Brave New FRBR World

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Introclusion

My introduction cannot be exclusively introductory; this paper is but a tiny dot in that huge "continuing resource" that the history of cataloguing efforts has been for centuries. Some sense of continuity made me coin that strange word, "introclusion", in order to convey the idea that this new chapter comes after many other chapters; it introduces and concludes at the same time. You have just heard about the Paris Principles and ISBDs; I now would like to tell you about the FRBR model: what it is and what it is *not;* what it does and what it does *not;* and how it relates to our major topics during the present Meeting.

What FRBR is

• a model developed for IFLA

FRBR (1) is the result of a study about the *functional requirements for bibliographic records* undertaken from 1992 through 1997 by a group of experts and consultants as a consequence of one of the 9 resolutions adopted in 1990 at the Stockholm Seminar on Bibliographic Records. That study, the aim of which "was to produce a *framework* that would provide a clear, precisely stated, and *commonly shared understanding* of what it is that the bibliographic record *aims to provide information about*, and what it is that we expect the record to achieve in terms of *answering user needs*" (2), was approved by the Standing Committee of the IFLA Section on Cataloguing (now known as Cataloguing Section) on September 5, 1997.

• an E-R model

FRBR is an entity-relationship model. It defines a number of general classes ("entities") of things that are deemed relevant in the specific context of a library catalogue, a row of characteristics ("attributes") that pertain to each of these general classes, and the relationships that can exist between instances of these various classes.

The very core of FRBR consists in a group of 4 entities that pertain to documents themselves (the "things" that are being catalogued), from carrier to content. These 4 entities highlight the 4 distinct meanings that a single word such as "book" may have in common speech:

— when we say "book", what we have in mind may be a distinct, merely physical object that consists of paper and a binding (and can occasionally serve to wedge a table leg); FRBR calls it: "Item";

— when we say "book", we also may mean "publication", as when we go to our bookseller's and ask for a publication identified by a given ISBN: the particular copy does not matter to us, provided it belongs to the general class of copies we require and pages are not missing; FRBR calls it: "Manifestation";

— when we say "book", as in "Who wrote that book?", we may have a specific text in mind, the intellectual *content* of a publication; FRBR calls it: "Expression";

— when we say "book", we eventually may mean an even higher level of abstraction, the conceptual content that underlies all of its linguistic versions, either the original or a translation; the "thing" that an author may recognize as his/her own, even in, say, a Japanese translation and even though he/she cannot speak Japanese and cannot therefore be held as responsible for the Japanese text; FRBR calls it: "Work".

For the sake of simplicity, I use the word "book" here as a paradigmatic term, but FRBR was designed to model any kind of material found in libraries: music, maps, engravings, electronic resources...

A second group comprises the 2 categories of actors that can be involved in the production of a document: Person and Corporate Body.

A third group of entities, reflecting what a Work may be *about*, comprises all of the above, plus 4 other entities that can *only* serve to express the subject of a work: Concept, Object, Event, and Place.

• a reference model

FRBR is a reference model. The very words quoted above from the *FRBR Final Report* and emphasised by me make it very clear: it is but a *framework for commonly shared understanding*. It allows us to have the same structure in mind and to refer to the same concepts under the same appellations. It allows us to compare data that may happen not to be structured the same way, in whole (e.g., Dublin Core vs. ISBDs, catalogues from the pre-ISBD era vs. ISBDs, museum documentation vs. library documentation, etc.) or in part (e.g., fixed length fields in various MARC formats, ISBD-based descriptions according to various national cataloguing rules, etc.).

What FRBR is not

• a data model

Can FRBR be labelled a "data model"? It seems that the attributes it defines for each entity are in many cases too generic to allow for an implementation of the model such as it stands, without having to refine it. *Titles* for instance may have different natures; FRBR defines a Title attribute for each of the 3 entities Work, Expression, and Manifestation, but this categorisation of the "title notion" does not suffice to cover the typology of titles we actually need and currently use: this typology should be added at each level, and might even be further refined.

