Harvard Project Proposal

In conjunction with the Linked Data for Libraries-Labs (LD4L-Labs) project, Harvard will focus on two specialized domains:

Cartographic Materials

Overview

Harvard will explore best practices for creating native Linked Data descriptions for library cartographic resources including printed maps, atlases, digital geospatial datasets, and other cartographic information resources. The project will evaluate BIBFRAME's effectiveness as a data model for describing cartographic materials for research needs and will compare BIBFRAME's effectiveness versus other available Linked Data descriptive schemas. In addition the group will evaluate the thesauri and controlled vocabularies associated with the description of cartographic resources to identify those vocabularies best suited to describe cartographic resources in a linked data environment.

The LD4L-Labs portion of this project (5.1 Geospatial Datasets and Geospatial Images) will focus on converting a subset of OpenGeoMetadata metadata records from the Harvard Geospatial Library, Stanford EarthWorks, and the Cornell University Geospatial Information Repository (where they are now represented using the geospatial community standard Federal Geographic Data Committee (FGDC) schema, ISO 19139) into linked data descriptions.

Objectives / Deliverables

- Identify library cartographic resources metadata use cases, user stories, and research needs.
- Evaluate the existing BF schema for suitability for describing cartographic resources.
- Evaluate other available LOD vocabularies for describing properties of cartographic resources.
- Develop and document a BF profile for the description of cartographic resources.
- Engage with cartographic resources community to develop BF best practices for description of cartographic resources.
- Catalog and convert a representative selection of cartographic resources using the developed BF profile (rare materials to born-digital, varying languages) and contribute descriptions to project triple store.
- Develop a set of mapping rules for Federal Geographic Data Committee (FGDC) geospatial metadata standards to linked data
- Work with LD4L-Labs to convert a set of OpenGeoMetadata records to linked data descriptions using the cartographic material ontology; reconcile linked data entities in the source metadata for Originators, Place and Theme keywords, and series works; and publish the descriptions to a linked data triplestore.
- Inform the development of metadata production tools to ensure compatibility for describing cartographic resources.
- Inform the development of a cartographic materials metadata visualization tool.
- Evaluate results of project and share set of recommendations for further research and development.
- Present project findings to appropriate library and linked data communities such as the ALA Map and Geospatial Information Round Table (MAGIRT), Program for Cooperative Cataloging (PCC), DLF, Alliance of Digital Humanities Organizations.

Community

- Harvard Library
    - Geospatial Metadata Librarian (Project Coordinator)
    - Metadata Creation unit catalogers
    - Metadata Technologies Program Manager
    - Head, Metadata Management and Metadata Creation units
- Harvard University Information Technology, Library Technology Services
    - Senior Software Engineer
- LD4L/P partner institution members
    - Stanford metadata librarians and catalogers
    - Library of Congress Geography and Map Division catalogers
- Selection of project Working Group contributors from the greater community of geospatial metadata and linked data professionals including
    - OpenGeoMetadata digital geospatial data representative
    - GeoHumanities Special Interest Group representative
    - ALA MAGIRT Cataloging and Classification Committee representative
    - ALA MAGIRT GeoTech Committee representative

Moving Images

As part the LD4L-Labs companion project ([5.2 Harvard Film Archive (HFA)](#)), Harvard will explore and assess the issues in converting legacy metadata for moving image resources to linked data. The project will additionally explore the issues in making that linked data useful for research and discovery. Metadata conversion tools will be developed that create linked data descriptions for a variety of formats (film prints, negatives, DVDs, VHS, Super 8, and others) and content (feature films, trailers, home movies, ethnographic films, propaganda) and related archival materials (including production elements, artwork, film stills, and promotional ephemera) held by the Harvard Film Archive (HFA). The project will assess BIBFRAME's effectiveness as a data model for describing moving image materials for research needs, and identify specific vocabularies for description of these materials in a linked data environment. The HFA project will create mappings for records from the HFA's film print database, focusing on a subset of moving image materials by women directors (work that has previously been underexposed and in many cases is unique to this collection). Wherever possible, entities will be reconciled to linked data URIs, including personal and corporate names (ISNI, LCNAF), place names (GeoNames), genres (LC genre/form, Getty AAT), and works.

Objectives / Deliverables

- Create and pilot a software tool for converting existing HFA metadata into BIBFRAME RDF, including entity resolution.
- Identify BIBFRAME extensions.
- Load the HFA linked data into the Harvard linked data infrastructure to support SPARQL queries defining relevant subgraphs.
- Create or repurpose a linked data visualization tool for displaying relevant portions of the HFA RDF graph for each described item.
- Assess the end-user value for discovery and research of the HFA linked data, including a written summary of project findings disseminated to appropriate moving image and linked data communities with a set of recommendations for future research and development.