Art & Rare Materials BIBFRAME Ontology Extension:
from Modeling to Implementation

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Linked Data for Production (LD4P)

Native RDF cataloging & ontology extensions

Collaborations with community partners

Community-developed extensions of BIBFRAME

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Motivation

Art & Rare Materials BIBFRAME Ontology Extension

Developed as a collaboration between:
- LD4P's partner Institutions: Cornell and Columbia
- RBMS' Bibliographic Standards Committee
- ARLIS' Cataloging Advisory Committee

GitHub Repository: https://github.com/LD4P/arm
Wiki: https://wiki.duraspace.org/x/CpTBB
Process

1. Use Cases
2. Diagrams
3. Recommendation narratives
4. OWL ontology files
5. SHACL application profiles
6. Editor customization
7. Review
<table>
<thead>
<tr>
<th>Areas modeled (Art and Rare)</th>
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<tr>
<td>Accession Numbers</td>
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<td>Attributions</td>
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<td>Pagination and Filiation</td>
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<td>Signature Statements</td>
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<td>Style and Period</td>
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<td>Titles in Art</td>
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</tbody>
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Modularized Ontologies

Core (ARM)

Awards

Custodial History

Measurements

Source ontologies (for use as defined in Application Profiles):
  BIBFRAME, dcterms, schema, and more...
Application Profiles

- Specifies decisions
- Determines local / shared requirements

SHACL (SHApes Constraint Language)
- Facilitates: form development & data validation

*Note: more files around which to learn semantics and to then maintain over-time

Steven Folsom (@sf433) led work on SHACL for rare monographs
Melanie Wacker <mw2064@columbia.edu> led work on SHACL for art materials
Testing the model

Discorsi sopra la prima deca di Tito Livio

Preferred title

Discorsi sopra la prima deca di Tito Livio
What does implementation mean?

- Further development
- Hosting & maintenance
- Tool advocacy
- Data creation

In other words: Community engagement
RBMS Bibliographic Standards Committee activity

Content standards (cataloging manuals)
RBMS Bibliographic Standards Committee activity

Thesauri

RBMS Controlled Vocabularies: Binding Terms

Alphabetical List | Hierarchical List

<< Greek style bindings | Grotesque bindings | Hierarchical View | Guard books >>

Back to: "G"

Grotesque bindings

Scope Note
16th century; decorated with grotesque figures, usually classical.

Broader Term
Styles (Gathering term; do not assign)

Send comments to RBMS Controlled Vocabularies editors.
RBMS Bibliographic Standards Committee activity

Occasional contributions to MARC 21 development

For example:

- 510 field, for bibliographic citations
- 590 field, for item-specific notes
- 752 field, for hierarchical place of publication
RBMS Bibliographic Standards Committee activity

And ...

The Art & Rare Materials BIBFRAME Ontology Extension

2018.06.22: BSC voted to commit to developing and maintaining the Art & Rare Materials BIBFRAME Ontology Extension
Next Steps for BSC - Development

- Further modeling & ontology development
- Further application profile development
- Testing models
- Identifying long-term hosting solutions
BSC - ARM: Collaboration

Who?
- communities of aligned interest
- technical services, ontologist and developers

Why?
- broadening perspectives & expertise
- bandwidth

ARM is a great example of collaboration
Thank You!