



Considerations of designing a user friendly BIBFRAME (Linked Data) editor:

Challenges and future of information
organization professionals

September 19, 2023



What's the theme of this talk?

- Experiences: Data creation and hybrid workflows (MARC 21 and BIBFRAME)
- Implementation: Strategies and challenges
- Interoperability: Data conversion and migration; ILS integrations
- Standards: Interplay of BIBFRAME with other standards, such as cataloging guidelines (RDA), provenance data; BIBFRAME as an open standard
- Technology: BIBFRAME tools and technologies
- User-centered design and user experience
- BIBFRAME and digital scholarship, specialized domains
- BIBFRAME and entity management

Well, our talk does not exactly align with any one theme...



Outline

- Why BIBFRAME?
 - Creating Library Data as Linked Data
- BIBFRAME editors
 - Comparisons
 - Feedback from the field
 - What can we do to create Library 'Data' as Linked Data
- Linked Data Editor considerations
- Changing professions



Why BIBFRAME

- As a producer: Libraries want to make library data searchable and discoverable on the web
- As a consumer: Libraries want to bring available linked open data (contextual information) to library users

BIBFRAME was developed to make the library data as linked data, so the Web can use the library data.



Why BIBFRAME

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Creating Library Data as Linked Data

- Share library data to the web
 - BIBFRAME development
 - BIBFRAME editors that create library catalog data in BIBFRAME ontology with authority URIs in various representations, json, turtle, xml

*How are we using BIBFRAME data in the Library and for our users?

Comparison of two BIBFRAME editors



Marva

- Ontologies: BIBFRAME
- Outputs: BIBFRAME in XML

- Profiles are built in
- Ease of navigation?
- Requires training

Sinopia

- Ontologies: BIBFRAME, RDA, others
- Outputs: BIBFRAME and others in different representations
- Can create resource templates
- Ease of navigation?
- Requires training

Functionality of Linked Data Editors

Profiles: Marva

The screenshot shows the Linked Data Editor interface for a 'Work' profile. The interface is divided into three main sections:

- Left Sidebar (Navigation Menu):** A dark sidebar with a list of categories and sub-items. The 'Content Type' category is selected and highlighted with a checkmark.
- Central Form (Work Metadata):** A light blue area containing several input fields for editing the work's metadata:
 - Creator of Work:** A dropdown menu currently showing 'Person' with a search field for LCNAP and a relationship designator field.
 - Title Information:** A dropdown menu currently showing 'Work Title' with a search field for LCGFT and fields for part number and part name.
 - Form/Genre:** A dropdown menu with a search field for LCGFT and a field for the Thesaurus (if not LCGFT).
 - Government publication:** A simple text input field.
 - Date of Work:** A simple text input field.
- Right Sidebar (Profile Details):** A light blue area showing the current profile's details, highlighted with a purple border. It includes:
 - Work:** Content Type: text; Admin Metadata: 12345, DLC, pcc, rda; English; Ic:R:T:bf2:Monograph:Work; 2023-04-11T18:18:51Z; create work.
 - Instance:** Mode of Issuance: single unit; Media type: unmediated; Carrier type: volume; Admin Metadata: 12345, DLC, pcc, rda; English; Ic:R:T:bf2:Monograph:Instance; 2023-04-11T18:18:51Z; create work.

Functionality of Linked Data Editors

Templates: Sinopia

The screenshot displays the Sinopia Linked Data Editor for a 'PCC BF2 Instance (Monograph)'. The interface is organized into several sections:

- Left Sidebar:** A vertical list of navigation options including 'Instance of', 'Instance Title', 'Parallel, Variant & Transliterated Titles', 'Statement of Responsibility', 'Edition Statement', 'Publication Information', 'Distribution, Manufacture, Production Information', 'Transcribed Provider Statement', 'Copyright Date', 'Contribution to the Manifestation/Instance', 'Series Statement', 'Identifiers', 'Note about the Instance', 'Extent', 'Dimensions', 'Mode of Issuance', 'Media Type', 'Carrier Type', and 'Uniform Resource Locator for Resource'.
- Top Right:** 'Close' and 'Save' buttons.
- Class Information:** A section titled 'INSTANCE' showing the class 'Instance (http://id.loc.gov/ontologies/bibframe/Instance)' and optional classes: 'Electronic (http://id.loc.gov/ontologies/bibframe/Electronic)', 'Manuscript (http://id.loc.gov/ontologies/bibframe/Manuscript)', and 'Print (http://id.loc.gov/ontologies/bibframe/Print)'. Each class has an unchecked checkbox.
- Instance of Section:** A section titled 'Instance of' with a search input field 'Enter lookup query for Instance of' and a search button. Below it are buttons for 'Create New' and '+ Add another Instance of'. A note indicates 'Lookup with: Sinopia BIBFRAME work resources'.
- Instance Title Section:** A section titled 'Instance Title' with a sub-section 'Title--Instance Title'. It shows the property 'Title (http://id.loc.gov/ontologies/bibframe/title)' and class 'http://id.loc.gov/ontologies/bibframe/Title'. Below this is a sub-section 'Title Proper' with a text input field containing 'Title Proper' and a search button. At the bottom of this section are several expandable options: '+ Add Number of Non-Filing Characters', '+ Add Other Title Information', '+ Add Part Number/Letter', '+ Add Part Title', and '+ Add Note on Title'.

