



College of Information Studies

University of Maryland Hornbake Library Building College Park, MD 20742-4345

Discovery and Delivery

Week 8

LBSC 671

Creating Information Infrastructures

Midterm Exam

- Posted by 5 PM on Wednesday March 26
 - Due at 5:30 PM on Monday March 31
 - 3 Hours, same process as the quiz (email, no talking, ...)
 - Note: there are also readings for that week's class
- Comprehensive, including tonight's class
 - Nature of information institutions
 - Have it, find it, serve it
 - Last semester's exam is available on the course Web page
- One question will be to create + represent a bibliographic description (w/authority control)
 - One RDA+MODS option
 - One DACS+EAD option

Tonight

- **Linked Open Data and BIBFRAME**
 - Discovery
 - Delivery

Some Basic Rules for XML

- XML declaration is the first statement
 - `<?xml version="1.0"?>`
- An XML document is a “tree”
 - Must contain one root element
 - Other elements must be properly nested
- All start tags must have end tags
- XML is case sensitive
- Attribute values must have quotation marks
 - `<item id="33905">`
- Certain characters are “reserved”
 - For example: < is used to represent `<`

Resource Description Framework

- XML schema for describing resources
- Can integrate multiple metadata standards
 - Dublin Core, P3P, PICS, vCARD, ...
- Dublin Core provides a XML “namespace”
 - DC Elements are XML “properties”
 - DC Refinements are RDF “subproperties”
 - Values are XML “content”

XML Namespaces

```
<?xml version="1.0"?>
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rss="http://purl.org/rss/1.0/"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
  <rss:channel rdf:about="http://www.xml.com/xml/news.rss">
    <rss:title>XML.com</rss:title>
    <rss:link>http://xml.com/pub</rss:link>
    <dc:description>
      XML.com features a rich mix of
      information and services for the XML community.
    </dc:description>
    <dc:subject>XML, RDF, metadata, information
      syndication services</dc:subject>
    <dc:identifier>http://www.xml.com</dc:identifier>
    <dc:publisher>O'Reilly & Associates, Inc.</dc:publisher>
    <dc:rights>Copyright 2000, O'Reilly &
      Associates, Inc.</dc:rights>
  </rss:channel>
</rdf:RDF>
```

Example from <http://www.xml.com/pub/a/2000/10/25/dublincore/>

Dublin Core in RDF XML

```
<rdf:RDF
```

```
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
```

```
  <rdf:Description
```

```
    rdf:about="http://media.example.com/audio/guide.ra">
```

```
    <dc:creator>Rose Bush</dc:creator>
```

```
    <dc:title>A Guide to Growing Roses</dc:title>
```

