JSC Format Variation Working Group

London Meeting, September 6th, 2002, 10 AM-5:30 PM British Library, St. Pancras Site Meeting Room X (5th Floor)

Minutes (Including Action Items and Follow-Up)

Note: Items marked [JSC RESPONSE] are quoted from the minutes of the JSC York Meeting (4JSC/M/490-527)

1. Welcome and Introductions, Logistics, etc.

Attendees: Jennifer Bowen (Chair), Matthew Beacom (Recording), Antony Gordon, Sue Lambert, Paul Weiss, Mick Ridley (guest)

Bowen called the meeting to order. Introductions were made among those present. The logistics of the site and the timing of breaks were noted for all.

2. Review of Agenda/Purpose of the meeting

The agenda was approved.

One purpose of the meeting was to bring together group members from the US and UK and to jumpstart our work as a group. Beyond that, the group began to develop criteria for evaluating expression-level collocation in online systems. At this meeting the group's agenda included reviewing and discussing several example systems: CADENSA, BOPAC2, the VTLS implementation of FRBR, and OCLC's FISH project.

Bowen led a discussion of the desired outcomes for this meeting. They were

- a. Develop criteria for evaluating systems that attempt expression-level collocation of records in user displays or that attempt to catalog bibliographic resources at the expression level.
- b. Provide an update to the FVWG's third report for Beacom to present to the Joint Steering Committee at their York meeting the following week
- c. Discuss pre-coordinate and post-coordinate approaches to enabling collocation at the expression level.

3. Review of the Working Group's current projects Doc 3A: FVWG 3rd interim report

One of the original and motivating ideas behind creating this working group was to test expression-based cataloging in a database and not just talk about it. For the first two years of its existence, no database has been available to the Format Variation Working Group. At this meeting, the group had its first look at OCLC's work with FRBR-based

records and displays in its development project named FISH. The group discussed the desirability of having someone from OCLC who is actually working on FRBR concepts join the working group. Working through our group member from OCLC Europe has been problematic because OCLC Europe is not directly involved with FRBR developments.

ACTIONS:

1. Bowen to ask JSC to invite Rich Greene to join the Format Variation Working Group in order to connect the FVWG directly to one active FRBR catalog project.

[JSC RESPONSE] JSC decided that a call for liaison contacts from utilities and vendors

would be made on appropriate email listservs by the Chair of the FVWG. Depending on the responses to this call, Rich Greene would be asked to join the FVWG as a liaison contact.

STATUS: pending

2. Bowen to ask JSC to allow the OCLC Europe representative to withdraw from the group.

[JSC RESPONSE] Stuart Hunt of OCLC Europe to be informed that his membership on the group is no longer required.

Although there was no substantive discussion of the MARBI discussion paper (DP08) at this meeting, the group discussed the possibility of a follow-up MARBI paper for the 2003 ALA annual conference in Toronto. As DP08 was a report to the larger community and specifically that part most concerned with the use of the MARC format, a second report may also be of value.

3.1 Revision of Ch. 25 to accommodate pre-coordinated expression-level citations

The group discussed briefly the work being done for revision to chapter 25 to provide for creating expression-level citations. This part of the Working Group's charge is clearly well within the purview of the rules.

3.2 Criteria for evaluation of Post-coordinated or System-generated Collocation Doc 3B: Bowen/Facilitating Post-Coordination in AACR

Discussion question: How can AACR better support system-generated collocation?

The discussion turned to the distinction between what we have been calling precoordinated and post-coordinated approaches to expression-level collocation. The terms were thought to be somewhat misleading. It was pointed out that the distinction is not one of either/or, but more a continuum.

The discussion brought out the value to users of expression-level collocation and noted that such collocation potentially could be defined or established in one of three ways:

1. by the cataloger through creating an expression-level citation

- 2. by the systems designer through utilization of various elements in records related to the expression, and
- 3. by the user through a display and interface that allows the user to select various elements in records related to the expression in order to create onthe-fly collocations that may not be full fledged expression-level citations but which draw upon the FRBR concepts of work and expression as operationalized in catalogs.

