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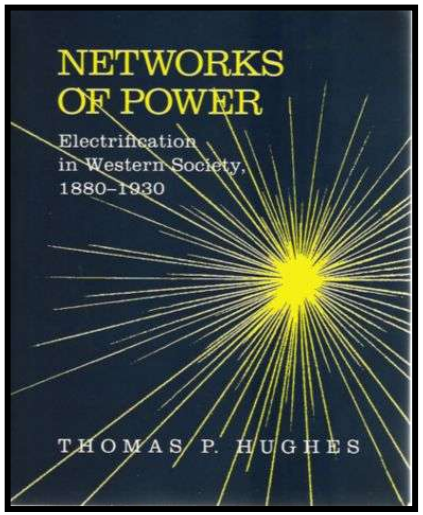
SI 640 Digital Libraries and Archives

Week 3 – Content Landscapes

•http://www.bootstrap.org/

Pre-history



- Networks and mainframes
- Moore's law
- Collaborative work: Doug Engelbart
- Business-government-academic

Thomas Hughes, *Networks of power: electrification of western society*, 1880-1930. Johns Hopkins, 1983.

SI's own history as an educational program is tied up in the evolution of the pre-history of digital libraries.

• **Xerox PARC.** http://www.parc.xerox.com/

History – scanning and storage

- Xerox PARC 1978 – first scanner
- IBM – storage and workflow
- BellCore – image and text

Building on existing infrastructures, the search for new markets for emerging technologies focused on digital content in “business practices.”

• USAA. http://www.usaa.com

History – govt./business early adoption

- Business efficiency – paperless office
- Govt. effectiveness – paperless govt.
- National Archives and Library of Congress – early experimenters
  - ODISS
  - Federal guidelines
  - American Memory pilot

• **DLF.** http://www.diglib.org/

History – university library experiments

- Michigan and Cornell, 1989
- LaGuardia Eight
- Digital Library Federation
- National leadership; little funding

Research libraries have a long and distinguished history of technology experimentation and adoption.
[CLR, CPA, CLIR]

• Fox. [1993] Digital Library Sourcebook. http://fox.cs.vt.edu/DLSB.html

History – university research efforts

- Fox and computer scientists
- NSF DLI1
- NSF DLI2
- Patents and trademarks as an issue

DLI1: http://www.dli2.nsf.gov/dlione/
DLI2: http://www.dli2.nsf.gov/

Themes of this week

Themes

- Overview
- How much information
- Content form and formats
- Institutional context
- Uniqueness

"Storage of new information has been growing at a rate of over 30% a year."

How Much Information, 2003

Overview

Multiple perspectives

- Where is information?
- What is information?
- Values assigned?
- By whom?

•Lyman and Varian

How much information

1. Themes
2. Overview
3. **How much information?**
4. Form and formats
5. Institutional context
6. Uniqueness

- Scope of the study
- Interesting findings
- Implications for the digital libraries

How Much Information:
http://www2.sims.berkeley.edu/research/projects/how-much-info-2003/

Forms and formats

1. Themes
2. Overview
3. How much information?
4. **Form and formats**
5. Institutional context
6. Uniqueness

Image available at:
http://www.cartoonbank.com/product_details.asp?sid=45095

Forms and formats

- Format: information structure
  - Discuss (image, text, multimedia)
- Form: Definitions
  - OED
  - Information as thing

Buckland, Michael. "Information as Thing."
***Journal of the American Society of Information Science* 42:5 (June 1991): 351-360.**
http://www.ischool.berkeley.edu/~buckland/thing.html

•Buckland. *Information as Thing*, 1991.

Information-as-Thing

- Tangible entity (touch or measure)
  - Representation of knowledge
- Information as evidence
  - Symbol, fact, legal standing
- Evidence in the form of documents or "informative things"
- Representations are a transformation, necessarily incomplete, form shifting, summarized, derived, retaining properties
- Situational and predicted value of information-as-thing.

