# Art & Rare Materials BIBFRAME Ontology Extension (ARM) and Application Profile

## LD4L Labs's Contributions to ARM

The Art & Rare Materials BIBFRAME Ontology Extension (originally two projects: ArtFrame and the Rare Materials Ontology Extension) is a product of the LD4P grant; however, LD4L Labs contributed effort to the project in three crucial ways: ontology expertise, application profile development and VitroLib customization.

For broader information about ARM, see the Art & Rare Materials BIBFRAME Ontology Extension GitHub Repository

#### **Ontology Expertise:**

■ The ARM project benefited from collaboration between communities of practice (e.g.: RBMS' Bibliographic Standards Committee and ARLIS' Cataloging Advisory Committee) and LD4P institutions; however, the group lacked enough colleagues with ontology expertise to enable the scale of work expected of the project. As such, LD4L Labs' colleague Rebecca Younes joined the ARM team. Rebecca led a number of subgroup efforts within the ARM project, including but not limited to modeling for custodial history as well as the Attributions subgroup. Additionally, her expertise was critical in training subject domain experts on data modeling. Without this additional support from LD4L Labs, the ARM project would have accomplished less modeling. Finally, the versioning process for terms in the ontology derives from the work done under LD4L Labs' supported bibliotek-o effort; development of the bibliotek-o versioning process was led by Rebecca Younes.

#### **Application Profile Development:**

■ LD4L Labs' support for ARM enabled the group to extend application profile development (in SHACL) beyond display shapes to include an investigation of how SHACL can facilitate validation; this work was conducted for aspects of the rare monograph application profile. More on the validation shapes is available in the SHACL maintenance document in the ARM GitHub.

### VitroLib Customization:

In order to test ARM, catalogers needed to engage with the model through an editing environment, in this case The VitroLib Metadata Editor. The effort devoted to building the SHACL-to-VitroLib transform was extended to meet the need of implementing ARM in VitroLib alongside considerable effort to build custom forms that facilitate cataloging in complex models. More information on the VitroLib implementation is available on The VitroLib Metadata Editor page of the LD4L Labs Outputs.

## Presentations and Workshops (included on LD4P Presentations and Publications)

- (accepted) 2018.09.10 Kovari, Wacker, Khan and Folsom. "Modeling and application profiles in the Art and Rare Materials BIBFRAME Ontology Extension". DCMI, Porto, Portugal
- 2018.06.23 Kovari and Lapka. "Art & Rare Materials BIBFRAME Ontology Extension: from Modeling to Implementation". ALCTS Metadata Interest Group: Implementing Linked Open Data in the Real World, ALA Annual Conference, New Orleans, LA
- 2018.06.19 Kovari, Isaac and Pearson. "Art & Rare Materials BIBFRAME Ontology Extension: from Modeling to Implementation". RBMS Conference, New Orleans, LA
- 2018.06.08 Kovari, Isaac and Pearson. "Art & Rare Materials BIBFRAME Ontology Extension: from Modeling to Implementation". Yale University, New Haven, CT