An Analysis of the use of MODS in Digital Repositories

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INTRODUCTION

One of the greatest challenges faced when developing digital collections is how to accurately and comprehensively describe those objects for information retrieval and sharing purposes. In response to this challenge, myriad metadata schemes have been developed. Descriptive metadata schemes attempt to allow for the description of bibliographic and other relevant information about an item. These schemes vary in their quality, interoperability, and target usage. One such scheme is the Metadata Object Description Schema (MODS). The purpose of this analysis is to examine the Metadata Object Description Schema metadata scheme to determine its utility based on structure, interoperability and metadata quality.

METADATA OBJECT DESCRPTION SCHEMA (MODS)

HISTORY

The MODS scheme was developed by the Library of Congress' Network Development and MARC Standards Office. The main reason for the development of MODS was the desire to create an XML version of a MARC21 record (Guenther, 2003). MARC21 is a format for encoding bibliographic data that was first developed in the 1960s as a way for libraries to share bibliographic data. This standard is used by thousands of libraries throughout the world, and is considered to be an extremely precise standard for encoding bibliographic information. MARC was developed at a time when computers lacked the power and speed to handle free-text information, and this results in the MARC21 format being complicated and difficult to express and apply to objects (Library of Congress, 2011). The first version of MODS was released in 2001, and the current version 3.3 was released in June 2010 (McCallum, 2004; Library of Congress, 2010).

The MODS website provides a list of 18 goals that are guiding principles for the development and continued usage of MODS (http://www.loc.gov/standards/mods/design-principles-mods-mads.html). These goals include customization for localization purposes, interoperability with other standards and metadata schemes, a manageable element set that is easy to learn but that allows for full description of an item, and the ability to be extensible for richer descriptions. These guiding principles make it clear that although the original impetus for the development of MODS was a way to express MARC21 records in XML format, the MODS scheme can be used in any repository for the description of collection items.

COMMUNITY

MODS is a flexible scheme that can be used for a variety of material types. The MODS website maintains an Implementation Registry that lists projects using MODS that are in planning, in progress, and completed. This registry currently contains 34 projects. The MODS scheme is currently being used by academic libraries, national libraries, medical libraries and technical libraries. These institutions are using MODS to describe physical and digital documents, artifacts, images, audio files, websites and other materials. The MODS website also maintains a list of tools developed by other institutions that are based on the MODS scheme. The MODS community is still small, but it is robust. The many ways in which MODS is currently being used speaks to the power and flexibility of the MODS scheme.

STRUCTURE

The MODS scheme is a set of highly customizable elements that are recorded in eXtensible Mark-up Language (XML) format. McCallum (2004) states "XML accommodates variable length data, explicit data tagging to multiple levels, hierarchical structure (even better than MARC), and 'all possible'

characters (through Unicode)" (83). This means that XML documents are easy to manipulate and share. The decision to use XML format to express MODS helps to achieve the goals of interoperability, customization and extensibility.

The MODS scheme is made up of 20 top level elements and 56 sub-elements. A list of these elements can be found in Appendix D. Each of these elements can be combined with attributes such as "authority" and "type" to create detailed, specific, and precise records. Some elements also allow for the use of linking attributes such as "xlink" that can link elements to URLs. For example, the <name> element could be linked to a URL for the name authority file or website of the item's creator. This is another advantage of using the XML format, and can ultimately be used to create a more precise record. According to the MODS website, "No element is mandatory in a MODS record, however, every MODS record requires at least one element." Elements can be presented in any order within the XML record, and every element except <recordInfo> can be repeated as many times as needed to capture information about an item.

MODS is designed to be used to create bibliographic records of items, and can be used with any set of cataloging rules. MODS can also be used with any controlled vocabulary or thesaurus. MODS also includes an element called <extension> which "may be used for elements that are local to the creator of the data. In addition, it may be used to extend MODS for various purposes when another XML schema may handle the type of information" (Library Of Congress, 2011). This combination of structure and rules means that MODS is highly adaptable and can meet the needs of a wide variety of institutions. Any repository using MODS correctly in XML format does well to ensure interoperability due to the ease of manipulating data in XML format, and the ability to create precise and unambiguous records.

GUIDELINES

The MODS website contains a lengthy guidelines section detailing the usage for each top level element (http://www.loc.gov/standards/mods/userguide/generalapp.html). Each top level element has its own page listing its definition, attributes, and sub elements and how these can be applied. The page also provides guidelines, a description, examples, and mappings for each top level element. The availability of extensive guidelines enhances metadata creators' ability to create complete, accurate, and consistent records. In addition to the element usage guidelines, the MODS website contains links to note types, MARC codes, source codes, and value lists that can be applied to the elements. This is extremely useful because it helps metadata creators to accurately apply attributes to records, and because these lists are collocated with the other guidelines. The main guidelines page also contains sample MODS records for several item types in XML and HTML format. This allows novice users to better understand how MODS is used for record creation purposes.

CONVERSIONS

As previously stated, a main goal of MODS is interoperability with different schemes and standards. This goal is achieved through the provision of mappings, stylesheets, and conversion tools. These tools help users convert MODS to and from MARC21, MARCXML, RDA, and Dublin Core. The availability of these documents helps to ensure quality metadata for institutions converting to MODS that already use MARC or Dublin Core for their records. Also, because MODS is expressed in XML format, it can be nested within records from other schemes/standards that allow for extensibility or addition of

descriptive metadata schemes. One such standard is the Metadata Encoding &Transmission Standard (METS).

METS was also developed by the Library of Congress as "a standard for encoding descriptive, administrative, and structural metadata regarding objects within a digital library" (Library of Congress). METS was designed to facilitate the management and exchange of digital objects across repositories. METS records contain seven sections, and three of these sections include metadata. MODS is frequently used within the Descriptive Metadata section of a METS recordMETS records are also expressed in XML format, and can combine the descriptive information from a MODS record with links to the actual digital object and other metadata about the objects creation and development. . The nesting of MODS information within a METS record serves to enhance the interoperability of MODS records across repositories.

CONTROLLED VOCABULARIES

There are many controlled vocabularies in existence. These vocabularies vary in terms of coverage, format, application, and creator. The MODS scheme allows for the use of any controlled vocabulary. The "authority" attribute can be used with six of the top level elements to designate which controlled vocabulary is being used for that particular element. MODS allows for multiple usages of elements, and therefore multiple controlled vocabularies can be used for the same element.

The three digital repositories that are the focus of this project use either uncontrolled vocabularies or the controlled vocabularies from the Library of Congress (LOC). The LOC Authorities includes many vocabulary schemes that jointly contain "265,000 subject authority records; 5.3 million name authority records (ca. 3.8 million personal, 900,000 corporate, 120,000 meeting, and 90,000 geographic names); 350,000 series and uniform title authority records; 340,000 name/title authority records" (LOC). The specific LOC vocabularies used within the three repositories in this report are the Library of Congress Subject Headings (LCSH), the Thesaurus of Graphic Materials (TGM), and the MARC Genre Term list (marcgt).

The LCSH is a controlled vocabulary scheme that is updated weekly, and attempts to provide a comprehensive list of terms that covers the entire scope of the materials held at the Library of Congress. Its coverage is vast and it is highly structured. The TGM was developed specifically to cover the subject indexing of pictorial materials, with a focus on historical images. Thus, for metadata records of pictorial items both LOC vocabularies can be used in subject related fields. The marcgt is a special set of terms to describe genres of information. The MODS metadata scheme was designed to be compatible with MARC records; and this relationship between MODS and MARC is definitely a factor in controlled vocabulary usage.

METADATA QUALITY

Metadata quality is an essential part of building digital collections. Quality metadata enhances a user's ability to navigate a collection and increases interoperability among collections and software systems. The main components of quality metadata are completeness, accuracy, and consistency. Completeness refers to the usage of a metadata scheme in terms of how many elements, sub-elements, and attributes are used within a record or set of records. Metadata schemes should allow for completeness

by providing comprehensive element sets and flexibility for different types of items. For example, an image may not have a language associated and a written work may not provide an abstract or table of contents. Thus, the record for a digital image would not be incomplete if it lacked a <language> element.

Accuracy is determined by how well the elements are applied throughout a set of records. Metadata schemes can enhance accuracy by providing good definitions of elements that decrease any semantic overlaps between them. The provision of guidelines is key to accuracy, especially in a scheme that is designed to be used by a mixed community of professionals and amateurs. Consistency is a measure of how the metadata scheme is applied to records across a collection. Consistency is a complement to accuracy because schemes that allow for accuracy should also enhance consistency by ensuring that elements are used for the same purpose in each record.

The MODS element set is designed to enhance quality while allowing for flexibility. The MODS guidelines are thorough, and the amount of elements, sub elements and attributes works to limit any semantic challenges in application of elements. The provision of conversions to popular schemes and formats also enhances the quality of MODS records because these conversions decrease ambiguity in element selection and application. MODS includes elements, sub-elements and attributes that can apply to all resources (such as <recordInfo> and <typeOfResource>) while also including elements, sub-elements and attributes that can apply to specific types of items (such as the sub-element <digitalOrigin> within <physicalDescription>). These design features mean that MODS can be used to create high quality, interoperable records.

REPOSITORY ANALYSIS

To test the effectiveness of MODS in a real world setting, three repositories were chosen from the MODS Implementation Registry. The MODS Implementation Registry lists 34 projects identified as using the MODS metadata scheme. Three digital repositories were selected from this Registry. Repositories were chosen based on the availability of MODS records for public view. Three repositories were examined for this project: Copac (http://copac.ac.uk/), the University of Florida Digital Collections (http://ufdc.ufl.edu/), and the Library of Congress Web Archives (http://lcweb2.loc.gov/diglib/lcwa/html/lcwa-home.html). Twenty-five records from each repository were analyzed for controlled vocabulary usage, completeness, accuracy, and consistency.