• Levi + Duranti, Diplomatics

Forms and formats

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. Institutional context
6. Uniqueness

- Form: Definitions
  - OED
  - Information as Thing
  - Business applications (use specific)
  - Diplomatics (components)

SAA Glossary of Archival Terminology
http://www.archivists.org/glossary/index.asp

Institutional context

- Creators, managers, users
- Institutional loyalties
- Choices and priorities

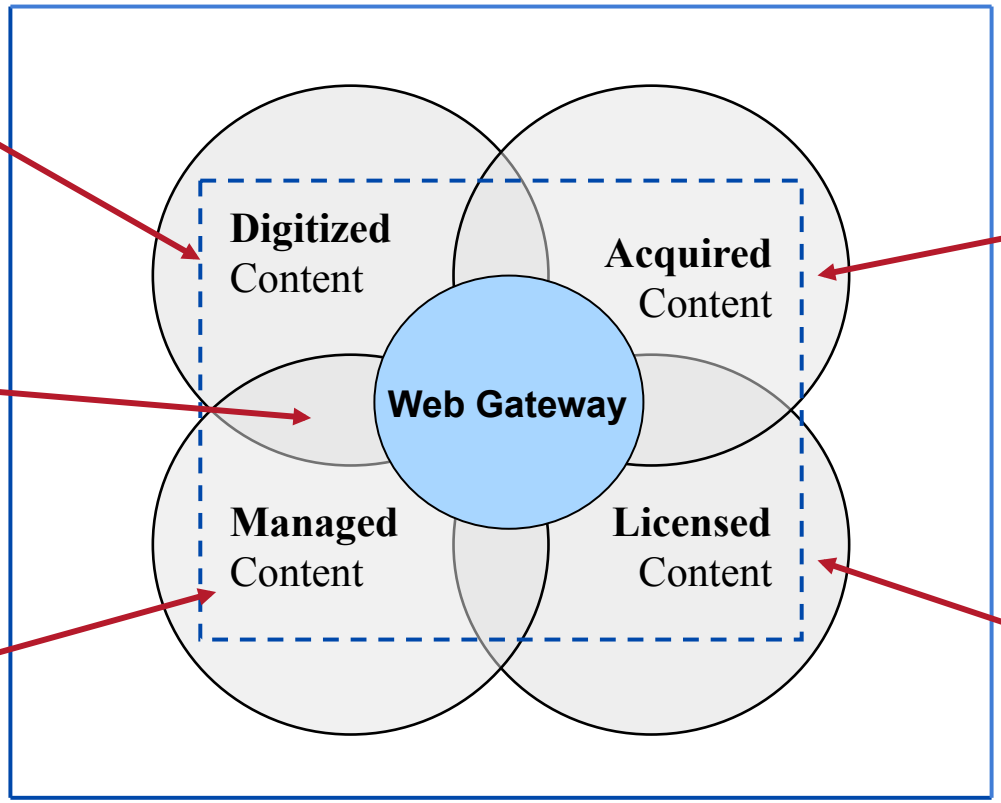
• **OCLC, Pattern Recognition, 2003, p. 125.**

Content Landscape

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. **Institutional context**
6. Uniqueness

Image can be found at: (http://www.oclc.org/reports/escan/images/collectgrid.gif)

Content Landscape



Blackboard objects
E-Reserve docs
Course websites

Image databases
Text databases
Multimedia
Research data
Student portfolios

Research center output
Faculty publications
Campus pubs
Enterprise systems
University archives
Web CMS

