2-14-2014

The Buzz About BIBFRAME

Angela J. Kroeger
University of Nebraska at Omaha, akroeger@unomaha.edu

Follow this and additional works at: https://digitalcommons.unomaha.edu/crisslibfacproc

Part of the Library and Information Science Commons

Please take our feedback survey at: https://unomaha.az1.qualtrics.com/jfe/form/SV_8cchtFmpDyGfBLE

Recommended Citation
https://digitalcommons.unomaha.edu/crisslibfacproc/63

This Presentation is brought to you for free and open access by the Dr. C.C. and Mabel L. Criss Library at DigitalCommons@UNO. It has been accepted for inclusion in Criss Library Faculty Proceedings & Presentations by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.
The Buzz About BIBFRAME

Angela Kroeger
Archives & Special Collections Associate
Criss Library, University of Nebraska at Omaha

Is RDA on Your RaDAr?
An Amigos Online Conference
February 20, 2014
What is BIBFRAME?

• Bibliographic Framework
• Traditional bibliographic records replaced by linkages among metadata pieces
• Relationships gather the pieces together for coherent display
• Think of LEGO bricks (Eric Miller’s analogy)
Why Replace MARC?

• Not used outside of libraries
• Not very interoperable with other metadata schema
• MARC cannot accommodate the diversity of linkages required in a Linked Data environment
• Machine interpretation of MARC subfield codes is dependent on accurate ISBD punctuation
BIBFRAME Progress

• Nov. 2012 – BIBFRAME Model Primer Released
• 2013 – Early experimenter trials, testing of vocabularies, transformations, and RDF
• 2014 – Test implementations, stable RDF vocabulary (version 1.0), creation of implementation tools
BIBFRAME Basics

• Linked Data (structure)
• RDF (data interchange model)
• XML (encoding format)
• Entity-Relationship Model (concept)
A rose by any other name . . .

RDF triple:
   subject--predicate--object

FRBR concept:
   entity--relationship--attribute

BIBFRAME concept:
   resource--relationship--property
MARC/XML vs. BIBFRAME RDF/XML

Author of a book, expressed in MARC/XML:

```xml
<marcxml:datafield tag="100" ind1="1" ind2=" ">
  <marcxml:subfield code="a">Erman, Adolf, </marcxml:subfield>
  <marcxml:subfield code="d">1854-1937. </marcxml:subfield>
</marcxml:datafield>
```

The same author, expressed in BIBFRAME RDF/XML:

```xml
<bf:creator>
  <bf:Person>
    <bf:label>Erman, Adolf, 1854-1937. </bf:label>
    <bf:authorizedAccessPoint>Erman, Adolf, 1854-1937. </bf:authorizedAccessPoint>
    <bf:hasAuthority>
      <madsrdf:Authority xmlns:madsrdf="http://www.loc.gov/mads/rdf/v1#">
        <madsrdf:authoritativeLabel>Erman, Adolf, 1854-1937. </madsrdf:authoritativeLabel>
      </madsrdf:Authority>
    </bf:hasAuthority>
  </bf:Person>
</bf:creator>
```

Example: BIBID 4541231 (The literature of the ancient Egyptians)
BIBFRAME Comparison Tool: [http://bibframe.org/tools/compare/](http://bibframe.org/tools/compare/)
BIBFRAME is all about RELATIONSHIPS
BIBFRAME Data Model Core Classes

• **WORK** – “conceptual essence of the cataloging item”

• **INSTANCE** – “individual, material embodiment of a Work”

• **AUTHORITY** – “authority concept which has a defined relationship to a Work or Instance”

• **ANNOTATION** – “augments another main BIBFRAME class when knowing who asserted the Annotation is vital information”

BIBFRAME and RDA and FRBR

• BIBFRAME creators use terms like “RDA-lite” and “FRBR-esque”

• BIBFRAME is independent of RDA and FRBR, but not incompatible with them
WEMI vs. WIAA
(FRBR Group 1 Entities vs. BIBFRAME Core Classes)

- BF:Work = FRBR:Work + FRBR:Expression
- BF:Instance = FRBR:Manifestation + FRBR:Item

OR...

- BF:Work = FRBR:Work + FRBR:Expression
- BF:Instance = FRBR:Manifestation
- BF:Annotation = FRBR:Item
BIBFRAME Work

Work XML properties include things like:

• *translation* and *translationOf*
• *absorbed*, *absorbedBy*, and *splitInto*
• *derivedFrom*
• *originDate*

BIBFRAME Work

Work types include things like:

- **Audio**
- **MixedMaterial**
- **MovingImage**
- **StillImage**
- **Text**

RDA Content Types Mapped to BIBFRAME Work Subclasses

RDA content: Text
= BIBFRAME Work: Language Material

RDA content: Spoken word
= BIBFRAME Work: Audio with subtype: nonmusical + spoken word

RDA content: Cartographic tactile 3-dimensional form
= BIBFRAME Work: Cartography + Tactile + Three dimensional object

BIBFRAME Resource Types: http://bibframe.org/documentation/resource-types/
BIBFRAME Instance

Instance XML properties include things like:

• *accompanies* and *accompaniedBy*
• *carrierCategory*
• *dimensions*
• *editionResponsibility*
• *publication*

