Libraries and Linked Data

Confessions of a Graph Addict

Ed Summers
June 24, 2010

The URL is the currency of the web. For something to be referenced, to be talked about, to be shared in the web environment, it needs to have a URL.

MARC Must Die.

To die is different from what any one supposed, and luckier.

Walt Whitman, Leaves of Grass, 1855.
100 1# $a Copernicus, Nicolaus, |d 1473-1543.
Some FRBR relationships around Copernicus's De Revolutionibus


- TINA is about De Revolutionibus

I treat the anonymous introduction by Osiander and De Revolutionibus as two works that come together in the manifestation.

- TINA discusses Maestlin's copy and the Schreiber copy (and many others not indicated)

Group 1 entries (Works, Expressions, Manifestations, and Items) are labelled; anything else is a Person or a Corporate Body (a Group 2 entity).

William Denton © 2006
Some FRBR relationships around Copernicus's De Revolutionibus


Nicolaus Copernicus

De Revolutionibus

Anonymous introduction

Printed

First printing (Nuremberg, 1543)

Second printing (Basel, 1556)

Owen Gingerich

You know the relations here, so I didn't include them

Walker and Company


Hershey and Whiteside


William Denton

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William Denton (c) 2006
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From Moby Dick to Mash-Ups: Thinking About Bibliographic Networks

Ron Murray and Barbara Tillett
June 28, 8:00AM-12:00PM
Hyatt Regency
Yorktown/Valley Forge
http://www.w3.org/History/1989/proposal.html
A Proposal "Mesh"

Linked information

Includes "Hypertext"

"Hypertext"

Includes Hypermedia

This document

Includes

fork

refers to

wrote

Tim Berners-Lee

CERN division

group

section

IBM GroupTalk

Hierarchical systems

VAX/VMS

uuop News

computer conferencing

HyperCard

ENQUIRE
Linked Data Design Issues

1. Use URIs as names for things.
2. Use HTTP URIs so people can look up those things.
3. When someone looks up a URI, provide useful information.
4. Include links to other URIs, so they can discover more things.

http://www.w3.org/DesignIssues/LinkedData.html
Linked Data Design Issues

1. Use URIs as names for things.
2. Use HTTP URIs so people can look up those things.
3. When someone looks up a URI, provide useful information, using the standards (RDF, SPARQL).
4. Include links to other URIs, so they can discover more things.

http://www.w3.org/DesignIssues/LinkedData.html
Results for #semtech

agledna: Added semantics to The New Republic site: 300% increase in page visits, 150% increase into unique visits. #semtech
about 14 hours ago via TweetDeck · Reply · View Tweet
10+ recent retweets

Scotland: Shout out to @joshwillworth and @shruhansa1 of @infoChimps on their speaking session at #SemTech today, check it out - http://bit.ly/99lTxG (expans)
4 minutes ago via web · Reply · View Tweet

semanticcon: Session Added at #SemTech - Consuming Linked Data by Juan Sequeda - 7:30 am
6 minutes ago via web · Reply · View Tweet

PaulMiller: @PullNews hoping to get into the personal data locker session this afternoon at #semtech - we may FINALLY meet f2f...:-)
10 minutes ago via Twitter for iPhone · Reply · View Tweet · Show Conversation

manzr: italy vs Slovakia at #semtech - 7 am in Imperial B (via @semanticcon) - @flatters that's the room you need to go into!!!
19 minutes ago via Twitter for iPhone · Reply · View Tweet

PaulMiller: Another foggy morning in SF. Barc required for trip to #structureconf
Welcome to Chronicling America, enhancing access to America's historic newspapers. This site allows you to search and view newspaper pages from 1880-1910 and find information about American newspapers published between 1690-present. Chronicling America is sponsored jointly by the National Endowment for the Humanities and the Library of Congress as part of the National Digital Newspaper Program (NDNP).

