RDA – An Opportunity for Library and Archive Collaboration

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Abstract

RDA (Resource Description & Access) is a new cataloging standard that has been implemented in libraries in several countries over the world. It is based on the conceptual model FRBR (Functional Requirements for Bibliographical Records) and its rules have been influenced by archival descriptive rules. Thus RDA provides an opportunity for collaboration between archives and libraries. Umeå University Library is currently running the project RDA – An Opportunity for Archive and Library Collaboration, with support from Lund University Library, the National Library of Sweden and the National Archives. The aim of this project is to explore how RDA can be applied on archival materials and how FRBR entities can be related to aforementioned materials. RIMMF (RDA in Many Metadata Formats) is a cataloging training tool and has been used to visualize RDA and FRBR. RDA Toolkit has been used as a support tool in the cataloging process. Different models for applying RDA on archival materials have been developed in the project. The models have separate advantages and disadvantages, for example when it comes to creating searchability and to link archival materials with published materials. Using RDA brings possibilities to create linked data useful for archives, libraries and other interested parties. RDA has the potential to work as a standard for describing both archival and bibliographic materials.

Keywords: RDA, FRBR, aggregates, archives, libraries, cataloging

Motivation and background

Archives and libraries have long worked with different systems for descriptive cataloging and authority data. RDA (Resource Description & Access) is a new cataloging standard developed to replace AACR2 (Anglo-American Cataloguing Rules, Second Edition) and the influence of archival descriptive rules and FRBR (Functional Requirements for Bibliographical Records) may facilitate the creation of richer authority files. This new standard also brings possibilities to associate and link entities [1]. RDA is presently in different states of implementation and translation in several countries around the world, including the United States, Great Britain, Germany, Iran and China [2]. In 2012 the National Library of Sweden made a decision on the Swedish transition to RDA and the National Library is currently preparing for the task [3].

RDA is based on the conceptual entity-relationship model FRBR [4], a model that aims at giving a new perspective on structure and relations in bibliographic- and authority records [5]. FRBR was developed to relate to user tasks: find, identify, select and obtain material, and it was structured as an entity-relationship model with the described entities divided into different groups. Group 1 contains the entities *work*, *expression*, *manifestation* and *item*. A work, described as an abstract intellectual or artistic creation, is realized in an expression and an expression can be embodied in a manifestation. An item is the physical form, a single copy of a manifestation (figure 1). The entities in group 2 represents authority data, for example responsibility for artistic and intellectual content or custodianship of the group 1 entities. The group 2 entities include *person* and *corporate body*. Group 3 entities serve as subjects for a work, this group includes the entities *concept*, *object*, *event* and *place.* Entities from the different groups are related through relationships [6].

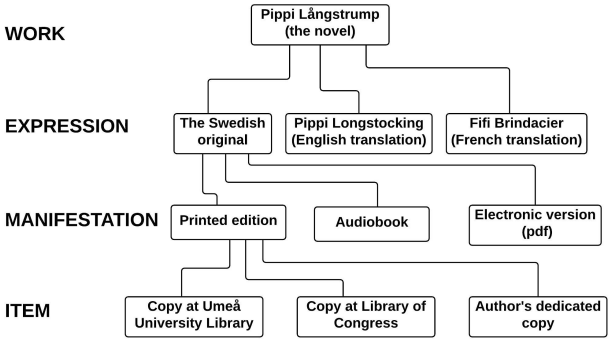

Figure 1. *FRBR (Functional Requirements of Bibliographic Records), group 1 entities.*

It is important to explore how RDA and FRBR can relate to archives and how archives can be related to the entities in group 1. One central question is whether an archive can be defined as a work or an *aggregated work*. This discussion emanates from the definition of work in FRBR: "a distinct intellectual or artistic creation" [6].

The FRBR report describes the concept of an aggregated work as "an aggregate of individual works brought together by an editor or compiler in the form of an anthology, a set of individual monographs brought together by a publisher to form a series, or a collection of private papers organized by an archive as a single fond" [6]. The possibility to regard archives as aggregated works is further researched in a report by The Working Group of Aggregates, where the authors of Appendix B lift the opportunity to view archival fonds as works of works [7]. The opportunity to relate to archival collections as aggregated works is further examined by Shoichi Taniguchi, who develops different models for aggregated works in FRBR and RDA. Taniguchi starts in the definition of "Collections" in the RDA-glossary: "A group of resources assembled by a person, family or corporate body from a variety of sources" [8, 9].

Other authors are more hesitant to apply the concept of work to archival collections. Alexander C. Thurman argues that FRBR

does not consider the differences between bibliographic materials and archival materials and that natural aggregation of every day material cannot be defined as ”a distinct intellectual and artistic creation” [10].