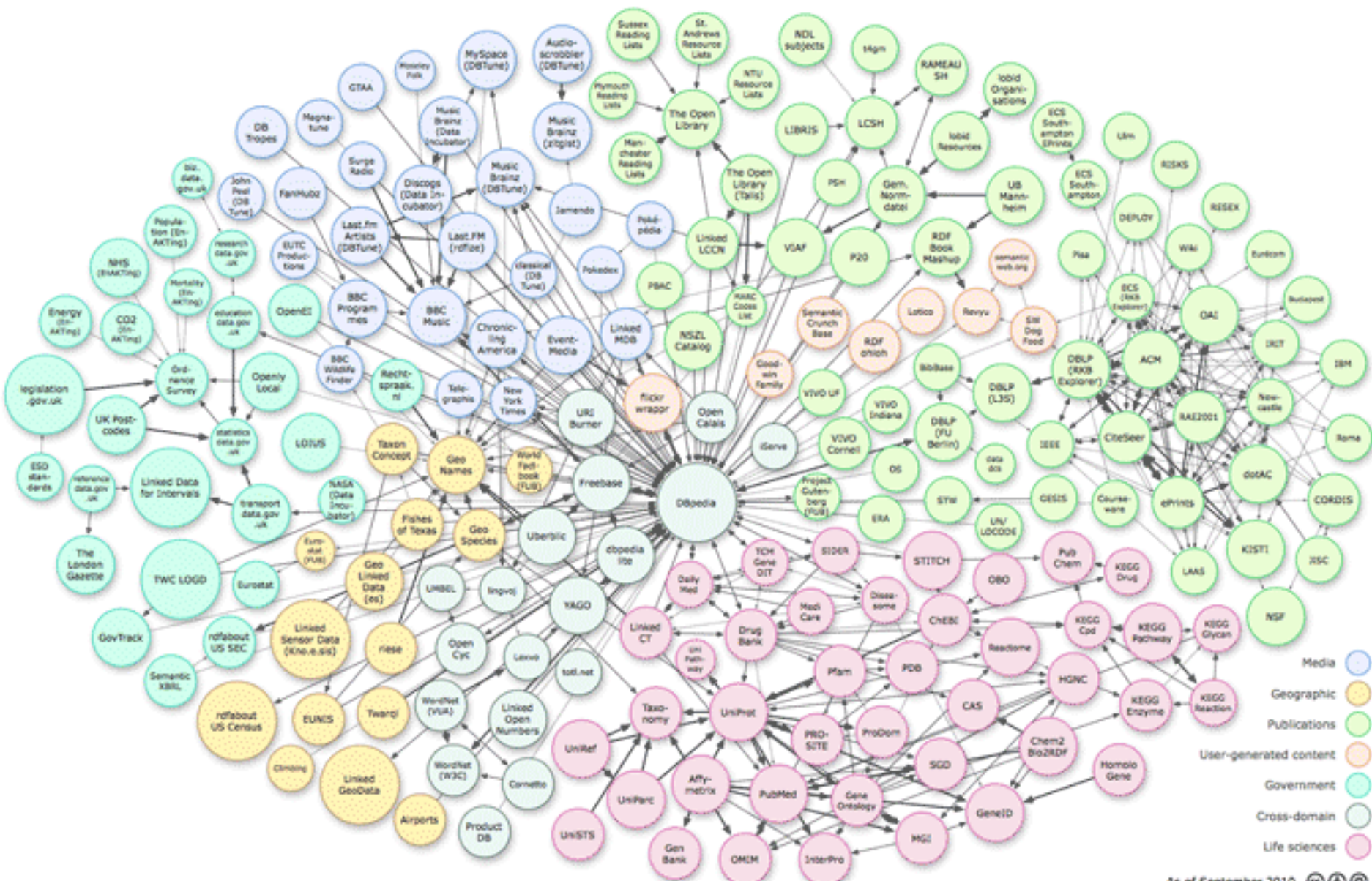
```
    <dc:description>Describes process for planting and nurturing
                      different kinds of rose bushes.</dc:description>
```

```
    <dc:date>2001-01-20</dc:date>
```

```
  </rdf:Description>
```

```
</rdf:RDF>
```

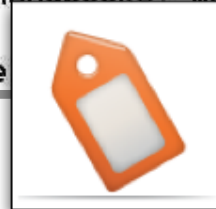
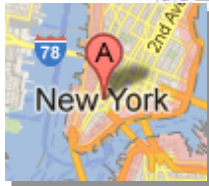
Linked Open Data