**VIEW NEwsPaper Pages**

View newspaper pages from 1880 to 1910 from the following states: California, District of Columbia, Florida, Kentucky, Minnesota, Nebraska, New York, Texas, Utah, and Virginia. **Why only these states and years?**

**FIND INFORMATION ABOUT NEwsPAPERS FROM 1690 TO TODAY**

Find information about newspapers published in the United States from 1690 to the present in the Chronicling America Directory.

Browse the Directory by newspaper title:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

SEARCH PAGES

SEARCH DIRECTORY
### About this Newspaper: New-York tribune.

<table>
<thead>
<tr>
<th><strong>Title:</strong></th>
<th>New-York tribune. : (New York [N.Y.]) 1866-1924</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alternative Titles:</strong></td>
<td>Combined New York morning newspapers Sept. 19-26, 1923</td>
</tr>
<tr>
<td></td>
<td>Combined New York Sunday newspapers</td>
</tr>
<tr>
<td></td>
<td>New York daily tribune</td>
</tr>
<tr>
<td></td>
<td>New York tribune</td>
</tr>
<tr>
<td></td>
<td>New-York daily tribune 1866-Mar. 31, 1912</td>
</tr>
<tr>
<td><strong>Place of publication:</strong></td>
<td>New York [N.Y.]</td>
</tr>
<tr>
<td><strong>Geographic coverage:</strong></td>
<td>New York, New York, New York</td>
</tr>
<tr>
<td></td>
<td>View more titles from this: <a href="#">City County, State</a></td>
</tr>
<tr>
<td><strong>Publisher:</strong></td>
<td>New York Tribune</td>
</tr>
<tr>
<td><strong>Dates of publication:</strong></td>
<td>1866-1924</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>Vol. 26, no. 7,802 (Apr. 10, 1866)-v. 83, no. 28,247 (Mar. 18, 1924).</td>
</tr>
<tr>
<td><strong>Frequency:</strong></td>
<td>Daily Dec. 7, 1879-1924</td>
</tr>
<tr>
<td><strong>Language:</strong></td>
<td>English</td>
</tr>
<tr>
<td>Created</td>
<td>Batch Name</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>2009-12-09 14:07:21</td>
<td>batch_dlc_harry_ver01</td>
</tr>
<tr>
<td>2009-12-09 14:07:21</td>
<td>batch_vi_elgar_ver01</td>
</tr>
<tr>
<td>2009-12-09 14:07:21</td>
<td>batch_az_coyote_ver01</td>
</tr>
<tr>
<td>2009-12-09 14:07:21</td>
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</tr>
<tr>
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<td>batch_kyu_fargo_ver01</td>
</tr>
<tr>
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<td>batch_wa_birch_ver01</td>
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<tr>
<td>2009-12-04 01:20:17</td>
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<tr>
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<td>batch_vi_yes_ver01</td>
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<tr>
<td>2009-12-04 01:11:12</td>
<td>batch_vi_xyz_ver01</td>
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<tr>
<td>2009-12-04 00:58:46</td>
<td>batch_vi_whitesnake_ver01</td>
</tr>
<tr>
<td>2009-12-04 00:47:15</td>
<td>batch_vi_vanhalen_ver01</td>
</tr>
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</table>
Awardee: Library of Virginia; Richmond, VA

<table>
<thead>
<tr>
<th>Ingested</th>
<th>Batch Name</th>
<th>Total Pages</th>
</tr>
</thead>
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<tr>
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<td>1325</td>
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<tr>
<td>2009-12-03 21:07:43</td>
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<td>2184</td>
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<td>2009-12-03 21:16:48</td>
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<td>batch_vi_creed_ver01</td>
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<td>2009-12-03 22:06:41</td>
<td>batch_vi_danville_ver01</td>
<td>1750</td>
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<tr>
<td>2009-12-03 22:21:15</td>
<td>batch_vi_defleppard_ver01</td>
<td>2252</td>
</tr>
</tbody>
</table>
Cool URIs

Title:
http://chroniclingamerica.loc.gov/lccn/{lccn}

Issue:
http://chroniclingamerica.loc.gov/lccn/{lccn}/{issue}

Page:
http://chroniclingamerica.loc.gov/lccn/{lccn}/{issue}/{page}

Batch:
http://chroniclingamerica.loc.gov/batches/{batch_name}
Genealogies of old newspapers

