

---

# Shareable Metadata in the Museum Community

---

Jenn Riley

Metadata Librarian

Indiana University Digital Library Program

---

# What does this record describe?

**identifier:** [http://name.university.edu/IC-FISH3IC-X0802\]1004\\_112](http://name.university.edu/IC-FISH3IC-X0802]1004_112)

**publisher:** Museum of Zoology, Fish Field Notes

**format:** jpeg

**rights:** These pages may be freely searched and displayed. Permission must be received for subsequent distribution in print or electronically.

**type:** image

**subject:** 1926-05-18; 1926; 0812; 18; Trib. to Sixteen Cr. Trib. Pine River, Manistee R.; JAM26-460; 05; 1926/05/18; R10W; S26; S27; T21N

**language:** UND

**source:** Michigan 1926 Metzelaar, 1926--1926;

**description:** Flora and Fauna of the Great Lakes Region

Orig. No. ....

460

Sta. No. ....

Locality Michigan: Trib. to Sixteen Cr., Sec. 26-27,  
T. 21N. R. 10W., Wexford Co.

Trib. Pine River → Mainstem

Water: mostly spring-fed; <sup>some surface</sup> clear; spring floods <sup>rather</sup> not so bad.

Vegetation: ~~not much~~ <sup>absolutely nothing</sup>

Bottom: sand; no mud, rather deep. Temp. 47° air 62°

Shore: mostly cleared → farms & some brush. Current: ~~fast~~

Distance from shore: ~~across~~ width 4 ft. Tide: .....

Depth of capture: ..... Depth of water: ~~6~~ 1 ft.

Method of capture: .....

Collected by Metzger Date: V: 18: 1926

Orig. preserv. .... Time: .....

Animal life subnormal

---

# Why share metadata?

- Benefits to users
  - One-stop searching
  - Aggregation of subject-specific resources
- Benefits to institutions
  - Increased exposure for collections
  - Broader user base
  - Bringing together of distributed collections

**Don't expect users will know about your collection and remember to visit it.**

---

# Sharing can be hard

- Some initiatives have fizzled out
  - CIMI
  - AMICO
- Some are still going
  - ARTstor
  - RLG Cultural Materials
  - CAMIO and other AMICO derivatives
- Note focus on art museums

---

# But it's getting easier

- Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)
  - Popular “low barrier” mechanism
  - Shares metadata, not necessarily content
  - Any metadata format with XML Schema can be shared
- Museum-centric OAI initiatives are emerging
  - CDWA Lite from the Getty
  - RLG Museum Collections Sharing Working Group
  - UC Berkeley Art Museum leading project to develop MOAC Community Toolbox
- Other sharing mechanisms: Z39.50->SRU, A9/OpenSearch