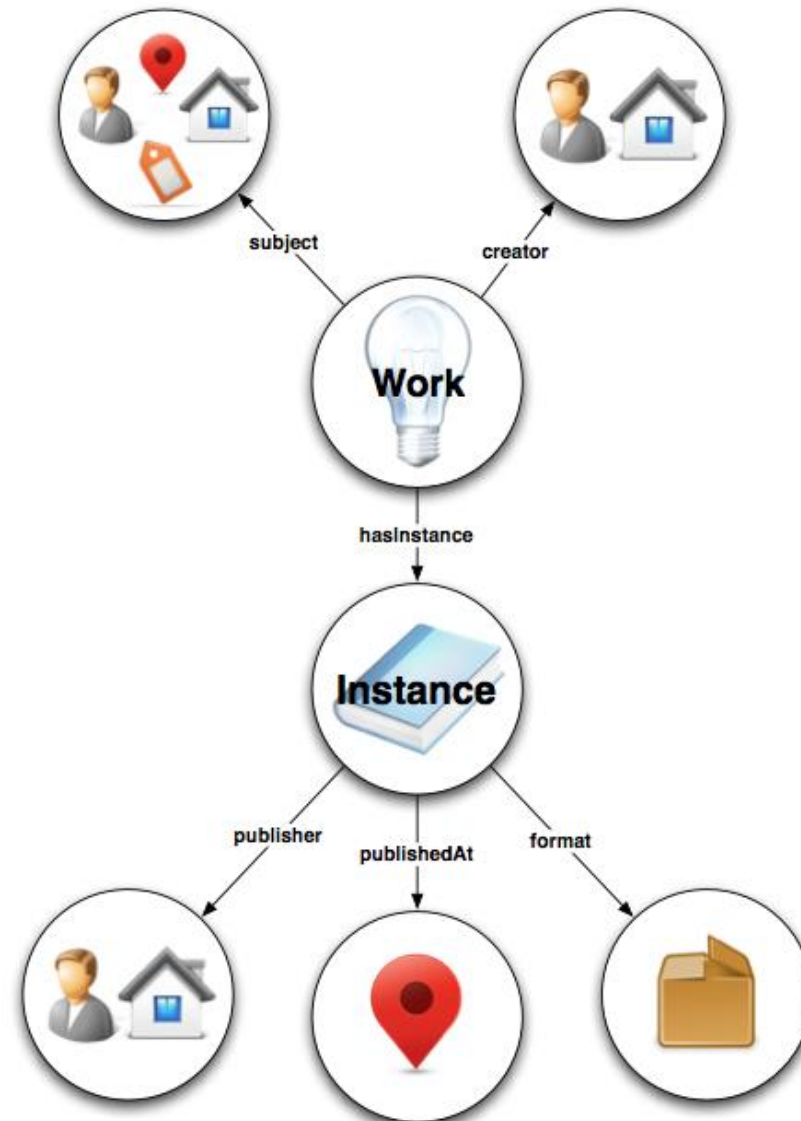
Deconstructing MARC



```
001 26132811
008 920608s1992 nyu 0 eng
010 $a92021087
020 $a1555701205
040 $aDLC$cDLC$dAGL
049 $aHNKA
050 00 $aZ678.9$b.C58 1992
082 00 $a025/.00285$220
1 $aCohn, John M
10 $aPlanning for automation :$ba how-to-do it manual for
librarians /$cJohn M. Cohn, Ann L. Kelsey, Keith Michael
Fiels
200 $aNew York $bNeal Schuman Publishers,$cc1992
300 $avi, 116 p. ;$c20 cm
440 0 $aHow-to-do it manuals for libraries ;$uno. 25
504 $aIncludes bibliographical references and index
650 0 $aLibraries$xAutomation$xManagement$xHandbooks, manuals, etc
650 0 $aLibrary planning$xHandbooks manuals, etc
700 10 $aKelsey, Ann L
700 10 $aFiels, Keith Michael
```



Bibliographic Framework Initiative (BIBFRAME)



Search

Edward Maynard

Author

- 2 (missing this field)
- 1 Bryan, W. B.
- 1 Georgetown (Washington, D Corporation.
- 1 Kahn, Tom.
- 1 Maynard, Edward,

Cooper, W. W. Corcoran, John A. B. Dahlgren, Stephen A. George Washington Riggs, Edwin McMasters Stanton, a

Subject

- Carter, Timothy W.
- Cooper, Samuel, (★)(✓)
- Corcoran, W. W. (✓)
- Dahlgren, John Adolphus Bernard, (★)(✓)
- Douglas, Stephen A. (✓)
- Ewing, Thomas, (★)(✓)
- Kearny, Philip, (★)(✓)
- Mackay, George
- Mann, Horace, (★)(✓)
- McClellan, George Brinton, (★)(✓)

Details

Visualization

Cooper, Samuel, 1798-1876

URI(s)

> <http://id.loc.gov/authorities/names/n8611443>

Instance Of

- > [MADS/RDF PersonalName](#)
- > [MADS/RDF Authority](#)
- > [SKOS Concept](#)

