BIBFRAME Pilot

Ray Denenberg / Nate Trail / Sally McCallum

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Extensions

**ArtFrame** *Columbia University.*
Art objects - paintings, photographs, sculptures, ceramics ....

**Cartographic** *Harvard*
printed maps, atlases, geospatial datasets ....

**Moving Image** *Harvard*

**Performed Music** *Stanford, MLA, ARSC, LC, and the PCC*
modeling of performers, medium of performance, and events

**Rare Materials** *Cornell*
model the complexity of rare materials, particularly item-level description. Provenance, physical description. Partnering with ArtFrame.

**Bibliotek-o** *LD4P*
How BIBFRAME Interacts with some of these external ontologies

... First, a quick review of the basic BIBFRAME model ...
basic BIBFRAME model

... begins with Work
a Work may have one or more instance
Work: Candide, the book

Instance 1, Print

Instance 2, Electronic
an Instance may have one or more Items
Work to Work
Relationships
Another Work: the play “Candide”

- Work: the book "Candide"
- Work: the play "Candide"
Another Work: the play “Candide”

These are two distinct Works
distinct but “related”

Work: the book "Candide"

bf:relatedTo

Work: the play "Candide"
More specifically, the play is an expression of the book and the relationship `expressionOf` is a subproperty of the property `relatedTo`
bf:Work has subclasses:
Music Extension
bf:Work has subclasses:

bf:cartography
bf:Audio
bf:NotatedMusic
bf:Text
bf:StillImage
bf:MovingImage
In particular, two subclasses related to music

bf:cartography
bf:Audio
bf:NotatedMusic
bf:Text
bf:StillImage
bf:MovingImage
Mozart Clarinet Quintet

- Mozart Clarinet Quintet: score
  - a bf:NotatedMusic
- A recording of Mozart Clarinet Quintet
  - a bf:Audio
two distinct works
Music extension adds a layer of abstraction to the basic model.
music extension invents an “abstract” work

Mozart Clarinet Quintet

bf:Work

bf:Audio

bf:NotatedMusic
... and adds relation to relate the abstract work to the two existing works

Mozart Clarinet Quintet
bf:Work

pmo:realizedIn

bf:NotatedMusic

Work to Work relation, subpropoerty of bf:relatedTo

bf:Audio

PMO: Performed Music Ontology
Mozart Clarinet Quintet

bf:Work

recording of the performance

bf:Audio

pmo:hasRecording

pmo:realizedIn

pmo:Performance

a bf:Event

Performance of Mozart Clarinet Quintet

Work to Event relation

Event to Work relation
BIBFRAME Events
BIBFRAME Events

class bf:Event  another core class
• There is a concert.

• The concert is recorded.

• A book is written about the concert.
There is a concert. The concert is an Event.

The concert is recorded. The recording is a Work.

A book is written about the concert. The book is a Work, and the concert is the subject of the book.
Brief digression:
BIBFRAME Subjects
Person as subject

bf:subject [  
a  bf:Person ;  
rdfs:label "Booth, John Wilkes, 1838-1865" ]
Place as subject

bf:subject [ 

  a bf:Geographic ; 

Work as subject

bf:subject [ 

a \ bf:Work ;

rdfs:label “the life and times of winston churchill ” ] .
• There is a concert. The concert is an **Event**.

• The concert is recorded. The recording is a **Work**.

• A book is written about the concert. The book is a **Work**, and the concert is the **subject** of the book.
Event

- bf:eventContent
  - bf:eventContentOf
    - Work 1
      - video of the event
    - Work 2
      - book about the event

bf:subject
Property pmo:createdFor
a motet celebrating the inauguration of a pope

motet (Work) \(\xrightarrow{\text{pmo:createdFor}}\) inauguration of a pope (Event)

\text{Pmo:createdFor supproperty of bf:relatedTo}
Additional pmo properties

- hasEventName
- hasInspiration
- hasPerformance Event that is the performance of a Work. Subproperty of eventContentOf
- recordingOf Subproperty of eventContentOf
Additional pmo Classes

- pmo:Concert
- pmo:Performance
- pmo:Festival

All subclasses of bf:Event
... and further subclassed:

- **Concert**
  - BenefitConcert
  - ConcertSeries
  - ConcertTour

- **Performance**
  - CommandPerformance
  - FirstPerformance
  - LivePerformance
  - OpenMicPerformance
  - RecordingSession
  - Rehearsal
  - Audition

- **Festival**
  - MusicFestival
Rare Materials: CustodialEvent

- ex:CustodialEvent
  - ex:Accessioning
  - ex:Auction
  - ex:Request
  - ex:ClaimOfOwnership
  - ex:Deposit
  - ex:Destruction
  - ex:Donation
  - ex:Inheritance
  - ex:Loan
  - ex:Loss
  - ex:Offer
  - ex:Recovery
  - ex:Repatriation
  - ex:Sale
  - ex:Theft
  - ex:Transfer

Subclass of bf:Event
BIBFRAME Titles
Consider this title:

“Penguin atlas of media and information - key issues and global trends”
“Penguin atlas of media and information - key issues and global trends"
The Penguin atlas of media and information: [key issues and global trends]

Subtitle from cover

Cataloger indicates the source of the subtitle. How do we reflect this in RDF?
bf:title [ 
  bf:mainTitle  "Penguin atlas of media and information" ;
  bf:subtitle "key issues and global trends" ]

bf:mainTitle and bf:subtitle are datatype properties
Define an object property:

**ex:subtitle**

.... And class:

**ex:Subtitle**
Penguin atlas of media and information

key issues and global trends
"Penguin atlas of media and information" ;
"key issues and global trends" 

"key issues and global trends" ;
"from cover"] ]
But this isn’t very linked-data friendly
A more linked-data friendly approach …
Subtitle is expressed twice. Once using the bibframe datatype property, and again using the external, object property. If the latter is not supported by the client, it will at least know the subtitle if not the source.