

bibliotek-o Notes & Annotations Pattern

NOTE: the following represents the direction taken by the LD4L Labs and LD4P Ontology Group in the development of bibliotek-o and may not be fully formed. This pattern document was used internally to define a direction and is shared with the intention of contextualizing a pattern found within the ontology; terms specified below may not fully align to the ontology as published. Further, discussion of BIBFRAME 2.0 may be out-of-date.

2016 December

This paper reviews the use of notes in BIBFRAME 2.0, including general notes, informal notes, and notes with a noteType expressed or implied. For many of the note properties, the adoption of the Web Annotation Model is recommended. A note in the cataloging context can be interpreted as a cataloger-asserted statement about the resource being cataloged, or an existing statement about the resource whose external source is being asserted. A resource does not itself have a summary, but a cataloger or publisher asserts one. Furthermore, the Web Annotation model is an appropriate framework to support use cases, such as those involving rare materials, in which institution-specific notes are needed. By using this model in all cases, we avoid creating multiple, arbitrary patterns for different types of notes or different types of materials, and avoid closing off options that may become useful in a linked open data environment.

We view this an experiment to be evaluated through application in production.

Pattern Overview

- The majority of informal note properties have been addressed by related recommendations, see [Object versus DataType Properties](#), [Content Accessibility](#) and [Activities](#).
- Use Web Annotation Model for: bf:credits, bf:custodialHistory, bf:historyOfWork, bf:natureOfContent, bf:preferredCitation, bf:summary, bf:review, bf:systemRequirements, and bf:tableOfContents.
 - For properties that we prefer to describe as Activities, such as bf:credits or bf:custodialHistory, we understand that a human-readable note may still have a place in aiding the user's understanding, and that legacy data may not be easy to parse into discrete Activities.
- Use existing OA named individuals to describe motivation when possible.
- Mint additional high level motivations, as narrower terms under oa:describing, oa:assessing or oa:linking, as appropriate.

oa:describing

- bib:summarizing
- bib:listing
- ld4:specifying

oa:assessing
 bib:reviewing
oa:linking
 o bib:linkingTableOfContents

- Mint additional named individuals for more specific motivations, as narrower terms under bib:summarizing, ld4:specifying, bib:listing or bib:reviewing, as appropriate. As stated above, this is considered to be an experimental approach; therefore no plans have been put in place to maintain these specific terms.

ld4:specifying
 bib:specifyingPreferredCitation
 bib:specifyingCustodialHistory
 bib:specifyingHistoryOfWork
 bib:specifyingNatureOfContent
 bib:specifyingSystemRequirements
 bib:specifyingContents

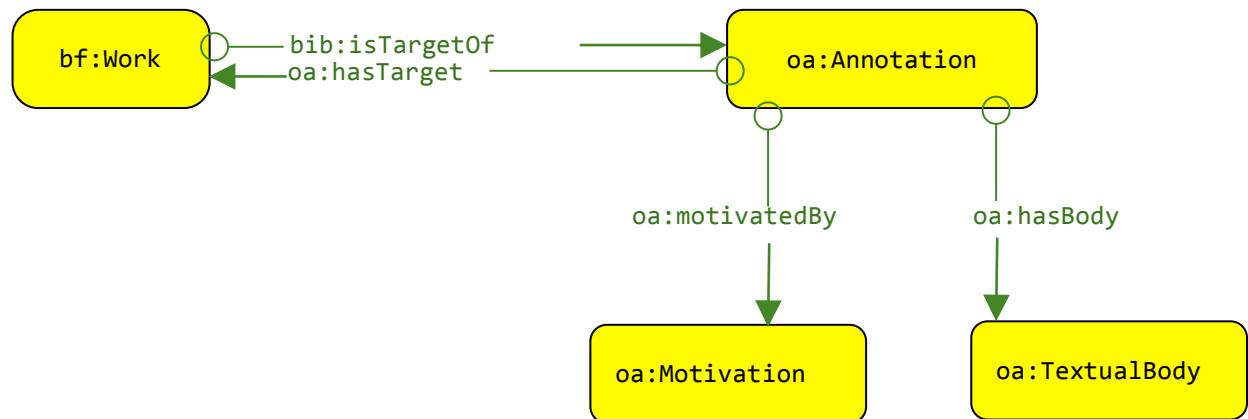
bib:listing
 bib:listingCredits

- Create a new object property, bib:isTargetOf, inverse of oa:hasTarget, to link from an annotated resource to an oa:Annotation.