BIBFRAME Draft Vocabulary for Instance: [http://bibframe.org/vocab/Instance.html](http://bibframe.org/vocab/Instance.html)
BIBFRAME Instance

Instance types include things like:

- Archival
- Collection
- Electronic or Print
- Monograph, MultipartMonograph, or Serial

BIBFRAME Draft Vocabulary for Instance: [http://bibframe.org/vocab/Instance.html](http://bibframe.org/vocab/Instance.html)
BIBFRAME Authority

Authority types include things like:

- **Agent** (subtypes: *Family*, *Jurisdiction*, *Meeting*, *Organization*, *Person*)
- **Place**
- **Temporal**
- **Topic**

BIBFRAME Draft Vocabulary for Authority: [http://bibframe.org/vocab/Authority.html](http://bibframe.org/vocab/Authority.html)
“Lightweight Abstraction Layer”

- BIBFRAME Authorities do not replace existing authorities, but facilitates access to many authority types
- A BIBFRAME Authority may link to one or more existing authorities, like LCSH or the Getty Thesaurus
- If no other authorities exist, the “lightweight abstraction layer” itself provides the authoritative URI
- One BIBFRAME Authority per entity

BIBFRAME Annotation

Annotation types include things like:

- CoverArt
- HeldMaterial
- Review
- Summary
- TableOfContents

BIBFRAME Draft Vocabulary for Annotation: http://bibframe.org/vocab/Annotation.html
Annotation Type: HeldMaterial

HeldMaterial XML properties include things like:

• `accessCondition`
• `heldBy`
• `lendingPolicy`
• `subLocation`

BIBFRAME Draft Vocabulary for Held Material: [http://bibframe.org/vocab/HeldMaterial.html](http://bibframe.org/vocab/HeldMaterial.html)
Further down the rabbit hole . . .

Annotation type *HeldMaterial* itself has a subtype: *HeldItem*

*HeldItem* XML properties include things like:

- *barcode*
- *circulationStatus*
- *shelfMark* (physical shelf location)
- *shelfMarkDdc* or *shelfMarkLcc* (call number)

BIBFRAME Draft Vocabulary for Held Item: [http://bibframe.org/vocab/HeldItem.html](http://bibframe.org/vocab/HeldItem.html)
BIBFRAME Linked Data

- **AUTHORITY (PERSON)**
- **AUTHORITY (TOPIC)**
- **WORK**
- **ANNOTATION (REVIEW)**
- **ANNOTATION (HELD MATERIAL)**

**Relationships:**
- **creator** from **AUTHORITY (PERSON)** to **WORK**
- **subject** from **AUTHORITY (PERSON)** to **WORK**
- **subject** from **AUTHORITY (TOPIC)** to **WORK**
- **expressionOf** from **WORK** to **ANNOTATION (REVIEW)**
- **hasExpression** from **WORK** to **ANNOTATION (HELD MATERIAL)**
- **hasInstance** from **WORK** to **INSTANCE**
- **instanceOf** from **INSTANCE** to **WORK**
- **creator** from **INSTANCE** to **AUTHORITY (PERSON)**
- **publisher** from **AUTHORITY (ORGANIZATION)** to **INSTANCE**
- **heldBy** from **INSTANCE** to **AUTHORITY (ORGANIZATION)**
- **holds** from **AUTHORITY (ORGANIZATION)** to **INSTANCE**
What can BIBFRAME + RDA do that MARC + AACR2 cannot?
BIBFRAME Use Cases

- “Books near me (Identify holdings of Instance)”
- “Mobile Reading (Discover Instances by Type)”
- “Broadening Search (Discover Adaptations of a Work)”
- “Local Subject Classification (Authority Updates)”

BIBFRAME Use Cases: http://bibframe.org/documentation/bibframe-usecases/
Bound With Example: Method A (expanded) (1)

1. **Bound With Example: Method A (expanded)**

   Description: From Leif Andresen: "A binding in one library of more than one text without any connection (example: five single books bound together of the library in one binding)" This example makes the bounded volume a type of local, or two additional BIBFRAME Works. There is an Instance of the ConstructedCollection and a Holding that points to (simple), this test case includes multiple instances of the bounded works. The Instance for the bounded collection is included in the bounded works in order to record which instance of a bounded Work is included in the bounded Instance.

   ```
   bin/wa?A2=ind1310&L=bibframe&T=0&X=566B2540DBDD7AEAC03&P=1202
   ```

   Tags: holdings and annotations

   Created: 2013-10-23

   Status: open

Bound With Example: Method A (simple) (1)

1. **Bound With Example: Method A (simple)**

   Description: From Leif Andresen: "A binding in one library of more than one text without any connection (example: five single books bound together of the library in one binding)" This example makes the bounded volume a type of local, or two additional BIBFRAME Works. There is an Instance of the ConstructedWork and a Holding that points to (simple), this test case includes multiple instances of the bounded works. The Instance for the bounded collection is included in the bounded works in order to record which instance of a bounded Work is included in the bounded Instance.

   ```
   bin/wa?A2=ind1310&L=bibframe&T=0&X=566B2540DBDD7AEAC03&P=1202
   ```

Possible Convergence of BIBFRAME and OCLC’s schema.org Bib Extension Vocabulary

The Future of Bibliographic Control
Questions or Comments?

Angela Kroeger
akroeger@unomaha.edu
References


