AACR2 TO RDA: A PARADIGM SHIFT?

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Abstract
Looks into the history of cataloging and the current change from AACR2 to RDA to determine whether the changes in the past cataloging codes and processes can be considered paradigm shifts. Discusses the changes implemented in some Philippine libraries to accommodate the new cataloging code.

It can be said the feathers of librarians especially those assigned with cataloging work were ruffled because of the new cataloging code – the *Resource Description and Access* (RDA). This stemmed from the new model for describing resources – the *Functional Requirements for Bibliographic Records* (FRBR) by IFLA's Joint Steering Committee for the Revision of the AACR. FRBR was a conceptual model and did not include rules and procedures as set in AACR. As such there was apprehension among librarians as to its realization, and its implementation in their respective libraries. To a certain extent, this apprehension has come to be coined as FRBRphobia (Bowen, 2005). FRBR changed the approach for describing resources in that it connects the individual resources to other related resources. It uses the entity-attribute relationship model and this made the shift to a different perspective toward information resources. If in the previous systems, each material is described separately, this new model prescribes otherwise. FRBR is the basis for formulating the prescriptions for describing resources indicated in RDA.

With these changes in cataloging practice it is expected that there would be some who can readily accept these changes and some who cannot. Others will simply be reluctant. As Krauss (2007) puts it "it should not be surprising when feelings run deep when it comes to the *Anglo-American Cataloging Rules 2 (*AACR2) successor – at stake is the library's profession's place in the future of organization and access" (p. 66). However, it should be noted that this was not the only instance where changes have been made and most likely, not the first time that change or revision was met with criticism. This brings to mind Kuhn's (1970) *Structure of Scientific Revolutions* and his concept of paradigm shift. It cannot be denied that we are facing a significant change in the field of cataloging. This paper analyzes whether we are indeed going through a paradigm shift. It also subsequently analyzes the progress and future of the implementation of RDA here in the Philippines.

According to Kuhn, paradigm has two characteristics: unprecedented achievement attracting an enduring group of adherents, and being open-ended enough to let the followers resolve upcoming problems In his postscript he disentangles the concept of paradigm from the context of scientific communities and offers the following definition of paradigm as the "entire

constellation of beliefs and values, techniques and so on shared by the members of the community" (p. 175). He clarifies this further by changing the term scientific theory as what scientists share into "disciplinary matrix" to remove all other implications of the term theory. In his term disciplinary matrix, he includes the following as components: a) symbolic generalizations; b) beliefs in particular models; c) values "which may still be shared by men who differ in their application"(p. 185). The discussion of paradigm in cataloging is based on the above characterizations by Kuhn. It would be best to look into the history of cataloging to determine whether we are in the event of a paradigm shift, or whether there have been paradigm shifts back then.

Pre-paradigm Stage

The history of cataloging from 2000 BC to 1800 would show individual practices per librarian in organizing their collection (Strout, 1956). In Lubetzky's(1953a) words "as long as libraries were small and few books were published, the contents of a library could be recorded in any fashion that struck the fancy of the one in charge" (p. 179). As such, when cataloging was specific to libraries there could be no paradigm to be considered. The primary reason for this is that there were no "enduring group of adherents", rather there were only librarians in their own libraries practicing what they deemed as the best way to organize their collection.

However, there were similar objectives among librarians during these times. Thompson (1977) described the cataloging practice during the ancient times as having organization and classification schemes already and that the prevailing principle then was "that a library must be arranged in some kind of order… a list of its contents should be provided" (p. 139). Since libraries were independent of each other, and there was no large scale library cooperation, it can be said that arrangement and organization was a natural and logical response of librarians to the collection. There were similarities in the organization and classification activities of these librarians because of this natural act of organizing their collection, but there are differing methods of organizing and arranging the collection. These individual ways of organizing were the individual interpretations of each librarian on the objective of organizing their collection. This is therefore the pre-paradigm stage in that there were prevailing practices or beliefs as to how collections can be cataloged but there was still no prevailing practice or belief that a group of adherents follows.

