Hello BIBFRAME 2.0: Changes from 1.0 and Possible Directions for the Future

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HELLO BIBFRAME 2.0: CHANGES FROM 1.0 AND POSSIBLE DIRECTIONS FOR THE FUTURE

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Hello BIBFRAME 2.0: Changes from 1.0 and Possible Directions for the Future

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BIBFRAME is . . .

- A data model for resource description
- Linked data (RDF)
- Not based on RDA or FRBR, but mostly compatible with them
- Still not finished, but getting closer
- One hailstone in a metadata maelstrom
BIBFRAME is intended to . . .

- Replace MARC
- Break apart the bibliographic record into atomistic metadata statements
- Play well with other metadata standards
- Make library resources more easily discoverable on the open web
BIBFRAME Development

• 2012 – Data model released to public
• 2013 – Early experimenters
  • Vocabulary testing, transformation tools
• 2014 – Implementation Testbed
  • Stable RDF vocabulary, refined transformation, draft specifications, input tools
• 2015 – Library of Congress pilot project
  • Profile editor and new search tools
• And then, a few upheavals
BIBFRAME Upheavals

- Library of Congress and Zepheira went their separate ways, pursuing variant models, vocabularies, and tools.
  - Zepheira: Bibframe Lite [http://bibfra.me/](http://bibfra.me/)
- BIBFRAME 2.0 draft specifications released in October 2015.
  - Significant changes in core classes, vocabularies, and specifications.
RDF Statements, aka Triples

RDF

subject—predicate—object

FRBR

entity—relationship—attribute

BIBFRAME

resource—relationship—property
Subject - Predicate - Object

I know why the caged bird sings

agent

Angelou, Maya
LC Linked Data Service

- [http://id.loc.gov/](http://id.loc.gov/)
- Home of more than LC name and subject authorities
- BIBFRAME 2.0 ontology located here
- Many other available datasets, vocabularies, schemes and codesets suitable for use with BIBFRAME
BIBFRAME 1.0 MODEL

Source: Library of Congress
BIBFRAME 2.0 MODEL

Source: Library of Congress
BIBFRAME 1.0 Core Classes

• Creative Work
  = FRBR Work + FRBR Expression
  Properties applicable to all editions and formats

• Instance
  = FRBR Manifestation
  Properties specific to one edition or format

• Authority
  Agent, place, temporal, or topic

• Annotation
  = FRBR Item + a whole lot of other stuff
  Summaries, reviews, holding information, etc.
BIBFRAME 2.0 Core Classes

- Work
  \[ \text{FRBR Work} + \text{FRBR Expression (no change)} \]
  Properties applicable to all editions and formats

- Instance
  \[ \text{FRBR Manifestation (no change)} \]
  Properties specific to one edition or format

- Item
  \[ \text{FRBR Item (huuuuuuge change)} \]
  Properties specific to a single copy
Holdings Information in BIBFRAME 1.0

• HeldMaterial was a subclass of Annotation
  • Properties applied to every copy of an Instance owned by the library

• HeldItem was a subclass of HeldMaterial
  • Unique, copy-specific information
  • Here was the FRBR Item entity, an annotation of an annotation
Holdings Information in BIBFRAME 2.0

- bf:Item is a core class, not an annotation
- bf:Item can be simple (representing a single thing) or compound (representing components of a multipart thing)
BIBFRAME 2.0 Key Concepts

• Agents
  • People, organizations, or jurisdictions with some relationship to a Work or Instance (e.g.: author, illustrator, translator, publisher, etc.)

• Subjects
  • Topical, temporal, geographic, etc.
  • Includes Works, Instance, Items, Agents, Events, etc.

• Events
  • Any human or natural activity that is recorded and may serve as the content of a Work.
Events

• Events are modeled as Works
• Events have relationships to Works (bf:eventContent and bf:eventContentOf)
• Event content may or may not be creative content

Source:
Events

AV Modeling Study: Content Data Description Model

Source:
Official BIBFRAME Website

http://www.loc.gov/bibframe/
Delete your bookmark

http://bibframe.org/
Bibframe Lite (Zepheira)

http://bibfra.me/
Bibframe Lite

- 22 classes (compared to 66)
- 59 properties (compared to 138)
- Bibframe Lite was developed from BIBFRAME 1.0, but its focus on Events and Agents does kind of anticipate some of the BIBFRAME 2.0 changes.
Two Editors, Two Different Approaches

- BIBFRAME Editor (Library of Congress)
  - http://bibframe.org/tools/editor/
  - Detailed workform
  - Geared toward trained catalogers

- BIBFRAME Scribe (Zepheira)
  - http://editor.bibframe.zepheira.com/static/
  - Simplified workform
  - Usable by non-catalogers
BIBFRAME and Schema.org

- OCLC and W3C Schema Bib Extend Community Group's Schema.org extension vocabulary evolved into BiblioGraph.net
- LC and OCLC are working toward one another
- BIBFRAME for description, curation, and data exchange
- Schema.org for discovery via common search engines

Source:
BIBFRAME and Schema.org

Source:
Mixing Metadata

• For Audio/Visual resources, BIBFRAME is insufficiently granular
• Rather than reinventing the wheel with BIBFRAME, resource descriptions could be composed of mixed metadata
• Example: a BIBFRAME resource description could include PREMIS preservation metadata
• Other RDF ontologies could be employed to fill gaps in BIBFRAME

Source:
BIBFRAME AV Assessment

• Preservation Metadata
  • PREMIS

• Structural Metadata
  • AV files are complex, may include multiple tracks (audio, video, captions, etc.)
  • Each bitstream may have different characteristics (e.g.: frame rate, aspect ratio, sampling rate, etc.)

• Technical Metadata
  • May be wise to use different standards for different formats (e.g.: MLA for music, FIAF for film, etc.)

Source:
BIBFRAME 2.0 + schema.org + PREMIS + . . .

• In theory, infinitely modular and extensible resource description
• Pragmatically, as modular and extensible as we are willing to allow it to be
• In practice, as modular and extensible as we are capable of supporting
BIBFRAME 2.0 + schema.org + PREMIS + . . .

• Dependence on standards and vocabularies from external communities
• Trust?
BIBFRAME 2.0 is . . .

- Maturing
- Linking up with other metadata standards
- Still not inevitable
- But starting to really take shape
YOU CAN GET THAT DONE BY TOMORROW, RIGHT?


http://www.loc.gov/bibframe/docs/index.html

http://www.loc.gov/bibframe/media/index.html


Extended bibliography available via email upon request.
Thank you!

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http://dx.doi.org/10.1080/01639374.2013.823584
or http://bit.ly/1IEOFsG