• an ISBD

Can FRBR be labelled a "new kind of ISBD"? No, roughly for the same reasons: FRBR does not state *how* to structure data elements nor *how* to display them so that their structure can be understood by just reading the description, FRBR provides an intellectual framework to typify data elements and to show how they are interrelated among distinct records (e.g., 4 instances of Manifestation may embody only 2 instances of Expression that realise a single instance of Work, an analysis that ISBDs do not deal with at all, but that is most important in knowledge organisation and in defining rational ways to display results after a query in our catalogues). Actually, FRBR is broader in scope and reaches a higher level in analytical abstraction than ISBDs; I would therefore argue that the FRBR terminology should *not* be merely incorporated such as it stands into ISBDs and cataloguing rules, but that ISBDs and cataloguing rules should keep their own specific terminology, and provide accurate definitions showing how each term in this specific terminology is conceptually related to the FRBR terminology.

Although FRBR is *not* an ISBD, it might however be used to inspire new approaches in the development of ISBDs.

• an event-aware model

In contrast to comparable models in the field of cultural information such as ICOM CIDOC's CRM or the Harmony Project's ABC, FRBR does *not* strive to *explicitly* account for temporal aspects, such as changes over time, though Michael Heaney suggested in his paper "Time is of the essence" (3) it would be an important issue. CRM models *events* that occur during the life-time of a document, ABC models *states* that hold between two changes: these are two different perspectives but both result in dynamic descriptions accounting for intuitive facts all of us can experience in real life. FRBR, faithful to past and current library practice, only considers uncontextualised snapshots of objects not supposed to stir over time. The AustLit Gateway Project — about which I'll talk a little more in detail later on — felt it as necessary to add an Event level between FRBR Group 1 and Group 2 of entities, i.e. between the objects we describe and the actors who took some part in their coming to existence and subsequent evolution.

History and achievements

The history of the FRBR model since it was approved by the IFLA Section on Cataloguing may be seen as the history of an inspiring construct, even outside the library world; of implementation efforts; and of a direct impact on ISBDs and cataloguing codes. Besides, this history is not over yet, and FRBR is still the object of current initiatives.

• inspiration

Some conceptual models have been influenced by FRBR, or happen to show some convergence with it. I'll only mention two here.

\circ <indecs>¹

The e-commerce community has — somewhat unexpectedly — showed some interest in the IFLA model, though it was primarily designed for library use, and borrowed some features from FRBR for their own model, developed for INteroperability of Data in E-Commerce Systems (<indecs> (4)). But in this model, the Work and Expression entities were misinterpreted. The Abstraction entity, which the originators of <indecs> assume is equivalent to FRBR Work, actually corresponds to a subclass of Expression that might be labelled as Expression_in_notated_form, whereas the entity that is called Expression in <indecs> actually matches the notion of Performance, another subclass of the FRBR Expression entity.

• ABC

The Harmony Project — an initiative supported by USA, UK and Australia — also proved its interest in the FRBR model by borrowing some entities from it for its own ABC model (5). The ABC model aims to integrate heterogeneous information among multimedia digital libraries, and to provide a common conceptual model to facilitate interoperability among metadata vocabularies. It seems that in ABC Work and Expression are mashed into a single Work class, which in turn is subsumed in the Abstraction class, along with Concepts.

• implementation

There are more projects than actual achievements in the field of FRBR implementation, but both projects and achievements are exciting and worth mentioning. However, what does the phrase "FRBR implementation" mean? I said a few minutes ago that FRBR was *not* a data model, so how could it be "implemented"? At best, by designing an intermediate data model, based on it; at worst, by just *mistaking* it for a data model; in any case, by mapping either an extant format to FRBR, or FRBR to a new format.

• AustLit Gateway

AustLit Gateway was the earliest database fully implementing FRBR (6). It is an atypical experiment, in that it applies to an exclusively literary corpus of Australian texts, and in that it results from the merging of a range of various, heterogeneous datasets, some of which were *not* based on ISBDs. It is not a catalogue, but rather a database aiming to provide scholars and students with as much information as possible about Australian writers and Australian literary works. As such, it is work-centred and it displays for each work all of its

¹ The <indecs> model was presented in Frankfurt 2003 in the present talk as "inspired" by the FRBR model, which is inaccurate. The <indecs> model was developed totally independently from the FRBR model, and a certain amount of convergence was noticed only afterwards. The fact that the term "Expression" was chosen in both models is a sheer coincidence and it is therefore quite unfair to blame the <indecs> originators for "misinterpreting" the FRBR model. Nothing was "borrowed" from FRBR into <indecs> and the entire paragraph is pointless. It is left here only as a testimony of the error that was made in Frankfurt and the present footnote is to be understood as an erratum and apology.

expressions and manifestations on a single Web page, instead of presenting users with rows of distinct bibliographic records, as we do in our current library catalogues. The AustLit team developed a data model based on FRBR and topic maps; I already mentioned that the AustLit data model adds an Event entity as an intermediate between FRBR Group 1 and Group 2. It also adds a "Superwork" entity. The AustLit format is based on XML. Any kind of "non-book material" is excluded from the database.

