RDA

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This paper explores Resource Description and Access the new cataloging standard better known as RDA. While RDA has not been officially adopted yet by the Library of Congress, the new standards are available and many libraries have purchased a set of standards either online or in print. Some libraries have even started to implement small changes. The purpose of this paper is to provide basic information about RDA and look at the differences between RDA and AACR2 (Anglo-American Cataloging Rules) which is the current standard. The first section of the paper will explain the background RDA and discuss the foundations and principals behind it. Because RDA is based on the FRBR model, a brief look at the Fundamental Requirements for Bibliographic Records (FRBR) will also be included. The physical layout of RDA in the RDA Toolkit will be provided as well. The next section of the paper will go over the major changes in the cataloging rules brought on by RDA. RDA will be compared to AACR2 and the differences highlighted. The differences and changes in the MARC (Machine Readable Cataloging) format will also be discussed. Then the paper will look at actual cataloging records and discuss the process of creating RDA records for these items. The final section of the paper will look at the how RDA relates to the Semantic Web and the future changes RDA might bring about.

# Part I: RDA

## Background

In 2004 a Joint Steering Committee (JSC) for Revision of the AACR2 cataloging rules was formed. This committee consisted of members from the American Library Association (ALA), the Library of Congress (LC), the British Library (BL) and the Chartered Institution for Library and Information Professionals (CILIP) in the UK; the Canadian Committee on Cataloging and the Canadian Library Association (CLA); and the National Library of Australia along with the Australian Committee on Cataloging. The new work in progress was entitled AACR3. There were five basic reasons the cataloging community felt that a revision of the cataloging rules was necessary. The first reason was to improve user access to all media in an online environment. The goal was to make better rules for all new media formats and to leverage the power of online catalogs and the web. The second reason was to increase compatibility with other standards for resource description and retrieval. This would make bibliographic data discoverable and useable inside the library catalog and outside the catalog on the web. The third reason was to make the cataloging rules more international in scope since according to Gennrav over 45 countries use the AACR2 rules and it has been translated into 25 languages (Hart, 2010b p. 4). The committee also wanted to publish the cataloging rules as a metadata standard to facilitate their use by other organizations like museums, achieves, and publishers. The fourth reason for revising was to make the cataloging rules easier and more efficient for catalogers to use and interpret. The current rules had too many inconsistencies, not enough examples for non-print materials and were mostly based on specific cases instead of general principals. The last reason for revision was to enhance the electronic format of catalogs. Catalogers recognized the power of web based interactive formats for presenting information and wanted to make better use of it (Hart, 2010b; Oliver, 2010).

In April of 2005 the committee adjusted the scope and format of the committee in response to a community review of their first draft. AACR3 was abandoned when it became clear it would be too difficult to accomplish the above goals in the AACR2 format. It was decided to start from scratch and create a whole new set of standards based on a model more compatible with the committee’s goals. The new standards were titled Resource Description and Access and were based on the FRBR model. These standards had a broader focus and a more explicit connection to the metadata community. The committee worked with backward compatibility in mind so that RDA records could coexist with AACR2 records therefore avoiding costly retro-conversions of older records. Because the committee was working to provide cataloging standards that would be international in scope and compatible with other metadata communities, other groups were invited to participate in the RDA writing and review process. IFLA, the International Federation of Library Associations, was the organization who sponsored the development of the FRBR model. From IFLA both the FRBR Review Group and the Working Group on Functional Requirements for Authority Data worked with the JSC to ensure RDA fully embodied the FRBR conceptual models. The Dublin Core Metadata Initiative (DCMI) worked with JSC to define RDA element vocabulary and register the RDA value vocabulary on the web. They also worked to address potential benefits of applying metadata practices to the new rules. The RDA/MARC Working Group was assigned the task of coordinating the changes needed for MARC 21 fields to accommodate RDA. The IFLA Meeting of Experts on International Cataloging Code (IMEC/ICC) was the committee who updated the Paris Principals. They oversaw the coordination of RDA’s scope with the new Paris Principals. Lastly, RDA/ONIX framework committee worked with publishers to ensure the relationship indicators used would be compatible with ONIX the publisher’s metadata scheme. Making RDA records more compatible with publisher’s records helps make RDA more accessible to other communities. All of these committees and participants reflect the large international scope of RDA and their focus on designing a cataloging standard that has compatibility with other metadata schemes (Hart, 2010b; Oliver, 2010; Taylor, 2007).

## Fundamentals of RDA

Basically, what is RDA? RDA is a set of cataloging instructions written for the electronic age. They are designed to be used with electronic resources and on the web. RDA has been written is such as way as to make them adaptable to future situations and new technologies. The founding principles behind RDA are to make cataloging easier by simplifying the process. Most data elements in RDA are transcribed directly from the source with no changes or abbreviations. The standards reflect the FRBR model and stress user tasks and relationships. The goal of RDA is to make the catalog simpler to use and more efficient for the patron. RDA draws heavily on the work of Cutter and the Paris Principles which emphasizes that the library catalog should enable the person to find a book by author, title or subject; show what the library has by a given author or subject; and assist in choosing the best resource (Taylor, 2007). These are also the founding principles of FRBR which RDA uses as a framework. RDA also emphasizes relationships between resources and between resources and persons. These relationships make finding resources more productive for the user. Here are some of the official objectives and principles found in RDA.

RDA is based on a theoretical framework designed for the digital environment. It has a much broader scope than AACR2. The theoretical framework that defines RDA is based on the FRBR and FRAD conceptual model. This framework gives catalogers and users a way of understanding the bibliographic universe. The scope of RDA is to provide a set of guidelines and instructions on formulating data to support resource discovery (RDA, 0.0). This means the focus is on the user and user tasks that are carried out in the process of resource discovery. RDA reinforces the idea that the purpose of recording data is to support these user tasks (Hart, 2010b; Oliver, 2010).

RDA was designed especially to run in the digital environment and to facilitate robust data using current and emerging technology. RDA defines the elements for recording description and access data. Each element is unambiguously defined and contains one particular kind of data. This is an important concept for creating metadata which will be discussed later on in the paper. Well formed data is vital to support good search results and better data displays. RDA is not tied to any single encoding schema Because of this RDA will be compatible with other metadata schemas and can be adopted by other metadata communities like achieves, museums and publishers. By providing this adaptability, RDA has the potential to make user searches in an online environment more productive because the searcher can pull hits from various metadata communities (Hart, 2010b; Oliver, 2010).

RDA has been designed for use in the networked environment on the web and in new database structures as well as in the traditional catalogs. This makes RDA very versatile and expandable. According to the JSC, “RDA was designed to provide a consistent, flexible and extensive framework for both technical and content description of all types of resources and all types of content.” (JSC, 2009). RDA has been designed to catalog electronic resources and electronic content. This was a big stumbling block for AACR2 which has been designed to work with print resources and was originally written for printing physical catalog cards. In today’s electronic environment the data recorded does not have to be confined to space of an index card. This gives the cataloger more freedom to record meaningful data that is useful to the searcher. By positioning the library community to take advantage of the web, RDA is making library data more widely visible, discernable and useable (Hart, 2010b; Oliver, 2010).

RDA is designed to be used in an international context. There are many countries and organizations involved in the development of RDA. The instructions are adjustable for use by other languages, scripts, numbering systems, calendars and measurements. One of the big complaints against AACR2 is its obvious bias towards English speaking countries. The new standards have worked to make the rules as unbiased as possible for worldwide application. RDA builds on the existing cataloging traditions and aligns with the international standards. This gives the standards more credibility and effectiveness in the international community. The concepts, principals and vocabulary used in RDA are recognizable by the international community making RDA more readily adoptable by other countries. When countries use the same standard library records become globally interchangeable. This in turn provides greater access to data by libraries and patrons (Hart, 2010b; Oliver, 2010).

RDA is written to be implemented gradually and be compatible with MARC 21 and AACR2 records. This is done to avoid costly retro-conversion of legacy data. RDA is also expandable and flexible. It has been designed to work with other metadata schemas and in other environments. This makes RDA open to future changes in technology as well as future forms of data content (Hart, 2010b; Oliver, 2010).

## RDA Objective and Principals

RDA has four main objectives which are stated in the introduction to the RDA standards. The first objective is to be responsive to the User’s needs. This is accomplished by RDA’s model based on user tasks. The second objective is to be cost efficient. RDA saves libraries time and money by making more records interchangeable and not requiring retro-conversions. The third objective is flexibility in format, medium and system. RDA is written for a variety of formats and mediums and can be expanded to accept new formats and mediums in the future. It is also not tied to any one system or metadata schema. The last objective is continuity. This is achieved by making RDA compatible with the existing records in the catalogs (RDA 0.4.2).

RDA also defines some basic principles to which the standards adhere. The first principle is differentiation. This means the information in the bibliographic record should uniquely describe that resource. The second principle is sufficiency. A sufficient description of the resource meets the needs of the user. The third principle is relationships. RDA emphasizes relationships and makes sure each record indicates significant relationships of the resource. The fourth principle is representation. Descriptive data should reflect the information found on the resource. The fifth principle is accuracy. It is necessary to provide sufficient information to provide an accurate account of the resource. The sixth principle is attribution. The information provided on the person, family or corporate body should come from the resource or a reference source. The seventh principle is language preference. The preferred names should be given in the original language of the resource or in the language of the cataloging agency. Titles should be in the language of the cataloging agency when alternate titles are available. The eighth principle is common usage or practice. Data that is not transcribed directly from the source should reflect common usage practices of the country. The ninth principle is uniformity. There is uniform data entry for capitalization and abbreviations (Hart, 2010b). These principles give RDA a uniform guideline for developing the cataloging instructions.

## FRBR

Because RDA is based on the FRBR model, to understand the layout of RDA it is important to understand what FRBR is and how the model works. FRBR is a conceptual model developed by an IFLA study group in 1997. The two main objectives of FRBR are to have a clearly defined structural framework for relating data in the bibliographic record to the needs of the user and the recommend the basic level of functionality for records created by national bibliographic agencies (Oliver, 2010 p. 14). The conceptual model, while originally designed to help the study group with their work, actually become better known then the work of study group. RDA shares the framework and the language of the FRBR model. Two other IFLA groups are important to the development of RDA. One is FRAD which works on the functional requirements for authority data. Their work has been included in the RDA model. The other group is FRSAD which is in the process of developing the functional requirements for subject authority data. These chapters in RDA have not yet been completed but they will be added to RDA later (Oliver, 2010).

