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Author(s): Paul Conway, Ph.D., 2010

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SI 640 DIGITAL LIBRARIES AND ARCHIVES

2010 Week 8: Metadata - Getting to METS

THEMES FOR THIS WEEK

- Panel discussion on Content
- Assignment briefing
- Metadata and digital libraries
- Origins and development
- METS

"Metadata is the core of any information retrieval system and so its implications for any digital library are profound."

Gartner, 2008.

ORIGINS AND DEVELOPMENT

1. Metadata

2. Developments

3. METS

○ 1998 Research agenda – ad mid-point of early developments.

- All things metadata – metadata as the solution for long-term preservation
- Simple schemes, complex objects, vision of interoperability
- Data exchange infrastructure
  - ○ RDF, crosswalks
- Policy and management (anticipated standards development, archival issues, and measurement)
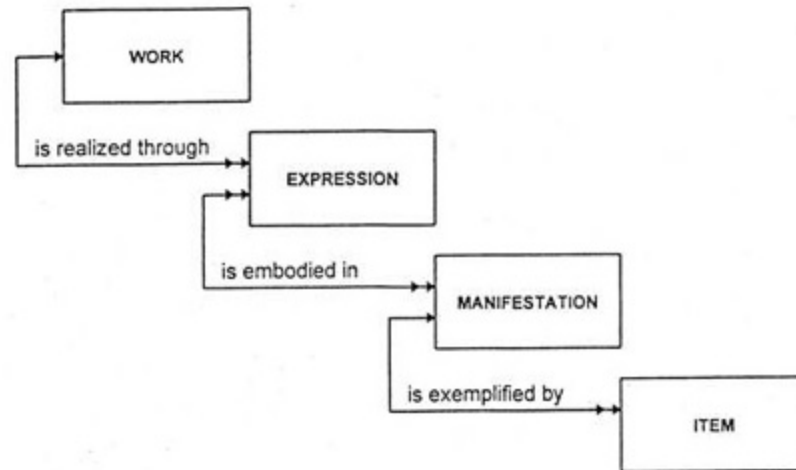
ORIGINS AND DEVELOPMENT

- Early digitization projects highlighted the critical value of metadata.
  - Discuss (quickly): what is metadata
  - Discuss: what roles for metadata in DL/DA?
  - Discuss: what roles for metadata beyond DL/DA?

METADATA AND DIGITAL LIBRARIES

- Inexorable trends toward standardization at multiple levels
- XML – standard behind the standards
  - SGML to HTML to XML
- Functional Requirements for Bibliographic Records (FRBR) inspired

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FRBR Family of Models. http://www.ifla.org/en/node/2016

A FAMILY OF METADATA FOR DL/DA

- Descriptive Metadata
  - For input and output
  - MODS and Dublin Core
- Administrative Metadata
  - For content management
  - MIX, VideoMD, AudioMD, Rights, source data, preservation (PREMIS)
- Structural Metadata
  - For hierarchies and relationships, inventory
  - Physical or logical structure

A BRIEF HISTORY: FROM EAD TO METS

- ***EAD*** originated at UCB in Berkeley Finding Aid Project: 1993-1995; goal – linking EAD finding aids to digital content
  - http://www.loc.gov/ead/
- ***MOA1*** developed digitization standards for books and journals: 1995-96; scanning and OCR quality + MD challenges
  - http://quod.lib.umich.edu/m/moagrp/about.html
- ***Ebind*** specified how discrete images fit together into a structured, coherent whole
  - http://sunsite.berkeley.edu/Ebind/
- ***MOA2*** defined functionality & MD needed for DO's, 1997-99 (structural, descriptive, administrative)
  - http://sunsite3.berkeley.edu/MOA2/
- ***METS*** expanded MOA2 DTD by supporting more flexibility for descriptive and administrative metadata, and audio / video / other data formats (2001 - present)
  - http://www.loc.gov/standards/mets/mets-home.html

METADATA ENCODING AND TRANSMISSION STANDARD

- METS supports world-wide exchange of metadata and associated content
- The <content> of metadata schemes is an open question
  - RDE, authorities, etc. on the horizon
- Too complex without tool development
- Software developers must adopt – not a DIY approach

METS Scheme: http://www.loc.gov/standards/mets/mets_full_schema_for_Primer.gif

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MCDONOUGH'S CRITIQUE OF METS

○ Challenge of interoperability in two ways
- Abstract elements provide flexibility
  - ○ Structural depth, labeling, arrangement
- Standards independence
  - ○ Need for each standard to be whole on its own
    - ○ DC, MODS, PREMIS, MIX all contain coding conventions for structure

○ Flexibility empowers the local and works against interoperability.

"It is, in essence, promoting the development of regional dialects at the expense of mutual intelligibility." (p. 13)

○ Calls for equal attention to schema development AND translation between schemas

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Thank you!

Paul Conway
Associate Professor
School of Information
University of Michigan
www.si.umich.edu

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