RDA and Serials in Transition

Matthew Short and Keiko Okuhara, Contributors

Matthew Short, a catalog librarian who participated in RDA testing, and Keiko Okuhara, a law library technical services librarian, share their opinions about the progress of RDA since its implementation in March 2013.

INTRODUCTION

Usually, when major change happens in cataloging, we see it as disruptive. But in the cosmic scheme, most changes are relatively minor tweaks to familiar practices. Cataloging has been very dynamic since the introduction of computers into library service, but the basic principles and goals of cataloging remain the same. In the early days of automation, many catalogers were excited, but they did not understand the full potential of machine processing of bibliographic data. Originally, computers were viewed as improved, more efficient typewriters—rather than typing card sets, we could order cards from OCLC by hitting the “produce” button on our dumb terminals. Cataloging departments routinely deleted data in MARC 600 (name-as-subject) fields, which duplicated data in MARC 100 or 700 (name-as-author) fields in descriptions of correspondence or autobiographies because each of those MARC fields generated a name-entry card, and only one card would be needed in the catalog with the author’s name to provide access to that book. The possibility of the digital data replacing the printed card was unimaginable.

Content versus carrier is another long-standing technology-dependent concern for catalogers. Initially, this debate focused on whether to describe microformats together with the original print format. As technology advanced, the question took on new dimensions. Electronic journals represented a true innovation. Serials catalogers had always enjoyed tackling the splits and mergers of serials—but now, we had serials that not only split and merged, but also could become integrating resources. They could lose their discrete numbering systems and their titles could actually disappear completely and be replaced by totally different titles, meaning even the earliest issues would acquire the latest title.

Cataloging rules have changed over the years to accommodate new realities. Earliest-entry serials cataloging changed to latest-entry cataloging. Both of these techniques allowed a full description of the life of a serial to fit on a single catalog card. With the arrival of automation, the need to fit the entire life of a serial onto a single card disappeared, and successive-entry cataloging, which allowed for more detailed descriptions of individually titled incarnations of serials, was born.

The new cataloging code, Resource Description and Access (RDA), is the latest development in the history of cataloging. Many catalogers have questioned the need for the new code. The wide learning curve for implementation of the new rules comes at a time of economic uncertainty for many libraries. Why should scarce resources be channeled into applying a complex new set of rules that looks so much like the old, familiar Anglo-American Cataloging Rules (AACR2)?

It is true that RDA and AACR2 have much in common. We see Cutter’s principles inherent in both codes. OCLC RDA bibliographic records look surprisingly similar to OCLC AACR2 records.

For this Balance Point column, I have asked two highly esteemed colleagues to answer the question “Why RDA?” one year after its adoption.

I’ve been privileged to have taught cataloging courses at two of the top library schools in the United States, the School of Information Sciences at the University of Pittsburgh, and the Graduate School of Library and Information Science at the University of Illinois at Urbana-Champaign. The students in my classes have been intellectually gifted, and many have
actually developed a sincere appreciation and enjoyment for cataloging.

One of my students at the University of Illinois was Matthew Short. Not only did Matthew have extraordinary technical cataloging skills, but he could also see cataloging issues from unique and innovative perspectives. Matthew was a participant in the University of Illinois’s RDA test program in 2010. Based on his experience testing RDA before its release, his experience as a professional catalog librarian at Northern Illinois University, and his unique insights, I invited him to share his perceptions of the development of RDA since its testing and implementation.

I’ve known Keiko Okuhara for over 15 years. We were colleagues at the University of Pittsburgh from 1997 to 2003. Keiko and I enjoyed sharing stories about interesting serial problems that we encountered at work. We’ve maintained our friendship through the years, even as Keiko has moved on to become the bibliographic services/systems librarian at the William S. Richardson School of Law Library at the University of Hawai’i at Mānoa. I’ve followed her outstanding achievements in the field of law library cataloging, primarily in the area of serials, and her leadership roles at the local, national, and international levels. In her work at the University of Hawai’i, Keiko is also heavily involved with the management of electronic journals. Because of her expertise in cataloging and her understanding of the public services impact of serials, I invited her to contribute her impressions on the development and impact of RDA.

RDA: AN OPINION

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Nearly a year has passed since the Library of Congress implemented RDA, and most catalogers have now had at least some exposure to the new descriptive standard. In that time, they have had to learn the difference between an Expression and a Manifestation, where and when to end a physical description with a period, and a whole host of major, but mostly minor, changes to the business of describing bibliographic material. The biggest change seems to have been conceptual: RDA represents a new way of thinking about description and library data, marking a shift away from format-based record creation and toward an emphasis on discrete elements and their relationships. But the instructions themselves are intended to be more or less compatible with existing cataloging formats, interfaces, and workflows, so part of the problem is imagining how our data might look or what it might do in the future, since currently our records generally look much as they did in AACR2. If the new descriptive standard produces records that look the same, then so what? This question is usually the first thing that a cataloger new to RDA asks, and it is even more difficult to answer for serials cataloging.

