Cutting Through the Hype About Metadata

Jenn Riley Metadata Librarian, Indiana University Indiana Online Users Group November 18, 2005 Everything you need to know about metadata on one slide

- It's more than cataloging
- It's an essential part of any digital library project
- The planning is as important as the implementation
- Must choose the right tool for the job
- Always plan for interoperability
- There are lots of acronyms ☺

Well, not really...

- "Metadata" means many different things
- It involves applying traditional library principles to new environments
- These new environments are diverse
- Many of them have been developed for specific knowledge domains
- Metadata planning requires thinking abstractly
- There is always more to learn

Getting started with metadata

- Types of metadata
- Levels of control
- Methods of creating metadata
- A sample of other things to think about
- Some hot topics to watch

Some types of metadata

- Descriptive metadata
- Administrative metadata
 - Technical metadata
 - Preservation metadata
 - Rights metadata
- Structural metadata

How metadata is used

	League of Nations. Secretariat. The aims, methods, and activity of the League of Nations. Geneva : Secretariat of the League of Nations, 1935.				
 Front Matter Title page Verso Table of Contents Body Part 1 Chapter 1 Chapter 2 Chapter 3 Chapter 4 Part 2 Chapter 1 Chapter 2 Chapter 3 Chapter 4 Part 3 Chapter 1 Chapter 3 Chapter 4 Back Matter Publications 	View full record: USENT I of 224 >> >I I Usew larger image The Aims, Methods and Activity of the LEAGUE OF NATIONS Image: Image Exercise of Nations, Secretariat. The aims, methods, and activity of the League of Nations. Secretariat of the League of Nations, Image: Image: Image: Image Secretariat of the League of Nations, 1935. Page: 1 of 224				
Preservation colophon	< << 1 of 224 >> > [view larger image]				

Levels of control

- Data structure standards, a.k.a "metadata schemas"
- Data content standards
- There are others as well
- Standards don't always fall neatly into one category

When there's no data content standard...

3-1	ry.ucla.edu - Sheet Music OAI Service Provider Item Display - Microsoft	3-1	ry.ucla.edu - Sheet Music OAI Service Provider Item Display - Microsoft heet Music Consortium Hosted by UCLA	
You are not logged	in nda Two-Step. Souvenir Brockton Fair 1901.	You are not logged	in nda : two-step for piano	
1	By Sylvester B. Grant. Fisher		Grant, Sylvester B. [composer] Fisher, F.	
Publisher : Date :	Brockton, Mass.: Compliments of Old Colony Piano Co., 4 Main St. 1901	Publisher : Date :	New York : Old Colony Piano Co. ¢1901	
Subjects : Description :	Horses Horse racing Respectfully Dedicated to mrs. A.E. Rice, Boston, Mass. ads on back cover for Old Colony Piano Co.	Subjects : Type : Description :	Piano music Sheet music For piano	
Source : Collection :	Johns Hopkins University, Lewy Sheet Music Collection, Box 028, Item 003 Johns Hopkins University Lewy Collection		At head of title: Souvenir Brockton Fair 1901. Respectfully dedicated to Mrs. A. E. Rice, Boston, Mass Illustration by F. Fisher Includes publisher's advertising	
Add a Note :		Source : Relation :	Lilly Library (Indiana University, Bloomington) Starr Sheet Music Collection. Call number: M1 .S8 II Animals Horses IsPartOf http://www.indiana.edu/~liblilly/starr.shtml	
	add - add/edit a note for this record	Rights : Collection : Add a Note :	http://purl.dlib.indiana.edu/iudl/lilly/starr/rights Indiana University	
Image: Second and second contraction Image: Second contre				

Creating metadata

- HTML <meta> tags
- Spreadsheets
- Databases
- XML
- Library catalogs
- Digital library content management systems
 - ContentDM
 - Greenstone

A sample of other things to think about

- XML technologies (XML, DTDs, XML Schema, XSLT, XPath, etc.)
- Unique identifiers
- Linking between records
- Writing procedures
- Mapping between metadata schemas, a.k.a "crosswalking"
- Metadata shareability

Some hot topics to watch

- MODS
- METS
- VRA Core/CCO
- OAI
- FRBR
- RDA

Metadata Object Description Schema (MODS)

- Bibliographic element set
- Developed and maintained by the Library of Congress
- Expressed in XML
- Heavily influenced by MARC, but tag names are words rather than numbers
- Not necessarily tied to AACR2
- Allows for specification of controlled vocabularies and encoding schemes used

Metadata Encoding and Transmission Standard (METS)

- "Wrapper" schema for descriptive, administrative, and structural metadata
- Descriptive and administrative metadata can be in any format
- Developed in the digital library community, maintained by the Library of Congress
- Expressed in XML
- Often used for "preservation packages"

VRA Core/Cataloging Cultural Objects (CCO)

- Initiatives of the Visual Resources Association
- Intended for the description for art & architecture
- VRA Core is a structure standard, CCO is a content standard
- Both currently in draft; VRA Core 4.0 and first version of CCO will be released early next year
- VRA Core takes some inspiration from Dublin Core
- VRA Core has separate records for Works and Images (and probably Collections in version 4)
- Together represent a major step forward for art image description

Open Archives Initiative (OAI)

- Protocol for metadata harvesting
- Began in the eprint community and expanded out
- "Data providers" expose metadata
- "Service providers" harvest metadata and pool it with metadata from other data providers
- Requires simple Dublin Core, but allows other supplementary formats
- Some OAI service providers
 - OAlster
 - □ <u>Arc</u>
 - UIUC Digital Gateway to Cultural Heritage Materials
 - OLAC

Functional Requirements for Bibliographic Records (FRBR)

- 1998 report from IFLA
- Purpose: "to provide a clearly defined, structured framework for relating the data that are recorded in bibliographic records to the needs of the users of those records."
- User tasks: find, identify, select, obtain
- Entity-relationship analysis employed
- 3 groups of entities defined (see handout)
- Ideas starting to be extended to authority records

Resource Description and Access (RDA)

- Name for the forthcoming revision of AACR
- Will incorporate FRBR principles and terminology
- Structure
 - Part I Resource Description
 - Part II Relationships
 - Part III Access Point Control
- Development has been controversial
 - Changes too extreme for some
 - Changes not extreme enough for others
- Scheduled for publication in 2008

For more information

- Metadata librarians listserv: http://metadatalibrarians.monarchos.com>
- Priscilla Caplan: Metadata Fundamentals for all Librarians, 2003
- These presentation slides and handouts: ">http://www.dlib.indiana.edu/~jenIrile/presentations/iolug2005/>
- jenlrile@indiana.edu