



Forging New Links: Libraries in the Semantic Web

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Memorial University Libraries

Computers in Libraries, Washington D.C.

March 23rd, 2011



The Gist

General Semantic Web

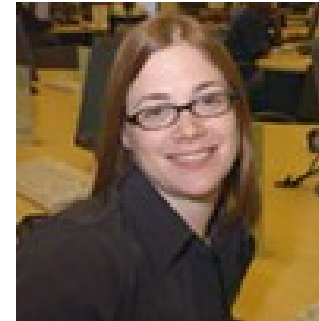
- How it works.
- A few tools.
- Who's involved?



Lisa

Libraries & Linked Data

- What it solves.
- Issues & obstacles.
- Where we are now.



Gillian

Web Search Problems

library resolver - Google Search

http://www.google.ca/search?hl=en&client=firefox-a&rls=org.m... library

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www.autotechcontrols.net Stock & Repairs Direct from Factory Rugged, Programmable Limit Switch

Headup: library resolver

The Resolver Library
The term **resolver** refers not to a special application, but to the **resolver library**. This is a collection of functions that can be found in the standard C ...
www.faqs.org/docs/linux_network/x-087-2-resolv.library.html - 25k - Cached - Similar pages

adns - advanced, alternative, asynchronous resolver
Advanced, easy to use, asynchronous-capable DNS client **library** and utilities. adns is a **resolver library** for C (and C++) programs, and a collection of ...
www.chiark.greenend.org.uk/~ian/adns/ - 10k - Cached - Similar pages

[security through absurdity]: DnDns - A .NET DNS Client Library ...
I've been sitting on the source code for a DNS **resolver library** I wrote for a few years now, wondering what to do with it - and too busy to really think ...
securitythroughabsurdity.com/2008/02/dndns-net-dns-client-library-resolver.html - 125k - Cached - Similar pages

The Resolver Library
When talking of "the **resolver**", we do not mean any special application, but rather refer to the **resolver library**, a collection of functions that can be ...
tldp.org/LDP/nag/node81.html - 2k - Cached - Similar pages

library-resolvers - ikarus-users | Google Groups
15 May 2009 ... In addition to modifying "psyntax.library-manager.ss" I also had to modify "makefile.ss" to add 'library-resolvers' to the ...
groups.google.com/group/ikarus-users/browse_thread/thread/e8ec65e1c5d95211 - Similar pages

DnDns - A .NET DNS Client Library (Resolver)
DotNetKicks.com is a community based news site edited by our members. It specialises in

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Integrated Library System - Google Search

http://www.google.ca/search?q=Integrated Library System

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Integrated Library System

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Headup: Integrated Library System

[Integrated library system - Wikipedia, the free encyclopedia](#)
An **integrated library system (ILS)**, also known as a **library management system** or **library management system (LMS)**, is an enterprise resource planning **system** for a **library**, used to track ...
[en.wikipedia.org/wiki/Integrated_library_system - 34k - Cached - Similar pages](#)

[Welcome to koha.org! — Koha - Open Source ILS - Integrated Library System](#)
... Ltd and first deployed in January of 2000 for Horowhenua **Library** Trust, ... ensures interoperability between Koha and other **systems** ...
[www.koha.org/ - 22k - Cached - Similar pages](#)

[Integrated Library System Reports](#)
An electronic newsletter designed to assist information professionals with **integrated library system** issues. ILSR's mission is to locate up-to-date IOLS ...
[www.ilsr.com/ - 6k - Cached - Similar pages](#)

[ILSR Sample RFPs](#)
Integrated Online Library System University of Wisconsin **Library** Authority
Includes planning documents, RFP evaluation guides and RFI. ...
[www.ilsr.com/sample.htm - 17k - Cached - Similar pages](#)
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[SirsiDynix : Solutions : Integrated Library Systems](#)
At the heart of SirsiDynix's technology offerings for libraries and consortia is the **integrated library system (ILS)**. For our ILS customers, ...
[www.sirsi.com/Solutions/Products/integratedsystems.php - 24k - Cached - Similar pages](#)