Cooper, Samuel, 1798-1876

VIAF ID: 38401361 (Personal)

Permalink: <http://viaf.org/viaf/38401361>

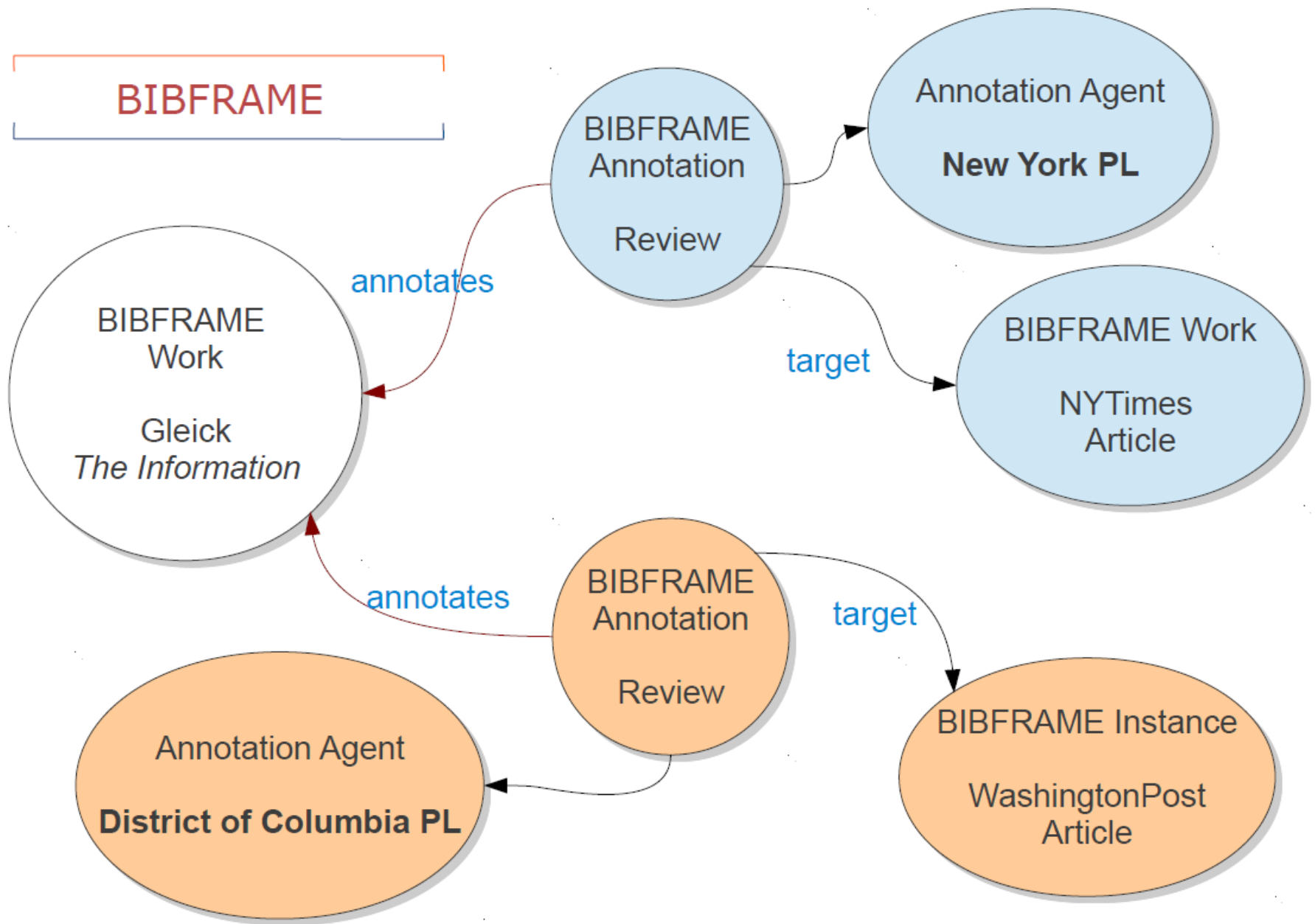
Preferred Forms

100 1 _ [⌘a Cooper, Samuel, ⌘d 1798-1876](#)

ashington, (★)(✓)
., (★)(✓)

ynard tape primer), his patent of it
ms manufactured utilizing the
his improvements in the breech-loading rifle and the sale of his patent rights. Correspondents include
(usetts Arms Company), George Mackay, Edward Riddle, Thomas L. Smith, and Joseph Washington
documenting Mavnard's Washington, D.C., dental practice. Patients mentioned include Samuel

