographic record, the special attributes for serials are included, such as numbering (serials), frequency statement (serials),

and, of course, all of the series data elements (p. 112–16).

The IFLA Study Group creating FRBR contacted people working with all types of materials to be sure to include them all in the model, and the worldwide serials community was involved.

Another inaccuracy that should have been caught by the reviewers: p. 238, “FRBR defines two relationships at the *manifestation* level: reproductions and alternates; all other relationships are defined only at the *expression* or *work* levels.” Not so. FRBR also defines whole/part *manifestation-to-manifestation* relationships (p. 77).

Mr. Jones refers to a “FRBR record structure” (p. 236), but there is no such thing in the conceptual model. That would be up to a system application of the model, which could be done in whatever ways made sense to the particular application, types of materials included, audience for the tool, etc.

In his historical narrative of the changing views of what constitutes a serial *work* mistakenly assuming that the *Paris Principle* “work” is the same as the FRBR “work,” Mr. Jones points to both the draft “Statement of International Cataloguing Principles” and the *Paris Principles* as sources for defining serial *works*, but neither document does that. In the *Paris Principles* and in AACR2, “work” was used very imprecisely to variously refer to a bibliographic record, the bibliographic resource represented by the bibliographic record, or actually the FRBR “work”—that is, the contained intellectual content. How the identifying data elements (attributes) for a *work* are packaged or displayed (e.g., through data elements in a bibliographic record, through a controlled citation in an authority record, etc.) is a system design issue, not a FRBR requirement.

The *Paris Principle* 11.5 codified successive entry, and it prescribed how one entered serials entered under title in a catalog. *Paris Principle* 11 is titled “Works Entered under Title,” but here the word “works” means bibliographic resources. More precisely *Paris Principle* 11.5 prescribes that separate “main entries” (i.e., bibliographic records) should be made for each different title when a serial publication is issued successively under different titles. There is no mention of the concept that FRBR calls *works*.

On p. 234, Mr. Jones states, “point 11.5 of the *Paris Principles* implies that a new catalog record is created *only* when the title changes.” This is a misunderstanding on the part of Mr. Jones. *Paris Principle* 11 is exclusively for “Works entered under title” and has nothing to do with works (i.e., bibliographic resources) entered under personal authorship (which is found under *Paris Principle* 8) or corporate authorship (found under *Paris Principle* 9). It was not that the “successive entry” in the *Paris Principle* 11.5 produced a different definition of *work* for serials than for other resources, as Mr. Jones states, but that in the *Anglo-American Cataloguing Rules*, the rules for creating serials

bibliographic records were so different from rules for other materials. FRBR helps us to see those differences and question why we should perpetuate such distinctions.

The term “main entry” and the imprecise use of the term “work” intentionally are avoided in the draft Statement of International Cataloguing Principles. Instead the statement builds on the FRBR model and basic principles of collocation, bringing together related resources to help users find, identify, select, and obtain information they need.

There are also some unfortunate statements that Mr. Jones makes, such as “The *work* shares content with its *expressions* and *manifestations*, it does not necessarily share a title proper”—they don’t “share” a title proper at all! In this section of his article, Mr. Jones’s statements about serial works reflect the unfortunate past practice, particularly with serials, of calling “titles” *works*. In FRBR the *work* is the content as expressed in the *expression* and recorded in some physical carrier or container that is the *manifestation*, as exemplified by an *item*. So an *item* contains the *manifestation*, *expression*, and *work* all at once. The “title proper” has been used by serials cataloging to identify a serial to provide clues about creating new bibliographic records; when enough of a change has occurred, our practices have required us to make a new bibliographic record. But this should not be confused with the FRBR concepts, because from the FRBR perspective, all that is going on is that the titles proper on *manifestations* are changing. We have been calling this a new title, or inaccurately from the FRBR perspective, a new serial *work*, when we are just identifying changing attributes of the *manifestation* in the FRBR sense. Title proper is a cataloging term for a title we find on the *manifestation*. In FRBR it is an attribute of the *manifestation* and not of a *work*—the entities don’t upwardly “share” attributes. Attributes of *works*, *expressions*, *manifestations*, and *items* have a transitive relationship among the entities; in other words, they are inherited from *work* to *expression* to *manifestation* to *item*—not upward from a *manifestation* (title proper) to *work* (uniform title).

Mr. Jones also makes assumptions about the FRBR-based system that are very limiting and reflect a narrow view of what such future systems might offer. On page 239 he states, “As with translations, placing the successor relationship at the *expression* and *work* level similarly breaks the *manifestation-to-manifestation* connection.” That would only happen if the system regrettably made no transitive relationships for the *work-expression-manifestation-item*. Transitive relationships are inherent to FRBR and should be part of any future system built on the FRBR model.