One instance where a cataloging practice was unprecedented and received by a significant group of followers was when the French Government came up with their cataloging code in 1791 (Hopkins, 1992). There was a need for the government to come up with an inventory of their collection. Since they wanted it done immediately, they had to have several persons do the inventory simultaneously. As such, they needed a set of rules or procedures "to identify the same work in various libraries, facilitating a decision as to whether to keep or sell a certain copy' (p. 383). I would not specifically classify this code as the paradigm in cataloging. While it is true that it received a great number of followers, it did not contain the components of a disciplinary matrix. The followers did not exactly share in the beliefs and values espoused

by this code on their own volition. They did not have much choice to begin with. It was the government dictating what to do in a time of need. Therefore, it was still specific to the needs of the country then. However, it should not be forgotten that this situation contributed to the adoption of catalog cards as they used playing cards then for the said inventory.

Paradigm Stage

The works of Panizzi in 1839, Jewett in 1853 and Cutter in 1876 ushered cataloging practice into a whole new light as they have systematized cataloging and have started cooperation among librarians. Panizzi's work stemmed from a need to organize the collection with the objective "to standardize the format of the bibliographic records and to assure that enough detail was included to differentiate one record from another" (Huffard, 1991, p. 28). Panizzi's rules were originally 73 rules but with the suggestions of the Board of Trustees of the British Museum, these were revised and became the 91 rules (Carpenter, 2002). When Jewett went to Europe he met with Panizzi and Edwards and "learned a lot from the two of those responsible for the 91 rules" (Blake, 2002, p. 7). When Jewett was put in-charge of the Smithsonian Institution, he formulated the 39 rules in his *On the Construction of Catalogs*. These rules were based (and some adopted verbatim) from Panizzi's 91 Rules. This shows what Kuhn describes as attracting some followers. Unlike the French Cataloging Code of 1791, these cataloging codes were formulated because there was a need to come up with one and were followed/implemented because those who followed these shared in the belief that these rules or codes addressed their problems. It can thus be said that they shared the same paradigm. They differed however in their approaches and the specifics of their codes or rules, but they nevertheless shared the view that catalogs should be designed in such a way that the users of these catalogs were able to find what they were looking for.

Cutter's publication of his Rules for a Dictionary Catalogue was influenced in part by Jewett. In here, he laid out the first principles for cataloging. It can be said that this is the stage where the paradigm for descriptive cataloging was formed. Unlike in the sciences whose paradigms are scientific theories, descriptive cataloging is more of the codes that show the ways by which materials in libraries should be organized. Cataloging did not experience the process of theory building and theory testing, rather, what happened was codes were formulated and the process included logical (for some personal) and practical issues. As Pettee (1985) puts it, the rules were primarily based on practices in cataloging and not on theories.

During the time when cataloging codes were made and used by quite a number of libraries, was actually the time when a paradigm for cataloging arose. The paradigm however was not the codes but the principles and motivations on which these codes were based. I have identified the following as the paradigm in cataloging based on the historical accounts reviewed:

a) Collection of libraries should be organized using a set of rules for uniformity

b) The organization of the collection should enable the users to find the material that

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they need and differentiate one from another

The specific codes and specific rules used are thus the "differing applications" of the paradigm. To a certain extent, the two identified paradigms were prevalent for quite some time even when the codes were being revised.

Challenges, Criticisms, Anomalies and Changes

The codes were not perfect. Cutter, for example, continuously revised his rules. These imperfections were probably the reason why not all libraries adopted Cutter's rules (or Panizzi's or Jewett's). Rather their codes were partly adopted by associations like LC, ALA, or LAUK. This situation was similar to the practice of theory testing where alternative explanations are put forward based on varying observations. As such, no single code was adopted because of existing differences in values and techniques.

