Memorandum

LIBRARY OF CONGRESS

6JSC/LC rep/3

TO: Joint Steering Committee for Development of RDA DATE: May 20, 2011

FROM: Barbara B. Tillett, LC Representative

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

Overview

This discussion paper suggests what might be added to the "placeholder" chapters in RDA for Concept, Object, Event, and Place, and opens discussion on related issues, such as considering the need to declare Time as an entity.

The general assumption of this discussion paper is that the JSC wishes to continue our policy of providing basic guidance within RDA for general libraries and others while referring out to specialist manuals, etc. (in this case other thesauri, subject heading lists, classification systems, etc.) for more specific instructions on form/structure of terminology, relationships among the values used as subject terms, and specifics for using any particular thesaurus or subject heading or classification list.

RDA is based on the FRBR family of conceptual models and relies on those models for the entities, their basic attributes (RDA's elements), and basic relationships. Now that *Functional Requirements for Subject Authority Data* (FRSAD – pronounced fra-sahd) has been published, it is time to return to those chapters in RDA (chapters 12-16, 23, 33-37) to explore options for addressing those additional entities. Further background information from FRSAD is attached as an addendum to this paper.

As a reminder, in FRBR, the Group 1 and Group 2 entities join the Group 3 entities to be candidates for subjects of works. This complicates our work on RDA, as will be addressed in this paper.

FRSAD

FRSAD gave us the most general theoretical model imaginable – *Thema* and *Nomen* – which can apply to everything.

The one attribute of *Thema* is given as (quoted here in blue):

4.1.1. Type of a *THEMA*.

The category to which a *thema* belongs in the context of a particular knowledge organisation system.

. . .

For example, in some implementations the original FRBR entities *work*, *expression*, *manifestation*, *item*, *person*, *family*, *corporate body*, *concept*, object, *event*, and *place* can be used as types, perhaps even adding *time* as has been suggested...

So, FRSAD acknowledges that the FRBR entities may be used as the types of *Thema*, adding *time*. For RDA, we could continue to declare those as entities, as FRBR and FRAD did. We could then go back to FRBR and the attributes and relationships (none were added to FRAD or FRSAD) for these entities and proceed.

A *Nomen* has more attributes, some of which are described in the addendum to this paper.

RDA Placeholders

RDA now has placeholders in chapters for the Group 3 entities and "subject":

- 12, General Guidelines on Recording Attributes of Concepts, Objects, Events, and Places,
 - 13, Identifying Concepts,
 - 14, Identifying Objects,
 - 15, Identifying Events,
- 23, General Guidelines on Recording the Subject of a Work,
- 33, General Guidelines on Recording Relationships between Concepts, Objects, Events, and Places,
 - 34, Related Concepts,
 - 35, Related Objects,
 - 36, Related Events,
 - 37, Related Places,

and the incomplete chapter 16 on Identifying Places.

Suggested Process for Adding Content to RDA

I suggest we proceed for RDA as follows:

- a. Add definitions for these additional entities (Concept, Object, and Event) following FRBR (FRAD said they were to be added following FRSAD, but FRSAD bypassed declaring these as entities; this task may be addressed by the FRBR Review Group when bringing together the "family of FRBR" models).
- b. Add Attributes and Relationships at a general level for each of the new entities (FRSAD offers some attributes and relationships for *Thema* and *Nomen* as shown in the attached addendum, and I suggest that RDA should try to incorporate those as much as possible).
- c. Add "Constructing Authorized Access Points" for *manifestations* and *items*, but leave access points for *concepts* to subject systems. For items, recognize

manuscripts as objects (as opposed to the works contained in the manuscripts) that need to be named as the subject of other works.