[Lorcan Dempsey's weblog](#)
One can read the phrase **Integrated Library System (ILS)** in two ways: as a noun or as a verb. It is clear that the **ILS** manages a progressively smaller part of the ...
[orweblog.oclc.org/archives/000585.html - 25k - Cached - Similar pages](#)

[Lorcan Dempsey's weblog](#)
A couple of notes on the **Integrated Library System**. A discussion document prepared at the University of Windsor, has been made ...
[www.ilsr.com/sample.htm - 17k - Cached - Similar pages](#)

ILS - Google Search

http://www.google.ca/search?q=ILS&ie=

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Integrated Library System - Google Search

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ILS

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Headup: ILS

 **1 Israeli shekel = 0.280113797 Canadian dollars**
Rates provided for information only - [see disclaimer](#). [More about currency conversion](#).

[Instrument landing system - Wikipedia, the free encyclopedia](#)
The **Instrument Landing System (ILS)** is a ground-based instrument approach system that provides precision guidance to an aircraft approaching and landing on ...
[en.wikipedia.org/wiki/Instrument_landing_system - 70k - Cached - Similar pages](#)

[Integrated library system - Wikipedia, the free encyclopedia](#)
An **integrated library system (ILS)**, also known as a library management system (LMS), is an enterprise resource planning system for a library, used to track ...
[en.wikipedia.org/wiki/Integrated_library_system - 34k - Cached - Similar pages](#)

[ILSmart: Aircraft Parts, Helicopter & Defense Parts, Marine Spares](#)
Online network for buying/selling aircraft parts, helicopter & defense parts, and marine spares. Inventory Management and MRO process software.
[www.ilsmart.com/ - 26k - Cached - Similar pages](#)

[News results for ILS](#)

 [ILS Proton Launches Indostar II/Protostar II Satellite](#) - 1 day ago
by Staff Writers International Launch Services (ILS) carried the Indostar II/Protostar II satellite into orbit, marking the second commercial mission of the ...
[Space Daily - 12 related articles »](#)

[ILS Learning Corporation](#)
ILScorp is the industry leader in providing online insurance, financial services, real estate and health care education and career development in [Canada](#).
[www.ilsCorp.ca/ - 25k - Cached - Similar pages](#)

[Ils \(2006\)](#)
Directed by David Moreau, Xavier Palud. With Olivia Bonamy, Michaël Cohen, Adriana Mocca. Lucas and Clementine live peacefully in their isolated country ...

http://en.wikipedia.org/wiki/Semantic_Web

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Semantic Web

From Wikipedia, the free encyclopedia



It has been suggested that *Semantic publishing* be merged into this article or section. ([Discuss](#))

The **Semantic Web** is an evolving extension of the [World Wide Web](#) in which the [semantics](#) of information and services on the web is defined, making it possible for the web to understand and satisfy the requests of people and machines to use the [web content](#).^{[1][2]} It derives from [World Wide Web Consortium](#) director Sir [Tim Berners-Lee](#)'s vision of the Web as a universal medium for [data](#), [information](#), and [knowledge](#) exchange.^[3]

At its core, the semantic web comprises a set of design principles,^[4] collaborative [working groups](#), and a variety of enabling technologies. Some elements of the semantic web are expressed as prospective future possibilities that are yet to be implemented or realized.^[2] Other elements of the semantic web are expressed in formal specifications.^[5] Some of these include [Resource Description Framework](#) (RDF), a variety of data interchange formats (e.g. [RDF/XML](#), [N3](#), [Turtle](#), [N-Triples](#)), and notations such as [RDF Schema](#) (RDFS) and the [Web Ontology Language](#) (OWL), all of which are intended to provide a [formal description](#) of [concepts](#), [terms](#), and [relationships](#) within a given [knowledge domain](#).



