

# The bibliotek-o Framework: Principles, Patterns, and a Process for Community Engagement

Folsom, Steven  
Cornell University  
[sf433@cornell.edu](mailto:sf433@cornell.edu)  
[@sf433](https://orcid.org/0000-0002-8333-3333)

Kovari, Jason  
Cornell University  
[jak473@cornell.edu](mailto:jak473@cornell.edu)

Younes, Rebecca  
Cornell University  
[rebecca.younes@cornell.edu](mailto:rebecca.younes@cornell.edu)

# bibliotek-o Application Profile Overview

[http://id.loc.gov/ontologies/bibframe/ \(bf\)](http://id.loc.gov/ontologies/bibframe/)

[bibliotek-o.org/ontology/ \(bib\)](http://bibliotek-o.org/ontology/)

[http://purl.org/dc/terms/ \(dcterms\)](http://purl.org/dc/terms/)

[https://www.loc.gov/standards/datetime/ \(EDTF\)](https://www.loc.gov/standards/datetime/)

[http://xmlns.com/foaf/0.1/ \(foaf\)](http://xmlns.com/foaf/0.1/)

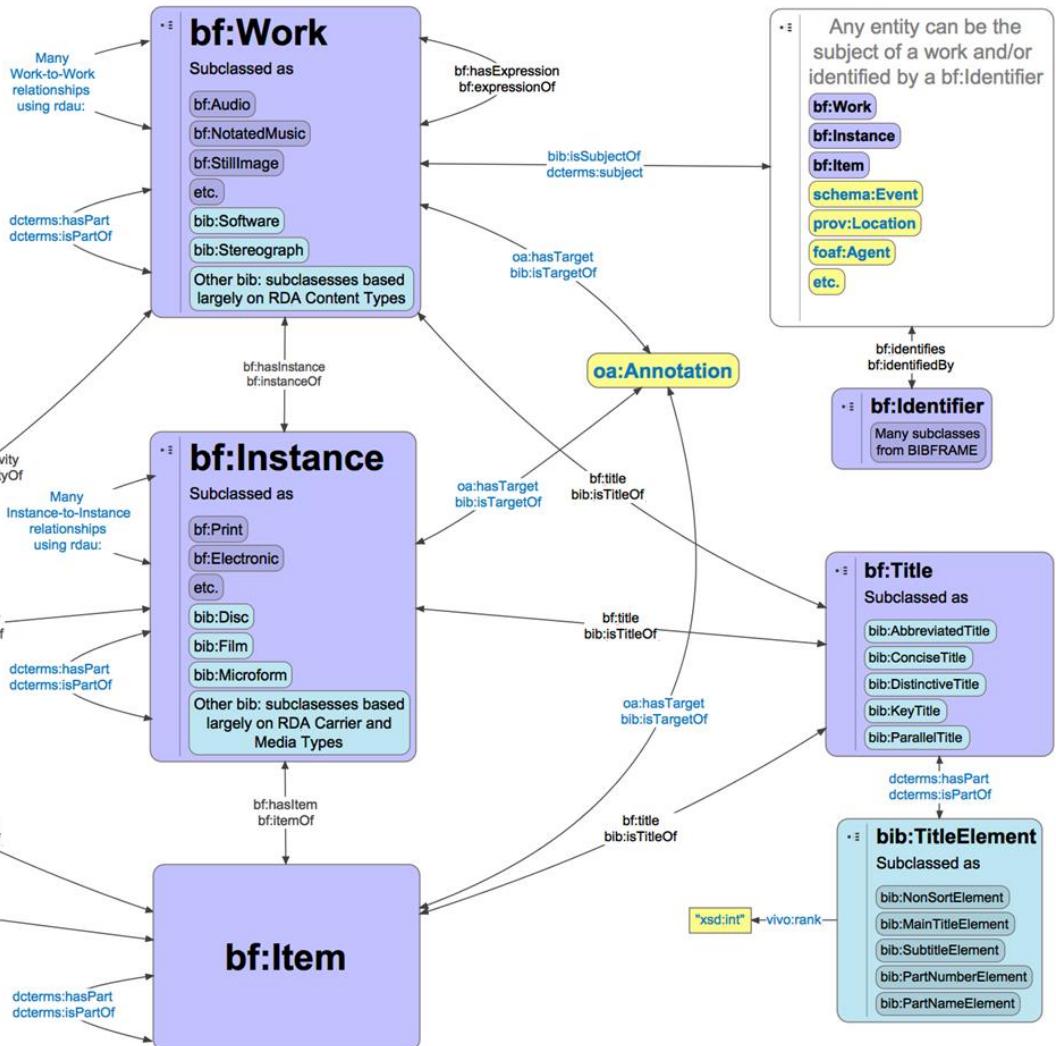
[http://www.w3.org/ns/oa# \(oa\)](http://www.w3.org/ns/oa#)