COPAC

Copac (http://copac.ac.uk/) is a repository containing the full catalogs of 71 libraries throughout the United Kingdom and Ireland. The entire contents of the Copac catalog is available to the public, however, this catalog is not a true digital repository because users cannot access digital copies of some collection materials. Copac was chosen as an alternative to the highly specialized collections found within the other two repositories examined because it represents a collection of records derived from multiple institutions. To collect the twenty-five sample records, the material type "Visual materials (eg. Video, Pictures, Physical objects)" was selected from the Main Search page. The first twenty-five records listed in the results were used for this analysis. Records were viewed in MODS XML format.

Controlled Vocabulary Usage

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The Copac website does not provide information about controlled vocabulary usage. Three of the twenty-five records (records 4, 5, and 25) sampled included the MODS <subject> element. These records can be viewed in Appendix A. Twenty of the twenty-five records sampled used marcgt to specify a genre. Record 4 is the record for a set of transparencies titled "Recent advances in nucleosides". This record uses both uncontrolled vocabulary terms and LCSH terms in the subject fields. The LCSH terms were pairs of terms collected within the same <subject></subject> bracketing, and it seems this convention was used to capture the structured format of LCSH terms (ex. Nucleosides – Analysis). The record includes "Fox" as an uncontrolled term, which is one of the author's surnames. This is a confusing choice as it may cause the record to be retrieved by users searching for the animal fox. Record 5 is for a CD-ROM titled "ECMSA 2002 strategy and marketing conference.", and uses only uncontrolled vocabulary terms that seem to accurately reflect the content of the item. Record 25 is for a collection of informational materials about the Catalonia region of Spain, and uses only one LCSH subject tag <subject authority="lcsh"> <geographic>Catalonia (Spain)</geographic></subject>. The use of this tag is appropriate as the title of the item is "Catalunya" which is a less common spelling of the Catalonia region. The inclusion of this tag will likely facilitate better retrieval of this item in searches for Catalonia.

Metadata Quality

Copac does not provide any guidelines on its website for how metadata was created. This may be due to the fact that Copac is a massive collection with items from multiple institutions. Combining content from multiple institutions makes it much more difficult to ensure the quality of metadata. The main components of quality metadata are completeness, accuracy, and consistency. As stated previously, MODS does not require the use of any elements as long as at least one element is present. That being said, using more elements will likely result in more complete records. All 25 Copac records were examined for usage of MODS top level and sub level elements. Appendix B shows a table with the MODS elements and their frequency of usage within the 25 sample records of each repository examined.

Of the 20 top level elements, the 25 sample Copac records used five (extension, originInfo, physicalDescription, recordInfo, and titleInfo) in each record. Many of the top level elements that were not used frequently may not apply to all records in a collection (abstract, accessCondition, classification, language, part, relatedItem, tableOfContents, and targetAudience). For example, an image may not have a language associated and a written work may not provide an abstract or table of contents. Only 3 of the 25 records contain a <subject> element, and this may be the most troubling omission in terms of completeness for these records. Subjects can be assigned to virtually any item within a collection, and subject/keyword searching is often the main access point for users when searching a collection. Also troubling is the lack of use in any records of the <typeOfResource> element as this information can be easily derived from any item, and can be very helpful in narrowing searches.

A sample of four of the twenty-five records is provided in Appendix C. These records were analyzed for both accuracy and consistency. The elements used amongst the four sample records were applied accurately according to MODS guidelines. The elements were also highly consistent amongst the four records. It was clear from the punctuation used, particularly in the <originInfo> element set, that these records were developed from MARC records. Using MARC as a basis greatly increases consistency due to the rigorous standards set for MARC records. There were only a few areas where elements could

have been used differently. Records 6 and 18 were for items with <name type="personal"> elements that also had <note type="statement of responsibility"> elements. The notes contained roles for each of the names, but the <name> elements did not make use of the <role> sub element. This is minor but could affect interoperability with other systems.

Each of the Copac records contains a lengthy <extension> section. MODS guidelines state that this element "may be used for elements that are local to the creator of the data." It appears that Copac chose to use this section for designating information about the physical location of the item within its host institution. This usage enhances the quality of Copac records, as Copac is a more traditional OPAC pointing to physical items rather than a true digital repository containing digital representations of the items. Overall, the quality of the Copac records is good. The most glaring problem with the quality of Copac's metadata is the lack of consistent usage of the <subject> and <typeOfResource> elements as discussed above.

UNIVERSITY OF FLORIDA DIGITAL COLLECTIONS

The University of Florida Digital Collections (UFDC) is a repository containing over 300 distinct digital collections held by the University of Florida. All of the collections contain digital representations of the items. The UFDC displays MODS metadata within a larger METS record, and this accounts for the variation in appearance found in these records as compared to the other repositories. The sample records from this collection were all gathered from the Radical Women Collection from the University of Florida Digital Collections (http://ufdc.ufl.edu/rw), with the exception of one final record retrieved from the Women in Development Collection. The originally selected Radical Women Collection only contained 24 items, and each of these items was used in the sample set. Several items linked to multiple volumes, and for these records the first item was selected.

Controlled Vocabulary Usage

The main UFDC website and the website for the Radical Women Collection do not specify controlled vocabulary usage. Eighteen of twenty-five records examined used the MODS <subject> element, and each of the records used LCSH terms exclusively. Seventeen records also use the sub-element <topic>, and sixteen use the sub-element <geographic>. Three records were chosen at random to examine, and can be found in Appendix A. Each of the three records used the same exact subject terms. The records examined were for a newspaper article about a Gainesville, FL abortion clinic and its advocacy work, a letter to the editor about incest, and is a pregnancy information pamphlet. The structure of the <subject> field grouped one or two topic terms with the same two geographic terms, again to create a structure similar to catalog headings like Feminism – Florida – Gainesville. The narrow scope of the collection means is reflected in the shared subjects, however, each record could have benefitted from the inclusion of additional subject terms specific to the content of the item. A searcher looking for articles about abortion could very likely miss the first record as there is nothing in the subject fields to indicate that the article is about abortion. It seems as though the subject terms may have been created for the collection as a whole, rather than item by item. This decision will likely result in frustrating searches, as users will miss items on specific topics and retrieve too many for general terms like "Feminism".

Metadata Quality

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The UFDC uses a software program called SobekCM to develop, maintain, and provide access to their collections. Their website (http://ufdc.ufl.edu/sobekcm/metadata) has an extensive guideline of the METS and MODS elements used, what they mean, how they are applied, and how they are mapped from MARC. The PDF document titled "MODS Elements – as utilized by SobekCM" outlines each top level element and provides a definition, an attribute list, a sub element list, a MARC → MODS mapping, and examples for each top level element. This guideline is consistent with the information provided by MODS, but the mapping section is not as complete as the map provided by MODS and there is no extra information that may be useful in applying each element.

An examination of the frequency of usage of the 20 top level elements within the 25 sample records (see Appendix B) shows that 3 (recordInfo, titleInfo, and typeOfResource) were used in each record. As mentioned in the Copac section, many of the elements available for use do not apply to all items. The records examined in UFDC all came from the same collection, however, and therefore one would expect elements like <subject> and <genre> to be applied more consistently throughout the collection. Many of the items in this collection were newspaper articles, pamphlets, and personal letters and this does account for variation in use of elements like <originInfo> and <name>. A sample of four records from the original twenty-five was examined more closely, and these records can be found in Appendix C.

This examination revealed that each element was used correctly amongst the four records, although there were variations in the application of attributes and sub elements. A majority of the elements in the sample records used a combination of attributes and sub elements to refine the scope and meaning of the information contained in the element. The authority attribute was used frequently to designate a controlled vocabulary or term list, and the most commonly used authorities were lcsh, iso-639-2b, and ufdc. The use of the authority attribute makes the records more complete, accurate, and interoperable because the authority files for these elements can be consulted to determine a more precise meaning. The variety in top level element use and the use of sub elements and attributes is likely a product of the varying types of resources being described in the collection. It is clear that the catalogers of this collection were concerned with accuracy based on the extensive use of element modifiers, although some elements could have been applied to more records to enhance search and retrieval. Specifically, each record should contain some type of <subject> information and the <note> element could have been used to add any additional pieces of information to the record that did not fit into a rigid interpretation of MODS elements.

LIBRARY OF CONGRESS WEB ARCHIVES

The Library of Congress Web Archives (http://lcweb2.loc.gov/diglib/lcwa/html/lcwa-home.html) contains 15 collections of archived websites. The collections were developed by subject specialists from the Library of Congress, and represent a variety of topics. The records in each collection are displayed in MODS XML format. Two collections were used to harvest sample records. The Visual Images collection contains seventeen archived websites, and each of these records was used in the analysis. The final eight records were selected from the Single Sites Web Archive. This collection was viewed by title and the first eight records alphabetically were used in the analysis.

Controlled Vocabulary Usage

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The website for this collection does specify controlled vocabulary usage and guidelines used for each MODS field. The MODS <subject> element is used by all twenty-five records examined. All twenty-five records use the <topic> sub-element, thirteen use the <geographic> sub-element, 19 use the <temporal> sub-element, 12 use the <name> sub-element, 3 use the <genre> sub-element, and 1 uses the <titleInfo> sub-element. The Technical Information section of the collection's website specifies that the <subject> element uses a combination of LCSH, TGM, local (Subjects assigned by cataloger), and keyword (Subject keywords extracted from META name=keywords tag in archived Web site (when available); reviewed, augmented, and/or edited by cataloger) terms. Three records from the collection were selected at random for examination, and can be found in Appendix A. The structure amongst the three records was similar to the UFDC collection in that sub-elements were nested together within the <subject> element to create distinct groups of terms. The authority attribute is used for each <subject> element to denote what vocabulary is being used by that particular grouping. This is a very efficient method for displaying subjects, and is very easy to both understand and automate. The LOC Web Archives had the most variety of terms used and the most subject elements per record of the three collections. This is likely due to the fact that the LOC developed the MODS scheme, the vocabularies used, and the collection itself.