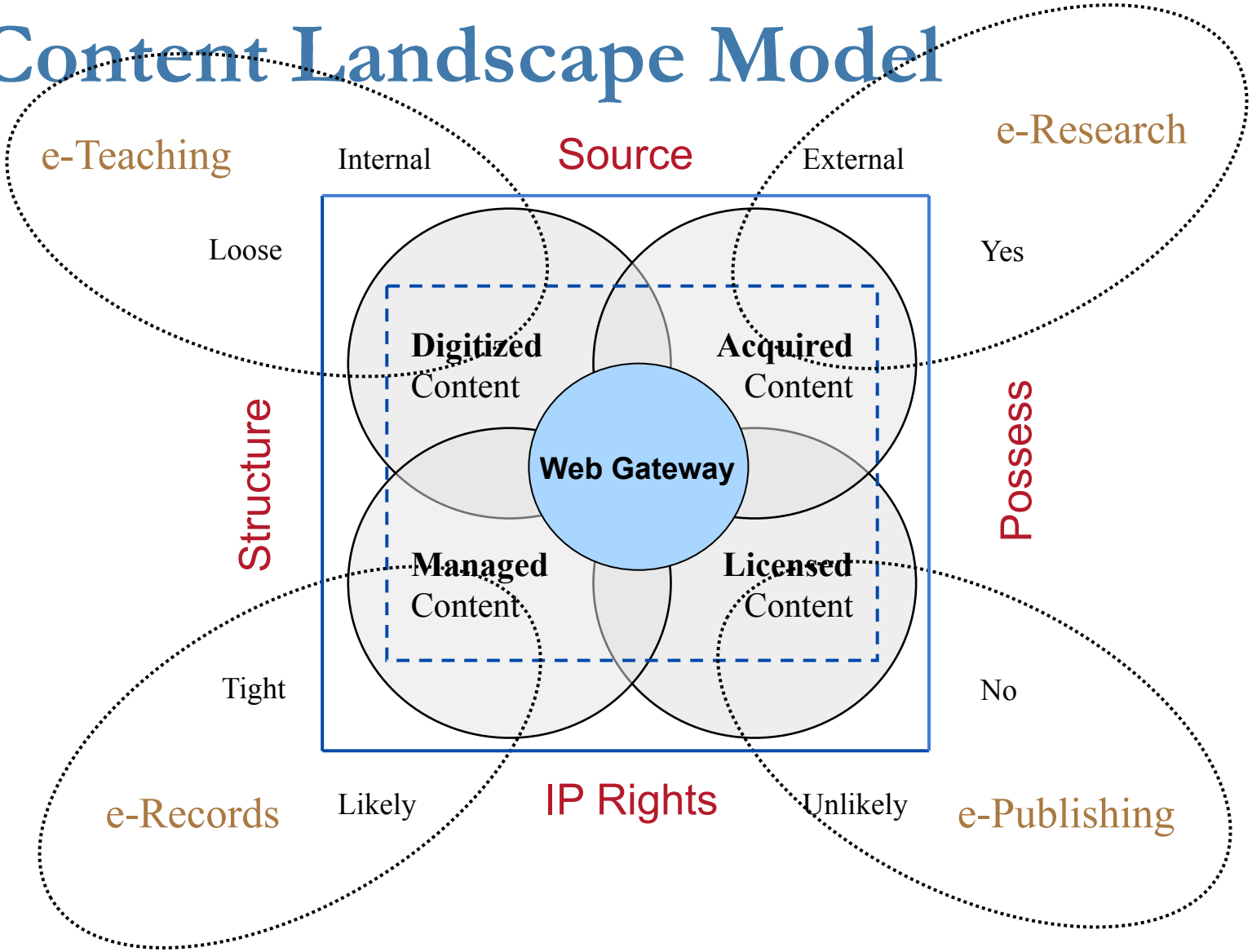
"Unmanaged" WWW
WWW resources

Research data + software
Library digital acquisitions

e-Journals
e-Books
Time-limited db

"Personal" digital collections

Content Landscape Model



Content Domains

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. **Institutional context**
6. Uniqueness

Lingering Questions:

- Is "format" a meaningful construct?
- Is web context preservable in any meaningful way?
- Content (value neutral) or assets (value laden)?

• O'Toole, *Uniqueness*, 1993.

Idea of Uniqueness

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. Institutional context
6. **Uniqueness**

- Records (artifacts)
- Information (duplication/publication)
- Processes (functional view)
- Aggregations (distinct assemblages)

• O'Toole, *Uniqueness*, 1993.

Idea of Uniqueness

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. Institutional context
6. **Uniqueness**

- Intangibility
- Mutability
- Readers and writers
- Connectability

• O'Toole, *Uniqueness*, 1993.

Idea of Uniqueness

1. Themes
2. Overview
3. How much information?
4. Form and formats
5. Institutional context
6. **Uniqueness**

- Does uniqueness have any value today?
- How much of this idea uniqueness is associated with copying?
- How do we document uniqueness?

Thank you!

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