[http://www.w3.org/ns/prov# \(prov\)](http://www.w3.org/ns/prov#)

[http://rdaregistry.info/Elements/u/ \(rda\)](http://rdaregistry.info/Elements/u/)

[http://schema.org/ \(schema\)](http://schema.org/)

[http://vivoweb.org/ontology/core# \(vivo\)](http://vivoweb.org/ontology/core#)



# bibliotek-o - purpose

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LD4 Ontology Group's BIBFRAME 2.0 assessment

Evaluate  
Extend  
Deviate  
Accommodate

# bibliotek-o - documentation

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Home page: <http://bibliotek-o.org/ontology>

OWL file: <http://bibliotek-o.org/ontology.owl>

Human-readable documentation: <http://bibliotek-o.org/ontology.html>

Visualization: <https://bibliotek-o.org/overview/overview.html>

GitHub repository: <https://github.com/ld4l-labs/bibliotek-o/tree/v1.0.1>

FAQ, pattern recommendations & RDA discussion:

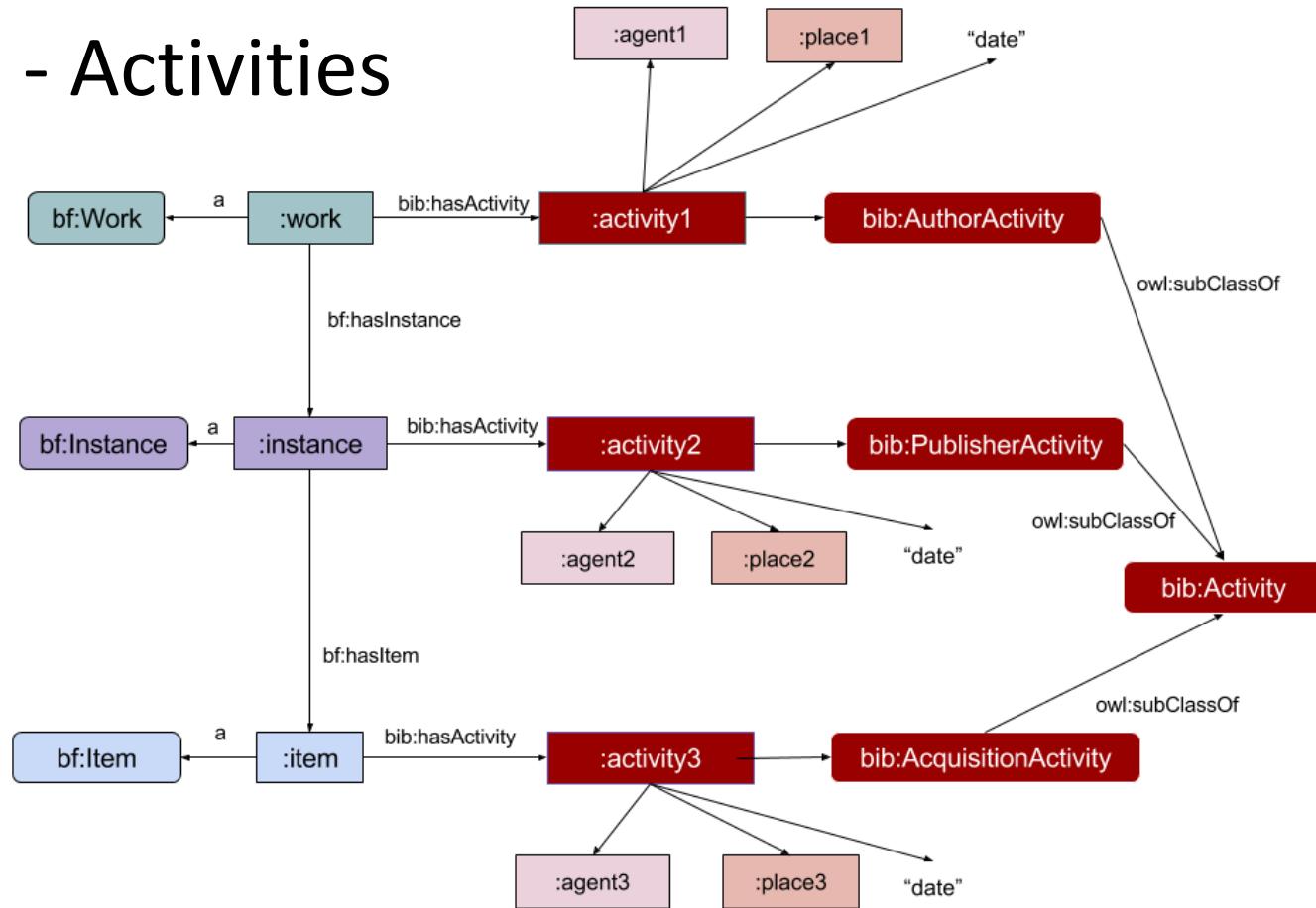
<https://wiki.duraspace.org/x/H5TBB>

# bibliotek-o - principles observed via patterns

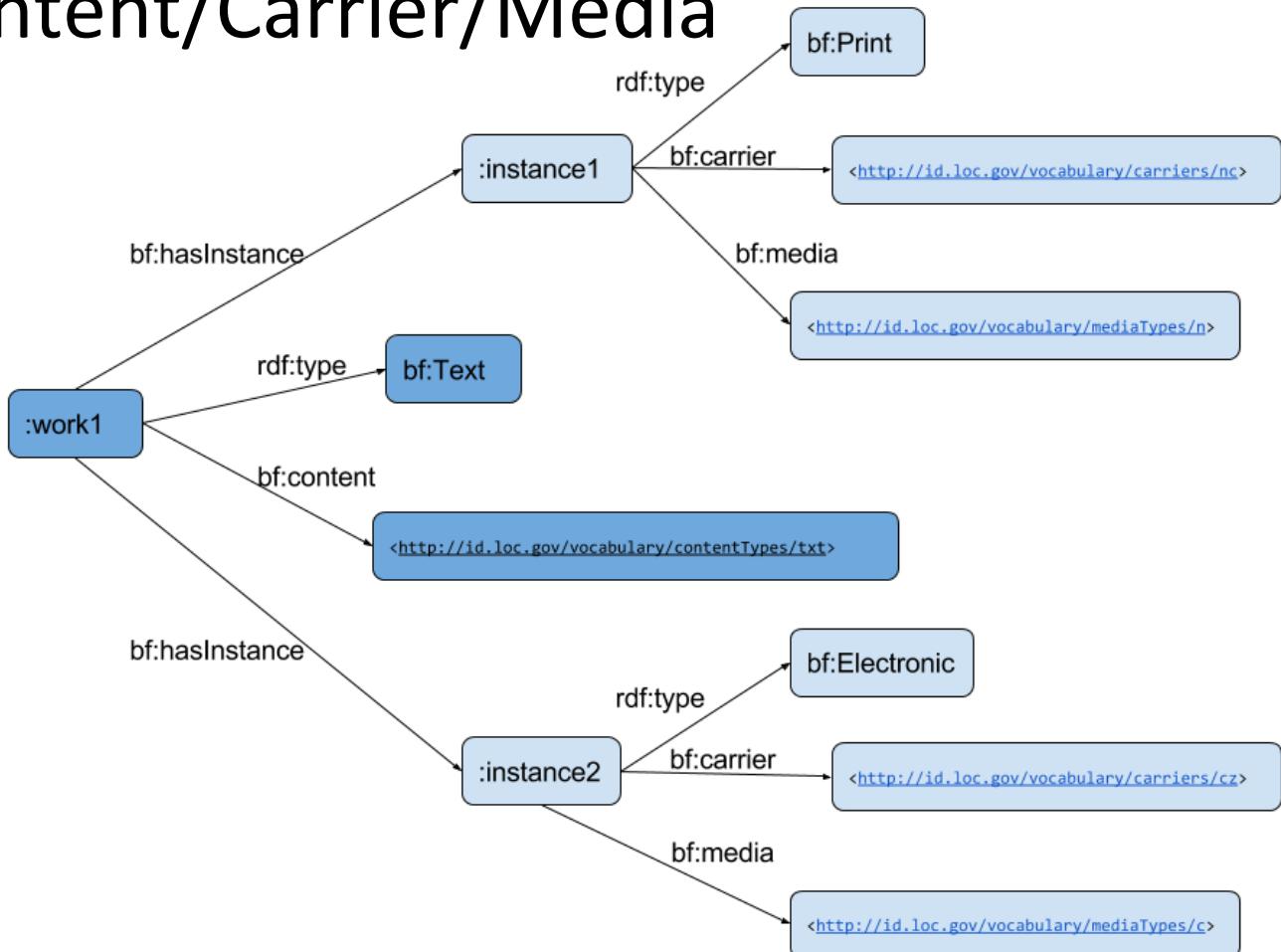
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- Activities
- Content Accessibility
- Content Type, Carrier Type and Media Type
- Identifiers
- Legacy Literals
- Notes and Annotations
- Relations
- Titles

