



# BIBFRAME expansion and access

Sally McCallum  
Library of Congress  
EWS 2019, Stockholm

# Year saw explosion of activity

- LD4 editor brings **17+** institutions into the BIBFRAME environment
- SHARE-VDE from Casalini enables **22+** institutions to see/feel their records as BIBFRAME descriptions
- Innovative Interfaces is into experimentation with discovery with BIBFRAME
- LC is at last able to make its BIBFRAME Work/Instance/Item file publically available and add **50+** more catalogers to the project.

# A year of implementation focus

- Getting it out
- Improving cataloger experience
- Bringing more catalogers in
- Closing in on BIBFRAME to MARC
- Defining hubs

# Reminder

- Get our data into current structures that the internet supports
- Explore different views of our data
- Use and exploit data linking
- Develop resource description efficiencies
- Employ new ways of sharing
- Work with a wider community – libraries, archives, museums,...

# Getting it out

- BIBFRAME file public access
  - BIBFRAME Works and Instance/Item files are now publically available through LC's Linked Data Service (LDS)—better known as **ID** or [id.loc.gov](https://id.loc.gov)
- ID contains many other linked data resources such as:
  - NACO name authority file
  - LCSH subject file
  - around 100 other resource lists used in BIBFRAME (and MARC) cataloging

# ID.LOC.GOV – Linked Data Service

Some of the files searchable and available in RDF with URIs:

## BIBFRAME

NEW!

- > [BIBFRAME Works](#)
- > [BIBFRAME Instances](#)

## Subjects, Thesauri, Classification

- > [LC Subject Headings \(LCSH\)](#)
- > [LC Classification \(LCC\)](#)
- > [LC Children's Subject Headings](#)
- > [LC Medium of Performance Thesaurus for Music \(LCMPT\)](#)
- > [Thesaurus for Graphic Materials \(TGM\)](#)
- > [AFS Ethnographic Thesaurus](#)
- > [Subject Schemes](#)
- > [Classification Schemes](#)

## Agents

- > [LC Name Authority File \(LCNAF\)](#)
- > [Cultural Heritage Organizations](#)

## Genre

- > [LC Genre/Form Terms \(LCGFT\)](#)
- > [MARC Genre Terms](#)
- > [Genre/Form Schemes](#)

## Languages

- > [MARC Languages](#)
- > [ISO639-1 Languages](#)
- > [ISO639-2 Languages](#)
- > [ISO639-5 Languages](#)

## Geographic

- > [MARC Countries](#)
- > [MARC Geographic Areas \(GAC\)](#)

## Ontologies

- > [BIBFRAME Ontology](#)
- > [MADS/RDF Ontology](#)
- > [PREMIS Ontology](#)

## Data Types

- > [Extended Date/Time Format \(EDTF\)](#)

## Cataloging

- > [Aspect Ratio](#)
- > [Authentication Action](#)
- > [Broadcast Standard](#)
- > [Carriers](#)
- > [Color Content](#)
- > [Content Types](#)
- > [Description Conventions](#)

Etc.

# BIBFRAME in ID – starting large and small

- Large – BIBFRAME Work and Instance database = entire LC bibliographic catalog + title authorities + holdings
  - 18.8 million BIBFRAME Works
  - 21.6 million BIBFRAME Instances
  - Displays of Works with links to Instances and vice versa
  - BIBFRAME Works are linked via “BIBFRAME Hubs”
- Small – initially simple search
  - Key word in Work title, Instance title, contributor names, publisher names, publication date
  - Result sets relevancy ranked
  - Type and date qualifiers/facets

## Bibframe Work

### Title

Harper Lee

### Type

Text

### Contribution

Haggerty, Andrew. Contributor

### Subject

- Lee, Harper--Juvenile literature.
- Authors, American--20th century--Biography--Juvenile literature.
- Lee, Harper. To kill a mockingbird--Juvenile literature.
- Lee, Harper.
- Authors, American.
- To kill a mockingbird.

### Genre Form

biographies

### Language

English

### Illustrative Content

illustrations

### Classification

- LCC: PS3562.E353 Z69 2009 (Source: dlc)
- DDC: 813/.54 full (Assigner: dlc)
- DDC: B full (Assigner: dlc)

### Identified By

Lccn: 2008050265

### Supplementary Content

- bibliographies
- filmography
- Index present
- Includes filmography (p. 93-94), bibliographical references (p. 101-118) and index.

### Summary

Presents the career of writer Harper Lee, describing the composition of her major work, "To Kill a Mockingbird," her relationship with Truman Capote, and the legacy of her writing.