Metadata Quality

The Library of Congress Web Archives repository is very narrow in scope, and only contains archived websites. This allows for enhanced metadata quality due to the similarity of items and the ability for automatic content generation (i.e. title element comes from HTML tag of archived site). The LOC Web Archives website contains a set of guidelines that are a short but accurate guide to where each metadata element comes from (http://lcweb2.loc.gov/diglib/lcwa/html/lcwa-techinfo.html) and this makes it easier to correctly assign elements. The narrow scope of this collection combined with concise and easy to follow guidelines should result in high quality metadata. An examination of the frequency of usage of the 20 top level elements within the 25 sample records (see Appendix B) shows that 14 of the top level elements are used in every record. Of the remaining six top level elements, four are not used in any records. The <name> and <targetAudience> elements are the only top level elements applied to only some item records. Not all items are associated with a particular audience, so this choice makes sense. The lack of consistent usage of the <name> element is troubling, as MODS guidelines define this element as "The name of a person, organization, or event (conference, meeting, etc.) associated in some way with the resource."

It is difficult to imagine that only 5 out of 25 websites would contain this information. The guidelines provided by the LOC allow for personal and corporate names to be used in this section; personal being "Name of Web site creator in inverted order; supplied by cataloger" and corporate being "Corporate Name of Web site creator; supplied by cataloger". Web sites often do not specifically designate a creator, and this may be why this element was only used in one-fifth of sample records. A sample of four records from the original twenty-five was examined more closely; these records can be found in Appendix C. The four sample records were very similar, the most similar of the three collections. There is extensive use of sub elements and attributes throughout each sample record, and a majority of elements contained some type of attribute used for greater specificity of meaning. All of the elements and

their modifiers were used correctly. There were variations in which attributes and sub elements were used, and this is likely due to the variations in content among the items in the collection.

COMPARISON

Controlled Vocabulary Usage

A comparison of the three collections shows that increasing levels of specificity can be achieved through the application of controlled vocabularies in the metadata of item records. The Copac records had the fewest records with subject elements, and this will make it more difficult for searchers to find items. The UFDC collection had a larger percentage of records with subject fields, but the similarity between records will make it difficult to differentiate between specific topics. Finally, the LOC collection was the most comprehensive and the metadata provides myriad ways for searchers to access the collection. It is clear that multiple vocabularies can be used within the same MODS record, and that this combination of vocabularies can only serve to enhance a searcher's ability to find items.

Metadata Quality

Metadata quality is an essential part of building digital collections. Quality metadata enhances a user's ability to navigate a collection, and increases interoperability among collections and software systems. The MODS element set is designed to enhance quality while allowing for flexibility. The MODS guidelines are thorough, and the amount of elements, sub elements and attributes works to limit any semantic challenges in application of elements. It is no surprise that all three collections contained metadata of relatively good quality, and that elements were applied accurately and consistently throughout the collections.

The biggest variation amongst the three collections in terms of quality is the completeness of records. The bar graph in Appendix B clearly shows the difference between the collection in terms of top level element usage. The LOC collection contains the most robust records, while the UFDC and Copac have less complete records. The UFDC records are slightly more complete than Copac, and their extensive use of attributes and sub elements contributes to their completeness. There are several factors that potentially explain this difference. MODS and the LOC Web Archives were both developed by the Library of Congress, and one would expect their application of the MODS schema to be a gold standard. Furthermore, the UFDC and Copac are composed of a wider variety of materials than the LOC Web Archives, which decreases their ability to gather like information about items. Finally, the Copac collection comes from many different institutions which decreases the availability of item information.

CONCLUSION

The developers of MODS outlined clear goals for the scheme: customization for localization purposes; interoperability with other standards and metadata schemes; a manageable element set that is easy to learn but that allows for full description of an item; and the ability to be extensible for richer descriptions. The MODS element set was designed to meet these goals, and thus to enhance quality while allowing for flexibility. The MODS guidelines are thorough, and the amount of elements, sub elements and attributes works to limit any semantic challenges in the application of elements. Each repository examined used the MODS scheme correctly and consistently across sample records. This speaks to both

the effectiveness of the MODS scheme and the availability of guidelines and mapping information. This examination has shown MODS to be a well-structured, interoperable scheme that can be used to create high quality metadata records.

APPENDIX A : SAMPLE CONTROLLED VOCABULARY RECORDS

Copac

Record 4

```xml
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
       xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
       http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
       http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
       http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006614293</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
      </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">2002</dateIssued>
      </originInfo>
- <originInfo>
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      </place>
- <place>
  <placeTerm type="text">Oxford :</placeTerm>
      </place>
  <publisher>Elsevier Science,</publisher>
  <dateIssued>2002.</dateIssued>
      </originInfo>
- <titleInfo>
  <title>Recent advances in nucleosides</title>
  <subTitle>chemistry and chemotherapy</subTitle>
      </titleInfo>
  <note type="statement of responsibility">edited by D.C.K. Chu.</note>
- <name type="conference">
  <namePart>Recent advances in nucleosides; chemistry and chemotherapy (Satellite symposium) (2000 Sep)</namePart>
      </name>
- <name type="personal">
  <namePart>Chu, D. C. K.</namePart>
      </name>
- <name type="personal">
  <namePart>Fox, Jack.</namePart>
      </name>
- <name type="conference">
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      </subject>
- <subject>
  <topic>chemistry</topic>
      </subject>
- <subject>
  <topic>chemotherapy</topic>
      </subject>
- <subject>
  <topic>nucleosides</topic>
      </subject>
- <subject authority="lcsh">
  <topic>Nucleosides</topic>
  <topic>Analysis.</topic>
      </subject>
- <subject authority="lcsh">
  <topic>Nucleosides</topic>
  <topic>Therapeutic use.</topic>
```

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```
        </subject>
- <language>
  <languageTerm type="text">English</languageTerm>
        </language>
- <physicalDescription>
  <extent>ix, 533 p. : ill. (some col.) ; 25 cm.</extent>
        </physicalDescription>
  <identifier type="isbn">0444509518</identifier>
  <genre authority="marcgt">Transparencies</genre>
- <extension>
- <h:localHolds>
  <h:org type="CURL" displayName="British Library">BLI</h:org>
  <h:objId>72006614293</h:objId>
- <h:holds>
- <h:item>
  <h:loc displayName="Document Supply Services">DSC</h:loc>
  <h:shelfmark>m03/40941</h:shelfmark>
        </h:item>
        </h:holds>
  <h:localNote />
        </h:localHolds>
        </extension>
        </mods>
        </modsCollection>
```

Record 5

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
        xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
        xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
        http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
        http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
        http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006640838</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
        </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">2002</dateIssued>
        </originInfo>
- <originInfo>
  <publisher>ECMSA,</publisher>
  <dateIssued>2002.</dateIssued>
        </originInfo>
- <titleInfo>
  <title>ECMSA 2002 strategy and marketing conference.</title>
        </titleInfo>
- <name type="conference">
  <namePart>Strategy and marketing (Conference) (2002 Nov : Barcelona, Spain)</namePart>
        </name>
- <name type="corporate">
  <namePart>European Chemical Marketing and Strategy Association.</namePart>
        </name>
- <subject>
  <topic>ECMSA</topic>
        </subject>
- <subject>
  <topic>chemical marketing</topic>
        </subject>
- <subject>
  <topic>marketing</topic>
        </subject>
- <subject>
  <topic>strategy</topic>
```

Carrie Moran Term Project

```
        </subject>
- <language>
  <languageTerm type="text">English</languageTerm>
      </language>
  <note>In case.</note>
- <physicalDescription>
  <extent>1 v.</extent>
  <extent>1 CD-ROM.</extent>
      </physicalDescription>
  <genre authority="marcgt">Kit</genre>
- <extension>
- <h:localHolds>
  <h:org type="CURL" displayName="British Library">BLI</h:org>
  <h:objId>72006640838</h:objId>
- <h:holds>
- <h:item>
  <h:loc displayName="Document Supply Services">DSC</h:loc>
  <h:shelfmark>3648.1065V 2002</h:shelfmark>
      </h:item>
      </h:holds>
  <h:localNote />
      </h:localHolds>
      </extension>
      </mods>
      </modsCollection>
```

Record 25

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
      xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
      http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
      http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
      http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006673829</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
      </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">1992</dateIssued>
      </originInfo>
- <originInfo>
- <place>
  <placeTerm type="text">Barcelona :</placeTerm>
      </place>
  <publisher>Generalitat de Catalunya,</publisher>
  <dateIssued>1992.</dateIssued>
      </originInfo>
- <titleInfo>
  <title>Catalunya =</title>
  <subTitle>Catalonia.</subTitle>
      </titleInfo>
- <titleInfo type="translated">
  <title>Catalonia</title>
      </titleInfo>
- <relatedItem>
- <name type="personal">
  <namePart>Puigjaner, Josep-Maria.</namePart>
      </name>
- <mods:titleInfo xmlns:mods="http://www.loc.gov/mods/v3" xmlns:lt="http://copac.ac.uk/schemas/language.term.lookup">
  <title>Conèixer Catalunya. English.</title>
      </mods:titleInfo>
      </relatedItem>
- <name type="corporate">
```

Carrie Moran Term Project