Functionality of Linked Data Editors

Templates: Sinopia

- Ontology agnostic
- Customizable

The screenshot displays the Sinopia Property Template editor. At the top, the URL `Property: http://sinopia.io/vocabulary/hasPropertyTemplate` is shown. Below this, the 'Property template' section is visible, with a class `Class: http://sinopia.io/vocabulary/PropertyTemplate`. The interface is organized into several sections, each with a red box highlighting a specific feature:

- Property*:** A section containing a text input for the URI (currently 'Property'), a text input for the label (currently 'Label for Property'), and a '+ Add another Property' button.
- Label*:** A section containing a text input for the label (currently 'Label') and a '+ Add Remark' button.
- Property type*:** A section containing a dropdown menu for selecting the property type (currently 'Select Property type') and a '+ Add Property attributes' button.

Other visible elements include '+ Add Remark URL', '+ Add Literal attributes (if a literal)', '+ Add URI attributes (if a URI)', '+ Add Lookup attributes (if a lookup)', and '+ Add Nested resource attributes (if a resource)' buttons.

Functionality of Linked Data Editors

Querying by string

Marva

The Marva interface shows a search window titled "Search LCNAF". On the left, there is a search filter set to "NAF All" and a search box containing "Lincoln, Abraham". Below the search box is a list of search results, with "Lincoln, Abraham, 1809-1865" selected. On the right, a detailed profile for "Lincoln, Abraham, 1809-1865" is displayed, including personal name, variants in various languages, birth place, field of activity, occupation, and associated language. A button at the bottom of the profile reads "Add Selected [SHIFT+Enter]".

Sinopia

The Sinopia interface shows a profile for "Agent" with the property "http://id.loc.gov/ontologies/bibframe/agent". Below this, there is a search box labeled "Enter your own URI and label" containing "Lincoln, Abraham, 1809-1865". A "Lookup with: LOC all names (QA)" option is visible. Below the search box, there is a section titled "Add 'Lincoln, Abraham, 1809-1865' as literal or select from:" which contains a list of search results. The first result, "Lincoln, Abraham, 1809-1865", is selected. Below the list, there is a detailed profile for "Lincoln, Abraham, 1809-1865" with various properties and editorial notes.

Feedback from the Field



Marva

- 2 graduate students and 5 original catalogers
- Attended Marva workshop


Sinopia

- 5 original catalogers, 2 graduate students, 2 non catalogers, and 2 cataloging and metadata Librarians
- Used the tool without prior training or experience

Feedback from the Field



- “I can navigate and work with the editors.”
- “*It is not easy: too many clicks, too verbose, too hard but I can follow through...*”
- “I really need to know RDA/FRBR”
- “What did I create? Where can I see the results?”
 - “What happened next after I completed the template?”
 - “Why do I create records for "works"?”
- “How are BIBFRAME, Linked Data/Semantic Web, and OPAC [discovery system] connected?”

- 
- Can we make a linked data editor that creates BIBFRAME data and more?
 - Do we need to create ‘Work’ level data - can that be ‘generated’ by the system?
 - Some of the ‘Instance’ Information can be used for creating ‘Work’ level data?
 - Discovery systems already know how to do the FRBRized search and display!



Linked Data Editor Considerations

- Simple interface with easy to understand labels
- Provide a set of templates for different resource types
- Ontology agnostic
 - Built-in mappings for different outputs (MARC, BIBFRAME in different representations, etc.)
- Make the editor work hard(er!)
 - Generate Work level data
 - Provide autocomplete service via LOD sources
 - Identify and alert duplicated data entry



What editors/systems can do better and what 'we' can do better?



Too many 'New' hats?

- Evolving role of Cataloging and metadata professionals
- Assume NEW roles as -
 - Coordinator, Facilitator, and more.
- Required NEW skills -
 - Understanding systems, multiple ontologies
- Lead changes



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Difficulty of hiring new professionals



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