MAY 13TH, 2010

Even before the Internet disrupted their environment in ways that are still unfolding, newspapers were complicated things, at once periodical publications, businesses, and devices of social organization and communication. The names of the best-known newspapers carry an aura of institutional solidity — the New York Times, the Wall Street Journal — but the history of newspapers includes many locales, many more papers, some of them short-lived, many changes in ownership, editorial leadership and political stance. Mergers and renamings have left their stamp on names like Star-Ledger, Journal-Constitution, Post-Gazette. We cite historical newspapers by name and date, usually ignoring the complexities of daily variations in editions and other irregular publication patterns that made newspapers awkward misfits in book-oriented bibliographic contexts long before digital media added new complications. Editorial page writers and historians have often employed without apology the convenient social fiction that a newspaper is a continuous identity of singular agency, judging that a more precise account would be hopelessly unwieldy. But they have been in a position to know how much of a fiction it is.

Ten years ago I had the good fortune to participate in the preparation of the Encyclopedia of Chicago. The editors sought to supplement the alphabetical entries with a number of new maps, tables, and charts. One of my colleagues prepared several charts to visualize highlights of the history...
Jefferson Park times and Mayfair times. (19??/1950) sn96070035

Jefferson Park times. (1950/1961) sn93057138

Mayfair times. (1950/1961) sn93057139

Portage Park times. (1957/1961) sn93057137

Jefferson Park Portage Park Mayfair times. (1961/1963) sn93057140

Portage Park times. (1963/1989) sn93057142

RDFa Primer

Bridging the Human and Data Webs

W3C Working Group Note 14 October 2008

Abstract

Today's web is built predominantly for human consumption. Even as machine-readable data begins to appear on the web, it is typically distributed in a separate file, with a separate format, and very limited correspondence between the human and machine versions. As a result, web browsers can provide only minimal assistance to humans in parsing and processing web data; browsers only see presentation information. We introduce RDFa, which provides a set of X/HTML attributes to augment visual data with machine-readable hints. We show how to express simple and more complex datasets using RDFa, and in particular how to turn the existing human-visible text and links into machine-readable data without repeating content.
RDFa ("Resource Description Framework in attributes") is having its five minutes of fame: Google is beginning to process RDFa and Microformats as it indexes websites, using the parsed data to enhance the display of search results with "rich snippets." Yahoo!, meanwhile, has been processing RDFa for about a year. With these two giants of search on the same trajectory, a new kind of web is closer than ever before.

The web is designed to be consumed by humans, and much of the rich, useful information our websites contain, is inaccessible to machines. People can cope with all sorts of variations in layout, spelling, capitalization, color, position, and so on, and still absorb the intended meaning from the page. Machines, on the other hand, need some help.
Our new social contract cannot be forged in an exclusive club. New models will be hammered out in many forums, tested in OPACs and search engines, shaped and reshaped by many hands. They will differ from the one we are used to--they must, to satisfy the need for change.

Managers

● What unique materials do you have in your library that others might like to link to?
● Where has the web been? Where is it likely to go?
● Take some chances with your developers, and experimental ideas.
Developers

- Think about your resources and their identifiers.
- Link to machine readable representations in your HTML.
- RDFa / HTML5
- Enrich your data with links
- Build useful apps!
Researchers

- What algorithms can we use for linking our data?
- How can publishers find out when their data is being linked to?
- What vocabularies are being used?
- What resources are being described?
Web 3.0
by Kate Ray
2 months ago

A story about the Semantic Web

Transcript, interview bios, and other info on kateray.net
Downloadable version on drop.io/web3point0

Interviews with:
Tim Berners-Lee
Tim Vickers

http://vimeo.com/11529540
Let’s Share What We Know

World Wide Web
Image Credits

- http://www.radford.edu/srabago/links/timbernerslee.jpg
- University of East Anglia Microfilm Collections: http://www.uea.ac.uk/polopoly_fs/1.35866!imageManager/115198276.jpg