## Bibframe Instance

### Title

Harper Lee To kill a mockingbird

### Type

Print

### Identified By

- Lccn: 2008050265
- Isbn: 9780761442806 (lib. bdg.)
- Isbn: 0761442804 (lib. bdg.)
- Local: ocn276602370 (Source: OCoLC)

### Note

Physical details: ill.

### Dimensions

23 cm.

### Extent

125 p.

### Provision Activity Statement

Tarrytown, NY : Marshall Cavendish Benchmark, c2010.

### Provision Activity

- Publication: New York (State) 2010
- Publication: Tarrytown, NY Marshall Cavendish Benchmark c2010

### Responsibility Statement

Andrew Haggerty

### Issuance

single unit

### Series Statement

Writers and their works



# RDF available

- Descriptions can also be screened as
  - RDF/XML
  - N-triples
  - JSON
- All three offered as
  - Verbose = data strings + URIs for data
    - Includes LC's local/display manipulation properties (bflc:)
  - Compact = URIs for data without strings
    - Local/display properties eliminated

- The public BIBFRAME description database is a work in progress
  - Displays continuously changed
  - Searching expanded
  - Conversion and RDF tweaked
- Also remember, LC's bibliographic data was produced over a span of 100 years so is only relatively consistent.
  - Changing cataloging conventions
  - Missing data from retrospective conversion practices
- RDF does not correct data or fill in missing data.