W3C's Semantic Web logo

Contents [hide]

- 1 Purpose
- 2 Relationship to the hypertext web
 - 2.1 Limitations of HTML
 - 2.2 Semantic Web solutions
- 3 Relationship to object oriented programming
- 4 Skeptical reactions
 - 4.1 Practical feasibility
 - 4.2 An unrealized idea
 - 4.3 Censorship and privacy



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Minimum browser
requirements: [Internet Explorer 6.0](#),
[Firefox 2.0](#), and [Safari 2.0](#)
Recommended minimum screen
resolution: 1024x768



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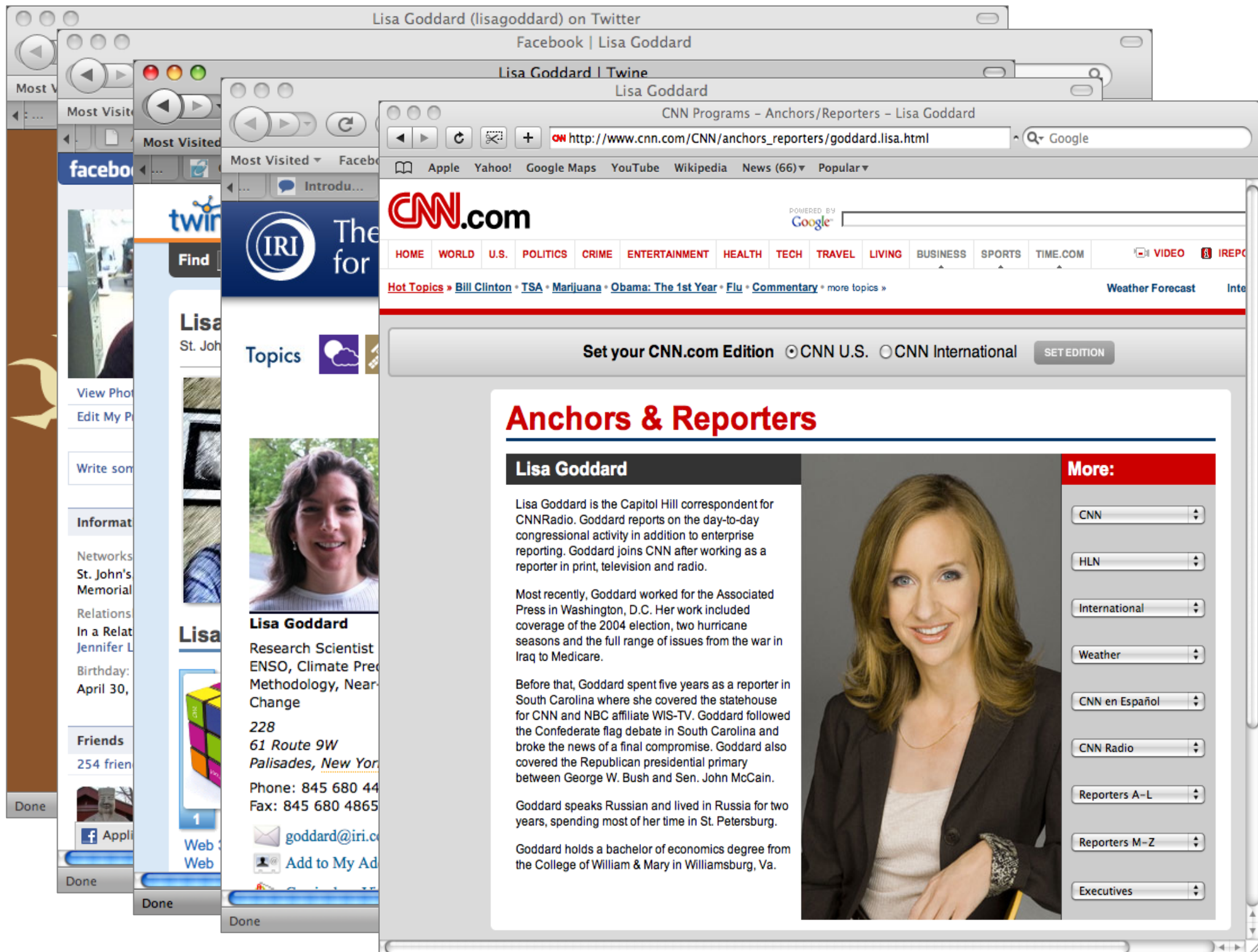
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www.ucl.ac.uk/anthropology/staff/ - 31k - [Cached](#) - [Similar pages](#)