The group next discussed and attempted our answers to the questions to the JSC posed in the Working Groups third interim report. http://www.nlc-bnc.ca/jsc/forvarwg3rep3.pdf (Note: the numbers below refer to numbers within that report)

2.1.1.1 The group affirmed that we should be considering the needs of system developers. Seen broadly, the Format Variation Working Group is trying to operationalize the FRBR concepts. The mandate of the Working Group is specifically to do this within *AACR*, but the deep and practical connections between the rules, the MARC format, design and architecture of library management systems, and OPAC displays cannot be ignored. How we are to do this is not clear.

[JSC RESPONSE] "JSC expressed the view that the needs of system developers should not be the determining factor, although they did need to be 'kept in mind'."

2.1.1.2 The group affirmed that it should provide guidance beyond the rules to system developers. This might be accomplished by a written report, such as the MARBI discussion papers, a generic FAQ, etc., by responses to particular projects such as those undertaken by OCLC and VTLS, and by engagement with groups that are working on related issues such as the ad hoc FRBR group now meets at ALA meetings (OCLC, LC, FVWG, etc.).

ACTION: Bowen to ask the JSC regarding how the working group might best handle any formal arrangements or ongoing commitments with interested parties, especially those in the library vendor community, e.g. bibliographic utilities, LMS vendors, etc.

[JSC RESPONSE] "JSC decided that guidelines could be included in a separate document, but that it should go to the JSC for final distribution and approval. JSC recognized that there was also informal communication with relevant groups, and asked FVWG members to make it clear when they were speaking as individuals."

2.1.2.1 The group affirmed that expressing the rationale for expression-level citations like uniform titles and expression-level elements such as relator information linked to names of contributors is essential. For example, in terms of collocation at the expression level, the optionality of uniform titles and relator information is a disaster. Although making the rules mandatory would seem to be enough, explaining why it is done is vital.

[JSC RESPONSE] "JSC agreed that this was a key role for the FVWG. JSC asked the FVWG to be explicit regarding the rationale for uniform titles, relator terms, and the benefits for users."

- 2.1.2.2 The group affirmed that AACR should discuss the need to "code" expression-level attributes like format and language in a catalog record to facilitate system-based collocation like that being attempted by VTLS and OCLC. Although these attributes may be handled now within a catalog record by the MARC format, bibliographic utility rules, LMS requirements, and local practices, the group sees the value of providing some guidance in the rules for these and other expression-level attributes.
- [JSC RESPONSE] "JSC decided that at this stage there was no need for coding of expression-level attributes in the rules, but that it would 'keep an open mind'."
- 2.1.2.3 The group partially affirmed the idea that AACR should discuss systems based approaches to partial expression-level collocation. The outstanding issue for the group is whether the discussion in AACR should be only at the level of rationale for bringing out these attributes or more directive and particular.

[JSC RESPONSE] "JSC decided that this was out of the scope of the FVWG".

2.1.2.4 The group affirmed that AACR should discuss how libraries or system vendors might tailor levels of collocation using data on expression-level attributes, and that this should be discussed within AACR.

[JSC RESPONSE] "JSC decided that the first question was outside the scope of the FVWG. In response to the second question, JSC noted that AACR already deals with collocation, as it is one of the objectives of the catalogue."

4. What's possible now? An introduction to two systems

4.1 CADENSA (Antony Gordon)

Gordon demonstrated CADENSA for the group. CADENSA is the catalog of the National Sound Archive of the British Library. The catalogue includes entries for almost two-and-a-half million recordings held in the British Library National Sound Archive (NSA). It covers both published and unpublished recordings in all genres from pop, jazz, classical and world music, to oral history, drama and literature, dialect, language and wildlife sounds. Its OPAC can be seen at http://cadensa.bl.uk/cgi-bin/webcat. Our discussion was focused largely on the technical interface and record design.

CADENSA is not an FRBR-based system. It pre-dates FRBR. However it is compatible with FRBR concepts to a large extent. CADENSA uses hierarchical records to record and display data about the work, the recording, and the product. These three records correspond closely to the FRBR concepts work, expression, and manifestation.

4.2 BOPAC 2 (Mick Ridley)

Ridley demonstrated BOPAC2. BOPAC2 is a research project using Z39.50. (http://www.bopac2.comp.brad.ac.uk/~bopac2/) As with CADENSA, it also predates FRBR. BOPAC2 looks at fields across records and looks at what fields vary the most between records and then displays that as an "expression level" (it is not based specifically on FRBR). Once a user has retrieved a set of records via Z39.50 they can then do free-text searching on that record set, which allows much flexibility for data display. The system lets users define which data elements to display in a results list.