The introduction of RDA provides an opportunity for collaboration between archives and libraries and may lead to better possibilities to make less visible materials more searchable. For archives that reside in library environments, this means that RDA can influence the methods of cooperation combining archival finding aids, bibliographic library records, authority files and controlled vocabularies [1].

FRBR’s entity-relationship model means that focus for library metadata can be shifted from looking at bibliographic records as a whole to looking at data as component pieces that have the potential to be shared and used as linked data. It is important to be economical and find effective ways to share metadata and maintain authority data [11]. Thus open linked data brings great opportunities for libraries, archives and museums to show off their collected strength of structured data. RDA makes it easier to connect persons and corporate bodies with the resource that is being described. There is great potential in cooperative cataloging and there is power in building records that bring together different contexts and perspectives [12].

Problem and aim

Umeå University Library is currently running the project, *RDA – An Opportunity for Archive and Library Collaboration*, with support from Lund University Library, the National Library of Sweden and the National Archives. The aim is to explore how RDA can be applied on archival materials and which possibilities and problems that arise in this process. To be able to apply RDA on archival materials it is important to understand how FRBR applies to archival collections [1]. One focus of the study is how to use the FRBR-model on archival material. To explore this, different models for how to use the FRBR entities in relation to archival collections have been developed, focusing on relations between works, how FRBR can be applied to aggregates and how to link entities both between and within the FRBR groups 1 and 2. The models have been used for cataloging archival materials from different personal archives.

Approach

The cataloging has been processed in RIMMF (RDA in Many Metadata Formats). RIMMF is both a cataloging training tool and a visualizing tool for catalogers. As it follows the FRBR structure closely, it can function as a sandbox and prototype for an RDA interface [13].

RDA Toolkit has been used as a support tool in the cataloging process. The toolkit is a web based tool used when cataloging in RDA and includes RDA instructions translated to different languages, mappings between RDA and formats such as MARC (Machine-Readable Cataloging) and different workflows. The workflows describe how to work with different kinds of materials. To access the toolkit you need a subscription for one or more users [8].

A selection of archival materials from the Research Archives in Umeå University Library and Lund University Library has been made. The focus of the project is on personal archives that include a wide range of different materials, for example letters, diaries and manuscripts. To be able to test the models in different kinds of archives we have used very small archives as well as larger and more versatile ones. It has also been interesting to catalog different kinds of archival materials and to explore relationships between archives (for example correspondence) and relationships between archival materials and library materials (for example manuscripts that can be connected to printed books, or offprints of published articles).

In this paper we will present examples from the personal archive of Gösta Adrian-Nilsson (GAN). GAN (1884-1965) was a Swedish painter and author and his archive includes, among other things, letters, offprints, drawings, sketches and manuscripts.

Results

Different models have been developed in the project and they have been tested with different kinds of archival materials and different personal archives.

At first a *simple model* was developed. In this model the archive is regarded as a work and is cataloged in RDA as a whole. Records for the group 1 entities, work, expression, manifestation and item, are created for the whole archive and information regarding the archive in its entirety is cataloged with support from the RDA Toolkit. Authority records for the group 2 entities, person and corporate body, are made for the creator, persons with relations to the creator and/or the archive, the archival repository and the custodian (figure 2).

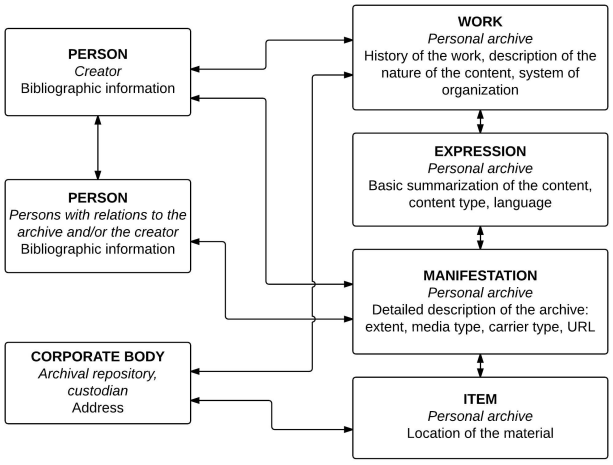

Figure 2. *A simple model for applying RDA to archival materials.*

The simple model was also developed into a *complex model*. In the complex model the archive is cataloged in RDA as above (figure 2), with records for the group 1 entities, work, expression, manifestation and item, for the whole archive. All the separate items in the archival collection (for example single letters) where then cataloged as separate works with their own expressions, manifestations and items. In this model the archive as a whole is viewed as an aggregated work. Records for the group 2 entities, person and corporate body, can be made for the creator, persons with relations to the archive creator and/or the archive, the archival repository and the custodian, both for the archive (figure 3) and for its aggregating parts (not illustrated).