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List of **Faculty Members** · Associate **Faculty Members** · The evaluation system · Citing F1000 · Take a tour of the site · Accessing fulltexts ...
www.f1000biology.com/about/members - [Similar pages](#)

Faculty members
19 Mar 2009 ... **Faculty members** McGill University. | Skip to search Skip to navigation Skip to page content. User Tools (skip): ...
www.mcgill.ca/spot/faculty/ - 19k - [Cached](#) - [Similar pages](#)

Faculty Members
Below is a list of the full-time **faculty members** teaching in the various programs housed in the Department of Educational and Counselling Psychology. ...
www.mcgill.ca/edu-ecp/professors/ - 44k - [Cached](#) - [Similar pages](#)
[More results from www.mcgill.ca »](#)

UNB faculty members protest honorary degree for N.B. premier
About 100 University of New Brunswick **faculty members** are protesting a decision to grant Premier Shawn Graham an honorary degree, in objection to the ...
www.cbc.ca/canada/new-brunswick/story/2009/05/12/nb-unb-graham-honourary-degree-944.html - [Similar pages](#)

Faculty Members
Faculty Members. Our **faculty** bring extensive business experience and board educational backgrounds to the classroom. This combination produces relevant, ...
www.cse.cse.mcgill.ca/faculty.htm - 15k - [Cached](#) - [Similar pages](#)

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Register for Free Business Software Demos. Registration Required!
www.2020Software.com

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Academic Staff Member
(University College London)

Equivalent to?

Faculty Member
(McGill)

Semantic Queries

Find all soccer players, who played as goalkeeper for a club that has a stadium with more than 40,000 seats and who are born in a country with more than 10 million inhabitants.

Scopus - Affiliation Search Results: memorial university newfoundland

http://www.scopus.com.qe2a-proxy.mun.ca/results/affiliationResults.url?selectio... emantic web

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Affiliation

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E.g., university of toronto

The Scopus Affiliation Identifier is the world's first tool to help you identify and group an organization's complete body of work. It turns a time-consuming process into a simple task. [More information...](#)

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Select one or more affiliations and click **show documents**.

Affiliation Results: 4 Page 1 of 1

Select: ☐ All ☐ Page

Affiliations	Documents	City	Country
1. ☐ Memorial University of Newfoundland Memorial University of Newfoundland Find unmatched affiliations	Details 13110	St John's	Canada
2. ☐ Sir Wilfred Grenfell College Memorial University of Newfoundland Sir Wilfred Grenfell College Find unmatched affiliations	Details 135	Corner Brook	Canada
3. ☐ Memorial University of Newfoundland, Faculty of Medicine Memorial University of Newfoundland	Details 66	St John's	Canada

Done

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The Semantic Solution



1. Structured data
2. Vocabularies & Reasoning
3. Linking

Machine-Actionable Data



mpedson Michael Peter Edson

"Our top two users are computers." Says [@udcmrk](#) about the importance of API's and machine readable data.