# How OAI works

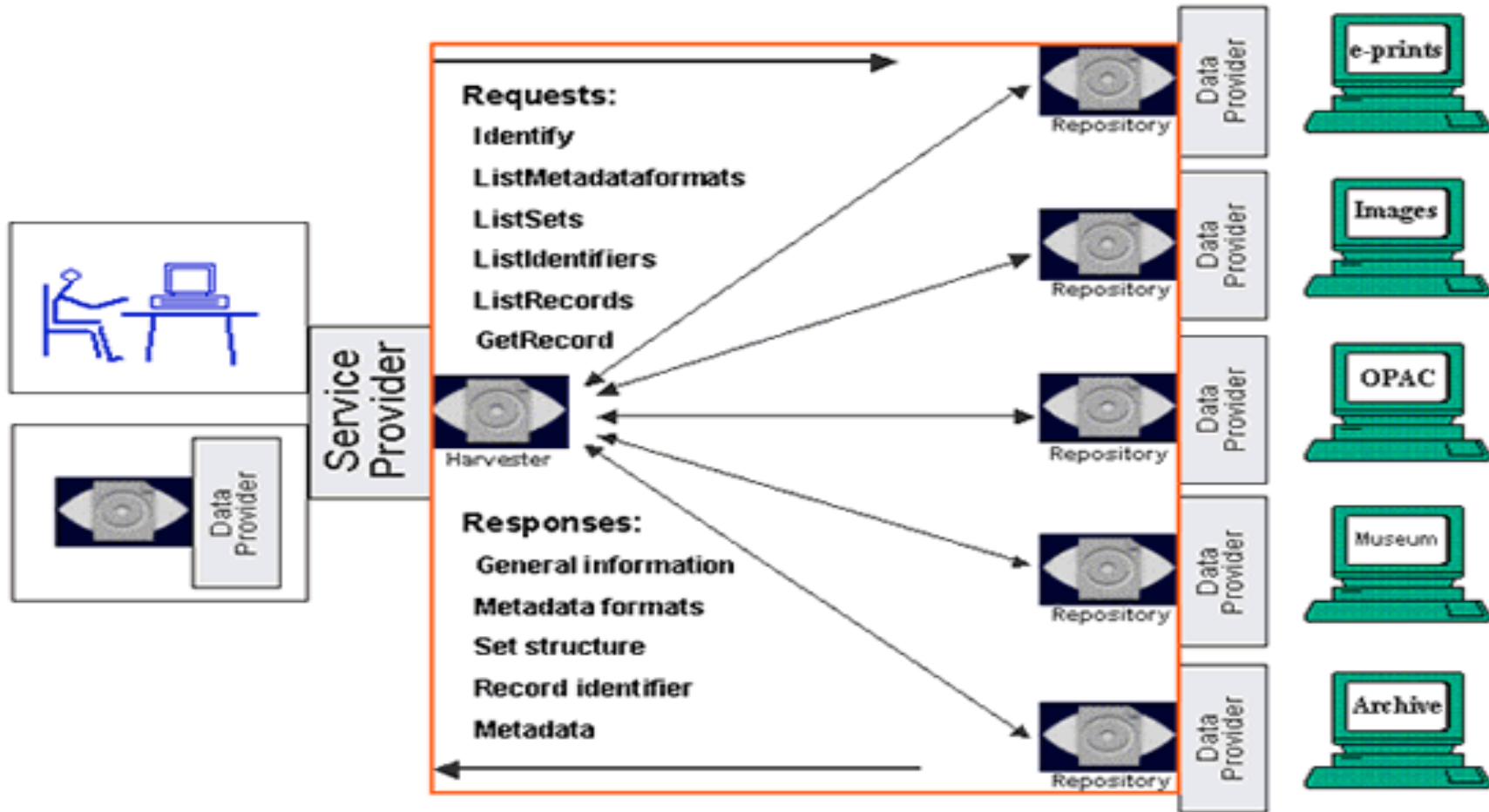


Diagram from OAI for Beginners - the Open Archives Forum online tutorial at <http://www.oaforum.org/tutorial/english/intro.htm>