- d. Follow the instructions now given for the attributes and construction of access points for conferences, etc., and move them to *events*; remove the instructions treating conferences, etc. as *corporate bodies*.
- e. Continue discussions about *Items/Objects* and *Events/Expressions* and Subjects of *expressions* to see if there is consensus on a direction for those to share with the FRBR Review Group.
- f. LC will provide completed chapters following the model shown here for Related concepts, if there is JSC agreement; a discussion during the June conference call could provide guidance to LC for preparation of chapters before the August 11 deadline for submission of proposals,

General issues to be discussed (see other areas of this paper for more information and for specific issues noted in the sections for the entities)

This paper resumes discussions on these issues that were started by the FRBR Study Group during the 1990's. It is hoped our discussion also informs the work of the FRBR Review Group as they tackle merging the conceptual models for the "FRBR Family."

- #1. Do we wish to declare for RDA that subjects exist only at the *work* level or may we allow subjects of *expressions*? FRBR describes them only at the *work* level, but does not prohibit any others. If we want to enable declaring relationships between works/expressions/manifestations/items with some of the Group 3 entities (especially Place) that are not "subject" relationships, we would <u>not</u> want to restrict the Group 3 entities to only subject relationships with *works*.
- #2. Should *object* be expanded to include *item* and perhaps not require the *work/expression/manifestation* entities in inherent relationships to such *objects/items*?
- #3. Should we consider *events* as *expressions*, if we already consider performances as *expressions*? This may prove useful, for example, to connect the identifying characteristics of a performance (an *expression*) with specific Group 3 entities.
 - #4. Do we want to include *time* as an entity?

Impact of Adding Subject Relationships to RDA

#5. There will be an impact on chapters 18/19-22, 24/25, 29, and Appendices I, J, and K that will need reworking to provide for subject relationships (and/or add another appendix for subject relationship designators) and possibly their instructions on "Source."

- #7. RDA as a general instruction set may just suggest following its own guidance on those entities regardless of their use or relationships, or may wish to allow use of thesauri/subject heading lists/classification schemes/etc. when such entities are used as subjects of works.
- #8. There needs to be a re-examination of "core-ness" with regard to all of the entities when they are in the "role" of the subject of a work.
- #9. We also will need to add examples for explanatory references in Appendix E (E.1.3.4).
- #10. We need to return to "Constructing access points" for manifestations and items, so that they may be used as subjects. This could be viewed as an "opportunity" to split the very long Chapter 6 into smaller chapters for the separate entities (work, expression, manifestation, item). Such changes should be done soon, especially if re-numbering is involved, before major ancillary documentation is written.
- #11. We should consider adding *Time*, as that is often controlled in library environments (for example \$y Chronological subdivisions in the 6XX (subject) fields of the MARC 21 format, as used in Library of Congress Subject headings (LCSH)). Further points on this complex issue are described under the section in this document on Time.
- #12. We need to review the impact of work needed for appendix K --mentioned under Related Concept below.
- #13. We need to add information to appendix J descriptive relationships that can also be considered subject relationships and add content or a placeholder in appendix K for relationships between *concept* and *concept*.
- #14. We need to add general information about the subject relationship between Group 2 entities and works in chapter 18 and perhaps in ch. 19-22.
- #15. We need to write general instructions for chapter 23 (General Guidelines on Recording the Subject of a Work).

The following section on "identifying" chapters looks at each entity to suggest a scope, attributes, relationships, and other issues that need discussion.

II. Possible Content for the "Identifying" Chapters

This section suggests what could go into the RDA chapters on identifying these entities. Capital letters are used in this paper for each entity to simplify discussion.

A. Concept

(RDA Chapter 13)

Scope

RDA needs to define Concept.

FRBR defines "concept" as "an abstract notion or idea" and gives examples that can be the subject of a work: "Fields of knowledge, disciplines, schools of thought (philosophies, religions, political ideologies, etc.), theories, processes, techniques, practices, etc.;" the term can be general or specific.

Attributes for Concept

- Term for the concept (FRBR) i.e., Preferred term (in RDA) note in some systems this may be the same as the authorized access point
- Variant term (in RDA) can include synonyms and language variations as with names for other entities
- Identifier (in RDA) can include a code for the concept from a standard scheme

Relationships for Concept

Broader, narrower, related relationships between concepts and "subject" relationship between a concept and a work/expression (or is it only to work?) [The relationship between a concept and a work or a work/expression would be covered in chapter 23.]