Areas for Future Work

- There are many more motivations for notes in resource descriptions than represented by the informal note properties listed below. [MARC 21 Bibliographic Data, 5xx](#), the [MODS note types](#) list or content standards such as [DCRM\(G\), area 7](#) may be sources that can be used to identify additional Named Individuals for oa:Motivation that are frequently needed in day-to-day cataloging workflows.
- The Web Annotations model allows for expression of much more detail than is specified in this recommendation. We leave it to each project to determine which properties to implement in support of their specific use cases, so that their outcomes can inform future recommendations.

Recommended Model



Side by Side Examples of BIBFRAME 2.0 and bibliotek-o

BIBFRAME2

```
_:w1 a bf:Work ;
  bf:summary _:s1 .
_:s1 a bf:Summary ;
  rdfs:label "This film consists of alternating black and white frames.--IMDb" .

_:w2 a bf:Work ;
  bf:hasInstance :inst1 ;
  bf:credits "Strips of film coated with glue and powdered metal were 'electrocuted' at the
HFA's Carpenter Center at a performance given by Tony Conrad April 7, 2008. The film was
then processed before the audience's very eyes, dried (with the help of a Harvard student
and his hair drier), and given to HFA film conservator Liz Coffey to project from the middle
of the theatre using two Eiki slot-load projector with sound." .
_:inst1 a bf:Instance ;
  bf:hasItem _:item1 .
_:item1 a bf:Item ;
  bf:note _:n1 ;
  bf:custodialHistory "Donated to the Harvard Film Archive by Tony Conrad." .
_:n1 a bf>Note ;
  bf:noteType "condition" ;
  rdf:label "Footage is approximately the height of Tony Conrad. Scratched during
performance. One loop was damaged by sprockets during performance." .
```

bibliotek-o v.2

```

_:w1 a bf:Work ;
  bib:isTargetOf _:s1 .
_:s1 a oa:Annotation ;
  oa:hasTarget _:w1 ;
  oa:motivatedBy bib:summarizing ;
  oa:hasBody _:b1 ;
  dcterms:creator <https://library.harvard.edu/hfa/ld41> .
_:b1 a oa:SpecificResource ;
  oa:hasSource <http://www.imdb.com/title/tt0059182/plotsummary> ;
  oa:hasSelector [
    a oa:TextQuoteSelector ;
    oa:exact "This film consists of alternating black and white frames." ]

_:w2 a bf:Work ;
  bf:hasInstance :inst1 ;
  bib:isTargetOf _:n1 .
_:n1 a oa:Annotation ;
  oa:hasTarget _:w2 ;
  oa:motivatedBy bib:listingCredits ;
  oa:hasBody _:b2 ;
  dcterms:creator <https://library.harvard.edu/hfa/ld41> .
_:b2 a oa:TextualBody ;
  rdf:value "Strips of film coated with glue and powdered metal were 'electrocuted' at the HFA's Carpenter Center at a performance given by Tony Conrad April 7, 2008. The film was then processed before the audience's very eyes, dried (with the help of a Harvard student and his hair drier), and given to HFA film conservator Liz Coffey to project from the middle of the theatre using two Eiki slot-load projector with sound." .
_:inst1 a bf:Instance ;
  bf:hasItem _:item1 .
_:n2 a oa:Annotation ;
  oa:hasTarget _:item1 ;
  oa:motivatedBy bib:specifyingCustodialHistory ;
  oa:hasBody _:b3 ;
  dcterms:creator <https://library.harvard.edu/hfa/ld41> .
_:b3 a oa:TextualBody ;
  rdf:value "Donated to the Harvard Film Archive by Tony Conrad." .
_:n3 a oa:Annotation ;
  oa:hasTarget _:item1 ;
  oa:motivatedBy oa:describing ;
  oa:hasBody _:b4 ;
  dcterms:creator <https://library.harvard.edu/hfa/ld41> .
_:b4 a oa:TextualBody ;
  rdf:value "Footage is approximately the height of Tony Conrad. Scratched during performance. One loop was damaged by sprockets during performance." .