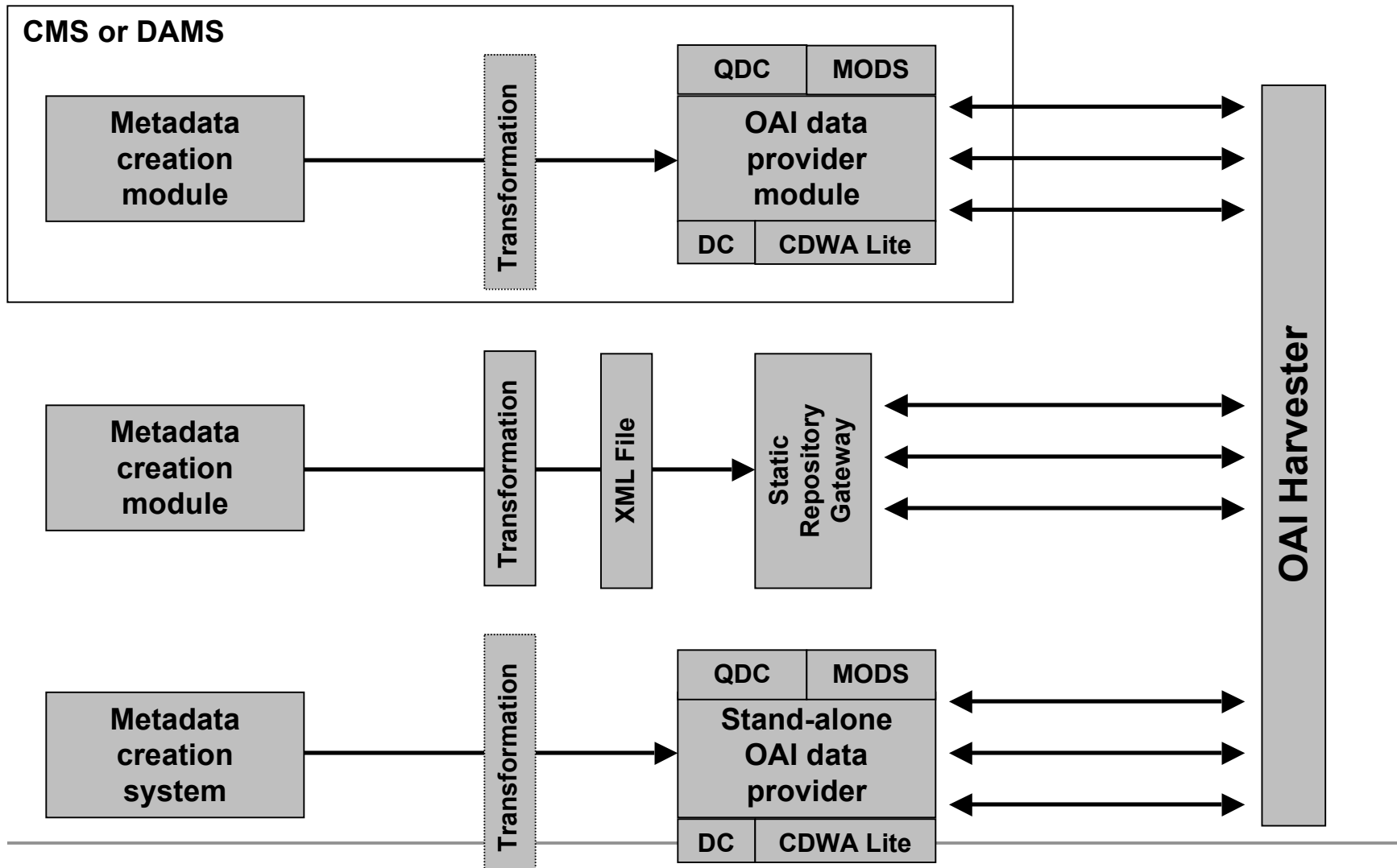
---

# Typical service provider behavior

- “Generic”
  - Collect and normalize metadata
  - Provide basic discovery
  - Send user back to home institution for more information and/or access to content
  - [OAster](#) is a good example
- Domain-specific
  - More advanced discovery capabilities
  - Selling branded products
  - ???



# Three possible architectures



---

# Shareable metadata defined

- Promotes search interoperability - “the ability to perform a search over diverse sets of metadata records and obtain meaningful results” (Priscilla Caplan)
- Is human understandable outside of its local context
- Is *useful* outside of its local context
- Preferably is machine processable

---

# Finding the right balance

- Metadata providers know the materials
  - Document encoding schemes and controlled vocabularies
  - Document practices
  - Ensure record validity
- Aggregators have the processing power
  - Format conversion
  - Reconcile known vocabularies
  - Normalize data
  - Batch metadata enhancement

---

## Metadata as a *view* of the resource

- There is no monolithic, one-size-fits-all metadata record
- Metadata for the same thing is different depending on *use* and *audience*
- Affected by format, content, and context
- Descriptive vs. administrative vs. technical, etc. data

---

# Choice of vocabularies as a *view*

## ■ Names

- LCNAF: Michelangelo Buonarroti, 1475-1564
- ULAN: Buonarroti, Michelangelo

## ■ Places

- LCSH: Bloomington (Ind.)
- TGN: Bloomington

## ■ Subjects

- LCSH: Neo-impressionism (Art)
- AAT: Pointillism

---

## Choice of metadata format(s) as a *view*

- Many factors affect choice of metadata formats
- Many different formats may all be appropriate for a single item
- High-quality metadata in a format not common in your community of practice is not shareable
- Museum-focused formats still developing
  - CDWA Lite for art museums
  - CIMI had a good start, but no longer maintained

---

## Focus of description as a *view*

- Link between records for analog and digital
- Hierarchical record with all versions
- Physical with link to digital
- All versions in flat record
- Content but not carrier

---

# 6 Cs and lots of Ss of shareable metadata

**Content**  
**Consistency**  
**Coherence**  
**Context**  
**Communication**  
**Conformance**

**Metadata standards**  
**Vocabulary and encoding standards**  
**Descriptive content standards**  
**Technical standards**



---

# Content

- Choose appropriate vocabularies
- Choose appropriate granularity
- Make it obvious what to display
- Make it obvious what to index
- Exclude unnecessary “filler”
- Make it clear what links point to

---

# Consistency

- Records in a set should all reflect the same practice
  - Fields used
  - Vocabularies
  - Syntax encoding schemes
- Allows aggregators to apply same enhancement logic to large groups of records

---

# Coherence

- Metadata format chosen makes sense for materials and managing institution
  - Not just Dublin Core!
  - Museums have specific needs: context, interpretation, relationships between objects, provenance, etc.
- Record should be self-explanatory
- Values must appear in appropriate elements
- Repeat fields instead of “packing”

---

# Context

- Include information not used locally
- Exclude information *only* used locally
- Appropriate context driven by intended use

---

# Communication

- Method for creating shared records
- Vocabularies and content standards used
- Record updating practices and schedules
- Accrual practices and schedules
- Existence of analytical or supplementary materials
- Provenance of materials

---

# Conformance to Standards

- Metadata standards, e.g., CDWA Lite
- Vocabulary and encoding standards, e.g., TGN
- Descriptive content standards, e.g., CCO
- Technical standards e.g., Sharing protocol, XML, Character encoding

---

# The reality of sharing metadata

- Creating shareable metadata requires thinking outside of your local box
- Creating shareable metadata will require more work from you and your technical staff
- Creating shareable metadata will require our vendors to support (more) standards
- Creating shareable metadata is no longer an option, it's a requirement

---

## For more information

- [jenlrile@indiana.edu](mailto:jenlrile@indiana.edu)
- DLF/OAI Best Practices for Shareable Metadata  
<<http://oai-best.comm.nsdlib.org/cgi-bin/wiki.pl?PublicTOC>>
- These presentation slides:  
<<http://www.dlib.indiana.edu/~jenlrile/presentations/mcn2006/shareableMetadata.ppt>>