In spite of those many differences between AustLit Gateway's preoccupations and ours, it is an extremely interesting example for us. It shows that it is possible to build an alternative to ISBDs on the basis of FRBR.

• Virtua

VTLS Inc. released in 2002 version 41.0 of the Virtua library system (7). For the very first time, a vendor made it possible for any library to create its own "FRBR catalogue". Extant MARC records can be "split" into the 4 levels of the FRBR Group 1 of entities, and any cataloguer can decide to account for bibliographic families rather than isolated documents, thanks to the FRBR structure. Virtua allows "flat records" and "FRBR records" to live side-by-side. The pattern followed when "splitting" records is based on Tom Delsey's mapping of MARC21 to FRBR (8). However, the cataloguing paradigm is still based on ISBDs — the "Manifestation level record" is not substantially different from any "traditional" ISBD-based record —, and the cataloguing format is still basically a MARC format, even though this MARC format is stored encapsulated in XML within the system, without cataloguers being aware of that.

• OCLC & RLG

Two such huge bibliographic databases as OCLC's WorldCat and RLG's Union Catalogue on the Web (now renamed RedLightGreen) are currently investigating their potential for "FRBRisation". Both aim to spare users overwhelming rows of "manifestation records" such as current cataloguing codes urge us to create them.

The OCLC research team has discovered (9) however that the Expression level is barely reflected in extant bibliographic records, and for the time being, as long as their research does not focus on musical documents, they only retain the "language" attribute as a discriminant among various expressions of the same work. This situation is likely to change, however, when musical documents are taken into account.

RLG intends to "collapse FRBR's four levels into just two, displaying a work and various manifestations of that work" (10). It can therefore be easily understood that uniform titles for expressions are not a crucial requirement for RLG.

• impact on cataloguing rules revision

• **ISBD revision**

The process of revising ISBDs on the basis of FRBR has already begun (11). It first focused on chapters 6 and 7 of the *FRBR Final Report*, making optional all those data

elements that had the lowest relevance rate for the four user tasks defined in the model: find, identify, select, and obtain. Elements that are labelled *optional* are of course not *forbidden*. A given National Bibliographic Agency may choose to maintain them in basic national bibliographic records, and to have that choice reflected in its national cataloguing code, whereas another one may choose to regard anything that is optional as definitely discarded. Revised ISBDs have therefore the potential to make national cataloguing codes more and more distant from each other over time.

The current trend in the ISBD revision process consists in a drastic FRBRisation of terminology. As I already stated above, I am not sure it is quite an appropriate response to the challenges we have to face. In my opinion — which of course it is possible to disagree with — the ISBD terminology should be related to, but not literally borrowed from the FRBR terminology, as the latter is more abstract and more encompassing than the former.

• AACR revision

The decision was made to incorporate FRBR terminology into AACR, and several institutions such as JSC, CC:DA or ALA were instrumental in that process. There have been lengthy and heated debates to determine whether what AACR calls the "item being described" was perfectly equivalent or not to what FRBR calls a "manifestation", and whether a systematic one-to-one replacement from "item" to "manifestation" wherever the term "item" occurs in AACR would improve the overall logic of the code. The Joint Steering Committee is looking into work-level and expression-level uniform titles and the use of FRBR concepts to clarify what the GMD should be.

• **RICA revision**

Italy's national cataloguing rules, RICA, have been in the process of revision since 1997, and FRBR was adopted as a general framework for that purpose (12). The Standing Commission for the revision of RICA proposes, among other suggestions, a structure for uniform titles for expressions, that might look like:

[Title of the *Work*] [kind of version] [language] [responsible for the version] [date]

This suggestion could form the basis for further discussion.