FRBR is an entity relationship model. It seeks to identify those concepts most important to the user. The user needs are the starting point of the model. The model maps out relationships between the data recorded and the needs of the user. These are the generic tasks that are performed by users when searching the library catalog. FRBR is looking at data in the context of large catalogs and databases and the user tasks needed to navigate through the large amounts of data and find appropriate resources. The four user tasks defined in FRBR are to find, identify, select and obtain a resource.

Find means to find entities that correspond to the users search criteria. The user should also be able to find an entity by searching for its attributes or relationships. The second user task is to identify. This means to confirm that the entity described corresponds to the entity sought by the user. The user should also be able to distinguish between two or more entities with similar characteristics. The third user task is to select the entity appropriate to the user needs. The user should be able to choose the entity that meets their requirements with respect to content, physical format or medium. The last user task is to obtain. A user should be able to acquire or obtain access to the entity through purchase, loan or electronic access. These user tasks are the basis for the entity relationship model (Hart, 2010b; Oliver, 2010).

There are three entity groups in the FRBR model. Each group has a set attributes that define the relationships of that group. Group 1 entities include the products of intellectual or artistic endeavor. These entities are Work, Expression, Manifestation and Item. According to FRBR a Work is a distinct intellectual or artistic creation. An Expression is the intellectual or artistic realization of a work. A Manifestation is the physical embodiment of an expression. The Item is a single exemplar of a manifestation (Oliver, 2010 p. 18). In other words the Work would be Homer’s Iliad. The Expression of this Work might be written text, a translation, or an abridgement. These are all Expressions of the Iliad. A Manifestation of the Expression would be the various print editions of the written text, or the translation printed by different publishers. The Item would be a single copy of one of the Expressions that the library owns. There are many relationships between these group one entities. These relationships play an important role. They carry information about the nature of the links between entities. Works can be related to other Works and to Expressions of the Work these would include sequels, supplements, digests, abstracts, adaptations, translations, parodies, dramatizations and novelizations. Expressions can be related to other Expressions through abridgements, revisions, translations, arrangements of music and all the above types of relationships as well. Manifestations can be related to each other by reproduction, alternate format, simultaneously released editions, volumes of the same set, and the soundtrack of a movie (Taylor, 2007). A Work can have more than one Expression but an Expression only realizes one Work. Likewise an Expression may embody many different Manifestations, while a Manifestation can be the embodiment of one or more Expressions. An example of this would be a collective work with several different Expressions manifested in one volume. A Manifestation can be exemplified by many Items but each item represents only one Manifestation.

Group 2 entities deal with those who are responsible for the content. The entities in this group are Persons, Families and Corporate Bodies. These entities are responsible for the creation of the Work, the realization of an Expression, the production of a Manifestation or the ownership of an Item. The relationships in this group are related to the group one entities. These are also very important relationships because these relationships link the resources to the entity responsible. Group 3 entities deal with subjects. The entities here are Concept Object, Event, and Place as well as all the entities from groups 1 and 2. Any of these entities could be the subject of the Work and should be recorded as a relationship. The relationships between all three groups of entities play a critical role in the FRBR model. These relationships allow for better searching in the catalog. The FRBR model adds a degree of precision to the search which allows users to identify and select the appropriate resources more accurately. The FRBR model also provides better collocation. The relationships in Group 1 help identify content that is the same and content that is the same Work but different Expressions. Relationships that identify content in different Manifestations and show content in different Expressions also help with collocation. Expressions are important entities because they help provide precision by bringing out the similarities and differences between the content of resources. The Work and Expression entities show the degree of relationship that exists between resources that embody the same work. Manifestations of the same Expression embody identical content with different dates or publishers. Manifestations of different Expressions related to the same work embody slightly different content. These are important relationships for users to be able to select the proper resource (Hart, 2010b; Oliver, 2010; Taylor, 2007).

Each entity has a set of characteristics called attributes. These attributes are used by searchers to find, identify, select and obtain a resource. The attributes of a Work include form of work, medium, performance and content. The attributes of an Expression are form of expression, language, type of score, and scale. The Manifestation attributes include publisher, date, form of carrier, extent, and media. Item attributes are item identifiers, marks and inscriptions. Group 2 attributes include name, dates, and titles (Oliver, 2010).

The FRBR model gives catalogers a way to organize and talk about the bibliographic universe in a logical and cohesive way. FRBR identifies the key components of bibliographic data and assess the value of each component in accomplishing user tasks. This model promotes a change in perspective because the data in analyzed in terms of its utility for the user. FRBR has played a significant role in the development process of the new cataloging standards. It acts as a basic road map for RDA. It can also be used as a reference point to measure and test the cataloging instructions to see if they are comprehensive and consistent while producing effective metadata (Oliver, 2010).

## RDA Layout

The physical layout of the RDA cataloging standards is based on the FRBR model. RDA uses the vocabulary of FRBR throughout the standard. The entity attributes are called elements in RDA and these are the basis for the standards. The whole work is organized into sections based on the Group entities of FRBR. The first part of RDA deals with the bibliographic content in sections 1-4. The second part of RDA deals with the relationships in sections 5-10. RDA has a strong emphasis on relationships with over half the sections devoted to the relationship factor. Most of the information needed to catalog a bibliographic record can be found in the first four sections. Many of the later chapters in RDA deal with authority records and are beyond the scope of this paper. A modified table of contents can be found in Appendix C which lists the chapters and what the cataloger can expect to find in each chapter.

A brief overview of the RDA layout follows. The first section of RDA deals with cataloging Manifestations and Items. Chapter 2 is the main chapter which lists most of the elements found in a bibliographic record. The most glaring item absent is content information. Content is considered part of a work not the manifestation so it is contained in Chapter 7 with other attributes of the Work. Chapter 3 is all about Carrier information. This is a new feature for RDA that is not found in AACR2. RDA has done away with the General Materials Designator and created three new elements for Content Type, Carrier Type and Media Type. This is to eliminate the confusion the GMD was causing by mixing media and carrier terms in the same subfield. Chapter 4 deals with restrictions on access and use as well as Terms of Availability. Chapter 6 deals with what used to be title main entry, uniform title and variant titles. These terms are now called Preferred Title and Variant Title. This chapter also covers various forms of the work and content types. Chapter 7 deals specifically with content and covers some of the items that would normally have been together with other elements of the bibliographic record. This chapter covers Illustrations and color content along with the new element for content carrier. Many of the other elements in Chapter 7 deal with sound and video characteristics. Chapter 9 talks about identifying Persons. This chapter deals with what used to be main entry and added entry for Persons. These access points are now called Preferred Name. Many new elements have added to clarify the attributes of Persons and define the relationships between Persons and resources. Chapter 10 covers identifying Families which is mostly a field that special collections, archivist or museums might use. Chapter 11 covers Corporate Bodies which relates to chapter 9. Chapters 13-16 deal with subjects which have not been completely developed yet. Only Chapter 16 on Places is complete. This chapter deals with what used to be geographic location which is now Preferred Place. Chapter 17-22 covers the relationships between the group 1 entities and group 1 to group 2 entities. These topics could be added entries and linking fields in the bibliographic record. Chapter 23 deals with relationships of subjects and is not yet complete. The rest of RDA from Chapter 24-37 deal with relationships found in authority control records. A few elements might overlap like relationship designators and linking fields but for the most part these chapters deal with authority data. RDA also contains several Appendices. The two most helpful are Appendix D with contains mappings from RDA to MARC fields and vice versa. This is extremely useful when cataloging RDA records with MARC. Another set of Appendixes that is helpful is I-L which contains the Relationship Designators (Hart, 2010b; Oliver, 2010).

RDA comes in two formats a paper copy and an electronic version. RDA is designed to be an electronic resource but a paper version has been produced due to requests. The online version is called the RDA Toolkit and there is an annual subscription fee based on the number of users. This means the resource can become quite costly (Hart, 2010a). Because the RDA Toolkit is designed to be online there are many features available with help the cataloger. Difficulties in using the new standard have been anticipated and RDA has build in many useful tools to help streamline the cataloging process. In the RDA Toolkit there is a tab called resources which has these tools together in one place for ease of use. The first tool is the mapping feature which allows the cataloger to look up the RDA standard and see which MARC field relates to that rule. There is also a reverse table which is listed by MARC field and correlates to the RDA instructions. This is an invaluable tool when cataloging in MARC because it allows the cataloger to find just what they need to complete a particular field. The second tool provided in resources is the workflow chart. These charts have been created to simplify the cataloging process. Workflow charts pull the RDA standards needed to complete a specific task like cataloging monographs or cataloging serials. There are several workflow charts already in place that have been created by various users in the testing process. Each institution also has the ability to create their own workflow charts which include local practices and save them to the RDA toolkit for easy access. This is a great feature for catalogers who work with a special format. There is also a link to the Library of Congress Policy Statements which clarifies specific rules in RDA. All of the mappings and workflows are hyperlinked to the RDA elements in the standard which provides access to the instructions. The RDA Toolkit has been well designed with the cataloger in mind (Oliver, 2010; RDA Toolkit, 2010).

# Part 2: Changes

## Differences between RDA and AACR2

As has been stated, RDA concepts and terminology reflect FRBR therefore the physical description is not based on the class of material. In AACR2 the rules are organized in chapters based of carrier type and format. RDA does not use carrier as a basis for their description because it is a stumbling block to flexibility and extensibility. RDA is designed to be expandable and encompass new types of resources as they emerged. A description based on carrier would limit that ability to adapt. RDA uses the attributes from the FRBR model to create data elements. Instructions for recording these data elements are written into each section. The RDA data elements can be used in different combinations to accommodate emerging technologies (Oliver, 2010).

The focus of RDA is based on the user and each section of RDA has objectives and principles that reflect that change. The purpose of the objectives and principles is to help maintain a logical, consistent and coherence throughout the standard. These functional objectives relate the instructions to user tasks. This helps to underline the relationships between the data recorded and the user tasks. Each objective is written specifically to match the content of that section and make catalogers more aware of the user tasks involved for that data (Oliver, 2010).

There have been many vocabulary changes in RDA. Here are some of the major changes. There is no physical description in RDA instead the term description of carrier is used. The ISBD is now known as an Identifier. Any Latin terms have been removed from the RDA vocabulary to make understanding clearer for the user. The term polyglot has also been discontinued instead an access point will be created for each language. All headings are now called access points. There are Preferred Access Points which include Preferred Titles and Preferred Names which replace the authorized headings for main entry, and uniform title. Variant Access Points would replace the variant titles. The chief source of information is now the Preferred Source (Oliver, 2010).