```xml
        <namePart>Catalonia (Spain)</namePart>
            </name>
    <subject authority="lcsh">
      <geographic>Catalonia (Spain)</geographic>
            </subject>
    <language>
      <languageTerm type="text">English</languageTerm>
            </language>
    <note>Title from case.</note>
    <note>In case.</note>
    <note>Includes bibliographical references.</note>
    <tableOfContents>Contents: Getting to know Catalonia / Josep-Maria Puigjaner -- Catalonia, yesterday and today (video
            cassette) -- Art in Catalonia (video cassette) -- Popular Catalan music (sound cassette) -- Tourist map of Catalonia
            1:350,000.</tableOfContents>
    <note>System requirements for CD-ROM: IBM compatible PC; 486 processor or higher; 4MB RAM; Windows 3.1 or later.</note>
    <note>System requirements for CD-ROM; Macintosh; LC II or higher; 4 MB RAM; System 7.0 or higher.</note>
    <note>CD-ROM in English, Catalan, French, German and Spanish.</note>
    <physicalDescription>
      <extent>1 map ; 81 x 86 cm. folded to 30 x 22 cm.</extent>
      <extent>1 v. (369 p.) : ill. (chiefly col.), maps, ports. ; 32 cm.</extent>
      <extent>1 computer optical disk : sd., col. ; 4 3/4 in.</extent>
      <extent>2 video cassettes (ca. 30 mins. each) : sd., col.</extent>
      <extent>1 sound cassette (ca. 50 mins.) : analog.</extent>
            </physicalDescription>
    <identifier type="isbn">8439314612 (Getting to know Catalonia)</identifier>
    <genre authority="marcgt">Kit</genre>
    <extension>
    <h:localHolds>
      <h:org type="CURL" displayName="British Library">BLI</h:org>
      <h:objId>72006673829</h:objId>
    <h:holds>
    <h:item>
      <h:loc displayName="Humanities and Social Sciences, St Pancras Reading Rooms">HMNTS</h:loc>
      <h:shelfmark>CDM.2003.b.165</h:shelfmark>
            </h:item>
            </h:holds>
    <h:localNote />
            </h:localHolds>
            </extension>
            </mods>
            </modsCollection>
```

University of Florida Digital Collection

Record 1

```xml
    <mods:mods>
    <mods:language>
      <mods:languageTerm type="text">English</mods:languageTerm>
      <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
            </mods:language>
    <mods:location>
      <mods:physicalLocation type="code">UF</mods:physicalLocation>
            </mods:location>
    <mods:name type="personal">
      <mods:namePart>Stacy, Mitch</mods:namePart>
    <mods:role>
      <mods:roleTerm authority="marcrelator">Creator</mods:roleTerm>
            </mods:role>
            </mods:name>
    <mods:originInfo>
      <mods:publisher>Gainesville Sun</mods:publisher>
    <mods:place>
      <mods:placeTerm type="text">Gainesville, Fla.</mods:placeTerm>
            </mods:place>
```

Carrie Moran Term Project

```
    <mods:dateIssued>1994</mods:dateIssued>
        </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00081158_00001</mods:recordIdentifier>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
        </mods:recordInfo>
- <mods:subject authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
        </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Feminists</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
        </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>Social conditions</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
        </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>History</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
        </mods:subject>
- <mods:titleInfo>
  <mods:title>20 years later - pioneering clinic still stands firm for abortion rights</mods:title>
        </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
        </mods:mods>
```

Record 8

```
<mods:mods>
- <mods:language>
  <mods:languageTerm type="text">English</mods:languageTerm>
  <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
        </mods:language>
- <mods:location>
  <mods:physicalLocation type="code">UF</mods:physicalLocation>
        </mods:location>
- <mods:name type="personal">
  <mods:namePart>Breeze, Nancy</mods:namePart>
- <mods:role>
  <mods:roleTerm authority="marcrelator">Creator</mods:roleTerm>
        </mods:role>
        </mods:name>
- <mods:originInfo>
  <mods:publisher>Breeze, Nancy</mods:publisher>
- <mods:place>
  <mods:placeTerm type="text">Gainesville, Fla.</mods:placeTerm>
        </mods:place>
  <mods:dateIssued>1981</mods:dateIssued>
        </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00081149_00001</mods:recordIdentifier>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
        </mods:recordInfo>
- <mods:subject authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
        </mods:subject>
```

Carrie Moran Term Project

```
- <mods:subject authority="lcsh">
  <mods:topic>Feminists</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>Social conditions</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>History</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:titleInfo>
  <mods:title>Letter to Alyce</mods:title>
      </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
      </mods:mods>
```

Record 16

```
<mods:mods>
- <mods:language>
  <mods:languageTerm type="text">English</mods:languageTerm>
  <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
      </mods:language>
- <mods:location>
  <mods:physicalLocation type="code">UF</mods:physicalLocation>
      </mods:location>
- <mods:name type="personal">
  <mods:namePart>Gainesville Women's Health Center</mods:namePart>
- <mods:role>
  <mods:roleTerm authority="marcrelator">Creator</mods:roleTerm>
      </mods:role>
      </mods:name>
- <mods:originInfo>
  <mods:publisher>Gainesville Women's Health Center</mods:publisher>
- <mods:place>
  <mods:placeTerm type="text">Gainesville, Fla.</mods:placeTerm>
      </mods:place>
  <mods:dateIssued>1978</mods:dateIssued>
      </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00081156_00001</mods:recordIdentifier>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
      </mods:recordInfo>
- <mods:subject authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Feminists</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>Social conditions</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
```

Carrie Moran Term Project

```
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>History</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:titleInfo>
  <mods:title>Pregnancy information pamphlet</mods:title>
      </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
      </mods:mods>
```

Library of Congress Web Archives

Record 1

```
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
- <titleInfo>
  <title>McKissack and McKissack - Building to Bring Change</title>
      </titleInfo>
  <typeOfResource>text</typeOfResource>
  <genre>Web site</genre>
- <originInfo>
  <dateCaptured encoding="iso8601" point="start">20060330</dateCaptured>
  <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
      </originInfo>
- <language>
  <languageTerm authority="iso639-2b" type="code">eng</languageTerm>
      </language>
- <physicalDescription>
  <internetMediaType>application/pdf</internetMediaType>
  <internetMediaType>application/x-javascript</internetMediaType>
  <internetMediaType>application/x-shockwave-flash</internetMediaType>
  <internetMediaType>image/gif</internetMediaType>
  <internetMediaType>image/jpeg</internetMediaType>
  <internetMediaType>text/html</internetMediaType>
      </physicalDescription>
  <abstract>Official Web site of McKissack and McKissack, archived by the Library of Congress between March 30, 2006 and
      November 29, 2006</abstract>
  <note type="system details">www.mckissack.com/philadelphia/default.htm</note>
- <subject authority="keyword">
  <topic>McKissack, M & M, Philadelphia, Architecture, Engineering, Design, Build, Construction Management MBE, WBE,
      Minority</topic>
      </subject>
- <subject authority="lcsh">
- <name type="personal" authority="naf">
  <namePart>McKissack, Leatrice</namePart>
      </name>
      </subject>
- <subject authority="lcsh">
- <name type="corporate" authority="naf">
  <namePart>United States</namePart>
  <namePart>Supreme Court</namePart>
      </name>
  <temporal>2000-2010</temporal>
      </subject>
- <subject authority="local">
  <topic>African Americans</topic>
  <topic>Commerce</topic>
      </subject>
- <subject authority="local">
  <topic>African Americans</topic>
  <topic>Industries</topic>
      </subject>
- <subject authority="local">
```

Carrie Moran Term Project

```xml
        <topic>Minority-owned architectural firms</topic>
        <geographic>Tennessee</geographic>
        <temporal>1910-2010</temporal>
            </subject>
-    <subject authority="local">
        <topic>Minority-owned architectural firms</topic>
        <geographic>New York (State)</geographic>
        <geographic>New York</geographic>
        <temporal>1990-2010</temporal>
            </subject>
-    <subject authority="local">
        <topic>Minority-owned architectural firms</topic>
        <geographic>Pennsylvania</geographic>
        <geographic>Philadelphia</geographic>
        <temporal>1990-2010</temporal>
            </subject>
-    <subject authority="lctgm">
        <topic>Construction industry</topic>
        <temporal>1910-2010</temporal>
            </subject>
-    <relatedItem type="host">
-    <titleInfo>
        <title>Visual Image Web Sites Archive</title>
            </titleInfo>
-    <location>
        <url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
            </location>
            </relatedItem>
        <identifier>hdl:loc.natlib/mrva0014.0008</identifier>
-    <location>
        <url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.mckissack.com/philadelphia/default.htm</url>
            </location>
-    <location>
        <url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0008</url>
            </location>
-    <location>
        <physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
        <physicalLocation authority="marcorg">dlc</physicalLocation>
            </location>
        <accessCondition>None</accessCondition>
-    <recordInfo>
        <recordCreationDate encoding="iso8601">20070917</recordCreationDate>
        <recordIdentifier source="dlc">mrva0014.0008</recordIdentifier>
            </recordInfo>
            </mods>
```

Record 8

```xml
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
-    <titleInfo>
        <title>Greg Lynn Form</title>
            </titleInfo>
        <typeOfResource>text</typeOfResource>
        <genre>Web site</genre>
-    <originInfo>
        <dateCaptured encoding="iso8601" point="start">20060601</dateCaptured>
        <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
            </originInfo>
-    <language>
        <languageTerm authority="iso639-2b" type="code">eng</languageTerm>
            </language>
-    <physicalDescription>
        <internetMediaType>application/pdf</internetMediaType>
        <internetMediaType>application/x-shockwave-flash</internetMediaType>
        <internetMediaType>text/html</internetMediaType>
            </physicalDescription>
```

Carrie Moran Term Project