• in progress

• FRANAR

Actually, the fabulous FRBR adventure is not over yet. FRBR only covered the content of *bibliographic* records (as opposed to authority records), and access points to bibliographic records (even those constructed access points "inherited" from authority records). The model could not therefore be regarded as covering the whole "bibliographic universe". It lacked a counterpart for authority records. This is the reason why the FRANAR Working Group was created in 1999 under the joint auspices of the IFLA Division of

Bibliographic Control and the Universal Bibliographic Control and International MARC Programme (the late UBCIM). The first of the three terms of reference for the FRANAR Group was "to define functional requirements of authority records, continuing the work that FRBR initiated" (13). Tom Delsey proved as instrumental in designing the FRANAR model as he had been in designing the FRBR model. "Person" and "Corporate Body", that were only represented in FRBR by a heading, are now fully modelled.

• IFLA WG on FRBR

The IFLA Cataloguing Section formed in 2002 a Working Group (14) devoted to FRBR issues. One of the actions planned for 2002-2003 was "to provide examples in the clarification of the Expression entity", felt as one of the trickiest in the model. This Working Group has its own Web site (15), hosted by IFLANET. Any individual interested in FRBR discussions is welcome on the listserv (frbr@infoserv.inist.fr) that was created for, but not restricted to, the members of the Group. To date (April 2003), there are about 200 subscribers to that listserv, from over 30 countries.

Problems that FRBR leaves unsolved?

In spite of that success — or, at least, that hint at a certain amount of interest — one may wonder whether FRBR allows us to face all the challenges that our catalogues put out to us. I'll take just two examples.

• is every "content" a "worxpression"?

I am not quite sure that FRBR suffices to solve the much addressed issue of the relationship of "carrier" to "content". Work is defined in FRBR — and commonly understood — as a distinct creation of the mind, and all the examples given in the *FRBR Final Report* show well-defined works, the importance of which in cultural history makes it undoubted that they *are* works. It is undoubted as well that each of them can be a content, or form part of a content. But is the opposite true as well? Is every "content" a "Work"? — or, to put it more accurately or more pragmatically, is every content the combination of *one* Work and one of all its possible Expressions, a "Worxpression" (if I am allowed to coin that ugly word in a language I'm not a native speaker of)?

I would argue that there is an intermediate level between the "Worxpression" and the Manifestation, and that this intermediate level might be called "Editorial Content" or "Package Content". The FRANAR model such as it was designed by Tom Delsey acknowledges an ontological distinction between "Content" on one side and "Work" and "Expression" on the other side, Work and Expression being "recognised as" Content. What I mean by "Package Content" would account for the overall content of a Manifestation. The combination *Hamlet* + *Macbeth*, as content of a given publication, has all the *functional characteristics* of an instance of the Work entity, from the logical point of view of FRBR as a purely conceptual model, without being *intellectually and culturally* regarded as "a work". This is the reason why the ISTC standard (16) makes it possible to assign an ISTC or not, according to one's needs ("functional granularity" principle), to *Hamlet* + *Macbeth*.

The "Package Content" notion might help clarify the "foreword issue" (and the "illustration issue", etc.). It is not clear, in *FRBR Final Report*, what the status of a foreword should be. Intellectually, a foreword is arguably a work of its own, but in FRBR it seems that a foreword only forms a part of a given expression of the work it introduces. It would be more accurate to state that both the expression of the main work and the expression of the foreword make up a "Package Content" — i.e., neither a distinct work nor an expression of the main work, but a related abstract entity that in turn might be available as a whole in various linguistic versions.

Whenever we create a single bibliographic record with several qualified ISBNs because a publication "is issued in more than one format", as ISBDs and cataloguing rules optionally allow us to do (17), the resulting bibliographic record actually reflects *one* instance of "Package Content" and *several* instances of the FRBR "Manifestation" at the same time.

• what is the status of digital/digitised resources?

The *FRBR Final Report* accounts for "native" electronic resources, available as such even before they enter the library and/or its catalogue, but does not explicitly address the issue of digitised holdings. That topic can be compared with the treatment of microforms produced *by libraries themselves* for preservation purposes. There are various practices in various institutions: just to take two examples, the Library of Congress creates separate bibliographic records for the original publication, a microform, and a digitisation of that original publication (implicitly regarding both the microform and the digitisation as distinct *manifestations*), whilst the Bibliothèque nationale de France creates only one bibliographic record for the original publication and regards the original copy, the microform and the digitisation as holdings exemplifying that same original publication (implicitly regarding the microform and the digitisation as instances of the *item* entity).