Choice and Form of Access Points for Concept

I recommend we not use RDA as the place to provide instructions for the choice and form of the terms used to *name* concepts, constructs to build *authorized access points* for concepts, or other "rules" that are in the domain of thesauri and subject heading and classification systems. I suggest, as we have done for some special types of resources that we defer to standard thesauri and subject heading and classification systems themselves for such instructions.

B. Object

(RDA Chapter 14)

Scope

FRBR defines "Object" as "a material thing." We need to reconcile this with "Item" which is also a material thing and perhaps acknowledge they can be the same entity, or if the name for an object is just used as a subject relationship to a work, there may be only limited numbers of attributes and other relationships.

Discussion is needed about Object and Item as related to "Realia" or RDA's "unmediated carrier" that is an object or "content type" as three-dimensional form and specific kinds of three-dimensional forms under RDA 3.4.6.2. As noted earlier, consider manuscripts as objects.

RDA currently defines object as: A three-dimensional artefact (or a replica of an artefact) or a naturally-occurring object.

Attributes

- Term for the object (FRBR) i.e., Preferred name (in RDA)
- Variant name for the object (in RDA) can include language variations as with names for other entities
- Identifier for the object (in RDA) can include a code for the concept from a standard scheme
- Dates and Locations/Place of object where object was found, where has resided, where currently resides [or the place connections could be given as relationships]

We should also consider all the attributes for "items."

Relationships

We should consider including all the relationships to other entities (including relationships to owners - provenance) and other objects that we have in RDA for items. What others would be helpful? I suggest we also leave the door open to add others as needed. Discussion is needed regarding an exception to inherent relationships as "core" for certain objects.

Choice of Access Points for Objects

I recommend we follow the instructions for naming items when possible – commonly known name as the preferred title and build on that as needed to identify the item/object.

C. Event

(RDA Chapter 15)

Scope

FRBR defines "event" as "an action of occurrence" and goes on to say it "encompasses a comprehensive range of actions and occurrences that may be the subject of a work: historical events, epochs, periods of time, etc." This is where FRBR merged "time" and the event that happened at that time, rather than just leaving time separately to cover any number of "events" that could have occurred at the same time. I suggest we move the "epochs" and "periods of time" to a new entity for "Time".

To agree with the spirit of ICP and FRBR (but treating 'historical events' in a more general sense), I suggest we open the discussion about moving conferences, exhibitions, expeditions, meetings, etc., here. I also suggest we retain the RDA instructions for

identifying elements and constructing authorized access points for conferences, etc., but include them under "Events."

RDA needs to define Event.

Attributes

- Term for the event (FRBR) i.e., Preferred name (in RDA) and move the information for attributes for conferences, meetings, etc. here
- Number of the event [to be part of a preferred name, when needed to distinguish]
- Frequency of the event [to be part of a preferred name, when needed to distinguish] Sometimes frequency is part of the name and sometimes not. Will the term for the event (the preferred name) be constructed in a conventional form rather than representing the form found on the resource?
- Variant name (in RDA) can include variant forms in the same language and language variations as with names for other entities
- Identifier (in RDA) can include a code for the concept from a standard scheme
- Dates and Locations/Place where found, where has resided, where currently resides [or the place connections could be given as relationships]

Relationships

Add relationships to persons, corporate bodies, families, places, etc.

Choice and Form of Access Points for Events

I recommend we follow the instructions for naming conferences, etc., when possible. What adjustments will be needed?

D. Place

(RDA Chapter 16)

Scope

FRBR defines "Place" as "a location" that includes terrestrial and extra-terrestrial, historical and contemporary, geographic features and geo-political jurisdictions. In RDA it also would include imaginary places to cover subjects.

We should consider expansion of what we now have in RDA to cover other geographic places that could be controlled names for places that are related as the subject of works/expressions, as the location for an expression (e.g., when the expression is a performance) or manifestation (e.g., place of production, publication, manufacture, distribution) or item (provenance locations).