Change is never easy to welcome, especially with criticisms, anomalies and challenges, because these signal that the tools that are being employed can no longer address existing issues. As Spanhoff (2002) wrote "catalogers show a tendency to return to first principles whenever they are seriously challenged. They revisit the intellectual foundations of cataloging, examine the structure and functions of the catalog and ask whether it is still doing what it is supposed to do" (p. 38). This is basically what Lubetzky did when he identified anomalies in the ALA cataloging rules. He revisited the principles of cataloging and was able to come up with his version of principles of cataloging. This is also what he did when the ISBD was incorporated to the AACR.

ALA to AACR to AACR2

Lubetzky (1953a), a very well known critique of the ALA rules came up with a systematic approach to analyze these rules and he asked these questions "a) what information or data should be given on the card? b) How should the information be organized? It was assumed as axiomatic that everything appearing on the card must be necessary or useful for some purpose of the catalog, and that the arrangement of the data must be related to some desired pattern. But what were those purposes and what was the pattern? (p. 181) By asking these questions, he goes to the first principles of cataloging and what better way to analyze the rules than determining what they were supposed to achieve in the first place.

In his analysis of the rules, he came up with these two objectives of a card catalog "a) to reveal to the user of the catalog under one form of the author's name, what works the library has by a given author and what editions or translations of a given work" (Lubetzky, 1953b, p. 36). These objectives are in a way, still similar to the objectives of the catalog put forth by Cutter. He re-worded these to make them more specific to express the principle of collocation. In a way, this was similar to what Panizzi wanted catalogs to be for "all editions and translations of a work regardless of their individual titles, were to be arranged, usually under the original

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title, in a prescribed order so that a person in search of a particular book would find it, not in isolation, but in context of the other editions and translations of the work and would thus be enabled to determine which of these would serve his/her purpose" (Lubetzky, 1979, p. 349).

This criticism to ALA rules ushered in a new code which was the AACR. Lubetzkyclearly presented the anomalies in the previous code and presented an alternative. Chan (1994) describes Lubetzky's work as "both exciting and frightening to those involved in cataloging. It presaged a new era for cataloging, yet many were concerned about the cost such drastic change would incur" (p. 39). Then the International Conference on Cataloguing Principles was held in October of 1961 in Paris. It brought about the "Paris Principles" that "drew heavily on Lubetzky's draft code of 1960" (p. 40). Was this then a paradigm shift? What happened was illustrative of Kuhn's description of what happens in a scientific revolution where a paradigm is challenged by an anomaly (in this case anomalies in the rules), alternatives are suggested/brought up by proponents (in this case the Draft Code of Lubetzky and the Paris Principles); there is a division among the practitioners (in this case the catalogers using the ALA code and then, later on those who could not agree on one code, thus the two editions of the AACR); acceptance/acknowledgement of the new paradigm (use of the new code). Although the situations parallel those mentioned by Kuhn, the change from ALA to AACR would not necessarily be qualified as a paradigm shift because the objectives for cataloging are still the same. The only difference is that the rules were revised and that other materials were included. These rules still addressed the need for catalogs to show what libraries have and to direct users to the information that they need. The AACR is more responsive to the users' needs in that it provides more description about the material and this then enables them to determine whether the said material is exactly what they need. Thus, the objective of enabling the user to differentiate one material from another based on the description was added but did not entirely change anything.

The objectives of the catalog did not vary much from the objectives of Panizzi or Cutter or Lubetzky. There were changes but these were not as revolutionary to merit a paradigm shift. The only shift was for the librarians to change how they design their catalogs and for the users to get used to the information they find in the catalog.

The change from AACR1 to AACR2 is also another story of shifting views. Descriptive cataloging seemed to become more complicated with the incorporation of the ISBD format and inclusion of other materials and formats. Essentially the goals of cataloging were still the same but the change was for the catalogers to get used to the new format being followed and with the myriad of punctuation marks and abbreviations to be used. It is at this point that Lubetzky (1979) criticized such development saying that this change has veered cataloging away from what it was supposed to do in the first place. Even when these punctuation marks are means to separate elements of the catalog, making it easier for automation to happen, these are not really understood by the users. However, even with such criticism AACR2 prevailed. It has, for quite some time, been in use in most libraries because there were no alternatives that can

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entirely replace this.