As far as I know, there is no internationally accepted normative text to support either view, and FRBR itself does not *explicitly* say anything about either approach, although it can be inferred from the FRBR text that any microform or digitisation constitutes in any case a new Manifestation.

This lack of clear statement proved problematic for other models derived from FRBR and that remain more or less faithful to IFLA's original model. Let us compare just three of them: the Variations2 Data Model developed by the Indiana University (Bloomington) for digital libraries specialised in music (18); the SMART model (Sinica Metadata Architecture and Research Task) developed by Taiwan's Academia Sinica in Taipei (19); and Stephen L. Abrams' Reference Model for Digital Library Objects, currently under development at Harvard University (Cambridge, MA) (20).

In the Variations2 Data Model, a digitised object in a digital library is but an item of the manifestation the original object belongs to (like a microform at the Bibliothèque nationale de France).

In the SMART model, a digitised object is a new manifestation of the work and expression embodied in the original manifestation (like a microform at the Library of Congress).

In the Harvard University reference model, a digital archival master is a new expression of a graphic work, and it has a "surrogate for" relationship to the original expression (labelled: "analog").

I would therefore argue that FRBR, if it accounts well for "native" electronic resources, is not appropriate for digital libraries, *nor even for the digitised part of collections*

in our "traditional" libraries, whenever original holdings coexist with their digitised surrogates.

These considerations may seem out of scope in the present context of this Meeting, but actually they may have an impact on the "uniform title" Focus Topic, and they highlight an urgent need for a reassessment of our cataloguing rules when it comes to surrogate items, microforms, and the "native digital" vs. digitised dichotomy. Beyond that, they show how *inadequate* the Manifestation level is for a bibliographic record. I am quite aware that this may sound as heresy, as the Manifestation-based bibliographic record is a dogma (21). Perhaps the "Package Content" level, as defined above, would be more relevant in order to provide a basis for the bibliographic record, with "format variations" information at an intermediate level between the bibliographic record itself and local data.

If we regard digitised objects as expressions, as in the Harvard University model, our recommendations for uniform titles at the expression level should take them into account; if we regard them as manifestations, as in the SMART model, our recommendations for citations of manifestations should take them into account; and if we regard them as items, as in the Variations2 model, it should be made explicit (and justified) in FRBR documentation. In any case, our choice also has an impact on the GMD issue.

FRBR and the Meeting's 5 "Focus Topics" (that happen to be 6...)

Tomorrow and on Wednesday, you will be invited to work on 5 "Focus Topics" that have been defined prior to the Meeting. There are actually 6 of them, since the GMD issue and the uniform title issue are gathered under one Focus Topic. These 6 topics can roughly be "filed under" 3 overall "headings": "Appellation issues", "Classifying issues", and "Continuing vs. Multipart". Let us have a quick glance at each of them at the light of FRBR.

• "Appellation issues"

• FRBR and names of persons

The attributes defined by FRBR for the Person entity distinguish between the "name" of a person and that person's "dates", "title", and "other designation"; actually, these are all the elements that make up the heading for a person in a bibliographic record, and it surely would have been enough, for the purposes of FRBR, to define just one attribute: "heading". The FRANAR model further refines that "heading" attribute into its components. The FRANAR model also solves some problems not addressed by FRBR (because they were out of scope, not because of a deficiency): Is an instance of the Person entity supposed to be an actual person in the real world, or "something" else, and what? I mean: Can a real person be represented by two instances of the Person entity; inversely, can two real persons be represented in the catalogue universe by only one instance of the Person entity? The FRANAR model, relying on AACR2, defines the notion of bibliographic identity: the Person entity does not reflect an actual person in the real world, but that intermediate between the real world and the catalogue universe, the bibliographic identity. An actual person may have several bibliographic identities (as in the case of pseudonyms), and several distinct persons may be merged into one single bibliographic identity (as in the case of families and shared pseudonyms, but also in the case of undifferentiated names).

In most cases we strive to "control" bibliographic identities, that is: we strive to be quite aware of when distinct bibliographic identities correspond to one real-world person (in which case we would like to see links between bibliographic identities), and when one bibliographic identity corresponds to distinct persons. Families and shared pseudonyms *can* be controlled; undifferentiated names of persons are grouped together and not separately distinguished. The question therefore is: To what extent is that lack of control tolerable? Can it be tolerated at all? Does it have a substantial impact on the practicability of our catalogues for our users? Do they complain about it?