RDA has several other changes that are new. The instructions in RDA are based on representation. This means that most data for the elements is transcribed directly from the source to give the most accurate representation of the resource as possible. This has eliminated most of the abbreviations that are in AACR2. The only abbreviations in RDA are taken directly from the source with a few exceptions. Another change is, while RDA has a preferred source, information can be taken from anywhere on the resource. This is especially true for relationship data. RDA also provides for more flexibility in using cataloger’s judgment. In many places there is the specification for the cataloger to use their best judgment in recording data. RDA does not have levels of cataloging but there are core elements that are required for every record. The standards do encourage catalogers to make as accurate and complete a record as possible (Oliver, 2010).

More major changes are listed below. First of all, inaccuracies or misspelling are recorded as found on the source. Notes are made for corrections if necessary. If the misspelling is in the title a variant title can be made to improve access to the resource. Punctuation is also transcribed as it appears on the source omitting only punctuation that is normally used to separates data elements. Marks of omission are used in serials when a name or date is used that changes from issue to issue. RDA uses marks of omission even at the beginning of a title unlike AACR2. In the leader field under descriptive cataloging form all RDA records are coded with i to represent ISBD punctuation is used in the record (Schiff, 2011).

One of the biggest and most talked about changes in RDA is the elimination of the General Material Designation (GMD). AACR2 has a confusing mix of terms that could be placed in the GMD. Some are carrier descriptions and some are media types. RDA has created specific fields for each type of metadata to help clarify the content. The new data elements for RDA are Content Type, Media Type and Carrier Type. By separating these data elements RDA is able to accommodate more formats of data and is open to future resource types. Each new element has controlled vocabulary and can be combined in a variety of ways to meet the needs of any resource. These elements also allow for more precision in searching because of the controlled vocabulary. The controlled vocabulary terms do not have to be displayed in the library catalog. The OPAC can be programmed to display icons or user friendly terms. The Content Type describes the form of communication in which the content is expressed. This is an attribute of an Expression and is found in Chapter 7 of RDA. The Media Type describes the general type of intermediation device required to view, play, or run content of the resource. The Media Type allows for better data retrieval and searching in the catalog. The Carrier Type describes the format of the storage medium and housing of the carrier in combination with type of intermediation device required to view, play or run the resource. Media Type and Carrier Type are closely tied together and each media type has a range of carriers for selection. Both Media and Carrier type are attributes of the Manifestation and are found in Chapter 2 of RDA. It is important to remember Carrier Type is a separate element from the Extent. It is critical that all three carrier types are recorded otherwise the user searches will not be as effective (Oliver, 2010).

There have also been some changes in how titles are recorded in RDA. Parallel Titles can be found anywhere on the resource not just the chief source and there are no restrictions on how many can be recorded. Other Title Information for serials no longer has restrictions and can be taken from anywhere on the source. However supplied other title information is not part of RDA because it goes against the policy of representation (Schiff, 2011).

The Statement of Responsibility can be taken from any place on the source. It is transcribed exactly as it is found on the resource. LC practice is not to abridge statements of responsibility. The only time a Statement of Responsibility is enclosed in brackets is if it comes from somewhere else besides the source. Nouns or noun phrases are treated as part of the Statement of Responsibility (Schiff, 2011).

The Edition Statement is now a transcribed element with no abbreviations unless they appear on the source. Record numbers as they appear on the source either in numerals or in words. The numbering exception rule does not apply here. (Schiff, 2011).

The Publication Information including place, and name are transcribed as found on the source with no abbreviations unless on the resource. Include both the local name and jurisdiction in the place. The place names are transcribed in the order found on the resource but only the first place name is required. The location that matches the cataloging country is no longer recorded first. If publication information is missing then distribution information is supplied. Copyright date no longer is a substitute for the publication date. A separate date must be recorder for publication date and copyright date preceded by the copyright symbol is recorded separately. LC policy is to supply a probable place or publisher rather than give distribution or manufacture information. If distribution or manufacture information is needed it is best to record the full distribution statement or manufacture rather than just the missing piece for clarity in the record. MARC has separate subfields for all elements except date of distribution. These must be placed in the same subfield. Approximate dates are no longer abbreviated ca. it is spelled out approximate. Question marks in dates are replaced with between and a date range (Schiff, 2011).

The Extent records carrier information with the number of units and an appropriate term for type of carrier. If there is more than one carrier type record each type. Specify the subunits as well. Most carrier types list the resource and place the subunit in parenthesis. For example 1 computer disc (xv pages, 50 maps). The Extent for text lists the subunits only if the carrier type is volumes. For example use 327 pages not 1 volume (327 pages). If the pages are unknown write 1 volume. Dimensions are given in cm unless it is a disc which is still inches. The Illustrative Content is recorded illustrations. LC policy is not to record the type of illustrations (Schiff, 2011).

In series numbering the numbering is taken from the resource and the term that is part of the series in not capitalized. Record numbers in the form preferred by the cataloging agency. Numerals can be substituted for numbers expressed in words. When recording ordinal numbers the cataloger should use the number form instead of the written form. If the series and the subseries both have ISSN numbers record both numbers (Schiff, 2011).

The mode of issuance must be recorded for every resource to help identify the resource. The modes of issuance are single unit, multi part monograph, serial and integrating resource. This is new element with no equivalent in AACR2. The mode of issuance is taken care of in MARC when the format template is chosen. Another new element is the Uniform Resource Locator which will be used to identify the element when it if converted to metadata for the web (Schiff, 2011).

New bibliographic and authority data elements have been created for Persons. Gender, Place of Birth, Place of Death, Country Residence, Address, Language Occupation have all been added to authority records. The rule of 3 no longer applies which means access points can be recorded for all persons involved the creation of the resource. RDA states, to record all significant relationships to enable users to find all the resources associated with a person, family or corporate body. Relationship Designators have also been added to access points. The Relationship Designator defines the nature of the relationships and makes it readily accessible to the user. RDA has also added new elements to describe the characteristics of a work (Oliver, 2010).

## Changes in MARC 21

Because of the many changes in RDA new fields have been added to MARC 21 to accommodate these changes. Some fields have been updated and some have new subfields added to them. While many changes have been made there are still some fields that code to multiple elements in RDA. This means several elements in RDA are sharing a subfield which makes it difficult to uniquely identify each element.

This is a breakdown of the major changes in MARC by field. Appendix D has a list of all new MARC fields and subfields that have been created for RDA. In the 007 fixed field for Physical Description a variety of new codes have been added to represent the new forms now being cataloged. New codes have also been added to the Music Format to accommodate the new elements in music. In the 040 field for Cataloging Source subfield e has been changed to accept the value rda which is now recorded on all RDA records. The fields 336-338 have been created for Content Type, Media Type and Carrier Type. Each field has a controlled vocabulary which can be recorded by term in subfield a or by code in subfield b. These three fields are required in all RDA records.

The 380 and 382 fields have been created to record the Form of Work and Other Characteristics. These fields are important for distinguishing the Work and creating relationships. Fields 382-384 have been created to record the new music elements for Medium of Performance, Numeric Designation of Musical Work, and Key. These fields are important for distinguishing between musical scores with similar titles. The 588 field has been added for serial records to clarify what volume the description is based on, what the source for the title is and what volume is the latest issue consulted. These records have been moved from the 500 field to their own note field. The Added Entry fields all have a new subfield i. This subfield is for recording relationship information between the data in the field and the resource. This field was formerly the Display Text subfield. The data in subfield i may be free text or controlled vocabulary for the relationship lists. Subfield e is used to record the Relater Term from the Relationship Designation lists. The Linking Entry fields also have the newly defined subfield i and subfield e for the relationship designator term. The new subfield 4 has been added to allow catalogers to enter the relationship designator information as code. Many changes have also been made to authority files which are not discussed in this paper.

## ETD Records

The Electronic Thesis Documents (ETD) which can be found in Appendix A have been cataloged using AACR2 and RDA. The original record has been constructed by using a metadata mining program that has been written specifically for Kent State. All Masters Theses and Doctorial Dissertations are submitted electronically and uploaded to OhioLink’s Electronic Thesis and Dissertation Center. This is an online resource which provides electronic access to the ETDs. The students are required to complete a form about their document when it is submitted. This form is used to create the data which populates the bibliographic record. Because this is an automatic machine driven process, a cataloger must go over the bibliographic information and check for errors and corrections. A copy of the actual Thesis is opened for comparison while completing the bibliographic record. Several items must be checked for accuracy. First the title must be checked to see if any proper names need to be capitalized. The program does not always catch this. Secondly, the Statement of Responsibility needs to be added to the 245 field. Because the authors name is put in the 100 field, subfield c is left blank. The authors name is taken directly from the title page of the document. Third, the Extent is updated with page numbers and illustrative material. Fourth, the 504 field is updated with page numbers for the bibliographic references. Fifth, the 520 summary field is checked for errors or symbols that did not transfer. Last, LC Subject Headings are created and an LC classification number is added. Per advice from my advisor the advisor has been added as a 700 field and the keywords have been added as 653 uncontrolled vocabulary field. The 653 field however is not indexed at Kent State which is possibly why local policy places them in a 500 field. At Kent State all records are given an LC number, even electronic resources and journals, to help with searching and collocation in the catalog. Finally the record is updated in OCLC and overlaid into KentLink.

Cataloging in RDA is a new challenge not only because the instructions are new but because it is in a completely different format. Finding the correct RDA instructions for each field of the bibliographic record proved to be difficult even with the mapping feature of RDA. The following process was used to catalog these records into RDA. First a bibliographic record was opened in OCLC for editing. The paper copy and the RDA Toolkit were both used in this endeavor. A template and checklist for cataloging an ETD in RDA was also consulted (Weber, 2011). Because of unfamiliarity with RDA, the RDA paper was used as a starting point. Starting in chapter 2 each instruction was read and compared with the bibliographic record to see if the record contained the element described. The RDA Toolkit was opened to the RDA/MARC mapping resource. As each instruction was read the mapping tool was checked to see which MARC fields were linked to that instruction. Some data element instructions in RDA were obvious and many were not due to changes in vocabulary and wording. This turned out to be a two day process to work through the RDA instructions to Chapter 11. These first 11 chapters covered all the bibliographic record with the exception of a few linking fields and the relationship designators. The rest of the chapters were just skimmed for needed information. This process was actually very helpful because reading through the instructions with a record in hand gave the procedure more meaning. It was also helpful in becoming familiar with the RDA instructions. It will be much easier to find things in RDA now that the instructions have been read through. Once this process was done cataloging the rest of the records was a much simpler process. Several things were discovered about RDA in this cataloging procedure. First some of the instructions in RDA linked to MARC fields that were different than expected. Some of the elements RDA puts in the 300 field for Extent were in other fields in the bib record. This was especially true for electronic resource information. The instructions for illustrations were also unclear in terms of recording color in the Extent or in a Note. Secondly, many of the instructions are vague and leave the cataloger in doubt as to the proper procedure. The new terminologies for Access Points also made it difficult to determine if the instructions were for the bibliographic record or the authority record. It will be interesting to see how the instructions are interpreted if they are officially adopted this summer.