Wilson (1989) proposed a shift in cataloging and proposed the rethinking of the term "descriptive cataloging" and whether we are still in a position to call it as such with the changes in the cataloging environment at that time. He was at that time discussing the cataloging of virtual collection that can be available to users outside of the library and whether the approach for descriptive cataloging could be more work dependent than material dependent. Essentially he was espousing that the second objective of cataloging by Lubetzky which is to "reveal to the user what works the library has by a given author…" be made the first objective. As such, instead of describing the materials themselves, and making these the focus of descriptive cataloging, the work should be made the main focus of the description instead of its embodiment.

AACR2 to FRBR and RDA

The AACR2 and MARC have prevailed for quite some time. However, these have also been criticized for almost two decades now. One of the criticisms for automated catalogs is that they have not adhered to the principles of collocation and that the designers of the databases were the ones in control and not the standards of cataloging (Carpenter, 2000). They do not adhere to the principles of collocation (Yee, 2000; Carlyle, 2000) because the ways by which the entries are retrieved do not conform to the linear presentation of the entries in the catalog cards. This is especially true when the users approach the database using the keyword search engine. These studies and more have resulted to FRBR as the new cataloging model and RDA as the new cataloging code.

The principles on which the model and the code are based are still similar to the previous principles set forth by Panizzi, Cutter, and Lubetzky. Svenonious' (2000) identified the following as principles that guided the design of bibliographic languages especially in the Anglo-American tradition and, according to Tillet, these are still the principles of the new code:

- Principle of user convenience

- Principle of common usage

- Principle of representation

- Principle of accuracy

- Principle of sufficiency and necessity

- Principle of standardization

- Principle of integration

This shows that FRBR and RDA have not entirely and essentially deviated from the principles of AACR and also from what has been identified earlier as the paradigm in

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cataloging. After all, RDA is still highly based on the AACR tradition. The changes were made to address the weakness of OPACs and the AACR discussed earlier.

FRBR is not entirely a new model because this is based on existing database models using the entity-attribute relationship. Since catalogers have been used to the linear model, they have had several apprehensions toward its implementation, especially when the RDA has not been developed. Zummer (2007) enumerates some of the factors that may contribute to the reluctance of librarians to implement FRBR and these are as follows: conservative attitude of librarians, legacy data, and use of entity-attribute relationship model. This is something new and the rules and processes related to the model are not yet as clear as what they have been used to (AACR2). There is also some apprehension because they are not sure as to how to migrate existing data. The difference with the previous code is the use of entity-relationship model for information sources. Before, the information sources were described independently from the work or author. In the new model, the work is the main entity and is related then to its expressions, manifestations and specific items of these manifestations. In other words, the concept of cataloging before was linear and this is what is being changed this time – making cataloging relational. This then addresses the problem of collocation in existing OPACs. As, according to Miksa (2009) the goal of RDA is to "facilitate resource discovery through library catalogs in a more consistent and powerful way than is currently possible with AACR2" (p. 47), this should be a welcome change. But there are more questions and criticisms than acceptance. Aside from questions on how to use the new code and how to implement this in particular libraries, the question of applicability for particular collections is a concern.

In the Philippines, library associations have sponsored seminars and training for librarians on FRBR and RDA. These seminars have focused primarily on orienting the librarians to the model of FRBR. These seminars focused primarily on how RDA differs from AACR2. The only problem however is there is no database yet to show how RDA works.