BIBFRAME



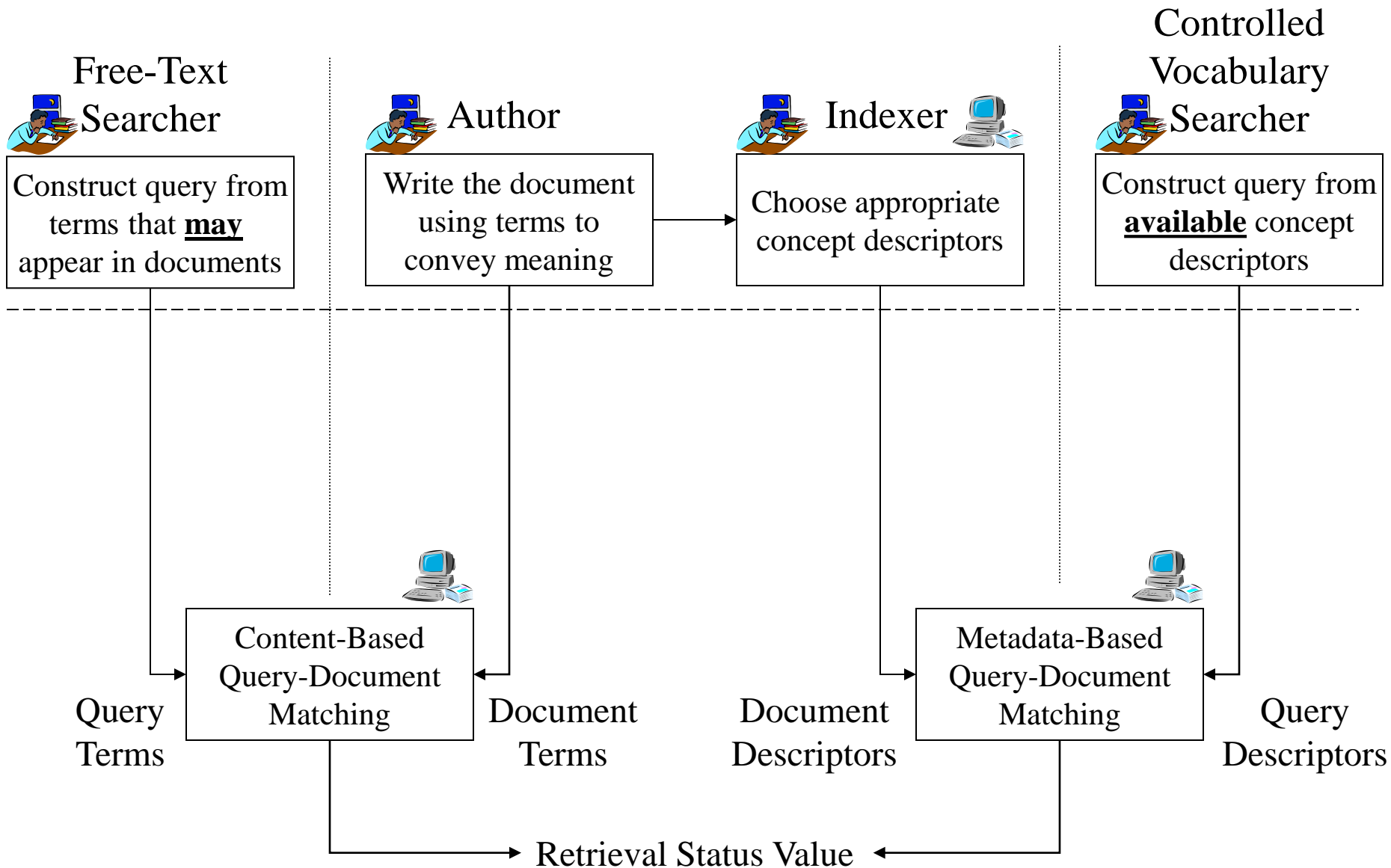
Tonight

- Linked Open Data and BIBFRAME

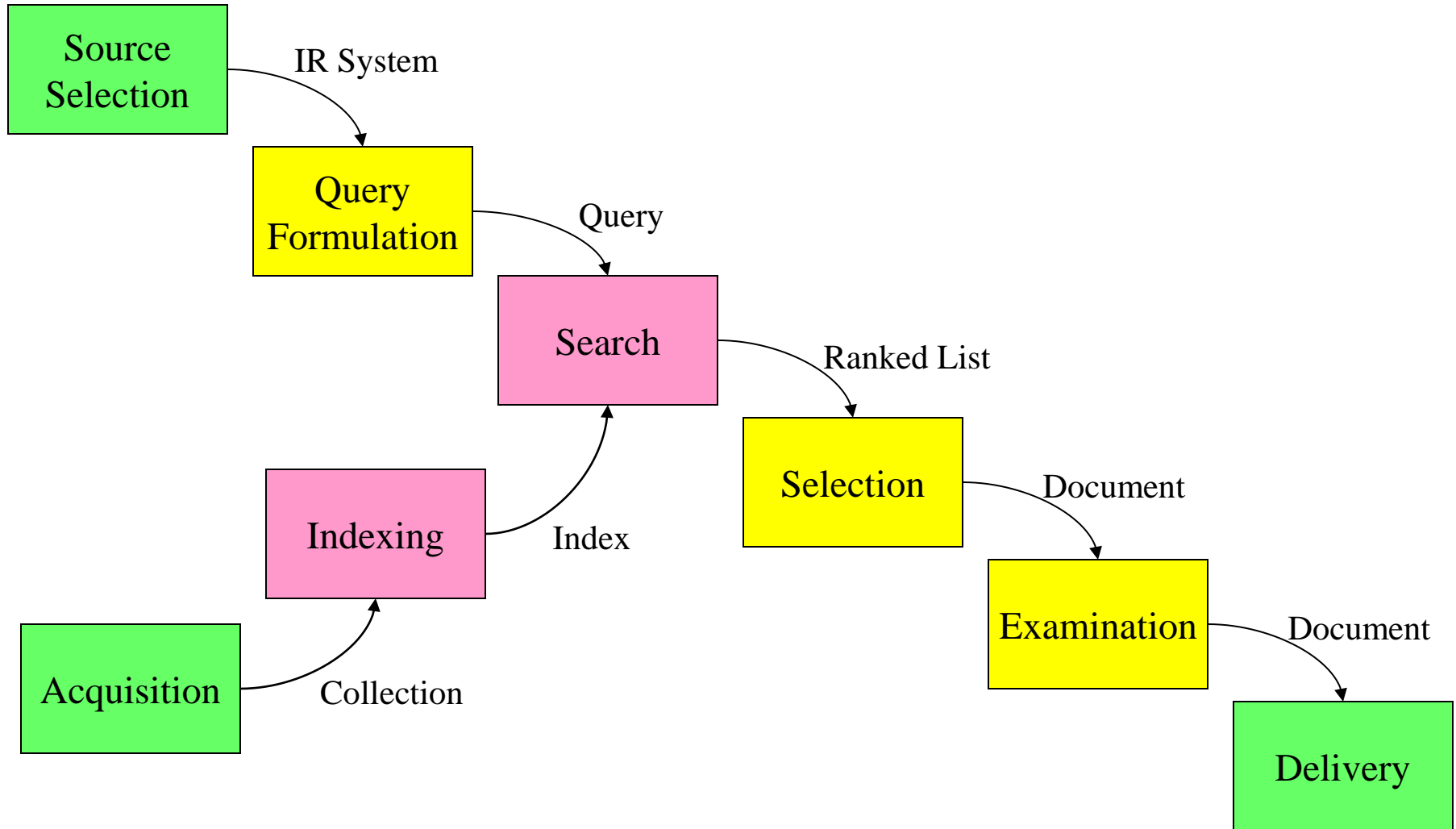
➤ Discovery

- Delivery

Two Ways of Searching



Supporting the Search Process



Online Public Access Catalog (OPAC)

