To: Joint Steering Committee for Development of RDA

From: Alan Poulter, CILIP Representative

Subject: 12-16, 23, 33-37 (Group 3 entities and "subject")

Summary and Recommendation

RDA is intended to cover subject access as well as description. From FRBR come as a means of subject access 'Concepts', 'Objects', 'Events' and 'Places' (Chapters 12-16, 23, 33-37). Only Chapter 16, 'Identifying Places' is complete. This proposal will outline a strategy for moving forward in completing the blank chapters, based on the model given in the recent FRSAD (2010) report. It recommends that the indexing system PRECIS (Preserved Context Indexing System), formerly used in BNB, be used to implement "thema/nomen" as outlined by FRSAD. Using PRECIS in this way will greatly speed the completion of the missing chapters, as instructions on creating PRECIS term strings and thesaural support already exist. PRECIS has the capacity to give multi-lingual support and, while it was used at BNB, it formed a switching system to connect to existing subject access tools, both subject headings and classification codes.

Rationale

The FRBR, FRAD and FRSAD reports have come from different groups over a long period of time. While FBBR and FRAD are tightly integrated, FRSAD stands out because of the lack of similarity between it and the earlier reports. It was however produced by the same process, so it deserves the same consideration as the earlier reports.

There is a significant mis-match between FRSAD and earlier FRx reports when proposing a conceptual model for subject access. FRSAD clearly rejects the four entities proposed in the earlier models (Concepts, Objects, Events and Places) for subject, using a card-sorting test to justify this decision.

If indeed these four entities can be developed into a general ontology, it could well be exceedingly complex. An extension of FRBR, FRBRoo, is related to the CIDOC CRM (the International Committee for Documentation Conceptual Reference Model), an ISO standard (21127:2006) which consists of an object-oriented hierarchy of 81 named entity classes, with 132 named properties, and which provide an extensible ontology for the cultural heritage sector.

FRSAD instead proposes a very general model, having researched the literature on subject access thoroughly, based on 'thema' and 'nomen', whereby the former, defined as 'any entity used as the subject of a work', is represented by the latter, defined as 'any sign or sequence of signs'. In general a 'thema' can have many 'nomens' and vice versa, while 'works' can have many 'thema' and one 'thema can apply to many works. These two entities are successfully related back to earlier models from FRBR and FRAD and the task "to build a conceptual model of Group 3 entities within the FRBR framework as they relate to the aboutness of works" is certainly

fulfilled, and the model resulting is very compact and generic. A new 'explore' task for users, to enable them to browse subject resources is also defined and added to the model.

By using such the simple thema/nomen model, the aim "to provide a clearly-defined structured frame of reference for relating the data that are recorded in subject authority records to the needs of the users of that data" is fulfilled. The thema/nomen structure proposed here is certainly 'implementation independent' but it needs to grow towards something that is implementable.

To try and move on without re-starting work on FRSAD or going back to first principles, it seems prudent to adopt the general model it proposes but use an existing system that is based on solid theory, congruent with that in FRSAD, that has been tried and tested. PRECIS (Preserved Context Indexing System is proposed for this role.

PRECIS is not a set of terms/codes. It is two sets of procedures, one syntactic using a general 'grammar' of roles to generate one or more terms (a 'string') to unambiguously represent a topic, the other semantic, setting up permanent thesaural connections between terms where needed. It does not prescribe terms. PRECIS grew out of research into classification which produced its set of syntactic codes, known as 'role operators' (Austen, D. 1974). Implemented first by the British National Bibliography, each PRECIS string was given a unique Subject Indicator Number (SIN). To reuse an existing string, one quoted its SIN. Once SINs were created, their re-use would save time and effort. Reference Indicator Numbers (RINs) performed a similar role for thesaural aspects (Austen, D. 1984).

To streamline subject operations at BNB, added to the SIN were equivalents in DDC and LCSH. This facility could be re-used, making resources labelled by PRECIS strings retrievable and viewable in different subject systems.

In its heyday, PRECIS was being used in bilingual Canada and its use in a number of languages was being investigated (Detemple, S.1982, Assuncao, J.B. 1989). A multi-lingual ability could be provided by equating SIN X in language A with SIN Y in language B

Finally, the software needed is given in a detailed specification (Austen, D. 1984) and could be hosted in the Toolkit.

References:

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