```

Recommended classes and properties

Some recommendations below have been copied from related documents; please follow links for the most up-to-date details.

BIBFRAME 2.0	bibliotek-o
Involved Classes	

<p><u>bf:Note</u></p> <p>Label: Note URI: http://id.loc.gov/ontologies/bibframe/Note Definition: Information, usually in textual form, on attributes of a resource or some aspect of a resource. SubClass Of: http://www.w3.org/2000/01/rdf-schema#Resource Used with: http://id.loc.gov/ontologies/bibframe/note</p>	<p><u>oa:Annotation</u></p> <p>URI: http://www.w3.org/ns/oa#Annotation</p> <p>Required Predicates: oa:hasTarget, rdf:type Recommended Predicates: oa:hasBody, oa:motivatedBy, dcterms:creator, dcterms:created Other Predicates: oa:bodyValue, oa:styledBy, dcterms:issued, as:generator</p>
<p><u>bf:Summary</u></p> <p>Label: Summary URI: http://id.loc.gov/ontologies/bibframe/Summary Definition: Description of the content of a resource, such as an abstract, summary, etc.. SubClass Of: http://www.w3.org/2000/01/rdf-schema#Resource Used with: http://id.loc.gov/ontologies/bibframe/summary</p>	<p>bib:summarizing (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:summarizing</p>
<p><u>bf:TableOfContents</u></p> <p>Label: Table of contents URI: http://id.loc.gov/ontologies/bibframe/TableOfContents Definition: Table of contents of a resource. SubClass Of: http://www.w3.org/2000/01/rdf-schema#Resource Used with: http://id.loc.gov/ontologies/bibframe/tableOfContents</p>	<p>bib:specifyingContents (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:specifying > bib:specifyingContents</p> <p>bib:linkingTableOfContents (Named Individual of oa:Motivation)</p> <p>oa:linking > bib:linkingTableOfContents</p>
<p><u>bf:Review</u></p> <p>Label: Review URI: http://id.loc.gov/ontologies/bibframe/Review Definition: Review of a resource SubClass Of: http://www.w3.org/2000/01/rdf-schema#Resource</p>	<p>bib:reviewing (Named Individual of oa:Motivation)</p> <p>oa:assessing > bib:reviewing</p>

<p>Used with: bf:review</p>	
	<p>oa:Motivation</p> <p>IRI: http://www.w3.org/ns/oa#Motivation Sub Class Of: skos:Concept Range Of: oa:motivatedBy, oa:hasPurpose</p>
	<p>oa:TextualBody</p> <p>IRI: http://www.w3.org/ns/oa#TextualBody Equivalent Classes: as:Note Required Predicates: rdf:value Recommended Predicates: dc:format, dc:language, rdf:type</p>
<p>Involved Properties</p>	
<p>bf:note</p> <p>Label: Note URI: http://id.loc.gov/ontologies/bibframe/note Definition: General textual information relating to a resource, such as Information about a specific copy of a resource or information about a particular attribute of a resource. Comment: Used with Unspecified Range: http://id.loc.gov/ontologies/bibframe/Note</p>	<p>bib:isTargetOf</p> <p>Definition: The relationship between a Target and an Annotation</p> <p>oa:hasTarget</p> <p>IRI: http://www.w3.org/ns/oa#hasTarget Definition: The relationship between an Annotation and its Target. Domain: oa:Annotation</p>
<p>bf:noteType</p> <p>Label: Note type URI: http://id.loc.gov/ontologies/bibframe/noteType Definition: Type of note Used with: http://id.loc.gov/ontologies/bibframe/Note Range: Literal</p>	
	<p>oa:motivatedBy</p> <p>IRI: http://www.w3.org/ns/oa#motivatedBy Definition: The relationship between an Annotation and a Motivation that describes the reason for the Annotation's creation. Domain: oa:Annotation</p>

	Range: oa:Motivation
	oa:hasBody IRI: http://www.w3.org/ns/oa#hasBody Definition: The object of the relationship is a resource that is a body of the Annotation. Domain: oa:Annotation