During the discussions that accompanied the two demonstrations larger issues came up. One was what words do we wish to use when talking about access points? Tracing, added entry, etc. are dated and tied to older technologies. Heading, citation, and access point (although most jargony of all) seem better terms. An important distinction was also noted between transcribed data and structured data in records. The efforts being made now to collocate at the expression level seem to require a greater emphasis on having data about the bibliographic entity well structured within the record than on having data in the record that is faithfully transcribed from the item being cataloged. The former is needed to provide for access and data manipulation, the latter not well suited to a computer-based catalog.

The group frequently lamented the optionality of uniform titles and relator information. The lack of such data in the records severely hampered attempts to collocate at the expression level.

4.3 Discussion Question: What can we learn from these working systems?

We noted that both of the systems that we looked at as possible models for FRBR-based systems actually predate FRBR, but use similar concepts to organize information.

One lesson learned is the strong need for data relating to the expression level to be explicitly recorded in a structured way. Data transcribed from an item or in notes cannot be used easily or consistently by computer programs; and data not recorded because of the optionality of the requirement is simply data lost. Consistently recorded and structured data enable us to make the catalog an extensible tool for discovery and use of library collections.

ACTION: Bowen to ask JSC to add Mick Ridley to the Format Variation Working Group.

[JSC RESPONSE] "JSC agreed that Mick Ridley be invited to join the FVWG." STATUS: Ridley has been added to the group's membership.

5. Issues related to the FRBR entity *Expression* and its attributes

As we discussed operationalizing FRBR and especially the entity *expression*, we noticed that efforts have tended to focus either on creating a new or future catalog or on using existing data in existing database. We noted that these efforts are not mutually exclusive and can feed into one other quite well. However, the working group is more strongly oriented toward the future catalog (e.g. new rules for an expression-level citation, etc.) than on developing algorithms to reuse old data in an FRBR style.

We also noted that the FRBR model is not an absolute. The FRBR model is neither fixed (set in stone) nor authoritative. The effort ahead is an attempt to translate the conceptual model in FRBR into rules for cataloging, catalog design, and use.

5.1 Definition of Expression (Doc 5A: FRBR entities)

Discussion Question: When does something become a new expression?

The group discussed this question only briefly, as a reminder of the issues involved. We noted that this question is fundamental and requires guidance in the rules. In some respects this is a restating of the question, When do I create a new record?

5.2 Expression-level attributes (Doc 5B: FRBR attributes)

Discussion Question: What makes them problematic?

We identified several reasons:

- First, the concepts and terminology are new. Catalogers, system designers, and users need to become familiar (in different ways from each other) with the concepts.
- Second, the key concepts and terms must be incorporated into the rules operationally. The rules need to embody the context that makes the ideas usable.
- Third, past practice has been to exclude some expression-level attributes or make recording them optional. Habits need to be broken; old value judgments need to give way to new ones. For example, adding relator terms was not worth the time, now it is clear it is critically important for relating expressions to one another.
- Fourth, our past practice of transcribing statements and relying on the user to read and understand the display in individual records is incompatible with a computer-based catalog. To maximize the advantages of a computer-based catalog, the data has to be structured. User readable displays easily can be constructed from the structured data; the reverse is difficult.
- 5.3 Types of expression-level attributes (Doc 5C: Bowen, J. "Generic vs. unique expression-level attributes")
- 5.3.1 Generic: those that apply to broad categories of materials
- 5.3.2 Specific: those that help to identify the expression

Discussion Ouestion: How could each be used to facilitate collocation?

We discussed the value of being able to group things by some expression-level attributes without fully creating an expression-level citation (a uniform title like heading). Users find it useful to collocate resources by language (only French, only English), physical format (only printed, only online), mode of expression (only texts, only images, only recorded sounds), etc.

5.4 Types or levels of expressions: "degrees of separation" from the original expression

Doc 5D: Buizza, Pino. "Expression and manifestation"

Doc 5E: Bowen, J. "Expression: Four degrees of separation?"

Doc 5F: LC Displays for Multiple Versions from MARC 21 and FRBR

Doc 5G: Bowen, J. "Guidecard table with comments"

Discussion Question: How could these levels be used to facilitate collocation?