In RDA there are several changes that have to be made to these records. First, the leader description field is changed to i for represent ISBD punctuation and rda is added to the 040 field. Next all the abbreviations in the record are spelled out. Secondly, the three new carrier fields are added and the GMD is removed. Third, the relationship designator is added in subfield e to the author’s name. In most cases this was dissertant from the relationship designator list except is a few cases where another designator fit better. The relationship designator, thesis advisor, is also added to all the 700 fields for the advisor. Fourth, the Extent is updated to reflect electronic resource and PDF. The 518 field is also updated to show the file type text file along with the size of the file. This is local practice to use a separate field instead of the Extent. Fifth, subfields are added to the 502 to clarify the type of degree, granting institution, and the date. These subfields will be important later if the records are ever converted to metadata. Overall, most changes were minor. The most important major changes are the addition of the relationship designators which will be very important for creating linked data and displaying relationships in the catalog. Another important change is the Extent and the three carrier types which better reflects the content and media type of the resource. These are also important fields for improving search results and helping patrons find resources in the desired format. The other major change is the addition of subfields to the 502 field. This creates a unique data field for each element which will again be important for linked data.

## Serial Records

The serial records can be found in Appendix B. These serial records have created by means of original cataloging. Later the records are compared to records found in OCLC if there is a match. The first set of records are cataloged in AACR2 following the CONSER Manual and the local practice table from the Kent State Cataloging Intranet site. The first thing to be noted is that serial records are much shorter than other records. This is due to serial records only recording basic information that is accurate for the whole serial not just one issue. Also many fields in the serial record are incomplete until the serial has finished its run and is complete. The Title of the journal is recorded in the 245 field. Any acronyms are recorded in the 246 fields as Variant Titles. Local practice is record the most prominent title in the 245 field and the other titles in the 246. There is generally no Statement of Responsibility because the corporate body and/or editor sometimes changes frequently with the issues. Usually the title is Main Entry for a journal. The publication information is recorded but the dates are not recorded until the journal is complete. The Extent is also not completed until the journal is complete. The Frequency is recorded in the 310 field and the Date the journal began is recorded in the 362 field. The 500 fields are used to record what source is used for the title and what issue the description is based on. LC Subject Headings are created for the record and an LC Classification number is assigned. Lastly linking fields are created to previous or later titles of the journal along with links to online or other versions of the journal. Creating cataloging records for serials is sometimes very difficult. Many times if the cataloger does not have the first issue of the journal in hand it is difficult to determine a start date for the journal. It is also difficult to link the journal to previous and later title changes. Frequently a new journal record is created and it is not linked to the other records that relate to that journal which makes it difficult to follow the trail of a journal. To create an accurate and properly linked record a great deal of research is involved and good authority records must be kept.

The same process as described above for cataloging ETDs is used for cataloging serials. The resources used are the RDA manual, the RDA Toolkit, The RDA/MARC mapping resource and the Serials flowcharts. The flowcharts are helpful in deciding which instructions to look at for serials. In RDA cataloging serial records is more complicated. In many places the RDA standards are vague in reference to serials. For instance, in RDA a Statement of Responsibility must be recorded. In serials many times there simply isn’t a statement of responsibility. There is the option to record no Statement of Responsibility given but LC policy does not like to use that option. The second big problem is the Extent. In RDA the cataloger fills in the bases of the Extent and waits until the journal is complete to add the volume numbers and dates. This is similar to the old cataloging rules before it changed. The new 588 fields are nice because the cataloger has a separate field to create the description based on and latest issue consulted data. The abbreviations are also a problem for serials. The numbering terms volume and number are only abbreviated if they appear that way on the source. While not a big deal it could be tiresome typing all those words out on an item record which lists all the holdings the library has. The RDA instructions are much clearer and more precise when cataloging ETDs in comparison to Serials.

# Part 3: The Future

## Semantic Web

RDA is designed for the digital environment and one of the future goals for RDA is to place library records on the web as metadata. Right now the libraries current records are in a silo. The data is recorded in records which are kept on library servers. While most library catalogs are online and records are searchable, the data that is in each field of the record is not visible on the web. When metadata is contained in a record it is defined by that record structure. The data is useless outside of that structure because the information is out of context and would not make sense. The data might be for an author’s name but without the library record the searcher does not know the title of the work that belongs to that author. This is what the semantic web does. It provides linked metadata that can be searched and understood on the Internet. RDA is moving away from long strings in fields and is trying to place each element in its own field. RDA has tried to make very clear data elements which are can be converting into metadata for use on the semantic web. This is why it is important that each data element have its own unique field or subfield and that all relationships are clearly defined. Without these two parameters it is not possible to make linked data (Coyle, 2010).

Linked data is used on the Semantic Web to track data elements. Linked data is basically a set of triplets that defines the data independently. Each triplet has a subject—predicate—object format. RDF, the Resource Description Framework, is the basic structure used to create metadata for the semantic web. It is neither a data format nor an application. It is the framework Dublin Core Metadata Initiative (DCMI) builds its model upon and it is the framework RDA is using (Coyle, 2010).

For RDA to be on the Semantic Web it must first define its vocabulary and register it as a metadata schema. This lets others know what the official vocabulary is for the data sets. The Ontology is the vocabulary of a particular domain which has defined data elements on the semantic web. The DCMI and RDA have been working to register the RDA value vocabularies with RDF. The value vocabularies are all the controlled vocabulary lists in RDA. There are more than 70 lists in RDA which have been converted to RDF by using SKOS, Simple Knowledge Organization System. SKOS is an application of RDF which is especially designed for controlled vocabularies. The Library of Congress is also working to create the LC Subject Headings in RDF/XML for use on the Semantic Web. The FRBR entities have been used to define classes in RDF. These classes have particular attributes known in RDF as properties. The classes are Works, Expressions, Manifestations, Items, Persons, Families, Corporate Bodies, Concepts, Objects, Events, and Places. The properties assigned to each class are the data elements from RDA which match each class. There are over 1,300 properties registered in RDF. The Relationship Designators are also codes as properties in RDF (Coyle, 2010).

RDA has already registered the FRBR entity relationship model with RDF and defined all the properties and value vocabularies. To create metadata on the Semantic Web each property is coded with a Uniform Resource Identifier (URI). On the web the URI is usually the web address which identifies the property. Once each property has an identifier it can then be combined into metadata triplets. These triplets help define the metadata. For example the author’s name Vladimir Nabokov is the subject. The predicate is the Relationship Designator for author. The Objective is the title of the book Lolita. The predicate links the two pieces of data together and defines their relationship. Now this triplet of metadata can be used independently by anyone and in any application. This is linked data and the purpose of the Semantic Web (Coyle, 2010).

With library metadata on the Semantic Web, information can be shared not only with other libraries worldwide but with other metadata communities as well. Metadata also provides the opportunity for machine metadata mining programs to read the library metadata and use it for indexing in search engines and other applications. It also opens the library data up to users in new ways because searchers would now be able to find library data more easily on the web (Hart, 2010b).

## Changes

By having the data parsed into independent elements it is possible to use the elements as search terms or to limit searches in the library catalog. These unique data elements can be used to create a search interface with a higher level of precision. It also gives greater flexibility to the display of information. These data elements could be used to sort search displays to organize a more meaningful search display (Oliver, 2010).

Data elements that are independently defined can be used in various ways. Different library applications can be created which use the same data elements. Libraries could share metadata with publishers and other metadata communities. Each community could take the data elements they need and create different elements of specific needs without having to recreate the data that is already available. It is possible in the future libraries will not even use records for cataloging. Metadata will just be recorded as triplets into the computer and library displays can be created on the fly based on the users search parameters. Another possibility is to have one Work level record with all the work level attributes defined. This record could then be shared by all the Expressions of that work thus eliminating much repetition and redundancy in the catalog. Another possible change is to create a database structure based on FRBR instead of bibliographic and authority records. The database would have records for Works, Expressions, Manifestations and Items (Hart, 2010b; Oliver, 2010).

Whatever the future holds RDA is prepared to meet it in the digital age. The JSC stated five reasons for creating new records: to improve access to all forms of media, to be compatible with other metadata standards, to be more international, to make the rules easier and more efficient, and to enhance electronic catalogs. RDA has addressed each of these issues and provided a solution. It will be interesting to see how the future of RDA develops and what changes in cataloging will be brought about by new technologies.

## 

# Appendix A: ETD Records

ETD Record in AACR2

Type a ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Conf 0 Biog MRec Ctry ohu

Cont bm GPub s LitF 0 Indx 0

Desc a Ills ab Fest 0 DtSt s Dates 2010

006 m d s

007 c ǂb r ǂd u ǂe n

040 KSU ǂc KSU

035 (OhCoOLI)kent1290405236

090 TD171.3.O32 ǂb A45 2010

049 KSUU

100 1 Widner, David E.

245 10 Old order Amish beliefs about environmental protection and the use of best management practices in the Sugar Creek Watershed ǂh [electronic resource] / ǂc by David E. Widner.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 ix, 98 p. : ǂb col. ill., col. maps, digital, PDF file.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF t.p. (viewed Apr. 1, 2011).

500 Advisor: Mandy Munro-Stasiuk.

516 2.55 MB.