```xml
<abstract>Official Web site of Greg Lynn Form, archived by the Library of Congress between June 1, 2006 and November 29,
    2006</abstract>
<note type="system details">www.glform.com/</note>
- <subject authority="lcsh">
- <name type="personal" authority="naf">
  <namePart>Lynn, Greg</namePart>
- <role>
  <roleTerm>architect</roleTerm>
    </role>
    </name>
    </subject>
- <subject authority="lctgm">
  <topic>Polychromy</topic>
  <temporal>1990-2010</temporal>
    </subject>
- <subject authority="lctgm">
  <topic>Color wheels</topic>
  <temporal>1990-2010</temporal>
    </subject>
- <subject authority="lctgm">
  <topic>Walls</topic>
  <temporal>1990-2010</temporal>
    </subject>
- <subject authority="lctgm">
  <topic>Fantastic architecture</topic>
  <temporal>1990-2010</temporal>
    </subject>
- <relatedItem type="host">
- <titleInfo>
  <title>Visual Image Web Sites Archive</title>
    </titleInfo>
- <location>
  <url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
    </location>
    </relatedItem>
  <identifier>hdl:loc.natlib/mrva0014.0006</identifier>
- <location>
  <url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.glform.com/</url>
    </location>
- <location>
  <url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0006</url>
    </location>
- <location>
  <physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
  <physicalLocation authority="marcorg">dlc</physicalLocation>
    </location>
  <accessCondition>None</accessCondition>
- <recordInfo>
  <recordCreationDate encoding="iso8601">20070917</recordCreationDate>
  <recordIdentifier source="dlc">mrva0014.0006</recordIdentifier>
    </recordInfo>
    </mods>
```

Record 16

```xml
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
- <titleInfo>
  <title>Van Alen Institute: Projects in Public Architecture</title>
    </titleInfo>
  <typeOfResource>text</typeOfResource>
  <genre>Web site</genre>
- <originInfo>
  <dateCaptured encoding="iso8601" point="start">20060406</dateCaptured>
  <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
    </originInfo>
- <language>
```

Carrie Moran Term Project

```xml
<languageTerm authority="iso639-2b" type="code">eng</languageTerm>
    </language>
- <physicalDescription>
<internetMediaType>application/pdf</internetMediaType>
<internetMediaType>application/x-javascript</internetMediaType>
<internetMediaType>application/x-shockwave-flash</internetMediaType>
<internetMediaType>image/gif</internetMediaType>
<internetMediaType>image/jpeg</internetMediaType>
<internetMediaType>image/png</internetMediaType>
<internetMediaType>image/x-icon</internetMediaType>
<internetMediaType>text/css</internetMediaType>
<internetMediaType>text/html</internetMediaType>
<internetMediaType>text/plain</internetMediaType>
    </physicalDescription>
<abstract>Official Web site of Van Alen Institute, archived by the Library of Congress between April 6, 2006 and November 29,
    2006</abstract>
<note type="system details">www.vanalen.org/</note>
- <subject authority="lcsh">
- <name type="corporate" authority="naf">
<namePart>Van Alen Institute</namePart>
    </name>
<geographic>New York (State)</geographic>
<geographic>New York</geographic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Architecture</topic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Contests</topic>
<geographic>New York (State)</geographic>
<geographic>New York</geographic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Awards</topic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Exhibitions</topic>
<geographic>New York (State)</geographic>
<geographic>New York</geographic>
<temporal>2000-2010</temporal>
    </subject>
- <relatedItem type="host">
- <titleInfo>
<title>Visual Image Web Sites Archive</title>
    </titleInfo>
- <location>
<url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
    </location>
    </relatedItem>
<identifier>hdl:loc.natlib/mrva0014.0016</identifier>
- <location>
<url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.vanalen.org/</url>
    </location>
- <location>
<url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0016</url>
    </location>
- <location>
<physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
<physicalLocation authority="marcorg">dlc</physicalLocation>
    </location>
<accessCondition>None</accessCondition>
- <recordInfo>
<recordCreationDate encoding="iso8601">20070917</recordCreationDate>
<recordIdentifier source="dlc">mrva0014.0016</recordIdentifier>
```

Carrie Moran Term Project

```
</recordInfo>
</mods>
```
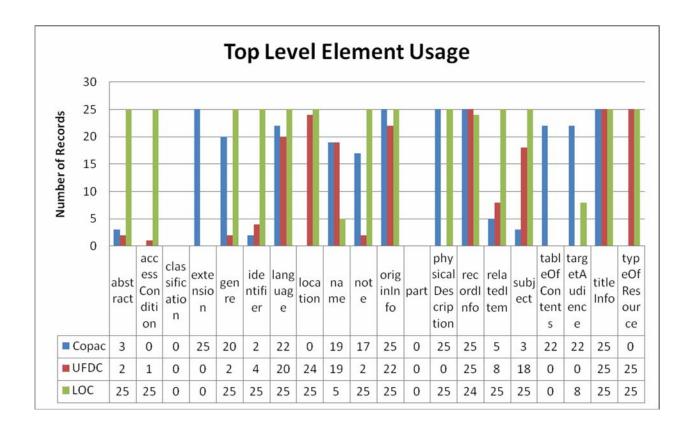
APPENDIX B : ELEMENT USAGE

	Copac	UFDC	LOC
abstract	3	2	25
accessCondition	0	1	25
classification	0	0	0
extension	25	0	0
genre	20	2	25
identifier	2	4	25
language	22	20	25
languageTerm	22	20	25
scriptTerm	0	0	0
location	0	24	25
physicalLocation	0	24	25
shelfLocator	0	0	0
url	0	2	25
holdingSimple	0	0	0
holdingExternal	0	0	0
name	19	19	5
namePart	19	19	5
displayForm	0	0	0
affiliation	0	0	0
role	2	19	1
description	0	0	0
note	17	2	25
originInfo	25	22	25

Carrie Moran Term Project

place	25	16	0
publisher	25	22	0
dateIssued	25	18	0
dateCreated	0	0	0
dateCaptured	0	0	25
dateValid	0	0	0
dateModified	0	0	0
copyrightDate	0	1	0
dateOther	0	0	0
edition	1	0	0
issuance	0	0	0
frequency	0	0	0
part	0	0	0
detail	0	0	0
extent	0	0	0
date	0	0	0
text	0	0	0
physicalDescription	25	0	25
form	0	0	8
reformattingQuality	0	0	0
internetMediaType	0	0	25
extent	25	0	0
digitalOrigin	0	0	8
note	0	0	0
recordInfo	25	25	25
recordContentSource	25	25	8

Carrie Moran Term Project

recordCreationDate	**25**	**2**	**25**
recordChangeDate	**0**	**0**	**0**
recordIdentifier	**25**	**25**	**25**
recordOrigin	**0**	**5**	**0**
languageOfCataloging	**0**	**2**	**8**
descriptionStandard	**0**	**0**	**0**
relatedItem	**5**	**8**	**25**
subject	**3**	**18**	**25**
topic	**2**	**17**	**25**
geographic	**1**	**16**	**13**
temporal	**0**	**0**	**19**
titleInfo	**0**	**0**	**1**
name	**0**	**0**	**13**
genre	**0**	**0**	**3**
hierarchicalGeographic	**0**	**3**	**0**
cartographics	**0**	**0**	**0**
geographicCode	**0**	**0**	**0**
occupation	**0**	**0**	**0**
tableOfContents	**22**	**0**	**0**
targetAudience	**2**	**0**	**8**
titleInfo	**25**	**25**	**25**
title	**25**	**25**	**25**
subTitle	**10**	**0**	**0**
partNumber	**0**	**0**	**0**
partName	**0**	**0**	**0**
nonSort	**0**	**0**	**2**

typeOfResource	**0**	**25**	**25**

Top Level Element Usage

	abst ract	acc ess Con diti on	clas sific atio n	exte nsio n	gen re	ide ntifi er	lang uag e	loca tion	na me	not e	orig inIn fo	part	phy sical Des crip tion	rec ordI nfo	rela tedI tem	subj ect	tabl eOf Con tent s	targ etA udi enc e	title Info	typ eOf Res our ce
■ Copac	3	0	0	25	20	2	22	0	19	17	25	0	25	25	5	3	22	22	25	0
■ UFDC	2	1	0	0	2	4	20	24	19	2	22	0	0	25	8	18	0	0	25	25
■ LOC	25	25	0	0	25	25	25	25	5	25	25	0	25	24	25	25	0	8	25	25

Carrie Moran Term Project

APPENDIX C : SAMPLE METADATA QUALITY RECORDS

Copac

Record 1

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">

- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
      xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
      http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
      http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
      http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006568396</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
    </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">2001</dateIssued>
    </originInfo>
- <originInfo>
- <place>
  <placeTerm type="text">London :</placeTerm>
    </place>
  <publisher>Department of Health,</publisher>
  <dateIssued>[2001]</dateIssued>
    </originInfo>
- <titleInfo>
  <title>Valuing people</title>
  <subTitle>a new strategy for learning disability for the 21st century.</subTitle>
    </titleInfo>
- <name type="corporate">
  <namePart>Great Britain.</namePart>
  <namePart>Dept. of Health.</namePart>
    </name>
- <language>
  <languageTerm type="text">English</languageTerm>
    </language>
  <note>In plastic case.</note>
  <note>Includes bibliographical references.</note>
  <tableOfContents>Contents: Valuing people (information, white paper, including accessible version with CD rom and audio
      tape). -- Nothing about us without us. -- Family matters (including accessible version). -- Learning difficulties and ethnicity
      (including summary version)</tableOfContents>
- <physicalDescription>
  <extent>8 v. (various pagings)</extent>
  <extent>1 computer optical disc.</extent>
  <extent>1 sound cassette.</extent>
    </physicalDescription>
  <genre authority="marcgt">Kit</genre>
- <extension>
- <h:localHolds>
  <h:org type="CURL" displayName="British Library">BLI</h:org>
  <h:objId>72006568396</h:objId>
- <h:holds>
- <h:item>
  <h:loc displayName="Document Supply Services">DSC</h:loc>
  <h:shelfmark>Vm01/50182</h:shelfmark>
    </h:item>
    </h:holds>
  <h:localNote />
    </h:localHolds>
    </extension>
    </mods>
    </modsCollection>
```