Attributes

• Term for the place (FRBR) – i.e., Preferred name for the place (in RDA 16.2.2)

- [Attributes for conferences, meetings, etc., moved here from RDA ch. 11]
- Variant name for the place (in RDA 16.2.3) can include variant forms in the same language and language variations as with names for other entities
- Identifier for the place (in RDA 16.3 "to be added") Is this where we should add a code for the concept from a standard scheme
- Dates
- Coordinates for the place with dates if needed (places do move)

Relationships

Relationships with other entities (Group 1, Group 2, and Group 3) and other places – hierarchical, whole/part relationships with broader areas or contained places. Are there others?

Choice of Access Points for Place

Chapter 16 now has only a reference at RDA 16.4 to RDA 11.13.1.1 for using place names as conventional names for governments.

E. Time

(no RDA chapter now)

We need to start conversations about advantages of controlling this data, the benefits and problems with *Time* as an entity for RDA. The definition would need to be a narrow one: excluding dates of birth and death, perhaps limiting to those time periods or date/times that would be needed by more than one resource or in relationships to more than one entity (making it worth "establishing" it as an entity for the purpose of linking). Considerations should include time for publication dates, dates of works, dates of expressions, dates of copyright, controlled or not. Would we need some reference in chapter 8 general guidelines for Group 2 entities to connect to this entity and explain when not?

Scope

Taking the "epochs" and "periods of time" from FRBR's "events" to define "time" as the point, moment, or period when an action, process, or condition exists – per Webster's. In the bibliographic context, it is tied to an event that may or may not have a product. We could include examples for eras, geological epochs, centuries, spans, etc. Is there any advantage in declaring "dates" as "time" and enabling them to be controlled as needed for certain applications (to use in relationships with things like the events, objects, etc.)?

RDA would need a definition for a limited scope for a time entity.

Attributes

• Term for the time (FRBR-speak) – i.e., Preferred name for the time (in RDA-speak)

- Mention standards to follow when choosing a preferred "name" or convention to follow for writing the time? (ISO?)
- Variant name for the time could include language variations as with names for other entities or a named time period with a variant for numeric times or coded times in different time systems?
- Identifier for the time— Is this where we should add a code for the concept from a standard scheme

Relationships

Relationships with other entities (Group 1, Group 2, and Group 3) and other times – maybe narrower and broader time spans?

Choice and Form of Access Points for Time

This will need to be stated with respect to the "name" we give to the particular Time. What other considerations are needed?

III. Example Model for Proposals for Chapters on Relationships

After JSC discussion of the issues in this discussion paper, LC will provide proposals for all the appropriate chapters. Below is a possible model for a chapter on relationships. Suggested wording is given in green.

Related Concept

(RDA chapter 34)

34.0 Purpose and Scope

This chapter provides general guidelines and instructions on recording relationships between concepts.

34.1 Related Concept

34.1.1 Basic Instructions on Referencing Related Concepts

34.1.1.1 Scope

A related concept is a concept related to the work/expression being described through an identifier, an authorized access point, or a description (e.g., a broader, narrower, or related term).

34.1.2 Sources of Information

Take information on related concepts from any source.

Alternative

Follow instructions in a chosen thesaurus.

34.1.3 Referencing Related Concepts

Reference a related concept applying the general guidelines on referencing related concepts, objects, events, and places given under 33.4.

34.2 Explanation of Relationship

34.2.1 Basic Instructions on Recording Explanations of Relationships

34.2.1.1 Scope

An explanation of relationship is information elaborating on or clarifying the relationship between a concept represented by an authorized access point and/or identifier and a related concept.

34.2.1.2 Sources of Information

Take information explaining a relationship from any source.

Alternatively, follow instructions in a chosen thesaurus.

34.2.1.3 Recording Explanations of Relationships

Record information elaborating on or clarifying the relationship between a concept represented by an authorized access point and/or identifier and a related concept, as necessary.

For guidelines on presenting an explanation of a relationship as part of an explanatory reference, see appendix E (E.1.3.4)

[Note: Use of a description cited in 34.1.1.1 is not addressed yet in 34.2.]