Even with the seminars conducted, there is still apprehension from librarians. The main concern is that RDA could not be implemented in their libraries. Many libraries are not equipped with OPACs, in other words, they are still operating in the card catalog environment. While some are excited about the new code, others are not as excited. The latter operate on the premise that there is no need for RDA as long as they can provide the users the information they need using whatever finding tools they have. However, there will eventually come a time when they will have to use RDA because the current framework of the AACR2will no longer be able to address the description issues.

SHIFT

The cataloging paradigm remains unchanged. There has not been a total shift in the view toward cataloging. The changes are seen only in the cataloging codes formulated. I would like to agree with what has been said in Thornton (1941) that the processes in cataloging administration undergo "periodical occultations." They emerge, are forgotten, emerge again in a different setting but much better. One example is the concept of collocation that was

espoused earlier by Panizzi and Cutter, which was no longer taken into account by OPACs but was revived with FRBR and RDA. Another is Wilson's proposal in the late 80s to adopt the second objective of Lubetzky and make it the priority of cataloging. It is now making some sort of re-appearance because this is now the focus of FRBR and RDA.

With the shift to a new cataloging code, librarians and library associations all over the world have busied themselves learning and being familiar with this. The National Library of the Philippines sponsored a salon discussion on the implementation of RDA in the Philippines (San Pedro, 2012). Cataloging experts came together for the planning for its implementation. The discussant was Prof. Rodolfo Y. Tarlit, the University Librarian of the University of the Philippines Main Library (UPML). Hon. Corazon M. Nera of the Board for Librarians (BFL) directed that the RDA be adopted by 2015 as the cataloging standard for the Philippines. She also mentioned that the inclusion of RDA in the Bachelor of Library and Information Science (BLIS) and Master of Library and Information Science (MLIS) curricula is pending on the approval of the Commission on Higher Education (CHED). This salon was concluded with the organization of a National Committee on RDA, tasked with the responsibility of planning and implementing the education and training of Filipino librarians on RDA and other related matters. Mr. Ruben Marasigan is the Chairperson of the said committee with Hon. Nera and Prof. Tarlit as Co-chairpersons. The committee pushed for training on RDA thus the National Training-Workshop on RDA sponsored by Philippine Association of Research Librarians (PAARL) and National Commission on Culture and the Arts-National Committee on Library and Information Science (NCCA-NCLIS). According to Prof. Tarlit, a trainers training on RDA will be conducted by April 2013 in Batangas. Subsequent trainings will also be held in Luzon, Visayas and Mindanao.

Several seminars have been held by the Philippine Association of Academic and Research Librarians (PAARL), Philippine Librarians Association Inc. (PLAI) and schools offering LIS to enable librarians to understand its theories and rules.

What follows is a list of some of the seminars on RDA (PAARL, 2012):

• RDA Issues and Concerns sponsored by PLAI Central Luzon Region Librarians Council held on October 25-26, 2012

• The Future of Library Technical Services sponsored by the PLAI-NCR held on October 16-17, 2012

• National Training-Workshop on Resource Description and Access (RDA) sponsored by PAARL and NCCA-NCLIS held on August 30-31, 2012

• ALAM 2012: Organization of Information Resources and Converging Practices in Libraries, Archives and Museums by the University of the Philippines Library Science Alumni Association (UPLSAA) in partnership with the University of the Philippines School of Library and Information Studies (UPSLIS) held on March 7-9, 2012

• PAARL Forum on RDA: A guide to basics sponsored by PAARL in cooperation with the

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University of Santo Tomas (UST) held on March 2, 2012

• From AACR2 to RDA: A Cataloging Journey by Center for Human Research and Development Foundation (CHRDF) Inc. held on March 9, 2013.

The University of the Philippines Main Library has subscribed to the RDA Toolkit on April 2012. The Staff Training and Development Committee (STDC) of the UP Main library were tasked to study RDA and create modules for the training of the librarians. As of now, there hasn't been any change in the iLib because they are still determining the possibility of incorporating RDA here. The main concern, according to Prof. Tarlit is how to connect the databases for authors etc. to show relationships.