Buizza had two approaches (p. 80) to categorizing the expressions. The MARC21 paper made use of a guide card concept. Bowen mentioned a user study that found naïve users grouped multiple library resources by attributes such as format (books, CDs, movies, etc.), audience level (adult, general, juvenile), etc. Collocating by expression (and making rules about that) is not simply a matter of identifying the expression-level attributes. It is also a matter of relating expressions to one another. For example, the most useful data element for showing the relationship between one expression and a translation of it may be the name of the translator. It was also noted that the relative importance of expression-level attributes varies by the form of expression (e.g. the names of performers and the date of performance may be most important for a sound recording)

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6 Two prototype FRBR-based systems

6.1 VTLS

Doc 6A: VTLS intro and Tillett Q&A

Doc 6B: Bowen Q&A

Doc 6C: Iportal screenshots)

We did not specifically discuss the VTLS implementation at this meeting, although at a different point of the discussion the tree structure being used by VTLS was mentioned as a promising approach, especially if a user could do keyword searches on this structure. VTLS has made their test server available to members of the Working Group and has asked us for our feedback. Members of the group were urged to respond to VTLS individually.

6.2 OCLC (Doc 6D: OCLC work algorithms)

We talked via conference call with Rich Greene, Bob Pearson, and Dena Bovee of OCLC about their project called FISH.

We critiqued the FISH displays, asked questions about the algorithms, and discussed the future of the project. Overall, the FISH project seems to us to be on the right track.

ACTION:

- 1. FVWG to give OCLC FISH project feedback on the work algorithm that uses titles in added entries as criteria for inclusion as the same work. There seems to us to be a problem in how the algorithm uses the indicators in the MARC tag field 700. Games related to a novel are being grouped as being the same work as the novel.
- 2. FVWG members may provide feedback to VTLS (and other vendors who might request our input) as individuals.
- 7 Brainstorming Session: Possible criteria for evaluating a system: what does it need to do?

We began by identifying specific elements from previous discussions that the group felt should be a part of a list of criteria:

- a. User displays
 - i. user sets sort and sub-sort requirements and can work with various subsets of the set retrieved (user controlled collocation).
 - ii. clearly shows relationships among entities without requiring the user to know the FRBR model and terminology
 - iii. clear display of relevant data to the user in records and in indexes (lists)
 - 1. clear, consistent terms
 - 2. visible tree structure better than sequence of links to show relationships
 - iv. default displays that support user tasks
- b. Grouping algorithms
 - i. Includes key expression elements
 - ii. Elements mapped correctly to MARC format (for example)
 - iii. Follows FRBR model
- c. Data quality
 - i. Appropriately structured data
 - ii. Fullness of data
 - iii. Accuracy of data

Because this initial list includes elements that cover several general areas of concern, these may provide an underlying structure for organizing a more exhaustive list of criteria:

First, a system needs to be evaluated in terms of the display to users, the logic of its internal algorithms, and the quality of its data—both the content quality and the structural quality. Evaluation must address each of these three parts of a system: displays,

algorithms, and data. The quality or value of the user experience is based on all three parts.

Secondly, these three parts need to be evaluated in terms of how well they each support fulfillment of the FRBR user tasks. Fundamentally, it is how well the three parts meet the user's needs that determine their quality.

Third, these three parts need to be evaluated in terms of how fully they implement the FRBR conceptual model. If we are evaluating the systems as FRBR systems, then how much or how little they implement the FRBR concepts is an obvious requirement.

The group present at this meeting will continue to develop this list with the goal of submitting a document to the JSC prior to its meeting in April 2003.

ACTION:

- 1. Beacom to pick out the defining elements per entity in FRBR model using the Delsey map to MARC and sketch an ideal or generic algorithm.
- 2. Bowen to draft an initial document based upon the outline above.

8 Recommendations to send forth to JSC and wrapup (update to what is in our 3rd Interim Report)

The Group reviewed the recommendations to JSC mentioned earlier in the meeting (under Items 3 and 4).

ACTION: Beacom to ask JSC to allow the FVWG to see relevant JSC documents, such as Pat Riva's work, the draft Introduction, etc.

Bowen called the meeting to end and thanked all the participants. Antony Gordon received special thanks for facilitating the local arrangements for the London meeting.