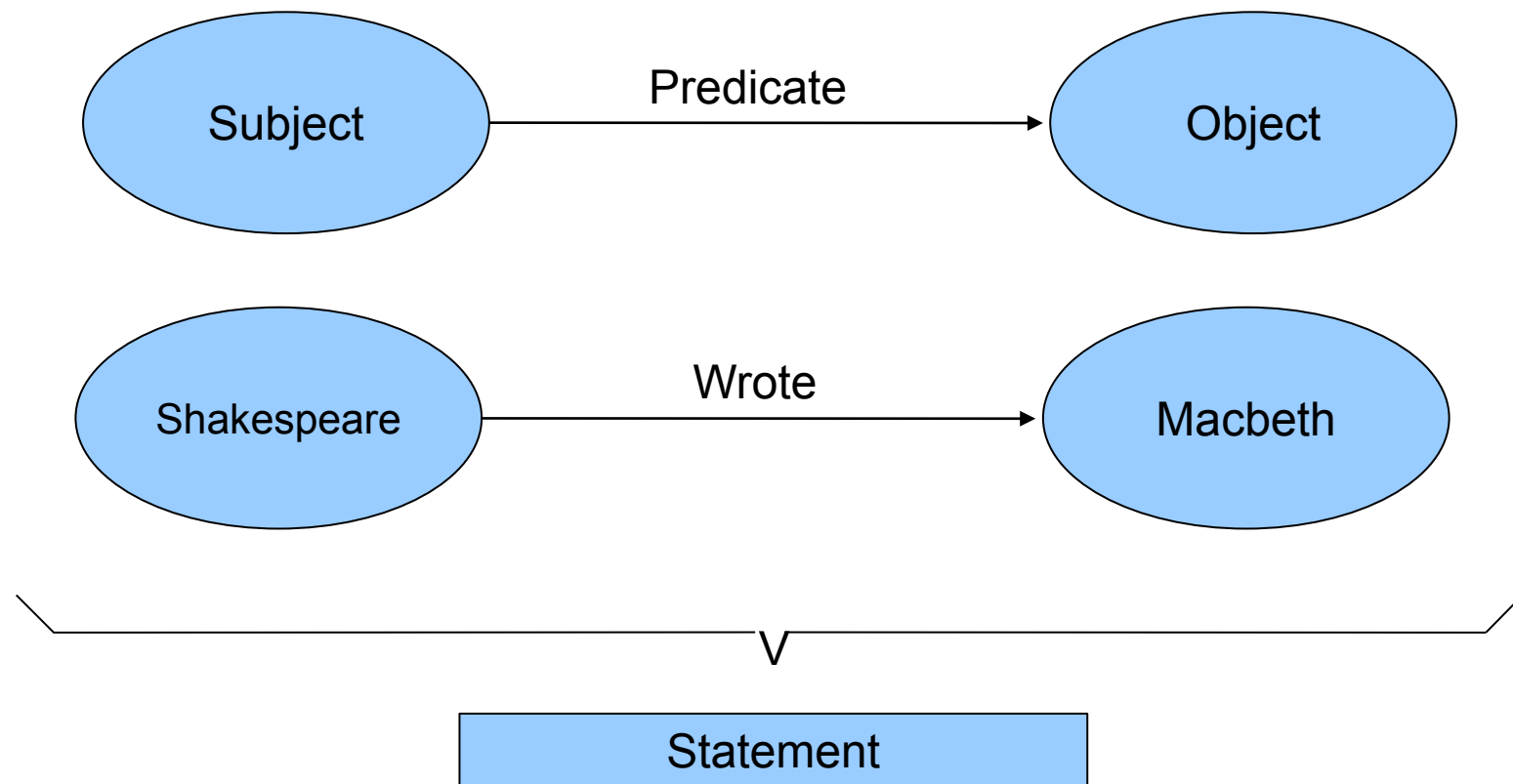
24 Jan

Structured Data: RDF

Semantic Web Metadata: RDF

Data model for writing simple statements about web objects.