502 Thesis (M.A.)--Kent State University, 2010.

500 Keywords: "Amish Culture; Environmental Awareness; Watershed; Best Management Practices"

520 3 The Sugar Creek Watershed (SCW) of Holmes, Stark, Tuscarawas, and Wayne counties, Ohio is currently one of the most polluted watersheds in the state. There are several small municipalities that influence the overall condition of the watershed, but the primary problem is non-point source pollution from the many farms in the Sugar Creek region. There are highly mechanized farms that utilize modern technology (machinery, chemicals etc.), and there are farms (Amish) that are of a more primitive nature that rely on animal power and animal waste. Both of these farm types contribute to the non-point source pollution problem in the SCW, but the focus of this particular study are the Old Order Amish farms that are in the SE corner of Wayne County, the SW corner of Stark County and the NE corner of Holmes County Ohio. Complicating the problem has been the removal of riparian buffer zones from a large portion of the SCW, and a historical ignorance of the importance of maintaining a clean water supply. The cultural and religious beliefs of local societies have a big impact on the level of concern about environmental issues. Numerous efforts have been made to educate the local population about the importance of restoring the environmental health of the watershed, but very little has been done to determine the environmental beliefs of the Old Order Amish.

504 Includes bibliographical references (p. 94-98).

650 0 Environmental protection ǂz Ohio ǂz Amish Country.

651 0 Sugar Creek, South Fork, East Branch, Watershed (Ohio) ǂx Environmental conditions.

650 0 Amish ǂz Ohio ǂx Social life and customs.

653 0 Amish culture $a Environmental awareness $a Watershed $a Best management practices.

700 12 Munro-Stasiuk, Mandy.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (Dept. of Geography)

856 4 0 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1290405236 ǂz Connect to resource online

\*PDF file in the 300 field is local practice which was changed to PDF in the RDA records.

\* The 710 field for the Electronic Theses and Dissertations Center is local practice.

\*The 793 field is local practice for a series statement.

\* all journals are given a LC classification number even electronic resources.

ETD Record in RDA

Type a ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Conf 0 Biog MRec Ctry ohu

Cont bm GPub s LitF 0 Indx 0

Desc i Ills ab Fest 0 DtSt s Dates 2010

006 m d s

007 c ǂb r ǂd u ǂe n

040 KSU ǂc KSU ǂe rda

035 (OhCoOLI)kent1290405236

090 TD171.3.O32 ǂb A45 2010

049 KSUU

100 1 Widner, David E. ǂe dissertant.

245 10 Old order Amish beliefs about environmental protection and the use of best management practices in the Sugar Creek Watershed / ǂc by David E. Widner.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 online resource (ix, 98 pages) : ǂb color illustrations, color maps, PDF.

336 Text ǂ2 rdacontent

337 Computer ǂ2 rdamedia

338 Online resource ǂ2 rdacarrier

516 Text file (2.55 MB).

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF title page (viewed April 1, 2011).

500 Advisor: Mandy Munro-Stasiuk.

502 Thesis ǂb M.A. ǂc Kent State University, ǂd 2010.

500 Keywords: "Amish Culture; Environmental Awareness; Watershed; Best Management Practices"

520 3 The Sugar Creek Watershed (SCW) of Holmes, Stark, Tuscarawas, and Wayne counties, Ohio is currently one of the most polluted watersheds in the state. There are several small municipalities that influence the overall condition of the watershed, but the primary problem is non-point source pollution from the many farms in the Sugar Creek region. There are highly mechanized farms that utilize modern technology (machinery, chemicals etc.), and there are farms (Amish) that are of a more primitive nature that rely on animal power and animal waste. Both of these farm types contribute to the non-point source pollution problem in the SCW, but the focus of this particular study are the Old Order Amish farms that are in the SE corner of Wayne County, the SW corner of Stark County and the NE corner of Holmes County Ohio. Complicating the problem has been the removal of riparian buffer zones from a large portion of the SCW, and a historical ignorance of the importance of maintaining a clean water supply. The cultural and religious beliefs of local societies have a big impact on the level of concern about environmental issues. Numerous efforts have been made to educate the local population about the importance of restoring the environmental health of the watershed, but very little has been done to determine the environmental beliefs of the Old Order Amish.

504 Includes bibliographical references (pages 94-98).

650 0 Environmental protection ǂz Ohio ǂz Amish Country.

651 0 Sugar Creek, South Fork, East Branch, Watershed (Ohio) ǂx Environmental conditions.

650 0 Amish ǂz Ohio ǂx Social life and customs.

653 0 Amish culture $a Environmental awareness $a Watershed $a Best management practices.

700 12 Munro-Stasiuk, Mandy $e thesis advisor.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (Dept. of Geography)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1290405236 ǂz Connect to resource online

ETD Art Record in AACR2

Type a ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Conf 0 Biog MRec Ctry ohu

Cont bm GPub s LitF 0 Indx 0

Desc a Ills a Fest 0 DtSt s Dates 2010

006 m d s

007 c $b r $d u $e n

040 KSU $c KSU

035 (OhCoOLI)kent1286447395

090 NK4210.G73 .b A4 2010

049 KSUU

100 1 Gray, Jessica.

245 10 Rhythmic relations $h [electronic resource] / $c by Jessica Gray.

260 [Kent, Ohio] : $b Kent State University, $c 2010.

300 vii, 43 p. : $b ill., digital, PDF file.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF t.p. (viewed Mar. 25, 2011).

500 Advisor: Kirk Mangus.

516 4.46 MB.

502 Thesis (M.F.A.)--Kent State University, 2010.

500 Keywords: ceramics; pottery; rhythmic relations; Jessica Gray; coil building; hand building; dimpling technique; stoneware clay; cone 6 glazes; cone 06 glazes.

520 3 My thesis body of work is the conclusion of a study that began ten years ago. The processes I employed in this show began as an idea that lay dormant in my mind four years. After returning to clay the idea became a study. I named the process I designed the Dimpling Technique. After many explorations and refinements to the origins of the process it has soared. My thesis walks one through the development and exploration of the Dimpling Technique. It is not the end but only the beginning of my work. There are endless avenues yet to explore with the Dimpling Technique – Quote from the author.

504 Includes bibliographical references (p. 43).

600 10 Gray, Jessica $v Exhibitions.

650 0 Pottery $v Exhibitions $y 21st century.

653 0 Ceramics $a Pottery $a Rhythmic relations $a Coil building $a Hand building $a Dimpling technique $a Stoneware clay $a Cone 6 glazes $a Cone 06 glazes.

653 1 Jessica Gray.

700 12 Mangus, Kirk.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (School of Art)

856 40 $u http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1286447395 $z Connect to resource online

ETD Art Record in RDA

Type a ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Conf 0 Biog MRec Ctry ohu

Cont bm GPub s LitF 0 Indx 0

Desc i Ills a Fest 0 DtSt s Dates 2010

006 m d s

007 c ǂb r ǂd u ǂe n

040 KSU ǂc KSU $e rda

035 (OhCoOLI)kent1286447395

090 NK4210.G73 ǂb A4 2010

049 KSUU

100 1 Gray, Jessica ǂe artist.

245 10 Rhythmic relations / ǂc by Jessica Gray.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 online resource (vii, 43 pages) : ǂb color illustrations, PDF.

336 Text ǂ2 rdacontent

336 Still image ǂ2 rdacontent

337 Computer ǂ2 rdamedia

338 Online resource ǂ2 rdacarrier

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF title page (viewed March 25, 2011).

500 Advisor: Kirk Mangus.

516 Text file (4.46 MB).

502 Thesis ǂb M.F.A. ǂc Kent State University, ǂd 2010.

500 Keywords: ceramics; pottery; rhythmic relations; jessica gray; coil building; hand building; dimpling technique; stoneware clay; cone 6 glazes; cone 06 glazes.

520 3 My thesis body of work is the conclusion of a study that began ten years ago. The processes I employed in this show began as an idea that lay dormant in my mind four years. After returning to clay the idea became a study. I named the process I designed the Dimpling Technique. After many explorations and refinements to the origins of the process it has soared. My thesis walks one through the development and exploration of the Dimpling Technique. It is not the end but only the beginning of my work. There are endless avenues yet to explore with the Dimpling Technique—Quote from the author.

504 Includes bibliographical references (page 43).

600 10 Gray, Jessica ǂv Exhibitions.

650 0 Pottery ǂv Exhibitions ǂy 21st century.

653 0 Ceramics $a Pottery $a Rhythmic relations $a Coil building $a Hand building $a Dimpling technique $a Stoneware clay $a Cone 6 glazes $a Cone 06 glazes.

653 1 Jessica Gray.

700 12 Mangus, Kirk $e thesis advisor.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (School of Art)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1286447395 ǂz Connect to resource online

ETD Music Record in AACR2

Type c ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Comp AccM MRec Ctry ohu

Part TrAr

Desc a FMus a LTxt n DtSt s Dates 2010

006 m d s

006 aag bm s000 0

007 c ǂb r ǂd u ǂe n

040 KSU ǂc KSU

035 (OhCoOLI)kent1279403848

090 M269 ǂb H69 2010

049 KSUU

100 1 Howard, Jason Tad.

240 10 Nighttime trilogy

245 12 A nighttime trilogy ǂh [electronic resource] : ǂb for saxophone and piano ; A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach / ǂc by Jason Tad Howard.

246 3 Nighttime trilogy for saxophone and piano. A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 v, 1 score (68 p.), v, 266 p. : ǂb col. ill., music, digital, PDF file.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title apears on item as: Part I : A nighttime trilogy for saxophone and piano ; Part II: A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

505 Part 1: Nighttime trilogy -- ǂt Midnight -- ǂt Nightmares -- ǂt Dreams-- ǂt Part 2: Schenkerian analysis -- ǂt Prelude -- ǂt Allemande -- ǂt Courante -- ǂt Sarabande -- ǂt Minuet No. 1 -- ǂt Minuet No. 2 -- ǂt Gigue -- ǂt Structural similarities and differences.

500 Title from PDF t.p. (viewed Mar. 16, 2011)

500 Advisor: Ralph Lorenz.

516 3.11 MB.

502 Thesis (Ph.D.)--Kent State University, 2010.

500 Keywords: Bach Cello Suites; Schenkerian Analysis; Music for Saxophone and Piano; Saxophone; Bach; Cello; Cello Suites; Schenker; Schenkerian; Bach Analysis; Piano; Bach Suites; Howard; Saxophone and Piano; Saxophone Music; Bach Performance; Performance.