• FRBR and names of corporate bodies

This is very much the same issue. The FRBR attributes for the Corporate Body entity actually could have been replaced, for the specific purposes of FRBR, with only one attribute, "heading"; it is the role of FRANAR to define what makes up a heading for a corporate body. Here again, the Corporate Body entity does not correspond to a real-world corporate body, but rather to the notion of "bibliographic identity" as defined by FRANAR. Does every name change reflect a transformation of a corporate body into a new corporate body? Should every name change result in the definition of a new bibliographic identity, or should all name changes be recorded as cross references for the same bibliographic identity? What about mergers and splits?

• FRBR and names of contents (aka "titles")

Title attributes are defined in FRBR at three levels: Work, Expression, and Manifestation. Appendix A in the *FRBR Final Report* explicitly states that the title of a work may be either a uniform title or the title proper; that there currently is no prescription at all for the title of an expression; and that the title of a manifestation may be the title proper, a parallel title, a variant title, a transliterated title (all of them are *transcribed* titles), or a key title (which actually is a title *created* by cataloguers, and functions as both a uniform title and a citation form).

Actually, some other attributes defined for the Work entity are included in uniform titles for works and have no other relevance in bibliographic records; once again, in the context of FRBR, I do think it would have been preferable to just define a "heading" attribute and leave further analysis to FRANAR. These attributes are: "form", "date", "other distinguishing characteristic", "medium of performance", "numeric designation", and "key". The originator of the Work is dealt with in FRBR as a relationship only; this is contradicted by library practice for some specific kinds of Works, such as choreographic works, for which the choreographer's name is integrated into the uniform title (22), and in some national cataloguing codes (23).

I think it is arguable and sensible to state that the title of an Expression actually consists of the title of the Work realised by the Expression, plus any combination of additional elements taken among all of the other attributes defined for the Expression entity. The "form", "date", "language", "other distinguishing characteristic", "type of score", and "medium of performance" attributes are the most likely to adequately serve that purpose. As I already mentioned above, the Standing Commission for the revision of RICA has made interesting suggestions towards a standardised structure of uniform titles for expressions. Although the XOBIS Project is not based on FRBR, it proposes structured uniform titles for an information level that can be deemed roughly equivalent to FRBR Expressions, such as:

"La Dame de Pique (Opera : Tchaikovsky : 1890) (Piano Score : 1910s)"; "La Dame de Pique (Opera : Tchaikovsky : 1890) (Performance : 1906 : La Scala : Italian)" (24).

The question is: Which elements, and in which order, are strictly indispensable in order to cite/refer to a specific expression, either in the role of title heading or in the role of subject heading?

• "Classifying issues"

• FRBR and categories of contents/carriers (aka GMDs)

GMDs are not mentioned in the *FRBR Final Report*. This is not surprising: some GMDs pertain to content, some to carrier, some to content and carrier at the same time ("printed text"). The issue of native digital vs. digitised resources makes it all the more difficult to determine what it is that GMDs should qualify at all. Perhaps FRBR lacks a "type" attribute for each of the three upper entities: Work, Expression, Manifestation. Perhaps what we have in mind when we talk about GMDs would be a combination of these 3 "type" levels, such as, for instance (these are only suggestions, I am aware they are not quite consistent):

textual work - expressed as sound - on physical carrier

textual work – expressed as written word – on manuscript

textual work - expressed as written word - on microform

musical work - expressed as notation - on printed material

musical work – expressed as sound – in an electronic resource on line

In some cases the expression level might be omitted:

cartographic work - in an electronic resource on line

motion picture – on physical carrier

multimedia work - on physical carrier(s).

The problem is that we would like GMDs to be as concise as possible. All these suggested GMDs are much too long.

• "Continuing vs. Multipart"

• FRBR and continuing resources

What is a continuing resource? Although FRBR does not explicitly make the statement, it seems that continuing resources are regarded in the model as works. This may be arguable for periodicals (although I do not feel quite comfortable with that view for a number of reasons that are out of scope here), much more questionable for series. The only difference between a periodical and a multi-volume monograph is that a periodical is supposed to go on for ever and ever, even if it happens to stop after the 1st volume, and even though no human activity can possibly last for ever and ever, whereas a monograph is supposed to end one day, even if several years intervene between all volumes. This is the reason why FRBR defines an "intended termination" attribute for the Work entity, though the mapping to current library practice in Appendix A of the *FRBR Final Report* states that this element is "not defined" in ISBDs nor in the UNIMARC format (25): it actually pertains to the very nature of the distinction between "continuing resource" and "monograph".