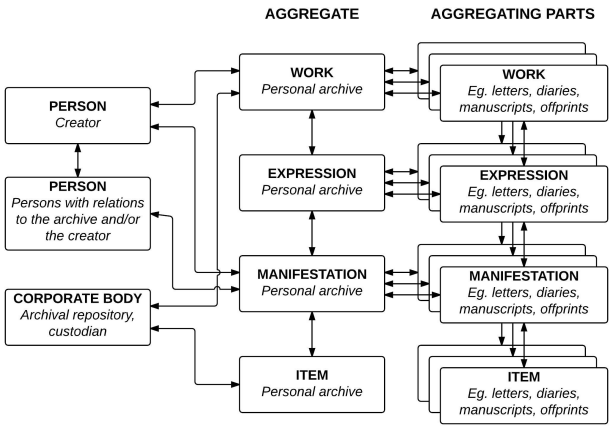

Figure 3. *A complex model for applying RDA to archival materials.*

The third model is a combination of the simple and the complex model. In this *flexible model* the archive in its entirety is considered to be a work and is cataloged as in figure 2. In the flexible model it is then possible to create more detailed records for separate parts of the archive that are considered more interesting or important. For example, a specific manuscript could be cataloged as a work in itself with expression, manifestation and item, and be searchable together with printed editions. As in the complex model, in the flexible model the archive itself becomes an aggregated work. Figure 4 shows an example of the flexible model applied to the article/offprint The Cosmic Ultra Radiation, published 1930 (original Swedish title: Den kosmiska ultrastrålningen) from GAN's archive. Records for the group 2 entities, person and corporate body are created as in the complex model.

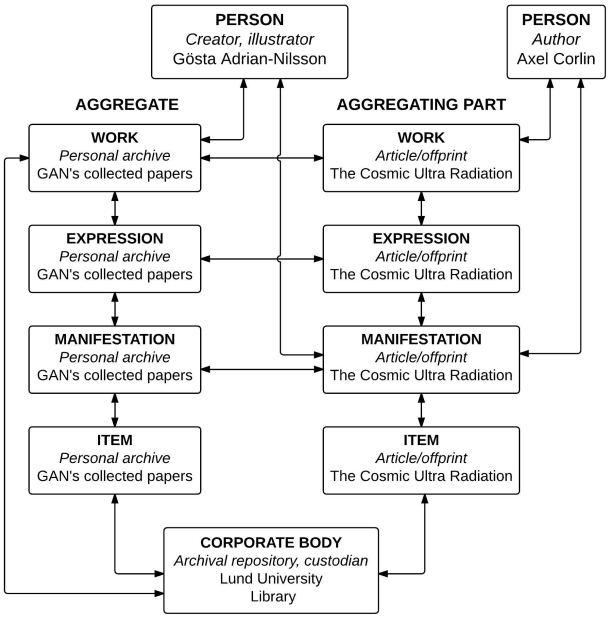

Figure 4. *An example of the flexible model for applying RDA to archival materials. The example shows the flexible model applied to the article/offprint: The Cosmic Ultra Radiation (original Swedish title: Den kosmiska ultrastrålningen) from Gösta Adrian-Nilsson's (GAN) personal archive.*

In figure 5 the flexible model is applied to an offprint from GAN's archive showing how cataloging in RDA can connect metadata regarding archival materials from an archive in Lund with metadata regarding published material from a library in Umeå. Lund and Umeå are two university towns in different parts of Sweden. In this example the offprint is related to two aggregated works: the journal in which the original article was published and the archive that contains the offprint. Records for person and corporate body are created as in the complex model. This example also shows relations between these group 2 entities and the aggregating part.

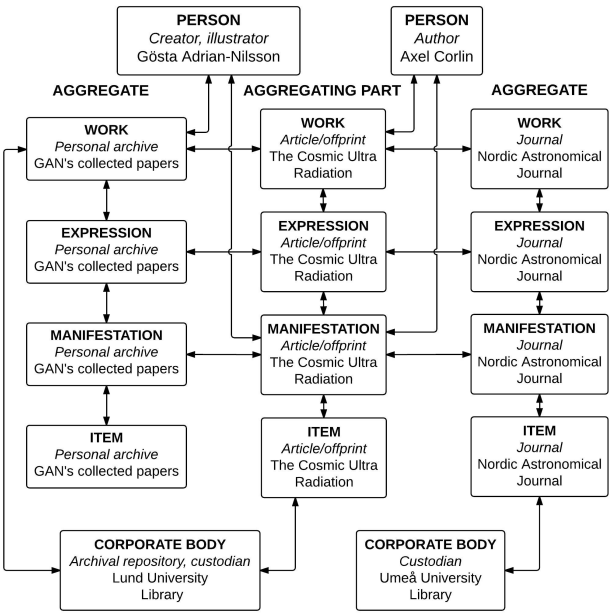

Figure 5. *The flexible model applied to the article/offprint, The Cosmic Ultra Radiation (original Swedish title: Den kosmiska ultrastrålningen), and its relations to two aggregated works: Gösta Adrian Nilsson's (GAN) personal archive and Nordic Astronomical Journal (original Danish title: Nordisk astronomisk tidsskrift).*

