Increasing Access to Archives Through Linked Open Data

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A Research Report on ...

The Metadata Vocabulary Junction Project:
Connecting Library Data to the Unfamiliar Data and Metadata Resources in the LOD Universe

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http://lod-lam.slis.kent.edu/
Project purpose:
To connect library, archive, and museum (LAM) data to the unfamiliar datasets available in the Linked Data (LD) community’s CKAN Data Hub.

Linked Open Data (LOD) is one of the groups in CKAN

5,951 datasets (as of August 4, 2012)
Preliminary Focus Areas

- Authority information
- Music and music-related information
- Archives and archival finding aids
- Museum object documentation
Aligning Library/Archive Data with LOD Data Constructs

LAM data:
- Library bibliographic records
  - MARC records
  - schema.org markup
- Digital collection metadata
  - Dublin Core-based
  - Other locally defined
- Archival descriptions
  - EAD, MARC, other
- Museum and Visual Resources object descriptions
  - VRA Core, other

LOD Datasets:
- Ontologies
- Metadata Application Profiles
- Structured data in XML/RDF samples
- Documentation
1. Analyze archival descriptive and authority standards to determine what information may be useful as linked data:
   - Encoded Archival Description
   - Encoded Archival Context

2. Review finding aid exemplars from several sources to discover how standards are applied:
   - OhioLink EAD Repository
   - Online Archive of California
   - Library of Congress Finding Aids

3. Identify and review other potential sources of information as needed

4. Then, break down the “records” and find:
   - Common elements
   - Possibilities for linking archival data elements to LOD classes and properties
   - Major access points
   - Hidden access points
Data Collection and Analysis (2): LOD Datasets

1. Identify datasets potentially relevant to archival collections
   a. Records creator/agent information
   b. Geographic information
   c. Event and activity information

2. Analyze the source of the data structures
   a. Ontologies used
      (e.g., Dublin Core Terms, FOAF, Event Ontology, LODE Ontology, GeoNames Ontology, etc.)
   b. Metadata schemas and application profiles
      (e.g., schema.org, LOCAH, Europeana EDM Schema, Archival Schema from U.Mass-Amherst) and derivatives
   c. Structured data in XML/RDF samples
   d. Documentation

3. Crosswalk their properties, indicating the matching level
   (e.g., broadMatch, equivalent, narrowMatch, etc.)

4. Identify major classes and properties useful to archives data
   (e.g., foaf:name, dbpedia:Place, dc:subject schema:Event)
Potential Intersection Points in the Archival Descriptions

- Personal, family, and corporate bodies
- Places
- Events
- Topics and genres/forms
## Alignment Example: EAD to FOAF (partial)

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<thead>
<tr>
<th>Root: EAD container tag(s)</th>
<th>Root: EAD Data Element</th>
<th>Target: FOAF Class</th>
<th>Class Mapping</th>
<th>Target: FOAF Property</th>
<th>Property Mapping</th>
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