The Buzz About BIBFRAME

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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

Example: BIBID 4541231 (The literature of the ancient Egyptians)
BIBFRAME Comparison Tool: http://bibframe.org/tools/compare/

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>
```
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

BIBFRAME Draft Vocabulary for Work: http://bibframe.org/vocab/Work.html
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](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
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/
BIBFRAME Test Suite Harness

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

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

   **Description**
   From Leif Andreassen: "A binding in one library of more than one text without any connection (example: five 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 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=566B2540DBDD7AEAC3&P=1202

   **Tags**
   holdings and annotations

   **Created**
   2013-10-23

   **Status**
   open

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

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

The Future of Bibliographic Control

Fontenelle Forest, Bellevue, Nebraska. Photograph © 2013 by Angela Kroeger
Questions or Comments?

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References