Addendum of information from FRSAD report

Attributes from FRSAD

4.2 Attributes of a *NOMEN*

4.2.1 Type of *nomen*

Category to which the *nomen* belongs.

In addition to other implementation-specific types, there are two important values of this attribute:

- <u>identifier</u> the sign or sequence of signs assigned to an entity that is persistent and unique within a domain
- <u>controlled name</u> the name constructed during the authority control or vocabulary maintenance process that usually serves as an access point (note: labeled as controlled access point in FRAD).

If needed, the values of the type attribute may be further refined: for example, additional refinement may include different kinds/formats of identifiers (e.g., URI, ISBN).

4.2.2 Scheme

The scheme in which the *nomen* is established, including value encoding schemes (subject heading lists, thesauri, classification systems, name authority lists, etc.) and syntax encoding schemes (standards for encoding dates, etc.)

Examples of attribute values:

- LCSH
- DDC
- UDC
- ULAN
- ISO 8601

4.2.3 Reference Source of nomen

The source in which the *nomen* is found. It may also be modeled as a relationship with the appropriate Group 1 entity.

Examples of attribute values:

- Encyclopaedia Britannica
- Webster's Third New International Dictionary (1961)
- Columbia Gazetteer

4.2.4 Representation of nomen

The data type in which the *nomen* is expressed.

Examples of values:

• alphanumeric

- sound
- graphic

4.2.5 Language of nomen

The language in which the *nomen* is expressed.

Examples of values:

- English
- Greek
- Chinese
- Slovenian

4.2.6 Script of nomen

The script in which the *nomen* is expressed.

Examples of values:

Cyrillic

Thai

Chinese (Simplified)

Chinese (Traditional)

4.2.7 Script conversion

The rule, system, or standard used to render the *nomen* in a different representation.

Examples of values:

Pinyin

ISO 3602, Romanisation of Japanese (kana script)

4.2.8 Form of nomen

Any additional information that helps to interpret the *nomen*.

Examples of attribute values:

- Full name
- Abbreviation
- Formula

4.2.9 Time of validity of nomen

The time period, in which the *nomen* is/was used of is/was valid within a subject vocabulary system.

This should not be confused with the temporal aspect of a *thema*.

Examples of values:

- until may 11, 1949
- after 1945

1945 – 1967

4.2.10 Audience

The community or user group for which the *nomen* is the preferred form.

In the global environment it is usually impossible to declare one *nomen* of a *thema* to be the preferred form. The notion of "preferred" form can, in general, be tied only to a particular community, defined by name, rule, or convention.

Examples of values:

- English-speaking users
- Scientists
- Children

4.2.11 Status of nomen

The status of the *nomen* in a subject authority system.

This should not be confused with the management of a subject authority system (e.g., including or excluding a *thema*).

Examples:

Proposed

Accepted

Obsolete

FRSAD Relationships

FRSAD also gives the most general of relationships:

Work/thema: "has as subject/is subject of"

Thema/nomen: has appellation/is appellation of

Thema/thema:

Hierarchical relationships:

Generic relationship (logical "inclusion")

Whole/Part relationship (whole is broader term)

Instance relationship (between general class and individual instance)

Polyhierarchical relationships

Other hierarchical relationships

Associative relationships:

Cause/Effect

Process/Agent

Action/Product of the action

Action/Patient of Target

Concept or Thing/Properties

Thing or Action/Counter-agent

Thing/Its parts (if it does not qualify for the hierarchical whole-part relationship)

Raw material/Product

Action/Property

Field of study/Objects of phenomena studied And there are "other approaches to semantic relationships that are acknowledged.

Nomen/Nomen relationships: Equivalence relationship Whole-Part relationship

User Tasks

Then there are the user tasks:

Find one or more subjects and/or their appellations...

<u>Identify</u> a subject and/or its appellation...

Select a subject and/or its appellation...

<u>Explore</u> relationships between subjects and/or their appellations (e.g., to explore relationships in order to understand the structure of a subject domain and its terminology)