Record 6

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
       xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
       http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
       http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
       http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006672680</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
      </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">1979</dateIssued>
      </originInfo>
- <originInfo>
- <place>
  <placeTerm type="text">London :</placeTerm>
      </place>
  <publisher>College of Librarianship, Wales,</publisher>
  <dateIssued>1979.</dateIssued>
      </originInfo>
- <titleInfo>
  <title>Media awareness for librarians</title>
  <subTitle>a collection of teaching materials on non-book media</subTitle>
      </titleInfo>
  <note type="statement of responsibility">research assistant: Jill Edwards.</note>
- <name type="personal">
  <namePart>Edwards, Jill.</namePart>
      </name>
- <language>
  <languageTerm type="text">English</languageTerm>
      </language>
  <tableOfContents>Contents: Unit 1. Management of resource centres: staffing structures - 8 transparencies; Unit 2. Storage of
      media - 48 transparencies; Unit 3. Cataloguing and classification - 12 perspex blocks, 13 worksheets, 7 cataloguing sheets
      (2 worked), 11 transparencies; Unit 4. Bibliographic aids for non-book media - 21 transparencies, 32 reference queries;
      Unit 5. Evaluation - 10 transparencies, 1 worksheet; Unit 6. Media technology - 14 transparencies, 5 booklets, 9 slides, 1
      story board; Booklet: Materials as aids for teaching the librarianship of the new media ..., pub. Council for Educational
      Technology, 1977.</tableOfContents>
- <physicalDescription>
  <extent>1 study kit ; 33x33x8cm.</extent>
      </physicalDescription>
  <genre authority="marcgt">Kit</genre>
- <extension>
- <h:localHolds>
  <h:org type="CURL" displayName="British Library">BLI</h:org>
  <h:objId>72006672680</h:objId>
- <h:holds>
- <h:item>
  <h:loc displayName="Humanities and Social Sciences, St Pancras Reading Rooms">HMNTS</h:loc>
  <h:shelfmark>CDB/149</h:shelfmark>
      </h:item>
      </h:holds>
  <h:localNote />
      </h:localHolds>
      </extension>
      </mods>
      </modsCollection>
```

Record 12

Carrie Moran Term Project

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
      xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
      http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
      http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
      http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006672713</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
  <recordCreationDate>20060525</recordCreationDate>
      </recordInfo>
- <originInfo>
  <dateIssued encoding="marc">1979</dateIssued>
      </originInfo>
- <originInfo>
- <place>
  <placeTerm type="text">Berlin :</placeTerm>
      </place>
  <publisher>Bibliotheksverbandes der DDR,</publisher>
  <dateIssued>1979.</dateIssued>
      </originInfo>
- <titleInfo>
  <title>Bibliotheken in der Deutschen Demokratischen Republik.</title>
      </titleInfo>
- <name type="corporate">
  <namePart>Deutscher Bibliotheksverband (East Germany)</namePart>
      </name>
- <language>
  <languageTerm type="text">German</languageTerm>
      </language>
  <tableOfContents>Sheets contain reproductions of the slides and notes in German, Russian and English.</tableOfContents>
  <abstract>... show library buildings, furniture and technical equipment ...</abstract>
- <physicalDescription>
  <extent>76 slides : col.</extent>
  <extent>86 sheets : ill. ; 15x21cm.</extent>
      </physicalDescription>
  <genre authority="marcgt">Kit</genre>
- <extension>
- <h:localHolds>
  <h:org type="CURL" displayName="British Library">BLI</h:org>
  <h:objId>72006672713</h:objId>
- <h:holds>
- <h:item>
  <h:loc displayName="Humanities and Social Sciences, St Pancras Reading Rooms">HMNTS</h:loc>
  <h:shelfmark>CDB/204</h:shelfmark>
      </h:item>
      </h:holds>
  <h:localNote />
      </h:localHolds>
      </extension>
      </mods>
      </modsCollection>
```

Record 18

```
- <modsCollection xmlns="http://www.loc.gov/mods/v3">
- <mods xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://www.loc.gov/mods/v3" xmlns:h="http://copac.ac.uk/schemas/holdings/v1"
      xmlns:cpc="http://copac.ac.uk/schemas/mods-copac/v1" xsi:schemaLocation="http://www.loc.gov/mods/v3
      http://www.loc.gov/standards/mods/v3/mods-3-2.xsd http://copac.ac.uk/schemas/mods-copac/v1
      http://copac.ac.uk/schemas/mods-copac/v1/mods-copac-v1.xsd http://copac.ac.uk/schemas/holdings/v1
      http://copac.ac.uk/schemas/holdings/v1/holdings-v1.xsd">
- <recordInfo>
  <recordIdentifier source="copac">72006672729</recordIdentifier>
  <recordContentSource>Copac</recordContentSource>
```

Carrie Moran Term Project

```xml
<recordCreationDate>20060525</recordCreationDate>
    </recordInfo>
<originInfo>
<dateIssued encoding="marc">1981</dateIssued>
    </originInfo>
<originInfo>
<place>
<placeTerm type="text">Loughborough :</placeTerm>
    </place>
<publisher>Loughborough University of Technology,</publisher>
<dateIssued>1981.</dateIssued>
    </originInfo>
<titleInfo>
<title>Public libraries</title>
<subTitle>a new information era</subTitle>
    </titleInfo>
<note type="statement of responsibility">Ronald Davies ...[et al.].</note>
<name type="personal">
<namePart>Davies, Ronald.</namePart>
    </name>
<language>
<languageTerm type="text">English</languageTerm>
    </language>
<note>Produced by Edinburgh City Libraries and Loughborough University of Technology.</note>
<note>Tape pulsed with inaudible frame change signals.</note>
<tableOfContents>Notes contain transcript of commentary.</tableOfContents>
<abstract>Discusses on-line information systems and videotex.</abstract>
<physicalDescription>
<extent>68 slides : col.</extent>
<extent>1 sound cassette (ca.20min.) : 3 3/4ips,mono + notes.</extent>
    </physicalDescription>
<genre authority="marcgt">Kit</genre>
<extension>
<h:localHolds>
<h:org type="CURL" displayName="British Library">BLI</h:org>
<h:objId>72006672729</h:objId>
<h:holds>
<h:item>
<h:loc displayName="Humanities and Social Sciences, St Pancras Reading Rooms">HMNTS</h:loc>
<h:shelfmark>CDB/247</h:shelfmark>
    </h:item>
    </h:holds>
<h:localNote />
    </h:localHolds>
    </extension>
    </mods>
    </modsCollection>
```

University of Florida Digital Collections

Record 1

```xml
<mods:mods>
<mods:language>
<mods:languageTerm type="text">English</mods:languageTerm>
<mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
    </mods:language>
<mods:location>
<mods:physicalLocation type="code">UF</mods:physicalLocation>
    </mods:location>
<mods:name type="personal">
<mods:namePart>Stacy, Mitch</mods:namePart>
<mods:role>
<mods:roleTerm authority="marcrelator">Creator</mods:roleTerm>
    </mods:role>
    </mods:name>
```

Carrie Moran Term Project

```
- <mods:originInfo>
  <mods:publisher>Gainesville Sun</mods:publisher>
- <mods:place>
  <mods:placeTerm type="text">Gainesville, Fla.</mods:placeTerm>
      </mods:place>
  <mods:dateIssued>1994</mods:dateIssued>
      </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00081158_00001</mods:recordIdentifier>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
      </mods:recordInfo>
- <mods:subject authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Feminists</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>Social conditions</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>History</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
      </mods:subject>
- <mods:titleInfo>
  <mods:title>20 years later - pioneering clinic still stands firm for abortion rights</mods:title>
      </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
      </mods:mods>
```

Record 6

```
<mods:mods>
  <mods:abstract displayLabel="Abstract">Image from the Margaret Dreier Robins Collection. The collection contains records
      related to the life of Margaret Dreier Robins. Her involvement with the women's movement and trade unions is extensively
      documented. Additionally, the collection contains documents and correspondence regarding such specific topics as:
      prohibition, China, Florida, public health, social welfare, religious groups, the 'Peace Movement', political parties and
      campaigns, and women's suffrage. The collection also contains biographical material related to both her and her husband
      as well as correspondence between the two and records related to the Chinsegut Hill estate. Raymond Robins' life is also
      documented through several scrapbooks and photo albums and many of the clippings and publications reflect his
      activities as well as those of his wife. There are also records of Raymond Robins' father, Charles E. Robins. The collection
      is divided into nine series: (1) Biographical and personal records, (2) Organizational and topical materials, and (3)
      Correspondence, (4) Publications, (5) Photographs, (6) Albums, (7) Clippings, (8) Scrapbooks, and (9)
      Miscellany.</mods:abstract>
- <mods:location>
  <mods:physicalLocation>University of Florida</mods:physicalLocation>
  <mods:physicalLocation type="code">UF</mods:physicalLocation>
  <mods:url displayLabel="Finding Guide" note="Guide to the Margaret Dreier Robins
      Collection">http://web.uflib.ufl.edu/spec/manuscript/guides/robins.htm</mods:url>
      </mods:location>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00099288_00001</mods:recordIdentifier>
  <mods:recordOrigin>Tracking GUI:4.0.2:UFAD\renner</mods:recordOrigin>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
      </mods:recordInfo>
- <mods:relatedItem type="series">
- <mods:titleInfo>
```