<p><u>bf:contentAccessibility</u></p> <p>Label: Content accessibility note URI: http://id.loc.gov/ontologies/bibframe/contentAccessibility Definition: Information that assists those with a sensory impairment for greater understanding of content, e.g., captions. Comment: Used with Work or Instance Range: Literal</p>	<p>See: Content Accessibility discussion paper</p>
<p><u>bf:credits</u></p> <p>Informal note property Label: Credits note URI: http://id.loc.gov/ontologies/bibframe/credits Definition: Information in note form of credits for persons or organizations who have participated in the creation and/or production of the resource. Comment: Used with Work or Instance. Range: Literal</p>	<p>bib:listingCredits (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:listing > bib:listingCredits</p> <p>Definition: The motivation for when the user needs to record information about one or multiple agents and their roles in the creation and/or production of the resource in one literal instead of parsing it out into discrete classes and properties.</p>
<p><u>bf:awards</u></p> <p>Informal note property Label: Award note URI: http://id.loc.gov/ontologies/bibframe/awards Definition: Information on awards associated with the described resource. Comment: Used with Work or Instance Range: Literal</p>	<p>See recommendation in Object versus DataType Properties document.</p> <p>notes from the ontology call on 2/28:</p> <p><i>Conclusion:</i> postpone for future work, use bf:awards, request changes to bf:grantingInstitution from LC</p>
<p><u>bf:natureOfContent</u></p> <p>Informal note property Label: Content nature URI: http://id.loc.gov/ontologies/bibframe/natureOfContent Definition: Characterization that epitomizes the primary content of a resource, e.g., field recording of birdsong; combined time series analysis and graph plotting system. Comment: Used with Work or Instance Range: Literal</p>	<p>bib:specifyingNatureOfContent (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:specifying > bib:specifyingNatureOfContent</p> <p>Definition: The motivation for when the user needs to characterize the primary content of the resource.</p>

<p><u>bf:editionEnumeration</u></p> <p>Informal note property Label: Edition enumeration URI: http://id.loc.gov/ontologies/bibframe/editionEnumeration Definition: Enumeration of the edition; usually transcribed. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:editionStatement</u></p> <p>Informal note property Label: Edition statement URI: http://id.loc.gov/ontologies/bibframe/editionStatement Definition: Information identifying the edition or version of the resource and associated statements of responsibility for the edition; usually transcribed. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:historyOfWork</u></p> <p>Informal note property Label: History of the work URI: http://id.loc.gov/ontologies/bibframe/historyOfWork Definition: Information about the history of a Work. Domain: Work Range: Literal</p>	<p>bib:specifyingHistoryOfWork (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:specifying > bib:specifyingHistoryOfWork</p> <p>Definition: The motivation for when the user needs to record information about the history of a work.</p>
<p><u>bf:preferredCitation</u></p> <p>Informal note property Label: Preferred citation URI: http://id.loc.gov/ontologies/bibframe/preferredCitation</p>	<p>bib:specifyingPreferredCitation (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:specifying > bib:specifyingPreferredCitation</p> <p>Definition: The motivation for when the user wants to specify a preferred citation for a</p>

<p>Definition: Citation to the resource preferred by its custodian of the resource.</p> <p>rdfs:comment: Used with Work or Instance</p> <p>Range: Literal</p>	<p>resource.</p>
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<p><u>bf:provisionActivityStatement</u></p> <p>Informal note property Label: Provider statement URI: http://id.loc.gov/ontologies/bibframe/provisionActivityStatement Definition: Statement relating to providers of a resource; usually transcribed. Domain: Instance Range: Literal</p>	<p>See recommendation in Activities document</p>
<p><u>bf:responsibilityStatement</u></p> <p>Informal note property Label: Creative responsibility statement URI: http://id.loc.gov/ontologies/bibframe/responsibilityStatement Definition: Statement relating to any persons, families, or corporate bodies responsible for the creation of, or contributing to the content of a resource; usually transcribed. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:review</u></p> <p>Label: Review content URI: http://id.loc.gov/ontologies/bibframe/review Definition: Review of a resource Comment: Used with Work or Instance Range: Review</p>	<p>bib:reviewing (Named Individual of oa:Motivation)</p> <p>oa:assessing > bib:reviewing</p>
<p><u>bf:seriesEnumeration</u></p> <p>Informal note property Label: Series enumeration URI: http://id.loc.gov/ontologies/bibframe/seriesEnumeration Definition: Series enumeration of the resource; usually transcribed. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:seriesStatement</u></p>	<p>See recommendation in Object versus dataType Property document</p>

Informal note property

Label: Series statement

URI:

<http://id.loc.gov/ontologies/bibframe/seriesStatement>

Definition: Statement of the series the resource is in; usually transcribed; includes the ISSN if applicable.