- Known-item search
 - Author, Title
- Topic search
 - Title, subject headings
- Result display
 - Sort by publication date, “relevance,” ...
- Navigation
 - Broader/narrower headings, other editions, ...
- Delivery
 - Call number or (digital content) direct delivery

Tonight

- Linked Open Data and BIBFRAME
- Discovery
- Delivery
 - Shelf Order
 - Inter-Library Loan
 - Digital Rights Management

Delivery (“Serve It”)

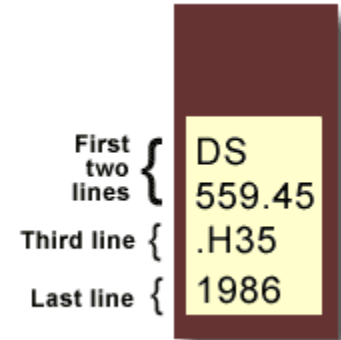
- Assigning a shelf order
- Moving physical materials
- Controlling access to digital materials

Library of Congress Classification

Book title: Uncensored War: The Media and Vietnam

Author: Daniel C. Hallin

Call Number: DS559.46 .H35 1986



The first two lines describe the subject of the book.

DS559.45 = Vietnamese Conflict

- D History
- DS1-937 History of Asia
- DS520-560.72 Southeast Asia
- DS556-559.93 Vietnam. Annam
- DS557-559.9 Vietnamese Conflict

The third line often represents the author's last name.

H = Hallin

*After other initial consonants
for the second letter:
use number:*

a	e	i	o	r	u	y
3	4	5	6	7	8	9

*For expansion
for the letter:
use number:*

a-d	e-h	i-l	m-o	p-s	t-v	w-z
3	4	5	6	7	8	9

The last line represents the date of publication.

The World Is Flat (in LCC)

HM846 .F74 2005

H Social sciences

HM Sociology

HM831 Social change – Causes

HM846 Technological Innovations. Technology.

.F74 Cutter number for Friedman, Thomas

The World Is Flat (in Dewey)

303.4833

300 Social science

300 Social sciences, sociology, & anthropology

303 Social processes

303.4 Social change

303.48 Causes of change

303.483 Development of science and technology

303.4833 Communication (Information technology)

Inter-Library Loan

- Users search “union catalog” to find books
- Remote library “ships” it to local library
 - Often by scanning it, where practical
 - Someone pays for this (local library or user)
- Local library manages circulation
 - Limited access period
 - Some “return” mechanism

Optimum statistical operations with celestial fix data for interplanetary navigation

Author: [David Randolph Scott](#); [Charles Joseph Januska](#); [Richard Errol Willes](#)
 Publisher: 1962.
 Dissertation: Thesis (M.S.)--Massachusetts Institute of Technology, Dept. of Aeronautics and Astronautics, 1962.
 Edition/Format: Thesis/dissertation : Thesis/dissertation : Manuscript Archival Material : English
 Database: WorldCat

Find a copy in the library

This item isn't held in your library system, but it is held by other WorldCat Libraries. You may request this item from a WorldCat library through interlibrary loan.

WorldCat

Find it in libraries globally

[Request Item through Interlibrary Loan](#)

[Worldwide libraries own this item](#)

Enter your location:

Displaying libraries 1-1 out of 1

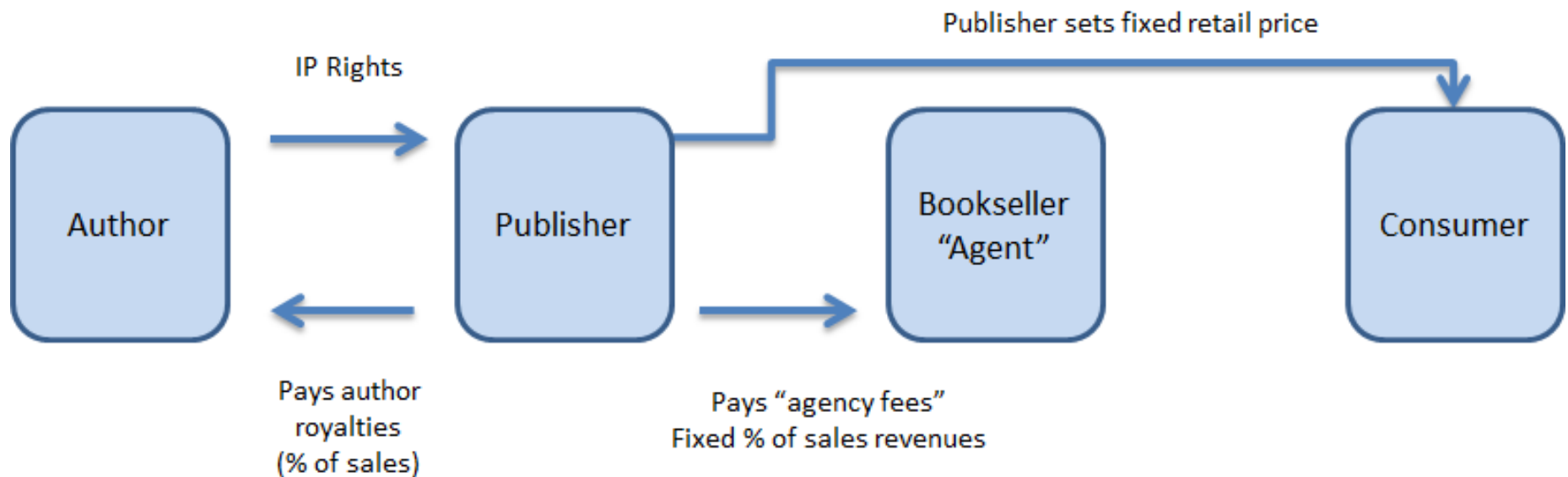
Show libraries holding [just this edition](#)

Library	Held formats	Distance	
1. MIT Libraries Massachusetts Institute of Technology Libraries Cambridge, MA 02139 United States	Book	382 miles <input type="button" value="MAP IT"/>	Library info Ask a librarian Add to favorites

Inter-Library Loan Issues

- Cost
- Delivery time
 - Satisficing
- Delivery
 - Online (links, PDF's)
 - Library pick up
 - Mail

E-Book Distribution



Copyright

- Balances two public interests
 - Incentivizing production of new information
 - Through owner's interest in monetizing assets
 - Fostering use of information
 - First sale doctrine
 - Fair use doctrine

First Sale Doctrine

- Owner may transfer access of the owned copy
 - But may not make a copy then transfer the copy
 - This is what permits “lending libraries”
 - Exception: no commercial lending of audio recordings
- Licensing can apply more restrictive rules
 - Establishes a conditional right of access
 - This is what permits limited-

Fair Use Doctrine

- Balance two desirable characteristics
 - Financial incentives to produce content
 - Desirable uses of existing information
- Safe harbor agreement
 - Book chapter, magazine article, picture, ...
- Developed in an era of physical documents
 - Perfect copies/instant delivery alter the balance

Recent Copyright Laws

- Copyright Term Extension Act (CTEA)
 - Ruled constitutional (Jan 2003, Supreme Court)
- Digital Millennium Copyright Act (DMCA)
 - Prohibits circumvention of technical measures
 - Implements WIPO treaty database protection

Digital Rights Management (DRM)

- Goal: protect intellectual property rights
 - Copyright relies on cost and quality of analog copies
- Three interlocking strategies
 - Make it difficult to produce an exact digital copy
 - Encrypt the content and then control description
 - Enforce policies to rebalance costs and benefits

Digital Rights Management

- No standards, so proliferation of one-off solutions
 - Many of which have caused unintended problems
- Unilateral implementation can result in imbalance
 - Establishing balance is a political process
- The “analog hole” is technically intractable
 - Unless interaction is needed

Before You Go!

- On a sheet of paper (no names), answer the following question:

What was the muddiest point in today's class?