Carrie Moran Term Project

```
<mods:title>Margaret Drier Robins Collection</mods:title>
    </mods:titleInfo>
    </mods:relatedItem>
- <mods:titleInfo>
  <mods:title>Image of women from copper photogravure. Worker's rights march (National Women's Trade Union
      League?)</mods:title>
    </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
    </mods:mods>
```

Record 12

```
<mods:mods>
- <mods:language>
  <mods:languageTerm type="text">English</mods:languageTerm>
  <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
    </mods:language>
- <mods:location>
  <mods:physicalLocation type="code">UF</mods:physicalLocation>
    </mods:location>
- <mods:name type="personal">
  <mods:namePart>Breeze, Nancy</mods:namePart>
- <mods:role>
  <mods:roleTerm authority="marcrelator">Creator</mods:roleTerm>
    </mods:role>
    </mods:name>
- <mods:originInfo>
  <mods:publisher>Breeze, Nancy</mods:publisher>
- <mods:place>
  <mods:placeTerm type="text">Gainesville, Fla.</mods:placeTerm>
    </mods:place>
  <mods:dateIssued>2007</mods:dateIssued>
    </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00081148_00001</mods:recordIdentifier>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
    </mods:recordInfo>
- <mods:subject authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
    </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Feminists</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
    </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>Social conditions</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
    </mods:subject>
- <mods:subject authority="lcsh">
  <mods:topic>Women</mods:topic>
  <mods:topic>History</mods:topic>
  <mods:geographic>Florida</mods:geographic>
  <mods:geographic>Gainesville</mods:geographic>
    </mods:subject>
- <mods:titleInfo>
  <mods:title>Nancy Breeze's oral history on her participation in the Gainesville Women's Health Center</mods:title>
    </mods:titleInfo>
  <mods:typeOfResource>mixed material</mods:typeOfResource>
    </mods:mods>
```

Carrie Moran Term Project

Record 18

```
<mods:mods>
  <mods:genre authority="marcgt">bibliography</mods:genre>
  <mods:genre authority="marcgt">non-fiction</mods:genre>
  <mods:identifier type="OCLC">42919829</mods:identifier>
- <mods:language>
  <mods:languageTerm type="text">English</mods:languageTerm>
  <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
    </mods:language>
  <mods:note type="bibliography">Includes bibliographical references.</mods:note>
  <mods:note type="statement of responsibility">Radical America.</mods:note>
  <mods:note>Issued as vol. 4, no. 2 (Feb. 1970) of Radical America.</mods:note>
- <mods:originInfo>
  <mods:publisher>Radical America</mods:publisher>
- <mods:place>
  <mods:placeTerm type="code" authority="marccountry">wiu</mods:placeTerm>
    </mods:place>
  <mods:dateIssued encoding="marc">1970</mods:dateIssued>
  <mods:dateIssued encoding="marc" point="start">1970</mods:dateIssued>
    </mods:originInfo>
- <mods:recordInfo>
  <mods:recordIdentifier source="ufdc">UF00087333_00001</mods:recordIdentifier>
  <mods:recordCreationDate encoding="marc">991202</mods:recordCreationDate>
  <mods:recordOrigin>Imported from (OCLC)42919829</mods:recordOrigin>
  <mods:recordContentSource>University of Florida</mods:recordContentSource>
  <mods:recordContentSource authority="marcorg">CUI</mods:recordContentSource>
- <mods:languageOfCataloging>
  <mods:languageTerm type="text">English</mods:languageTerm>
  <mods:languageTerm type="code" authority="iso639-2b">eng</mods:languageTerm>
    </mods:languageOfCataloging>
    </mods:recordInfo>
- <mods:relatedItem type="original">
- <mods:physicalDescription>
  <mods:extent>95 p. : ill. ; 22 cm.</mods:extent>
    </mods:physicalDescription>
    </mods:relatedItem>
- <mods:subject ID="SUBJ650_1" authority="lcsh">
  <mods:topic>Feminism</mods:topic>
  <mods:geographic>United States</mods:geographic>
    </mods:subject>
- <mods:titleInfo>
  <mods:title>Women</mods:title>
    </mods:titleInfo>
- <mods:titleInfo type="uniform" displayLabel="Uncontrolled">
  <mods:title>Radical America</mods:title>
    </mods:titleInfo>
  <mods:typeOfResource>text</mods:typeOfResource>
    </mods:mods>
```

Library Of Congress Web Archives

Record 1

```
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
- <titleInfo>
  <title>McKissack and McKissack - Building to Bring Change</title>
    </titleInfo>
  <typeOfResource>text</typeOfResource>
  <genre>Web site</genre>
- <originInfo>
  <dateCaptured encoding="iso8601" point="start">20060330</dateCaptured>
  <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
    </originInfo>
- <language>
```

Carrie Moran Term Project

```xml
<languageTerm authority="iso639-2b" type="code">eng</languageTerm>
    </language>
- <physicalDescription>
<internetMediaType>application/pdf</internetMediaType>
<internetMediaType>application/x-javascript</internetMediaType>
<internetMediaType>application/x-shockwave-flash</internetMediaType>
<internetMediaType>image/gif</internetMediaType>
<internetMediaType>image/jpeg</internetMediaType>
<internetMediaType>text/html</internetMediaType>
    </physicalDescription>
<abstract>Official Web site of McKissack and McKissack, archived by the Library of Congress between March 30, 2006 and
    November 29, 2006</abstract>
<note type="system details">www.mckissack.com/philadelphia/default.htm</note>
- <subject authority="keyword">
<topic>McKissack, M & M, Philadelphia, Architecture, Engineering, Design, Build, Construction Management MBE, WBE,
    Minority</topic>
    </subject>
- <subject authority="lcsh">
- <name type="personal" authority="naf">
<namePart>McKissack, Leatrice</namePart>
    </name>
    </subject>
- <subject authority="lcsh">
- <name type="corporate" authority="naf">
<namePart>United States</namePart>
<namePart>Supreme Court</namePart>
    </name>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="local">
<topic>African Americans</topic>
<topic>Commerce</topic>
    </subject>
- <subject authority="local">
<topic>African Americans</topic>
<topic>Industries</topic>
    </subject>
- <subject authority="local">
<topic>Minority-owned architectural firms</topic>
<geographic>Tennessee</geographic>
<temporal>1910-2010</temporal>
    </subject>
- <subject authority="local">
<topic>Minority-owned architectural firms</topic>
<geographic>New York (State)</geographic>
<geographic>New York</geographic>
<temporal>1990-2010</temporal>
    </subject>
- <subject authority="local">
<topic>Minority-owned architectural firms</topic>
<geographic>Pennsylvania</geographic>
<geographic>Philadelphia</geographic>
<temporal>1990-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Construction industry</topic>
<temporal>1910-2010</temporal>
    </subject>
- <relatedItem type="host">
- <titleInfo>
<title>Visual Image Web Sites Archive</title>
    </titleInfo>
- <location>
<url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
    </location>
    </relatedItem>
<identifier>hdl:loc.natlib/mrva0014.0008</identifier>
- <location>
```

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```
<url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.mckissack.com/philadelphia/default.htm</url>
    </location>
- <location>
<url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0008</url>
    </location>
- <location>
<physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
<physicalLocation authority="marcorg">dlc</physicalLocation>
    </location>
<accessCondition>None</accessCondition>
- <recordInfo>
<recordCreationDate encoding="iso8601">20070917</recordCreationDate>
<recordIdentifier source="dlc">mrva0014.0008</recordIdentifier>
    </recordInfo>
    </mods>
```

Record 6

```
- <mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
- <titleInfo>
<nonSort>The</nonSort>
<title>Alternative Museum</title>
    </titleInfo>
<typeOfResource>text</typeOfResource>
<genre>Web site</genre>
- <originInfo>
<dateCaptured encoding="iso8601" point="start">20061025</dateCaptured>
<dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
    </originInfo>
- <language>
<languageTerm authority="iso639-2b" type="code">eng</languageTerm>
    </language>
- <physicalDescription>
<internetMediaType>application/octet-stream</internetMediaType>
<internetMediaType>application/pdf</internetMediaType>
<internetMediaType>application/x-shockwave-flash</internetMediaType>
<internetMediaType>audio/mpeg</internetMediaType>
<internetMediaType>image/gif</internetMediaType>
<internetMediaType>image/jpeg</internetMediaType>
<internetMediaType>text/css</internetMediaType>
<internetMediaType>text/html</internetMediaType>
<internetMediaType>text/plain</internetMediaType>
    </physicalDescription>
<abstract>Official Web site of The Alternative Museum, archived by the Library of Congress between October 25, 2006 and
    November 29, 2006</abstract>
<note type="system details">www.alternativemuseum.org/</note>
- <subject authority="lcsh">
<topic>Virtual museums</topic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Art exhibitions</topic>
<temporal>2000-2010</temporal>
    </subject>
- <subject authority="lctgm">
<topic>Photographs</topic>
<temporal>2000-2010</temporal>
    </subject>
- <relatedItem type="host">
- <titleInfo>
<title>Visual Image Web Sites Archive</title>
    </titleInfo>
- <location>
<url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
    </location>
    </relatedItem>
<identifier>hdl:loc.natlib/mrva0014.0003</identifier>
- <location>
```

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```xml
<url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.alternativemuseum.org/</url>
    </location>
- <location>
  <url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0003</url>
    </location>
- <location>
  <physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
  <physicalLocation authority="marcorg">dlc</physicalLocation>
    </location>
  <accessCondition>None</accessCondition>
- <recordInfo>
  <recordCreationDate encoding="iso8601">20070917</recordCreationDate>
  <recordIdentifier source="dlc">mrva0014.0003</recordIdentifier>
    </recordInfo>
    </mods>
```