520 3 The composition component of the dissertation will be a three-movement work for saxophone and piano, A Nighttime Trilogy for Saxophone and Piano. The three movements of this piece, "Midnight," "Nightmares," and "Dreams," are unified by both programmatic and musical elements. As the titles indicate, each movement focuses on a different aspect of the nighttime. "Midnight" depicts an individual's struggle to stay awake for prayer and meditation late at night when his body and mind repeatedly drift toward sleep. "Nightmares" depicts three recurring nightmares from the composer's childhood. In "Dreams," three types of dreams, floating dreams, pleasant dreams, and unpleasant dreams, are depicted in the music. The musical language includes triadic harmonies incorporating progressions derived from maximally smooth cycles and hexatonic systems, Messiaen's "effect of a stained glass window," and quartal harmonies. Musical unification of the three movements is achieved through the use of the same material in different ways. Consonant harmonic material from the hexatonic system in the first movement is utilized as dissonant harmonic material and as melodic material in the second movement; melodic material in the second movement is reworked as harmonic material in the third movement. The topic for the theory portion of this dissertation is a Schenkerian analysis of Suite No. 1 for Unaccompanied Cello by J. S. Bach. The purpose of this project is two-fold. First, Schenkerian graphs and verbal explanation reveal the underlining structures of this suite. Second, these graphs are used to suggest performance decisions. Such a project is valuable because, while Bach's Six Suites for Violoncello without Bass Accompaniment hold a prominent role in the repertoire for violists, cellists, bassists, and several other instruments via transposition, very little literature is available that discusses performance decisions. A systematic approach that truly evaluates the musical events within each movement is probably quite rare and is certainly not available in published form for the majority of the movements within the six suites. This dissertation addresses this void by discussing each movement's formal structure and the impact that formal structure will have on performance. This project reveals a three-step fundamental structure as the basic framework of each movement. Since each of these movements is in the same key and written during the same time period, similar structures are also present at deep middleground levels and to a lesser degree in early middleground and foreground levels, where the primary differences occur. Although the intention of this project is not to make performance decisions, it does provide guidance that individuals working with this suite would not otherwise have readily available.

504 Includes bibliographical references (p. [264]-266).

650 0 Saxophone and piano music ǂv Scores.

600 10 Bach, Johann Sebastian, ǂd 1685-1750. ǂt Suites, ǂm violoncello ǂn BWV 1007, ǂr G major.

650 0 Schenkerian analysis.

650 0 Suites (Violoncello) ǂx Analysis, appreciation.

653 0 Bach cello suites $a Schenkerian analysis $a Music for saxophone and piano $a saxophone $a Cello $a Cello suites $a Schenkerian $a Bach analysis $a Piano $a Bach suites $a saxophone and piano $a Saxophone music $a Bach performance $a Performance.

653 1 Bach $a Schenker $a Howard.

700 12 Lorenz, Ralph.

700 12 Howard, Jason Tad. ǂt Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

710 2 OhioLINK Electronic Theses and Dissertations Center.

740 02 Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach.

793 0 KSU dissertations (Hugh A. Glauser School of Music)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1279403848 ǂz Connect to resource online

\* The uniform title was created because the score contained 3 pieces with title and a collective title. This is local policy.

\*The variant title is written with the subtitle included with the main title.

ETD Music Record in RDA

Type c ELvl I Srce d Audn Ctrl Lang eng

BLvl m Form s Comp AccM MRec Ctry ohu

Part TrAr

Desc i FMus a LTxt n DtSt s Dates 2010

006 m d s

006 aag bm s000 0

007 c ǂb r ǂd u ǂe n

040 KSU ǂc KSU ǂe rda

035 (OhCoOLI)kent1279403848

090 M269 ǂb H69 2010

049 KSUU

100 1 Howard, Jason Tad ǂe composer.

240 10 Nighttime trilogy $m saxophone, piano. $f 2010.

245 12 A nighttime trilogy : ǂb for saxophone and piano ; A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach / ǂc by Jason Tad Howard.

246 3 Nighttime trilogy for saxophone and piano. A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 score (68 pages), 1 online resource (266 pages) : ǂb color illustrations, music, PDF.

336 Text $2 rdacontent

336 Notated Music $2 rdacontent

337 Computer $2 rdamedia

338 Online resource $2 rdacarrier

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title appears on item as: Part I : A nighttime trilogy for saxophone and piano ; Part II: A Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

505 Part 1: Nighttime trilogy -- ǂt Midnight -- ǂt Nightmares -- ǂt Dreams-- ǂt Part 2: Schenkerian analysis -- ǂt Prelude -- ǂt Allemande -- ǂt Courante -- ǂt Sarabande -- ǂt Minuet No. 1 -- ǂt Minuet No. 2 -- ǂt Gigue -- ǂt Structural similarities and differences.

500 Title from PDF title page (viewed March 16, 2011)

500 Advisor: Ralph Lorenz.

516 Text file 3.11 MB.

502 Thesis ǂb Ph.D. ǂc Kent State University, ǂd 2010.

500 Keywords: Bach Cello Suites; Schenkerian Analysis; Music for Saxophone and Piano; Saxophone; Bach; Cello; Cello Suites; Schenker; Schenkerian; Bach Analysis; Piano; Bach Suites; Howard; Saxophone and Piano; Saxophone Music; Bach Performance; Performance.

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504 Includes bibliographical references (pages [264]-266).

650 0 Saxophone and piano music ǂv Scores.

600 10 Bach, Johann Sebastian, ǂd 1685-1750. ǂt Suites, ǂm violoncello ǂn BWV 1007, ǂr G major.

650 0 Schenkerian analysis.

650 0 Suites (Violoncello) ǂx Analysis, appreciation.

653 0 Bach cello suites $a Schenkerian analysis $a Music for saxophone and piano $a saxophone $a Cello $a Cello suites $a Schenkerian $a Bach analysis $a Piano $a Bach suites $a saxophone and piano $a Saxophone music $a Bach performance $a Performance.

653 1 Bach $a Schenker $a Howard.

700 12 Lorenz, Ralph $e thesis advisor.

700 12 Howard, Jason Tad. ǂt Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach

700 12 Howard, Jason Tad $e composer. $t Midnight, $m saxophone, piano. $f 2010.

700 12 Howard, Jason Tad $e composer. $t Nightmares. $m saxophone, piano. $f 2010.

700 12 Howard, Jason Tad $e composer. $t Dreams. $m saxophone, piano. $f 2010.

710 2 OhioLINK Electronic Theses and Dissertations Center.

740 02 Schenkerian analysis of Suite no. 1 for unaccompanied cello by J. S. Bach.

793 0 KSU dissertations (Hugh A. Glauser School of Music)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1279403848 ǂz Connect to resource online

ETD Literature Record in AACR2

Type a ELvl I Srce d Audn Ctrl Lang eng

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006 m d s

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040 KSU ǂc KSU

035 (OhCoOLI)kent1278962634

090 PS3618.O374 ǂb F56 2010

049 KSUU

100 1 Rodriguez, Ryan ǂq (Ryan K.)

245 10 Finding Frank $h [electronic resource] : ǂb and other stories / ǂc by Ryan Rodriguez.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 207 p. : ǂb digital, PDF file.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF t.p. (viewed February. 18, 2011).

500 Advisor: Varley O'Connor.

516 0.72 MB.

502 Thesis (M.F.A.)--Kent State University, 2010.

500 Keywords: fiction; genetic manipulation; genre hybrid; linked stories.

520 3 This thesis will contain a series of fictional stories. Best described as a "ring" of stories, each self-contained narrative will help to build upon an overarching, premise-driven structure. This overarching premise assumes that genetic manipulation of human beings has taken place since WWII. The stories all interact within this shared history and revelations of this world are slowly unfolded as the book progresses. The genetic manipulation is utilized to highlight human behavior that is "animal-like" and explores the essence of the human condition while placing characters in situations that highlight searches for identity and community. The works will concentrate on retaining elements of literary realism while introducing "fantastic" elements.

505 00 ǂt Interview with a whale -- ǂt Birthmark -- ǂt The softest pillow in the world -- ǂt Wolf down pizza -- ǂt My Gregory file: a literary summary of the poisoning of my 7th clone -- ǂt Finding Frank.

650 0 Genetic engineering ǂv Fiction.

655 0 Science fiction.

655 0 Short stories.

653 6 Fiction.

653 0 Genetic manipulation $a Genre hybrid $a Linked stories.

700 12 O’Connor, Varley.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (Dept. of English)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1278962634 ǂz Connect to resource online

ETD Literature Record in RDA

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006 m d s

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040 KSU ǂc KSU ǂe rda

035 (OhCoOLI)kent1278962634

090 PS3618.O374 ǂb F56 2010

049 KSUU

100 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author.

245 10 Finding Frank : ǂb and other stories / ǂc by Ryan Rodriguez.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 online resource (207 pages) : ǂb PDF.

336 Text ǂ2 rdacontent

337 Computer ǂ2 rdamedia

338 Online resource ǂ2 rdacarrier

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from PDF title page (viewed February. 18, 2011).

500 Advisor: Varley O'Connor.

516 Text file (0.72 MB).

502 Thesis ǂb M.F.A. ǂc Kent State University, ǂd 2010.

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505 00 ǂt Interview with a whale -- ǂt Birthmark -- ǂt The softest pillow in the world -- ǂt Wolf down pizza -- ǂt My Gregory file: a literary summary of the poisoning of my 7th clone -- ǂt Finding Frank.

650 0 Genetic engineering ǂv Fiction.

655 0 Science fiction.

655 0 Short stories.

653 6 Fiction.

653 0 Genetic manipulation $a Genre hybrid $a Linked stories.

700 12 O’Connor, Varley $e thesis advisor.

700 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author. $t Interview with a whale, $f 2010.

700 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author. $t birthmark, $f 2010.

700 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author. $t The softest pillow in the world, $f 2010.

700 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author. $t Wolf down pizza, $f 2010.

700 1 Rodriguez, Ryan ǂq (Ryan K.) ǂe author. $t My Gregory file: a literary summary of the poisoning of my 7th clone, $f 2010.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU masters theses (Dept. of English)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1278962634 ǂz Connect to resource online

ETD Restricted Access Record in AACR2

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040 KSU ǂc KSU

035 (OhCoOLI)kent1290459085

090 QD305.S54

049 KSUU

100 1 Grabicka, Bogna E.

245 10 Microwave-assisted synthesis of ordered mesoporous organosilicas with surface and bridging groups ǂh [electronic resource] / ǂc Bogna E. Grabicka.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 v. : ǂb digital, PDF file.

506 Restricted; full text unavailable until Nov. 30, 2012.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from OhioLINK ETD abstract webpage (viewed Mar. 30, 2011).