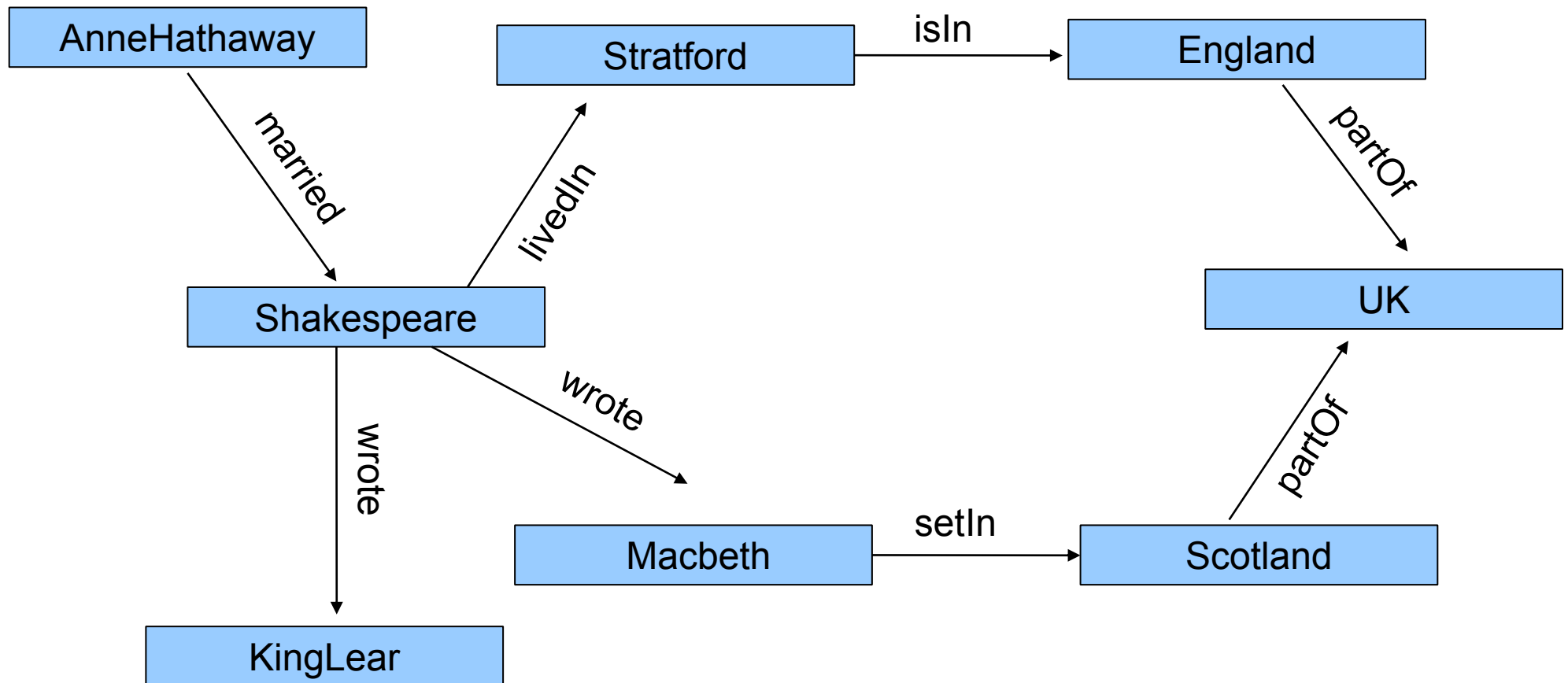
RDF statements are written as “triples”.