# Improving cataloger experience

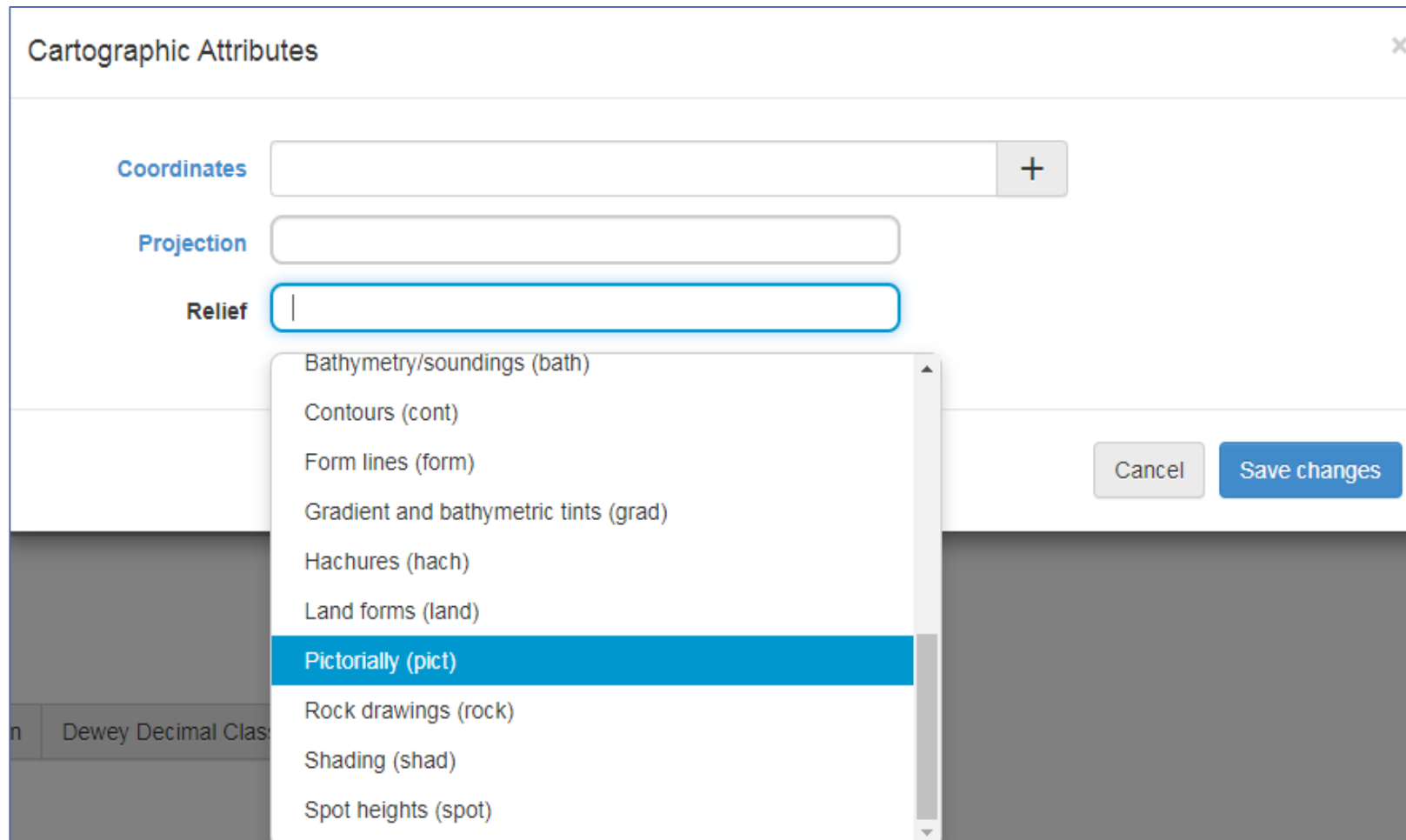


The Editor interface is the catalogers' view of BIBFRAME



- This year greatly improved the BIBFRAME Editor interface
  - More pick lists at catalogers' request – improves consistency
  - Roll over context information – helps catalogers differentiate without elaborate lookups in other files
  - Adjustable and save-able templates for input
  - Sharpened create, modify, save, clone, and download functionality BUT download/merge still outstanding
- Editor software is always available for download and experimentation by others at [bibframe.org](http://bibframe.org)

# Additional drop-down vocabularies



The screenshot shows a dialog box titled "Cartographic Attributes" with a close button (X) in the top right corner. It contains three input fields: "Coordinates" with a plus sign button, "Projection", and "Relief". The "Relief" field is highlighted with a blue border, and a dropdown menu is open below it, listing various relief styles. The "Pictorially (pict)" option is currently selected and highlighted in blue. At the bottom right of the dialog, there are "Cancel" and "Save changes" buttons. A partial view of another dialog box titled "Dewey Decimal Clas" is visible in the bottom left corner.

Field	Value
Coordinates	
Projection	
Relief	Pictorially (pict)

- Bathymetry/soundings (bath)
- Contours (cont)
- Form lines (form)
- Gradient and bathymetric tints (grad)
- Hachures (hach)
- Land forms (land)
- Pictorially (pict)**
- Rock drawings (rock)
- Shading (shad)
- Spot heights (spot)

The map catalogers requested a drop-down list of Relief values to correspond with data in MARC tag 008

# Rollover context information

Information in context: determine which authorized access point is appropriate without leaving the editor to search another source

The screenshot displays a library catalog interface. On the left, there are sections for 'Variants' and 'Sources'. The 'Variants' section lists 'Jensen, Arne, 1950-'. The 'Sources' section lists a book: 'Nordic Summer Sch. in Math. (1988 : Sønderborg, Denmark). Schrödinger operators, c1989: CIP t.p. (A. Jensen) t.p. verso (Arne Jensen; Dept. of Math. & Computer Sc., Aalborg U., Denmark) data sh. (b. 2/28/50) found'. Below this is a 'Work' section with fields for 'Creator of Work' (Primary Contribution) and 'Title Information' (Work Title). On the right, a search box contains the text 'jensen, A. (Arne), 1950- (n88262162)'. Below the search box is a list of results under the heading 'LCNAF'. The first result, 'Jensen, A. (Arne), 1950- (n88262162)', is highlighted in blue. A rollover tooltip is visible over this result, showing 'View on id.loc.gov' and 'Other Identifying Attributes (RDA 9.6-9.11)'. Below the tooltip are links for 'Address of Person (RDA 9.12)' and 'Biographical Information (RDA...'. Other results in the list include 'Jensen, A. (Arne), 1951- (n88052491)', 'Jensen, A. Bruce (Arthur Bruce), 1939- (n2005050961)', 'Jensen, A. L. (n83062313)', 'Jensen, A. P. (Alton Peter), 1925- (n88600185)', 'Jensen, A. R. (n88635351)', 'Jensen, A. S. (Anthony Svend), 1922- (no98094986)', 'Jensen, Aage Lund (nb99092579)', and 'Jensen, Aage, 1888-1962 (n85310140)'. Plus signs are visible to the right of the first two results in the list.

Variants

- Jensen, Arne, 1950-

Sources

- Nordic Summer Sch. in Math. (1988 : Sønderborg, Denmark). Schrödinger operators, c1989: CIP t.p. (A. Jensen) t.p. verso (Arne Jensen; Dept. of Math. & Computer Sc., Aalborg U., Denmark) data sh. (b. 2/28/50) found

View on id.loc.gov

Other Identifying Attributes (RDA 9.6-9.11)

Address of Person (RDA 9.12)

Biographical Information (RDA...