500 Advisor: Mietek Jaroniec.

502 Thesis (Ph.D.)--Kent State University, 2010.

500 Keywords: ordered mesoporous materials; microwave-assisted synthesis; cage-like mesostructures; channel-like mesostructures; organosilica; nitrogen adsorption; organic surface groups; periodic mesoporous organosilica; cocondensation synthesis.

520 3 This dissertation reports the synthesis of ordered mesoporous organosilicas, with surface and bridging groups, obtained under microwave conditions. The study was focused on the usage of microwave irradiation to synthesize high quality organosilica mesostructures, and to monitor their adsorption and surface properties by varying chemical composition as well as time and temperature of hydrothermal synthesis. Specifically, channel-like and cage-like ordered mesoporous organosilicas with various surface and bridging groups were synthesized under microwave conditions. Also, microwave-assisted synthesis of cage-like ordered mesoporous silicas was carried out and improved. For the purpose of comparison, analogous mesostructures were prepared by using conventional heating instead of microwave irradiation. This study shows that the removal of polymeric template from as-synthesized cage-like siliceous mesostructures requires a combination of extraction with acidified ethanol and thermal treatment in flowing nitrogen at about 350 &#186;C. The microwave-assisted synthesis was successfully used to screen a wide range of temperatures and time in order to establish optimal conditions for the preparation of SBA-16. It is noteworthy that this synthesis requires only 8-18 hours instead of the 48 hours normally used. The resulting cagelike materials exhibited high surface area, large pore volume and large pore diameters. The attachment of vinyl, ureidopropyl and mercaptopropyl groups into siliceous pore walls of SBA-15 and SBA-16 mesostructures was successful under microwave conditions. Mono- and bi-functional channel-like and cage-like organosilicas prepared under microwave irradiation showed comparable or improved adsorption properties (for instance, larger pore volume and pore size and higher specific surface area) than those obtained for the corresponding samples synthesized using conventional heating. The microwave-assisted synthesis of periodic mesoporous organosilicas with ethane, isocyanurate and disulfide bridging groups was also explored. Similarly as in the case of organosilicas with pendant groups, the co-condensation synthesis under microwave irradiation afforded ordered mesostructures having organosiliceous framework with high surface area and large pore volume. This work demonstrates the attractiveness of the microwave technique for the synthesis of ordered mesoporous organosilicas.

504 Includes bibliographical references.

650 0 Organosilicon compounds.

650 0 Mesoporous materials.

653 0 Ordered mesoporous materials $a Microwave-assisted synthesis $a Cage-like mesostructures $a Channel-like mesostructures $a Organosilica $a Nitrogen adsorption $a Organic surface groups $a Periodic mesoporous organosilica $a Cocondensation synthesis.

700 12 Jaroniec, Mietek.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU dissertations (Dept. of Chemistry)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1290459085 ǂz Connect to resource online

ETD Restricted Access Record in RDA

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035 (OhCoOLI)kent1290459085

090 QD305.S54 ǂb G73 2010

049 KSUU

100 1 Grabicka, Bogna E. ǂe dissertant..

245 10 Microwave-assisted synthesis of ordered mesoporous organosilicas with surface and bridging groups / ǂc Bogna E. Grabicka.

260 [Kent, Ohio] : ǂb Kent State University, ǂc 2010.

300 1 online resource : ǂb PDF.

336 Text ǂ2 rdacontent

337 Computer ǂ2 rdamedia

338 Online ǂ2 rda carrier

506 1 Restricted; full text unavailable until Nov. 30, 2012.

538 Mode of access: World Wide Web.

538 Available online via OhioLINK's ETD Center.

538 System requirements: Adobe Reader.

500 Title from OhioLINK ETD abstract webpage (viewed March 30, 2011).

500 Advisor: Mietek Jaroniec.

502 Thesis ǂb Ph.D ǂc Kent State University, ǂd 2010.

500 Keywords: ordered mesoporous materials; microwave-assisted synthesis; cage-like mesostructures; channel-like mesostructures; organosilica; nitrogen adsorption; organic surface groups; periodic mesoporous organosilica; cocondensation synthesis.

520 3 This dissertation reports the synthesis of ordered mesoporous organosilicas, with surface and bridging groups, obtained under microwave conditions. The study was focused on the usage of microwave irradiation to synthesize high quality organosilica mesostructures, and to monitor their adsorption and surface properties by varying chemical composition as well as time and temperature of hydrothermal synthesis. Specifically, channel-like and cage-like ordered mesoporous organosilicas with various surface and bridging groups were synthesized under microwave conditions. Also, microwave-assisted synthesis of cage-like ordered mesoporous silicas was carried out and improved. For the purpose of comparison, analogous mesostructures were prepared by using conventional heating instead of microwave irradiation. This study shows that the removal of polymeric template from as-synthesized cage-like siliceous mesostructures requires a combination of extraction with acidified ethanol and thermal treatment in flowing nitrogen at about 350 &#186;C. The microwave-assisted synthesis was successfully used to screen a wide range of temperatures and time in order to establish optimal conditions for the preparation of SBA-16. It is noteworthy that this synthesis requires only 8-18 hours instead of the 48 hours normally used. The resulting cagelike materials exhibited high surface area, large pore volume and large pore diameters. The attachment of vinyl, ureidopropyl and mercaptopropyl groups into siliceous pore walls of SBA-15 and SBA-16 mesostructures was successful under microwave conditions. Mono- and bi-functional channel-like and cage-like organosilicas prepared under microwave irradiation showed comparable or improved adsorption properties (for instance, larger pore volume and pore size and higher specific surface area) than those obtained for the corresponding samples synthesized using conventional heating. The microwave-assisted synthesis of periodic mesoporous organosilicas with ethane, isocyanurate and disulfide bridging groups was also explored. Similarly as in the case of organosilicas with pendant groups, the co-condensation synthesis under microwave irradiation afforded ordered mesostructures having organosiliceous framework with high surface area and large pore volume. This work emonstrates the attractiveness of the microwave technique for the synthesis of ordered mesoporous organosilicas.

504 Includes bibliographical references.

650 0 Organosilicon compounds.

650 0 Mesoporous materials.

653 0 Ordered mesoporous materials $a Microwave-assisted synthesis $a Cage-like mesostructures $a Channel-like mesostructures $a Organosilica $a Nitrogen adsorption $a Organic surface groups $a Periodic mesoporous organosilica $a Cocondensation synthesis.

700 12 Jaroniec, Mietek $e thesis advisor.

710 2 OhioLINK Electronic Theses and Dissertations Center.

793 0 KSU dissertations (Dept. of Chemistry)

856 40 ǂu http://rave.ohiolink.edu/etdc/view?acc%5Fnum=kent1290459085 ǂz Connect to resource online

# Appendix B: Serial Records

Serial Record with Title Change in AACR2

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq m MRec Ctry ohu

S/L 0 Orig EntW Regl r Alph

Desc a SrTp p Cont DtSt c Dates 1959 , 9999

040 KSU ǂc KSU

090 NA54.O4 ǂb G74

049 KSUU

245 00 Great Lakes architecture & engineering.

246 33 Great Lakes architecture and engineering

260 Cleveland, Ohio ǂb Regional Builiding.

310 Monthly

362 1 Began in 1959.

500 Description based on: Vol. 6, no. 8 (Aug. 1959).

500 Title from t.p.

650 0 Architecture ǂz Ohio ǂv Periodicals.

650 0 Architecture ǂz Great Lakes Region (North America) ǂv Periodicals.

780 10 ǂt Architecture and engineering in Ohio ǂw (OCoLC)2505342

\* This item did not have an ISSN number printed on the item.

\* Journal had a previous title.

\* The CONSER Manual update 5/10/2010 states that the 300 field is not required Local practice is to leave the 300 field out.

\* Local practice is not to record a date in the 260 field until the journal is complete.

\* In the 362 field if first issue is not in hand then only the date is recorded—CONSER Manual.

Serial Record with Title Change in RDA

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq m MRec Ctry ohu

S/L 0 Orig EntW Regl r Alph

Desc i SrTp p Cont a DtSt c Dates 1959 , 9999

040 KSU ǂc KSU ǂe rda

090 NA54.O4 ǂb G74

049 KSUU

245 00 Great Lakes architecture & engineering ǂc Ohio Council of American Registered Architects.

246 33 Great Lakes architecture and engineering

260 Cleveland, Ohio ǂb Regional Builiding $c 1959-.

300 Volumes : $b illustrations ; $c 28 cm.

310 Monthly

336 Text ǂ2 rdacontent

337 Unmediated ǂ2 rdamedia

338 Volumes ǂ2 rdacarrier

362 1 Began in 1959.

588 Description based on Vol. 6, no. 8 (Aug. 1959) ; title from title page.

588 Latest issue consulted Vol. 8, no. 3 (April/May 1961).

650 0 Architecture ǂz Ohio ǂv Periodicals.

650 0 Architecture ǂz Great Lakes Region (North America) ǂv Periodicals.

710 2 Ohio Council of American Registered Architects ǂe issuing body.

710 2 Ohio Council of the ARA ǂe issuing body.

780 10 ǂt Architecture and engineering in Ohio ǂw (OCoLC)2505342

Discontinued Serial Record in AACR2

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq m MRec Ctry nyu

S/L 0 Orig EntW Regl r Alph

Desc a SrTp p Cont a DtSt d Dates 1900 , 1950

022 08885-4165 ǂl 0885-4165 ǂ2

040 KSU ǂc KSU

090 QK73.N55 ǂb J68

049 KSUU

245 00 Journal of the New York Botanical Garden.

260 Lancaster, Pa. ǂb New Era Printing ǂc 1900-1950.

300 51 v. : ǂb ill. ; ǂc 23 cm.

310 Monthly

362 0 Vol. 1, no. 1 (Jan. 1900)-v. 51, no. 612 (Dec. 1950).

500 Publisher changed to the Science Press Printing Company from 1928-19?? .

500 Title from cover.

500 Description based on: Vol. 13 no. 145 (1912).

530 Also issued online.

650 0 Botany ǂv Periodicals.

610 20 New York Botanical Garden ǂv Periodicals.

710 2 New York Botanical Garden.

785 00 ǂt Garden journal of the New York Botanical Garden ǂw (DLC)sf 86008000 ǂw (OCoLC)7651953

776 0 8 ǂi Online version: ǂt Journal of the New York Botanical Garden ǂw (OCoLC)557605231

Discontinued Serial Record in RDA

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BLvl s Form Conf 0 Freq m MRec Ctry nyu

S/L 0 Orig EntW Regl r Alph

Desc i SrTp p Cont a DtSt d Dates 1900 , 1950

022 08885-4165 ǂl 0885-4165 ǂ2

040 KSU ǂc KSU ǂe rda

090 QK73.N55 ǂb J68

049 KSUU

245 00 Journal of the New York Botanical Garden / ǂc New York Botanical Garden.