Discussion

The models developed in the project all have advantages and disadvantages. In the simple model, the archive is cataloged in its entirety and the whole archive is considered to be a work. This is a very simplistic model that is relatively easy to work with but also runs the risk that a large quantity of information is lost. For example this model means that you lose the possibility to connect archival materials, such as manuscripts and offprints, to bibliographic materials such as printed books and journals.

The complex model, where the archive is looked upon as an aggregated work, makes it possibilities to catalog all of the information regarding the different materials in the archival collection and thereby create detailed metadata which will increase the searchability for separate parts of the archive, for example letters or manuscripts. However, the complex model can be discussed in relation to resources and time. In a very small archive it can be possible and justified to catalog every single part according to the complex model, while it would mean an enormous amount of work in a more extensive archive.

Another basis for discussion is whether cataloging archival materials in the complex model can replace a finding aid. In this model the information in the archive would be displayed differently and the hierarchal structure in the finding aid would not be visible in the same way. This can be regarded as an impairment but can also lead to more searchable data when the data is available as separate data components and not bound in a specific form.

An interesting and feasible model for cataloging archival materials in RDA is to combine the simple and the complex model. In this flexible model the archive itself would be cataloged in its whole as in the simple model, while detailed records could be created in the fashion of the complex model, but only for specific works in the archival collection. This could for example apply to particularly important manuscripts which would then be searchable together with the printed editions of a book. The flexible model is exemplified with an article/offprint which clearly shows how cataloging both archival materials and bibliographic records in RDA facilitates the connection between the metadata of archival materials to the metadata of library materials.

A central discussion when applying RDA and FRBR to archival collections, is whether the archive actually can be regarded as a work and if it is possible to look upon the archive as an aggregated work. Can the archive be regarded as a work based on the FRBR definition: "a distinct intellectual and artistic creation" [6]? Are personal archives different from other archives in this question? Not all researchers choose to look at this in the same way. Thurman means that an archive cannot be defined as a work based on the FRBR definition [10] while Nimer points out the possibilities in applying FRBR on archival materials [1]. The idea to regard archives as aggregated works is described in the FRBR report [6] and in the report from The Working Group of Aggregates, Appendix B [7]. Taking the definition of collections in the RDA Toolkit, Tanaguchi develops these thoughts even further when describing five different models for aggregated works, three of which are applicable to collections [9]. Based on this and the results we have seen in this study, we believe that when it comes to connecting archival materials with published materials, it is interesting to further examine the flexible model in which the archive is regarded as an aggregated work and where specific archival materials are described as separate works in this aggregated work.

The development towards more open, linked data is a conceptual change which is important for archives, libraries and museums to be a part of. It is also important to improve cooperation between cultural institutions to be able to enhance and enrich metadata from different contexts. To be able to connect archival materials, for example manuscripts and offprints, to library materials exemplifies how metadata can be enriched when two contexts are brought together.

Metadata from different contexts can be brought together in different ways. Cultural institutions may keep their own ways of describing metadata and the information could thereafter be brought together using collective search systems, or they may work with common standards for describing metadata. It is however central to be economical with existing resources and to find the most effective ways to collaborate in the areas of authority files and bibliographical data [11].

RDA has the potential to work as a standard for describing both archival and bibliographic materials. The possibilities to create relations in RDA, for example relations between works and

relations to authority files, makes it easier to link data, which is useful for archives and libraries as well as for users in other contexts.

Conclusions

This project is a pilot project that gives a contribution to both archives and libraries regarding how to apply RDA on different materials and how to relate FRBR entities to archival collections.

The models presented in the project all have separate advantages and disadvantages. The simple model could be used on a large scale but may lead to heavy losses of information. The complex model gives possibilities to create more extensive searchability for archival materials but it can be difficult to apply to larger archives in relation to resources and time. A combination between the simple and the complex model gives us the flexible model where the archive in its entirety becomes an aggregated work and specific materials in the archive can be described in more detail as works related to the aggregated work. The models proposed in this project can be used as a starting point for discussion and further research in this field.

Metadata can be enriched and amplified when different contexts are brought together. In this project this is exemplified when archival materials and published materials can be linked together with relationships in RDA. Using RDA brings possibilities to create linked data which is useful to archives, libraries and other interested parties, thus RDA has the potential to work as a standard for describing both archival materials and bibliographic materials.

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Author Biography

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