Work

Creator of Work Primary Contribution

Title Information Work Title

Form of Work

jensen, A. (Arne), 1950- (n88262162)

LCNAF

- Jensen, A. (Arne), 1950- (n88262162)
- Jensen, A. (Arne), 1951- (n88052491)
- Jensen, A. Bruce (Arthur Bruce), 1939- (n2005050961)
- Jensen, A. L. (n83062313)
- Jensen, A. P. (Alton Peter), 1925- (n88600185)
- Jensen, A. R. (n88635351)
- Jensen, A. S. (Anthony Svend), 1922- (no98094986)
- Jensen, Aage Lund (nb99092579)
- Jensen, Aage, 1888-1962 (n85310140)

# Cataloger templates

Template creation:  
The cataloger has the ability to turn off/on fields. Mandatory fields can't be changed. Templates are stored locally.

Template for: Monograph:Instance

<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Instance of</b>	BIBFRAME Work
	<b>Title Information</b>	Instance Title   Variant Title   Parallel Title
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Statement of Responsibility</b>	<input type="text"/> +
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Edition Statement</b>	<input type="text"/> +
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Publication, Distribution, Manufacture, Production</b>	Publication   Distribution   Manufacture   Production
	<b>Transcribed Provider Statement</b>	<input type="text"/> +
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Copyright Date</b>	<input type="text"/> +
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Series statement</b>	<input type="text"/> +
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Series enumeration</b>	<input type="text"/> +
	<b>Mode of Issuance</b>	<input type="text"/> single unit
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Identifiers</b>	ISBN   Other Identifier   Local system number
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Notes about the Instance</b>	Note
	<b>Media type</b>	<input type="text"/> unmediated
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Extent</b>	Extent
<input type="checkbox"/> OFF <input checked="" type="checkbox"/> ON	<b>Dimensions</b>	<input type="text"/> +

# Current projects for Editor

- Issues with Editor
  - Difficult to reimagine functionality
  - Consistency among users
  - Consistency of Editor created descriptions and descriptions converted from MARC
- Began pilot cataloger-driven contract for redesign of editor interface

# Bringing more catalogers in

- Added 57 more catalogers including:
  - 10 new catalogers from non-book media areas like sound recordings, notated music, and cartographic
  - 10 new catalogers from field offices – Cairo, Jakarta, Islamabad, and Nairobi
- Trained local and remote pilot participants in July/August
- Now have 107 catalogers in Pilot



- Training
  - Cataloger enthusiasm!
  - Training materials on web
  - 1 institution but 100 pilot cataloging individuals, so guidelines for BIBFRAME input prepared: <http://www.loc.gov/aba/pcc/bibframe/BIBFRAME-Manual-Final-2019-07-12.pdf>
  - Field Offices bring more non-Latin script material forcing the following issues:
    - Script designation in BIBFRAME descriptions
    - How much transliteration is necessary
    - Limiting the use of 880 fields when going to from BIBFRAME to MARC

# Closing in on BIBFRAME to MARC

- A tough task because:
  - Different resource types bring different resource models
    - Mass produced resources – e.g., many books
    - Unique material – such as manuscripts, rare material, graphics
    - Material available in multiple carriers – e.g. audio visual (paper print, 16 mm master, 35mm, etc.)
    - Evolving resources (diachronic) – such as serials
  - Various sources of descriptions now and over the years
    - 200 LC catalogers not in the pilot yet
    - LC field offices
    - Vendor supplied descriptions – brief and shelf ready
    - Various copy cataloging sources
    - CONSER/OCLC program

- Duplication in MARC
  - notes, codes, labels, transcriptions, typos
    - Filmed in Italy, it, e-it, Italy, Italie, Itayl
  - Data not needed in BIBFRAME description omitted in BIBFRAME
    - 210 - Abbreviated title - Indicator 1 - Title added entry
- Places for URIs
  - Problems with subfields, coded data like 007, 008
- Data that originated in MARC
  - Different code lists, different cataloging guidelines, different card to MARC conversion techniques

- Expectations for the converted MARC record
  - BIBFRAME to MARC records are structurally sound
  - URIs are carried over from BIBFRAME description
  - More variable data fields, fewer coded control fields
  - No punctuation at subfield boundaries
  - Less duplication
  - Simpler non-Latin/transliteration data
- Target date -- end of year

# Defining hubs

- Hubs are aggregation and collocation resources
- Not hierarchical, but adjacent resources, part of a larger graph of data
- Lightweight and sufficiently abstract for flexible use
  - contributor, title, variant titles, creation date, a few relationships like translation or arrangement.
- Relate in MARC to titles found in uniform titles, subjects and added entries
- Created only when needed for relationships
- Ongoing correlation with the SHARE-VDE Superwork

# Coming up

- New editor interface – then review of other interfaces
- BIBFRAME to MARC working and more catalogers added
- Refining: editor, data conversion, searching and end user interface
- Search and retrieval