Repeatedly throughout this article, Mr. Jones conflates the current cataloging rule interpretations, MARC format limitations, and CONSER practice with a conceptual model that can be applied in many ways. The value of a conceptual model is to use it for another perspective on the universe of

things being controlled by cataloging to see what is really going on with them and how they might be best presented to users without the baggage of cataloging rules, communication formats, or rule interpretations and special practices that have evolved over time for practical purposes.

His analysis points out how sloppy we have been in the past in describing resources, and how that sloppiness prevents us from meeting basic objectives for catalogs and fulfilling basic user tasks as pointed out in FRBR. Hopefully by using FRBR as an analysis tool, we can see how to improve our descriptions and systems for the future.

On page 238, we get to what is perhaps the basic theme of this article “catalogs that incorporate the FRBR model will need answers to these questions, and revisions to AACR2 and MARC 21 to accommodate the FRBR model will need to provide those answers.” I wish he had stated that right up front.

In his conclusions, Mr. Jones first recommends looking at abandoning the title-based definition of “work” for serials. He immediately throws this out by saying the large number of legacy records built on that premise present a formidable barrier, but is this really a problem for systems? If it is true, as he claims, that legacy data is based on a title-based definition of *work* for serials, it provides us with a mapping for a FRBR-based system design. We may find we don’t need to convert the legacy records but instead re-use them in creative ways in the future.

His second conclusion is about frequently revised *works* having different rules and two “competing” citation practices that present a challenge to the model. The model still works just fine with such different practices, so perhaps Mr. Jones meant any FRBR-based system would need to recognize these differences and accommodate them. Serials can have personal authorship and be entered under personal name according to our rules, but our rule interpretations and guidelines limit the practice. These particular different practices for main entry have no impact on retrieval in a future system that can rearrange data elements for displays (if the data elements are clearly tagged and labeled). The fact that there are different identifiers for the same entity also is not a problem, as there is no claim that an ISSN or an ISBN is a unique identifier, and no need for them to be unique—they would just be displayed along with other identifiers as an attribute of the *manifestation*.

For his third conclusion about using a single bibliographic record for multiple *manifestations*, this is not an “intermediate level” for FRBR, but instead reflects current practice of combining multiple *manifestations* on the same bibliographic record. The entities in the bibliographic record are still the FRBR *manifestations*. FRBR entities

do not equate to MARC records—there is nothing in the FRBR conceptual model that requires a separate record for each entity; in fact, it is well-recognized that the attributes of all the FRBR Group 1 entities now appear in the MARC bibliographic record. There would be some advantages to fulfilling user needs if we were to more clearly distinguish among the attributes for distinctive entities, such as enabling better collocation of displays. At the LC Bicentennial Conference in 2000, Matthew Beacom pointed out the benefits of *manifestation*-level records in MARC bibliographic records for communicating and later manipulation of the records, and how much more difficult it is when one combines many *manifestations* into a single MARC record for systems to them pull out the individual *manifestations* for display purposes.

In his fourth conclusion, Mr. Jones observes that relationships within the current MARC structure are imprecise. We need to step back to think what relationships are important to this type of material and how might those be displayed usefully to users. It’s too easy in serials cataloging to forget that for the vast majority of serials, users are trying to find an article, not the *work*, *expression*, *manifestation* of the entire serial. We overly complicate our lives and the work of users by focusing on the serial level rather than the article level. One can view the serial level as the citation—needed for authority control for a consistent citation and to show how things are related so users can find what they need even if their citation is slightly wrong (as interlibrary loan staff deal with constantly). Our serial cataloging records are mostly for acquisitions, check-in, and other catalogers—library uses—to organize and manage these packages of information, this particular mode of issuance used to convey articles—*works* in their own right. Why not take a really radical view—a user’s view—to see how we might better describe serials and other continuing resources in the future for the various user needs: the acquisitions need for placing and tracking orders (subscriptions, standing orders, etc.) with order records; the check-in need to provide inventory control for received and missing and claimed issues on check-in records; the cataloger’s need to distinguish among serials with similar titles—perhaps in authority records; the researcher’s need to obtain a specific article (the part within the whole—the component *work* within the aggregate *work*) with direct links to the article. Let future systems combine with abstracting and indexing services even more than we do today and with publisher’s data and with digital resources to get the various users to what they need, hopefully at a faster and less expensive way than we do now.—Barbara B. Tillett ([btill@loc.gov](mailto:btill@loc.gov)), Chief, Cataloging Policy and Support Office, Library of Congress