During the Summer term of AY 2011-2012, the UP School of Library and Information Studies (UPSLIS) offered LIS 198 Special Topics: MARC 21, FRBR and RDA: Concepts, Issues and Applications. This course served to determine how RDA will be incorporated in the cataloging courses offered. At the moment, FRBR and RDA are included in the trends in cataloging unit of LIS 61: Cataloging and Classification I. The scope of LIS 61 is Descriptive Cataloging for Monographs and Access Points, Sears List of Subject Headings, Dewey Decimal Classification (DDC) and Trends in Cataloging. LIS 62 on the other hand covers Descriptive Cataloging for non-book materials, Library of Congress Subject Headings and Library of Congress Classification. With the new code, the components of LIS 61 and LIS 62 may have to be re-arranged to address the teaching of RDA. In as much as RDA covers all types of materials, it may be unnecessary to differentiate the descriptive cataloging of materials as currently done. Instead, it may be that the first cataloging course deal only with descriptive cataloging of all types of materials and the second cataloging course deal also with subject headings and classification systems.

In a discussion group of the UP SLIS faculty members held on September 17, 2012, the specific rules of RDA were discussed. The differences and similarities of AACR2, MARC 21 and RDA were presented. The main question raised was on the implementation of the "relationship" aspect. How will the existing OPAC display relationships of works with expressions, manifestations and items? Mr. Dan Dorado and Prof. Johann Frederick Cabbab explained that the principles of FRBR and rules of RDA are easily implemented with a relational database. It would also make cataloging easy in terms of input since the work will be made as the "key". As such, additional relations to the work will really be additional data. Instead of the usual practice of making a new record for every material, data about these will just be added to existing data about the work. Databases for authors and publishers and other entities that need to be "related" will also be easier to implement. Mr. Dorado also informed the group that the Library of Congress already came out with MARCXML which is more compatible with a relational database.

According to Dr. Juan Buenrostro the University Librarian of the Baliuag University,

they are in the process of revising their OPAC with the addition of the MARC elements related to RDA. They have three (3) cataloging courses and the first course is the descriptive cataloging part. As such, there is no need to have a significant revision in their courses.

For the St. Mary's University in Bayombong, Nueva Vizcaya, they already have an RDA compliant system with the Koha Integrated Library System. According to Mr. David Cabonero, their librarians are being sent out for training so that they can implement cataloging with RDA as soon as the librarians are ready. They have not, however, included RDA in their cataloging courses because they feel that they need more training in RDA before they can teach this. Mr. Cabonero also relates that his approach to introducing RDA aims to remove the skepticism among the librarians. His initial explanation is that RDA is an improvement of the AACR and that most of the rules are still based from the AACR.

Conclusion

The process of cataloging is dynamic but the principles and objectives remain essentially the same. However, it is in part dependent on the types of materials that carry information and the technology that deliver information. When in the past, there were only books and printed materials, now there are electronic materials, in the future there may also be something else but the goal of cataloging is still to enable the users to find the material that they need. There is no essential difference in what was done in the past with what is being done now and probably what will be done in the future in reference to cataloging. The only difference is the formulation of the specific codes that serve to guide the implementation of these objectives based on the current materials and technologies available.

There is a need for librarians to shift their attitudes toward the new cataloging code. There may be difficulties in learning and applying this but eventually FRBR and RDA will be properly implemented. The shift therefore lies in the following:

1. from a linear perspective of describing materials to a relational perspective

2. from cataloging that is publication/material specific to cataloging the work itself and the embodiments of the work

3. from a display specific code (AACR) to a non-display specific code (RDA)

There is no paradigm shift in cataloging but there is a need to shift the views and attitudes of librarians so that the new code can be properly implemented. As shown above, the librarians in the schools offering LIS and their respective libraries are in the process of shifting from AACR2 to RDA. They are showing that they have accepted the change and that they are willing to learn the rules and eventually implement this.

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