Record 12

```xml
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
+ <titleInfo>
  <typeOfResource>text</typeOfResource>
  <genre>Web site</genre>
- <originInfo>
  <dateCaptured encoding="iso8601" point="start">20060406</dateCaptured>
  <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
    </originInfo>
- <language>
  <languageTerm authority="iso639-2b" type="code">eng</languageTerm>
    </language>
- <physicalDescription>
  <internetMediaType>application/pdf</internetMediaType>
  <internetMediaType>application/postscript</internetMediaType>
  <internetMediaType>application/x-shockwave-flash</internetMediaType>
  <internetMediaType>audio/x-pn-realaudio</internetMediaType>
  <internetMediaType>image/gif</internetMediaType>
  <internetMediaType>image/jpeg</internetMediaType>
  <internetMediaType>image/tiff</internetMediaType>
  <internetMediaType>text/html</internetMediaType>
    </physicalDescription>
  <abstract>The Pritzker Architecture Prize World Wide Web Site provides current information about the world's most prestigious
      architecture award and its Laureates. The Pritzker Architecture Prize World Wide Web Site provides current information
      about the world's most prestigious architecture award and its Laureates.</abstract>
  <note type="system details">www.pritzkerprize.com/</note>
- <subject authority="keyword">
  <topic>Pritzker Architecture Prize, award, architecture, Hyatt Foundation, Philip Johnson, Luis Barragan, James Stirling, Kevin
      Roche, Ieoh Ming Pei, Richard Meier, Hans Hollein, Gottfried Boehm, Kenzo Tange, Gordon Bunshaft, Oscar Niemeyer,
      Frank O. Gehry, Aldo Rossi, Alvaro Siza, Fumihiko Maki, Christian de Portzamparc, Tadao Ando, Rafael Moneo, Sverre
      Fehn, Renzo Piano, Sir Norman Foster, Jay Carter Brown, Jensen & Walker, Inc.Art of Architecture Pritzker Architecture
      Prize, award, architecture, Hyatt Foundation, Philip Johnson, Luis Barragan, James Stirling, Kevin Roche, Ieoh Ming
      Pei,Richard Meier, Hans Hollein, Gottfried Boehm, Kenzo Tange, Gordon Bunshaft, Oscar Niemeyer,Frank O. Gehry,Aldo
      Rossi,Alvaro Siza, Fumihiko Maki, Christian de Portzamparc, Tadao Ando, Rafael Moneo, Sverre Fehn, Renzo Piano, Sir
      Norman Foster, Jay Carter Brown, Jensen & Walker, Inc.Art of Architecture</topic>
    </subject>
- <subject authority="lcsh">
  <topic>Pritzker Architecture Prize</topic>
  <temporal>1970-2010</temporal>
    </subject>
- <subject authority="lctgm">
  <topic>Architects</topic>
  <temporal>1970-2010</temporal>
    </subject>
- <subject authority="lctgm">
  <topic>Awards</topic>
  <temporal>1970-2010</temporal>
    </subject>
- <relatedItem type="host">
```

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```xml
- <titleInfo>
  <title>Visual Image Web Sites Archive</title>
      </titleInfo>
- <location>
  <url>http://hdl.loc.gov/loc.natlib/collnatlib.00000014</url>
      </location>
      </relatedItem>
  <identifier>hdl:loc.natlib/mrva0014.0012</identifier>
- <location>
  <url displayLabel="Archived site">http://loc.archive.org/visual/2006*/www.pritzkerprize.com/</url>
      </location>
- <location>
  <url usage="primary display">http://hdl.loc.gov/loc.natlib/mrva0014.0012</url>
      </location>
- <location>
  <physicalLocation>Library of Congress, Prints and Photographs Division, Washington, DC., 20540</physicalLocation>
  <physicalLocation authority="marcorg">dlc</physicalLocation>
      </location>
  <accessCondition>None</accessCondition>
- <recordInfo>
  <recordCreationDate encoding="iso8601">20070917</recordCreationDate>
  <recordIdentifier source="dlc">mrva0014.0012</recordIdentifier>
      </recordInfo>
      </mods>
```

Record 18

```xml
<mods xmlns="http://www.loc.gov/mods/v3" version="3.2">
- <titleInfo>
  <title>Abraham Lincoln Research Site</title>
      </titleInfo>
- <originInfo>
  <dateCaptured encoding="iso8601" point="start">20060330</dateCaptured>
  <dateCaptured encoding="iso8601" point="end">20061129</dateCaptured>
      </originInfo>
- <language>
  <languageTerm authority="iso639-2b" type="code">eng</languageTerm>
      </language>
- <physicalDescription>
  <form authority="marcform">electronic</form>
  <internetMediaType>text/html</internetMediaType>
  <digitalOrigin>born digital</digitalOrigin>
      </physicalDescription>
  <targetAudience>general</targetAudience>
  <typeOfResource>text</typeOfResource>
  <genre authority="marcgt">web site</genre>
  <abstract>Presents information about Abraham Lincoln's life and accomplishments. The web site is organized into three main
      sections entitled the Abraham Lincoln Research Site, Abraham Lincoln's Assassination, and the Mary Todd Lincoln
      Research Site. More information on Abraham Lincoln can be found under Lincoln Links. Site created and maintained by
      Roger Norton.</abstract>
  <note type="system details">home.att.net/~rjnorton/Lincoln2.html</note>
  <note type="quality review">Virtual exhibition of Abraham Lincoln materials</note>
- <subject authority="keyword">
  <topic>Abraham Lincoln, abraham lincoln, assassination, springfield, honest abe, ann rutledge, booth, john wilkes booth, civil
      war</topic>
      </subject>
- <subject authority="lcsh">
- <name type="personal">
  <namePart>Lincoln, Abraham</namePart>
  <namePart type="date">1809-1865</namePart>
      </name>
      </subject>
- <subject authority="lcsh">
- <name type="personal">
  <namePart>Lincoln, Mary Todd</namePart>
  <namePart type="date">1818-1882</namePart>
```

```xml
            </name>
          </subject>
- <subject authority="lcsh">
  <topic>Presidents</topic>
  <geographic>United States</geographic>
  <genre>Biography</genre>
          </subject>
- <subject authority="lcsh">
  <topic>Presidents' spouses</topic>
  <geographic>United States</geographic>
  <genre>Biography</genre>
          </subject>
- <name type="personal">
  <namePart>Norton, Roger (Roger J.)</namePart>
          </name>
- <relatedItem type="host">
- <titleInfo>
  <title>Single Sites Web Archive</title>
          </titleInfo>
- <location>
  <url>http://hdl.loc.gov/loc.natlib/collnatlib.00000013</url>
          </location>
          </relatedItem>
  <identifier type="hdl">hdl:loc.natlib/mrva0013.0004</identifier>
- <location>
  <url usage="primary display" access="raw object">http://hdl.loc.gov/loc.natlib/mrva0013.0004</url>
          </location>
- <location>
  <url displayLabel="Archived site">http://webarchives.loc.gov/collections/lcwa0013/*/home.att.net/~rjnorton/Lincoln2.html</url>
          </location>
- <location>
  <physicalLocation>Library of Congress, Washington D.C., 20540 USA</physicalLocation>
  <physicalLocation authority="marcorg">dlc</physicalLocation>
          </location>
  <accessCondition>None</accessCondition>
- <recordInfo>
  <recordContentSource authority="marcorg">dlc</recordContentSource>
  <recordCreationDate encoding="iso8601">20090324</recordCreationDate>
  <recordIdentifier source="dlc">mrva0013.0004</recordIdentifier>
- <languageOfCataloging>
  <languageTerm authority="iso639-2b" type="code">eng</languageTerm>
          </languageOfCataloging>
          </recordInfo>
          </mods>
```

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APPENDIX D : MODS ELEMENTS

abstract
accessCondition
classification
extension
genre
identifier
language

      languageTerm
      scriptTerm

location

      physicalLocation
      shelfLocator
      url
      holdingSimple
      holdingExternal

name

      namePart
      displayForm
      affiliation
      role
      description

note
originInfo

      place
      publisher
      dateIssued
      dateCreated
      dateCaptured
      dateValid
      dateModified
      copyrightDate
      dateOther
      edition
      issuance
      frequency

part

      detail
      extent

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date
text

physicalDescription

form
reformattingQuality
internetMediaType
extent
digitalOrigin
note

recordInfo

recordContentSource
recordCreationDate
recordChangeDate
recordIdentifier
recordOrigin
languageOfCataloging
descriptionStandard

relatedItem
subject

topic
geographic
temporal
titleInfo
name
genre
hierarchicalGeographic
cartographics
geographicCode
occupation

tableOfContents
targetAudience
titleInfo

title
subTitle
partNumber
partName
nonSort

typeOfResource

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Library of Congress. (2010). Scope and Purpose. Retrieved from http://www.loc.gov/rr/print/tgm1/ia.html

McCallum, S.H. (2004). An introduction to the Metadata Object Description Schema (MODS). *Library Hi Tech, 22*(1), 82-88.

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·   I have not quoted the words of any other person from a printed source or a website without indicating what has been quoted and providing an appropriate citation.

·   I have not submitted this paper / project to satisfy the requirements of any other course.

Signature Carrie E. Moran

Date   June 3, 2011