Most of the training examples and display mock-ups used to demonstrate the benefits of RDA rely on monographs or music with multiple translations or versions. It is not difficult to see the benefits of FRBR’s (Functional Requirements for Bibliographic Records) hierarchical organization when shown a FRBRized display of multiple editions of Hamlet in various languages, especially when movie adaptations and criticism are added to the mix. There are far fewer examples using continuing resources, most likely because it is relatively uncommon for a serial to be published in multiple languages or versions and even less likely for a serial to have many derivatives. But part of the reason for this is that FRBR has never been particularly comfortable with the concept of seriality (IFLA Study Group on the Functional Requirements for Bibliographic Records, 1998), so the hows and the whys are not necessarily clear. What, exactly, constitutes a serial work, and how should complex works that aggregate many other works, such as journals and their articles, be modeled? These questions have been under discussion for more than a decade (Riva, 2003). The other part of the problem is that MARC and our cataloging interfaces and retrieval systems are not particularly comfortable with seriality either. Catalog records are intended to exist on their own, with added entries for preceding or succeeding serials, serving, at best, as informal pointers from one record to the next. Even if a FRBRized display could be created for a serial, it is difficult to imagine how that display could be generated from MARC in the context of our current retrieval systems. And again, this problem of imagination is exacerbated by the fact that not much seems to have really changed in terms of the records that we create.

By way of guidance during the transition to RDA, CONSER, the Cooperative Serials Program of the Program for Cooperative Cataloging (PCC), provided a list of core elements, a mapping from MARC, and a checklist adapted from the generic workflow created by the Library of Congress (CONSER, 2012). This checklist, which makes frequent reference to RDA itself and the Library of Congress Policy Statements, provides clarification about optional rules and alternatives, but seems to serve primarily as a cross-reference between chapter 12 of AACR2 and RDA. Because there is no single chapter in RDA that deals with continuing resources, the checklist tells the serials cataloger where to look for serial-specific instructions when constructing a catalog record. But other than the location of these instructions, there are not too many differences. RDA uses the same rules for determining seriality and when to create a successive entry, descriptions are still based on the earliest available issue, and the cataloger is required to provide information about the description, like the issue used and the latest issue consulted. And while there are quite a few cosmetic differences, most of these have more to do with RDA’s approach to transcription and recording data than they do with serials. Once making
this realization, and given the paucity of examples, it is fair to ask why we are going to the trouble of learning the location of the same rules in a new manual.

While there are enough minor differences to make the transition annoying, the biggest change RDA makes is in how we think. Under RDA, cataloging is less about the catalog—an aggregation of records, each describing an item in hand and primarily intended for display—and more about the aggregation of elements that are related to each other but are not necessarily bound by a single record. In this way, RDA is not a cataloging standard in the sense that AACR2 was a cataloging standard. It tells us what data can be found in bibliographic descriptions, what elements are important, and how they are related, not how to create a record, and especially not how to create a record for a resource in a particular format. More work still needs to be done to clarify how the underlying data model applies to serials, but this shift may eventually improve access to serials just by virtue of being specific about what elements make up a bibliographic description.

Our decisions about how to handle serials have usually been driven by practical concerns, not theoretical questions about the best way to model our data. We have needed to differentiate one serial from the next, while showing the relationships between them, but all within the confines of the card or the MARC record. The difficult balance to strike has always been between providing the greatest level of detail about individual resources and how they have changed over time, but without overwhelming the patron with information or the cataloger with work. However, when it comes to complex serials with frequent changes, involving splits, mergers, continuations, reproductions, multiple parts, and so on, it can be difficult to provide enough information in a human-readable and machine-readable way. In many cases, there is no easy way to view the publication history of a particular title at a glance—it typically takes a professional cataloger, who understands preceding and succeeding relationships, to piece everything together. As Barbara Tillett (2005) once suggested, we have been creating serial records for other serial catalogers, instead of creating serial records for our patrons. But there might be a much more intuitive way of expressing the complexity without overwhelming either the patron or the cataloger.

Limitations on space, time, and resources have also resulted in a split catalog, where data about the contents of a serial are separate from data about the serial itself. If a patron knows exactly what article he or she is looking for, then the catalog is usually the best place to start, especially if the article is not available electronically and the patron has a good citation. But if the patron does not know exactly what is needed, then we have to direct him or her to a completely different and external database, with a separate interface. This is despite the fact that most patrons are far more interested in the contents of the serial—the articles, typically—than the behavior of the serial over time, which has been the focus of serials cataloging and is usually only of interest to other librarians. Discovery services, such as Primo or Summon, exist solely because there is no easy way to query both sets of data in one place, but discovery services are mostly ignorant about how a particular article fits into the larger context of the serial. By storing our bibliographic data and our index data in different silos and in incompatible formats, we have made it difficult for patrons to find and identify what they need. When it comes to serials, the catalog is only ever used as an inventory of holdings and rarely used to actually discover resources. This is also something that needs to change.