Domain: Instance

Range: Literal

<p><u>bf:subseriesEnumeration</u></p> <p>Informal note property Label: Series statement URI: http://id.loc.gov/ontologies/bibframe/seriesStatement Definition: Statement of the series the resource is in; usually transcribed; includes the ISSN if applicable. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:subseriesStatement</u></p> <p>Informal note property Label: Subseries statement URI: http://id.loc.gov/ontologies/bibframe/subseriesStatement Definition: Statement of the subseries the resource is in; usually transcribed; includes the ISSN if applicable. Domain: Instance Range: Literal</p>	<p>See recommendation in Object versus dataType Property document</p>
<p><u>bf:summary</u></p> <p>Informal note property Label: Summary content URI: http://id.loc.gov/ontologies/bibframe/summary Definition: Summary or abstract of the resource described. Domain: Work or Instance Range: Literal</p>	<p>bib:summarizing (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:summarizing</p> <p>Definition: The motivation for when the user needs to add a summary or abstract to the resource being described.</p>
<p><u>bf:systemRequirements</u></p> <p>Informal note property Label: Equipment or system requirements URI: http://id.loc.gov/ontologies/bibframe/systemRequirements Definition: Equipment or system requirements beyond what is normal and obvious for the type</p>	<p>bib:specifyingSystemRequirements (Named Individual of oa:Motivation)</p> <p>oa:describing > bib:specifying > bib:specifyingSystemRequirements</p> <p>Definition: The motivation for when the user needs to record any equipment or system requirements beyond what is normal and obvious for the type of carrier or type of file.</p>

<p>of carrier or type of file, such as make and model of equipment or hardware, operating system, amount of memory, programming language, other necessary software, any plug-ins or peripherals required to play, view, or run the resource, etc.</p> <p>Domain: Instance Range: Literal</p>	
<p><u>bf:tableOfContents</u></p> <p>Informal note property Label: Table of contents content URI: http://id.loc.gov/ontologies/bibframe/tableOfContents Definition: Table of contents of the described resource. Domain: Work or Instance Range: bf:TableOfContents</p>	<p>bib:specifyingContents (Named Individual of oa:Motivation) oa:describing > bib:specifying > bib:specifyingContents</p> <p>bib:linkingTableOfContents (Named Individual of oa:Motivation) oa:linking > bib:linkingTableOfContents</p>
<p><u>bf:custodialHistory</u></p> <p>Informal note property Label: Custodial history URI: http://id.loc.gov/ontologies/bibframe/custodialHistory Definition: Information about the provenance, such as origin, ownership and custodial history (chain of custody), of a resource. Comment: Used with Work, Instance or Item Range: Literal</p>	<p>bib:specifyingCustodialHistory (Named Individual of oa:Motivation) oa:describing > bib:specifying > bib:specifyingCustodialHistory</p> <p>Definition: The motivation for when the user needs to record information about the history of the resource being described in one literal.</p>

BF2 Approach to Notes

For an in-depth explanation on use of notes in BIBFRAME 2.0 see the [BIBFRAME 2.0 Specifications, Notes](#).

Notes can be expressed in five different ways in BF 2.0: Informal notes, a plain note with no type expressed; a note with type implied (a bf:note used in conjunction with another property which provides context); as a note with a noteType expressed as a literal and as a note with a type expressed by an external class. BIBFRAME 2.0 does not internally define any note types.

LD4L-O v.1 Approach to Notes

LD4L-O v.1 defines broad range of note properties, all of them subproperties of [ld4l:note](#), with a range of literal, as well as other datatype properties that cover textual information similar to BF2 notes, such as `ld4l:custodialHistory` and `ld4l:accessibilityFeature`. It does not define any classes for notes.

LD4L-O v.1 also includes classes and properties from the Web Annotation Model. It also includes an inverse for `oa:hasTarget`, `ld4l:hasAnnotation`.