260 Lancaster, Pa. ǂb New Era Printing ǂc 1900-1950.

300 Volumes : ǂb illustrations ; ǂc 23 cm.

310 Monthly

336 Text ǂ2 rdacontent

337 Unmediated ǂ2 rdamedia

338 Volume ǂ2 rdacarrier

362 0 Vol. 1, no. 1 (Jan. 1900)-v. 51, no. 612 (Dec. 1950).

500 Publisher changed to the Science Press Printing Company around 1928 until sometime before 1950.

530 Also issued online.

588 Description based on: Vol. 13 no. 145 (1912) ; Title from cover.

588 Latest issue consulted: Vol. 34 no. 406 (1933).

650 0 Botany ǂv Periodicals.

610 20 New York Botanical Garden ǂv Periodicals.

710 2 New York Botanical Garden ǂe issuing body.

785 00 ǂt Garden journal of the New York Botanical Garden ǂw (DLC)sf 86008000 ǂw (OCoLC)7651953

776 08 ǂi Online version: ǂt Journal of the New York Botanical Garden ǂw (OCoLC)557605231

Serial Record with an Acronym in AACR2

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BLvl s Form Conf 0 Freq a MRec Ctry ohu

S/L 0 Orig EntW Regl r Alph

Desc a SrTp Cont DtSt c Dates 2008 , 9999

022 0 1947-9441 ǂl 1940-5731 ǂy 1940-5732 ǂ2 1

040 KSU ǂb ǂc KSU

090 PN98.I58 ǂb L38

049 KSUU

245 00 LATCH.

246 13 Journal for the study of literary artifacts in theory, culture, or history

246 13 Literary artifacts in theory, culture or history

260 Cuyahoga Falls, OH : ǂb OpenLatch.

310 Annual

362 1 Began with Vol. 1 (2008).

500 Description based on Vol. 1 (2008).

500 Title from cover.

650 0 Intertextuality ǂv Periodicals.

650 0 Literature ǂx History and criticism ǂv Periodicals.

650 0 History ǂv Periodicals.

650 0 Culture ǂv Periodicals.

776 08 ǂi Also issued online: ǂt LATCH ǂx 1940-5731 ǂw (DCL) 2007215718 ǂw (OCoLC)180866507.

856 41 ǂu <http://www.openlatch.com>

\* The CONSER manual and RDA states the Acronym is always a variant title and the full name of the journal goes in the 245 field. However, local practice is to record the most prominent title in the 245 field even though it’s not in the rules that way (AACR2 12.1B2)

Serial Record with an Acronym in RDA

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq a MRec Ctry ohu

S/L 0 Orig EntW Regl r Alph

Desc i SrTp Cont DtSt c Dates 2008 , 9999

022 0 1947-9441 ǂl 1940-5731 ǂy 1940-5732 ǂ2 1

040 KSU ǂb ǂc KSU ǂe rda

090 PN98.I58 ǂb L38

049 KSUU

245 00 Journal for the study of literary artifacts in theory, culture, or history / $c Paul Neel editor.

246 13 LATCH

246 13 Literary artifacts in theory, culture or history

260 Cuyahoga Falls, OH : ǂb OpenLatch $c 2008-.

300 Volumes ; $c 18 cm.

310 Annual

336 Text ǂ2 rdacontent

337 Unmediated ǂ2 rdamedia

338 Volume ǂ2 rdacarrier

362 1 Began with Vol. 1 (2008).

588 Description based on: Vol. 1 (2008) ; title from cover.

588 Latest issue consulted: Vol. 1 (2008).

650 0 Intertextuality ǂv Periodicals.

650 0 Literature ǂx History and criticism ǂv Periodicals.

650 0 History ǂv Periodicals.

650 0 Culture ǂv Periodicals.

700 12 Neel, Paul $e editor.

710 2 OpenLatch.

776 08 ǂi Also issued online: ǂt LATCH ǂx 1940-5731 ǂw (DCL) 2007215718 ǂw (OCoLC)180866507.

856 41 ǂu <http://www.openlatch.com>

Serial Record for an Annual in AACR2

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq a MRec Ctry nyu

S/L 0 Orig EntW Regl r Alph

Desc a SrTp Cont a DtSt c Dates 1975 , 9999

040 KSU ǂc KSU

090 R11 ǂb C55

049 KSUU

245 00 Clinical symposia ... annual.

260 Summit, N. J. : ǂb CIBA Pharmaceutical.

310 Annual

362 1 Began in 1975?

500 Description based on 1980.

500 Title from t.p.

580 An annual cumulation of the bimonthly publication: Clinical symposia.

650 0 Medicine ǂv Periodicals.

775 1 ǂt Clinical symposia (Summit, N.J. : 1957) ǂx 0009-9295 ǂw (DLC) 88640821 ǂw (OCoLC)1642384

\*This serial did not have an ISSN number printed on the item.

\* The earliest serial catalog records created used 050 field and later they were corrected and switched to the 090 field.

Serial Record for an Annual in RDA

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq a MRec Ctry nyu

S/L 0 Orig EntW Regl r Alph

Desc I SrTp Cont a DtSt c Dates 1975 , 9999

040 KSU ǂc KSU ǂe rda

090 R11 ǂb .C55

049 KSUU

245 00 Clinical symposia ... annual / ǂc CIBA Pharmaceutical Company.

260 Summit, N. J. : ǂb CIBA Pharmaceutica $c 1975-l.

300 Volumes : ǂb illustrations ; ǂc 25 cm.

310 Annual

336 Text ǂ2 rdacontent

337 Unmediated ǂ2 rdamedia

338 Volumes ǂ2 rdacarrier

362 1 Began in 1975?

580 An annual cumulation of the bimonthly publication: Clinical symposia.

588 Description based on: 1980 ; title from title page.

588 Latest issue consulted: 1985.

650 0 Medicine ǂv Periodicals.

710 2 CIBA Pharmaceutical Company ǂe issuing body.

775 1 ǂt Clinical symposia (Summit, N.J. : 1957) ǂx 0009-9295 ǂw (DLC) 88640821 ǂw (OCoLC)1642384

Serial Monograph Record in AACR2

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq b MRec Ctry mau

S/L 0 Orig EntW Regl r Alph

Desc a SrTp p Cont a DtSt c Dates 1993 , 9999

022 1066-2235

040 KSU ǂc KSU

090 ND212. ǂb .N465

049 KSUU

245 00 New American paintings.

260 Boston, Mass. : ǂb Open Studios.

310 Bimonthly

362 1 Began in 1993.

500 " Each competition is cataloged in a regional volume of New American paintings: Northeastern, Mid-Atlantic, Southern, Midwestern, Western, and Pacific Coast."--t. p.

500 Description based on: No. 47, title from t.p.

650 0 Painting, American ǂy 20th century ǂv Catalogs ǂv Periodicals.

776 08 ǂi Online version: ǂt New American paintings ǂw (OCoLC)605519289

776 08 ǂi Online version: ǂt New American paintings ǂw (OCoLC)605519302

Serial Monograph Record in RDA

Type a ELvl I Srce d GPub Ctrl Lang eng

BLvl s Form Conf 0 Freq b MRec Ctry mau

S/L 0 Orig EntW Regl r Alph

Desc i SrTp p Cont a DtSt c Dates 1993 , 9999

022 1066-2235

040 KSU ǂc KSU ǂe rda

090 ND212. ǂb .N465

049 KSUU

245 00 New American paintings / ǂc Open Studios .

246 34 Juried exhibition - in - print.

260 Boston, Mass. : ǂb Open Studios $c 1993-.

300 Volumes : $b illustrations ; $c 25 cm.

310 Bimonthly

336 Text ǂ2 rdacontent

336 Still image ǂ2 rdacontent

337 Unmediated ǂ2 rdamedia

338 Volume ǂ2 rda carrier

362 1 Began in 1993.

500 "The ... Open Studios ... Competition: a catalog of the winner's work" - from title page.

500 " Each competition is cataloged in a regional volume of New American paintings: Northeastern, Mid-Atlantic, Southern, Midwestern, Western, and Pacific Coast."-- from title page.

530 Also issued online.

588 Description based on: Number 47 ; title from title page.

588 Latest issue consulted: Number 47.

650 0 Painting, American ǂy 20th century ǂv Catalogs ǂv Periodicals.

710 2 Open Studios Competitions ǂe sponsering body.

770 0 New American paintings. M.F.A. annual ǂw (DLC)2004238269 ǂw (OCoLC)48205587

776 08 ǂi Online version: ǂt New American paintings ǂw (OCoLC)605519289

776 08 ǂi Online version: ǂt New American paintings ǂw (OCoLC)605519302

# Appendix C: RDA

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L – Relationship Designators: Concepts, Objects, Events and Places

(RDA Toolkit, 2010)

# Appendix D: MARC

**New MARC Fields**

Leader/18—coded i to represent ISBD punctuation in all RDA records

007 – Physical Description – new codes added for electronic resources, globes, maps, microform, motion picture, and graphics

Comp—Form of Composition – new codes

FMus – Format of Music – new codes

Form – Form of Item – new codes for electronic and online resources

Orig – Form of Original Item – new codes

Proj – Projection – new codes

033 Date/Time/Place of an Event – new subfield p – place of event

040 – Cataloging Source – subfield 3 record value rda for all RDA records

046 – Special Coded Dates – to record date of work for differentiation

257 – Country of Producing Entry – field name changed

336 – Content Type – new field

337 – Media Type – new field

338 – Carrier Type – new field

380 – Form of Work – new field

381 – Other Distinguishing Characteristics of Work or Expression – new field.

382 – Medium of Performance – new field

383 – Numeric Designation of Musical Work—new field

384 – Key – new field

490 – Series Statement – subfield x for ISSN in now repeatable

510 – Citation/Reference Note – new subfield u –Uniform Resource Identifier

518 – Date/Time/Place of an Event Note – new field

534 – Original Version Note – new subfield 3 – materials specified

542 – Information Relating to Copyright Status – new subfield p – country of publication

588 – Source of Description – new field

7xx – Added Entries and Linking Fields—new subfield i—relationship information

76x-78x – Linking Entry Fields – new subfield 4 – relationship codes

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