Although RDA does not enable us to solve either of the problems mentioned, it does move us closer in that direction by making it easier to think of library records in terms of discrete elements that can be precisely defined and flexibly repackaged. Carefully modeled data would make it easier to create retrieval systems that bring out the publication history of a particular serial in a much more intuitive way. Instead of a catalog with multiple records for a single serial scattered throughout, with minor changes at the Manifestation level but few changes at the Work or Expression level, we might envision a hierarchical display showing how each consecutive Manifestation is related from beginning to end, with links to any horizontally related Works, like splits and mergers. A catalog in which the article index and bibliographic data about the serial are fully integrated would also be that much easier to achieve if we gave more thought to the data itself and how it might be combined with external sources. That being said, more work needs to be done on the underlying model, FRBR, especially as it relates to serials. What we consider to be a serial Work and how we draw the line between Work, Expression, and Manifestation becomes much more important when we are creating more than Manifestation-level bibliographic records intended primarily for display. But RDA itself is important, if only because it has started to change how we think, both about the data we create and how it might be used. The records might look the same right now, but that is only because we need to change how we think before we can change how we act.

FROM PARIS PRINCIPLES TO IFLA
INTERNATIONAL CATALOGING PRINCIPLES

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The International Federation of Library Associations and Institutions (IFLA) Statement of International Cataloging Principles known as the “Paris Principles” (International Conference on Cataloging Principles, 1961), which was approved by the International Conference on Cataloging
Principles in 1961, achieved its goal in setting international cataloging standards for bibliographic services. It provided the foundation for a second statement of International Cataloging Principles in 2009 (IFLA Cataloguing Section & IFLA Meetings of Experts on an International Cataloguing Code, 2009) to define the function of a library catalog for the convenience of its users and to support the sustainable structure of the conceptual model of the bibliographic description, Functional Requirements of Bibliographic Records (FRBR), and the new cataloging code, Resource Description and Access (RDA). FRBR provides a fresh perspective on the structure and relationships of bibliographic and authority records. The entity and relationship models in FRBR enable bibliographic data to create a bibliographic universe in a semantic web and linked data environment. FRBR explains entities, attributes, and relationships as Uniform Resource Identifiers (URIs) and reexamines the conventional linking mechanisms of uniform titles in an online environment.

**Bibliographic Relationships in FRBR**

RDA incorporates the entity–relationship concept of FRBR Group One entities (work, expression, manifestation, and item) for the description of bibliographic data. The inherent relationships in FRBR allow related items to collocate among the Group 1 entities and navigate through the complex network of bibliographic relationships. A continuum in Group 1 is depicted in the content relationships as equivalent (share the same intellectual or artistic content), derivative (a new work but still related to some original work), and descriptive (new works describing some original work). Another take on content relationships is the whole/part and part-to-part relationships. The whole–part relationships explicate that one entity is composed of one or more parts which are themselves instances of another entity, such as components in aggregates. This analogy can apply for digital resources—a website as a whole and its parts as components. In digital resources, there is a relationship among parts, part to part as sequential, accompanying, and companion relationships. The companion relationship has dependent and independent components. The dependent component is described in a note in bibliographic records, while the independent component is linked with a separate bibliographic record as a separate work. Therefore, the bibliographic description is broken down into data elements in FRBR to relate and connect each element in a semantic fashion, and those relationships underline RDA to describe an attribute or relationship of one or more entities. In RDA, serials are illustrated as whole/part and part-to-part relationships. A serial can be regarded as an aggregate work with the issues as components. Also, articles are within the issues as components to components. “While the end result, expressed in MARC format, looks very similar to the end result of cataloging using AACR2, the fundamental decision-making and intellectual exercise involved in developing the description is different” (Boehr, Romano Reynolds, & Shrader, 2012). For the description of continuing resources, the use of these entity-relationship models strengthens the function of collocation and differentiation capabilities of preferred titles (uniform titles in AACR2) as a linking device. The unique characteristic of serials cataloging is that preferred title functions to identify the record for a manifestation of a work.