Once again, the issue in cataloguing is about the correlation between appellations and the intrinsic essence of the entities that bear those appellations. Does every title change always indicate a substantial transformation of a continuing resource into another continuing resource? ISBD(CR) strives to answer that question. Does a title change affect the Manifestation level or the Work level of a continuing resource? Does the key title identify a continuing resource as a Work, as an Expression, or as a Manifestation? Why is the name of the originator of a continuing resource integrated into a key title as a qualifier, whereas for other kinds of works we most often create author-title headings? Why don't we deal with key titles in authority records rather than bibliographic records? Why do we make bibliographic records for continuing resources? Is it justified at all to create bibliographic records for periodicals?

• FRBR and multipart structures

Periodicals and multi-volume monographs are characterised by conceptual unity despite and over physical/temporal fragmentation; one might label as "patchwork" resources, those resources that are characterised by conceptual multiplicity despite and within physical/temporal unity.

I already mentioned the "Content" issue. The present issue consists in a refinement of "Content" into all of its "Worxpression" components. For example, a title proper, found on a title-page, such as "Four Jacobean sex tragedies" reflects a Content; whereas information found on the same title-page, such as "William Barksted and Lewis Machin: The insatiate countess (from a draft by John Marston)", "Francis Beaumont and John Fletcher: The maid's tragedy", "Thomas Middleton: The maiden's tragedy", "John Fletcher: The tragedy of Valentinian" reflects Works. These four Jacobean plays were "edited with an introduction and notes by Martin Wiggins": should we regard "Four Jacobean sex tragedies" as a Work by Martin Wiggins, then? In the ISTC standard, it is a possibility; but whatever our answer as librarians to that question might be, there are several different ways to deal with the four plays themselves, that we regard as undoubted works:

just ignore them, as they are more than three. This is how that book actually has been catalogued at the University Library of Padua, Italy, and in three German University libraries; mention them in an "other title information" statement, as we found them on the title-page, just under the main title. This is how that book actually has been catalogued at Bibliothèque nationale de France;

mention them in a note. This is how that book actually has been catalogued at the British Library (and in most British libraries), at the Library of Congress, at the New York Public Library, in several French University libraries, in several Austrian University libraries, and in Göteborgs Universitetsbibliotek. BibliotheksVerbund Bayern and the Staatsbibliothek zu Berlin mention only the first two plays in a contents note; so does the Giessen Universitätsbibliothek, but in that catalogue all authors are indexed and retrievable;

or provide structured and controlled access points to them,

either through author/title added entries (7 of them, since one work has two authors and one has three authors). This is how that book actually has been catalogued at the Freiburg University Library in Switzerland, and at the National Library of Scotland, in addition to extensive contents notes,

or through analytical records (if we are lucky enough to have a computer system and a format that allow us to do so). Actually, I could not find any European catalogue where this book had been dealt with that way (which does not necessarily mean that there is no such catalogue).

Brave new FRBR world

The question is: What is crucial for our users, to give them access to an overall Content, as we currently always do, or to give them access to an overall Content *and* individual "worxpressions", as we often omit to do, chiefly because of the economical "rule of three"?

Concluduction

My conclusion cannot be exclusively conclusive; it can only serve as an introduction to our works during this Meeting: this is the reason for that strange coined word. And this is the reason too why I just would like to express three feelings:

My profound conviction (I hope that John Byrum and the FRBR Review Group will pardon me): ISBDs *such as we know them* are doomed to disappear. Not at once, of course, and not today; but at a moment in the future. Perhaps they will just be seamlessly and progressively transformed into something else – on the basis of the FRBR paradigm.

My pragmatic (and pessimistic) view: We could keep everything unchanged without much damage. We could continue to catalogue according to ISBDs, AACR, RICA, RAK, AFNOR standards, etc., for ever and ever without ever revising them: nobody would care, no end-user would protest.

My practical hope: somewhere in between... In an International Cataloguing Code, perhaps?

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(22) See for instance AACR2 25.5B: "when the item represents a particular choreographer's version of the work, include the surname of the choreographer as part of the qualifier"; <u>http://www.loc.gov/catdir/pcc/naco/trainers/lcri25.pdf</u>, November 2002, p. 24-26.

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