# bibliotek-o - Activities



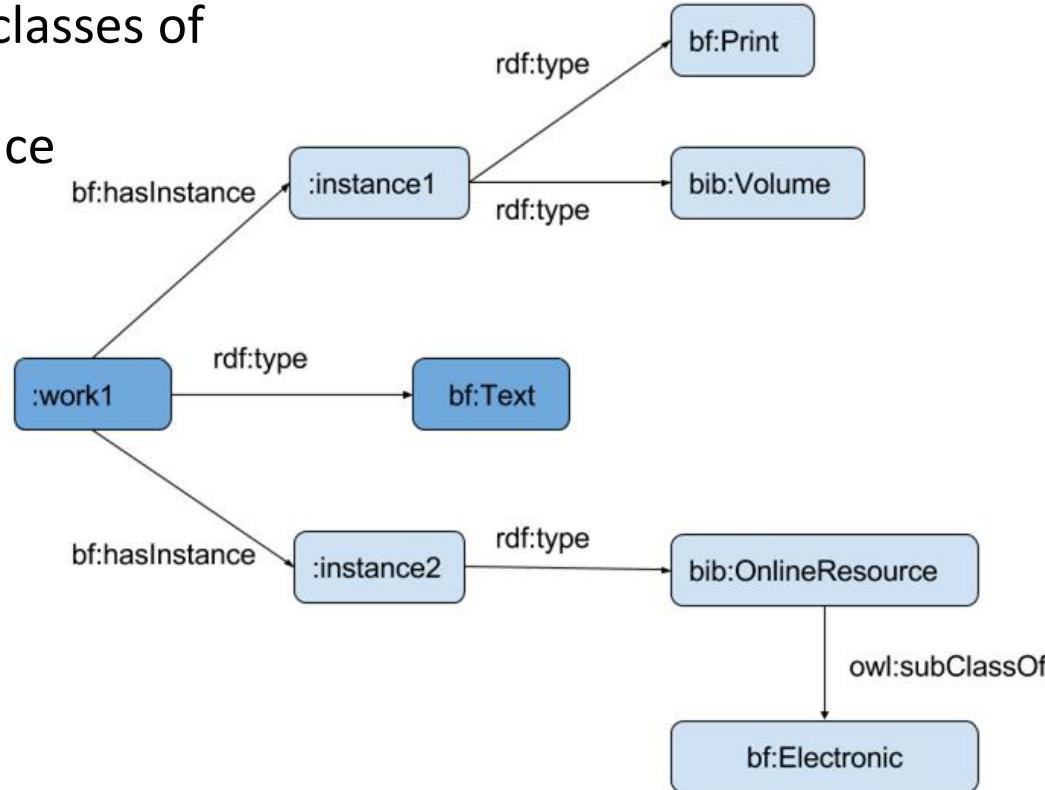
# BIBFRAME Content/Carrier/Media



# bibliotek-o Content/Carrier/Media

Committing to subclasses of

bf:Work | bf:Instance



# bibliotek-o: Relations

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*Design principle: Reuse and align with existing external vocabularies to promote data exchange and interoperability.*

- Decided to selectively reuse RDAu
- BF minimally expressive when relating Works other works, especially derivative works
  - e.g. P60243 “is free translation of”.
  - **The Relations Pattern document goes into much more detail**
- *Yes, Osma... the opaque RDA URIs and interpreting some of the definitions are a pain ;) but we didn't want to mint our own properties*

# SHACL application profiles

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- Want ontology driven applications, but the ontology definitions alone are not enough
- Current use case - Editor Form Specifications
  - Eventually we'll want to address general data validationExamples (in progress)
- Current Work (in progress)
  - Hip Hop (<https://github.com/LD4P/HipHop/tree/develop/application-profiles>)
  - Moving Image ([https://github.com/LD4P/moving-image/tree/develop/application\\_profiles](https://github.com/LD4P/moving-image/tree/develop/application_profiles))
  - Soon we will organize general shapes in the bibliotek-o github repo (e.g. Titles, Measurement, Subjects, for shared across Domains/Applications)

# SHACL Semantics for Form Building

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- Define shapes to build modular form components\*
  - **Property order/grouping** (sh:order/sh:group)
  - Associating properties with **Entity types/external data sources** (sh:class/sh:target/sh:hasValue)
  - **Display of form fields** (sh:name/sh:description)
  - **Cardinality/repeatability** (sh:max/sh:min)
  - **Expected node kind** (sh:nodeKind defines whether the shape should have a IRI, Literal, or Blank Node)
  - Extensions to SHACL- nested forms, defining lookups

\*Fuller **draft** slide deck with examples: <http://bit.ly/2AmC7wC>

# Leaving time for questions...

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Please:

- Seek us out to discuss any part of our work
- Read and comment on our outputs publicly
- Share any of your own assessments publicly

And...

- If you have thoughts process and tools for community owned/transparent ontology management, we would definitely like to talk.