**Bibliographic Relationships of Continuing Resources in RDA**

In AACR2, there are three major types of bibliographic relationships in continuing resources: chronological, horizontal, and vertical relationships. In MARC 21, the links are made in the following fields: chronological relationships in the 777, 780, and 785 fields as a preceding or succeeding entry; horizontal relationships in the 765, 767, 775, and 776 fields as various versions of bibliographic items; and vertical relationships in the 760, 762, 770, 772, 773, and 774 fields (examples of these vertical relationships include a specific article in a journal or a subseries within the main series). All these relationships are linked reciprocally in bibliographic records to pair them based on their own relationships. These three types in AACR2 are roughly transformed into the FRBR bibliographic relationships as sequential (chronological), derivative (horizontal), and whole/part (vertical). The horizontal relationship can also be equivalent if the intellectual and artistic content and authorship are carried on. The supplement/special issue entry in the 770 field and the supplement parent entry in the 772 field have two different subsets: Supplements can exemplify the “accompanying” relationship, and special issues can be the whole/part relationship in FRBR, and yet the special issues can be further categorized as either dependent or independent. Riva created a comprehensive table of the MARC 21 linking entry and FRBR bibliographic relationships (2004, pp. 134–135).

**Bibliographic Description of Continuing Resources in RDA**

While the bibliographic relationships in FRBR have become diverse, there is no change in the definitions of serials and integrating resources in RDA. A new description is created in the case of a major change in title proper, the statement of responsibility, or the scope or coverage. Also, a change in the mode of issuance or media type for a serial or integrating resource requires a new description. RDA guidelines for corporate body creators are similar to AACR2, but a significant change is that families can be creators in RDA. Although little emphasis has been given to the statement of responsibility in serials cataloging practice, the transcription of the statement of responsibility is significant in RDA. In RDA cataloging, the source of the description is recorded if the first issue of a serial or the latest iteration of an integrating resource is not available.
RDA Bibliographic Data and Local Systems

VTLS has developed a FRBRized integrated library system “with a tree style display,” while OCLC utilized “algorithm for analyzing WorldCat records” (Riva, 2004, p. 130). The priority in the implementation of RDA is a system to configure the integrated library system (ILS) and online public access catalog (OPAC) to use new codes in the leader and replace general material designation (GMD) with 33X fields (RDA content, RDA media, and RDA carrier). Each institution must decide how to display these fields to the public. In the future, our local systems should be able to automatically create authority records from access points in the bibliographic data, since the study indicates that “80% of these records reflect a single manifestation per work” (Tillett, 2003). Moreover, the authority records can generate subject headings in relation to its classification as each manifestation of bibliographic data is created to make bibliographic data reusable and sustainable.

Good or Bad or No Choice?

Since RDA is more semantic and deliberative, new vocabulary in RDA and the conceptual models in FRBR have to be understood in order to apply the entity-relationship model in bibliographic data. For instance, in the supplement/special issue (770) and the supplement parent (772) entries, both fields are described as vertical relationships in MARC 21. They are characterized in the whole/part relationship in RDA and yet can be broken down into supplement and accompanying relationships. This subcategorization process requires studying different taxonomies and searching for various combinations of terms. The purpose of the RDA bibliographic description is to portray an attribute or relationship of one or more entities; thus RDA, in short, is all about relationships. The change in the mode of issuance or media type requires careful study to differentiate a major change for a new description or a minor change. If an online static journal has been changed to a searchable article database, it requires a new description. While the changes from CD-ROM to online don’t need a new description, since they are the same type of media (computer), the change in format from a print journal to online journal requires a new description. For those provider-neutral records, which are contrary to the principles of RDA, the PCC drafted P-N/RDA version in March 2012 (Program for Cooperative Cataloging, 2012). According to the PCC guidelines of the Hybrid Bibliographic Records of AACR2 and RDA (Program for Cooperative Cataloging, 2013), the CONSER standard record and the provider-neutral record co-exist well for the most part, including enhancing and editing non-RDA serial records. The hybridization of AACR2 and RDA can be handled manually or through machine manipulation. Furthermore, the guidelines for working with RDA and non-RDA records prior to implementation of RDA detail how to edit CONSER records (Program for Cooperative Cataloging, 2011). The legacy of the single-record approach has to be handled at the local level. The flexibility in RDA for “community” decision making gives so many options or alternatives that making the best decision may be complicated. Even though “the concept of continuing resources may be absent from RDA,” (Boehr et al., 2012), the role of the catalog stems from the IFLA International Cataloging principles, which stresses the convenience of the users. The goal is to help users discover resources by publishing sustainable metadata to create reusable linked data in the semantic web. It seems that we may have to go with the flow for greater interoperability and cooperation among different constituencies to find harmony in cataloging.

CONCLUSION

Both Matthew Short and Keiko Okuhara have demonstrated that even though RDA and AACR2 are similar in many ways, there are some very significant differences. These differences do not lie in superficial variations in descriptive cataloging practices, but rather in a new basic theoretical understanding. Cataloging is no longer simply a local function, focusing on strict application of rules to create “bibliographic records” contained in a “catalog.” It has been transformed by the World Wide Web into a vast, international data store that facilitates semantic relationships, with incredible potential for advancing service to the public.

REFERENCES