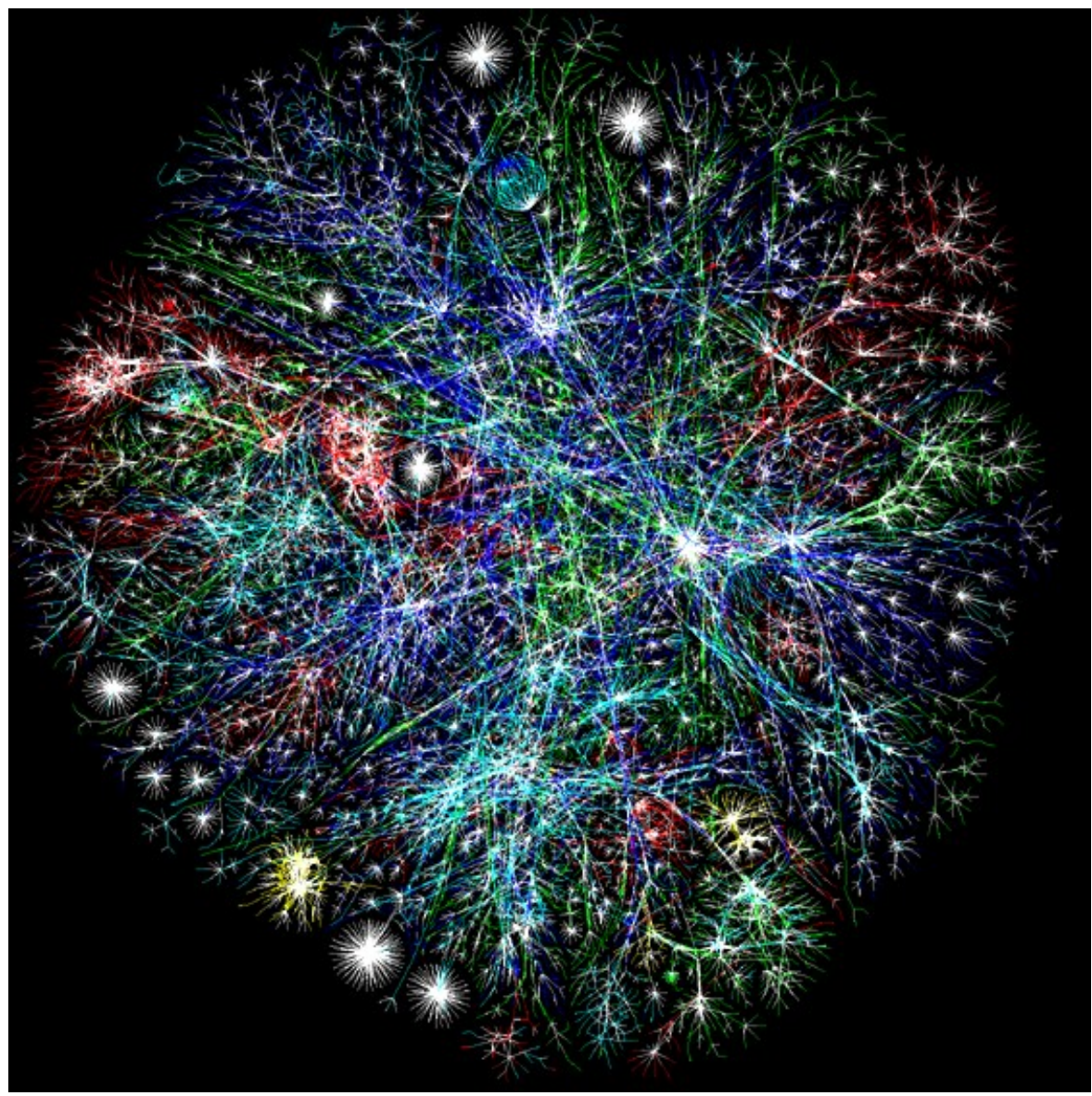


RDF Triples

Subject	Predicate	Object
Shakespeare	Wrote	King Lear
Shakespeare	Wrote	Macbeth
Anne Hathaway	Married	Shakespeare
Shakespeare	Lived in	Stratford
Stratford	Is in	England
Macbeth	Set in	Scotland
England	Part of	UK
Scotland	Part of	UK

RDF Graph: A Semantic Net

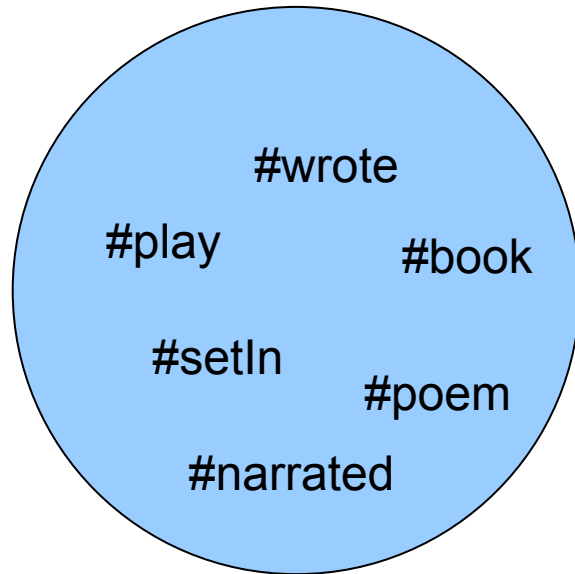




Vocabularies: Ontologies

Controlled Vocabulary

Terms and definitions are posted online, so they can be shared by many different organizations.



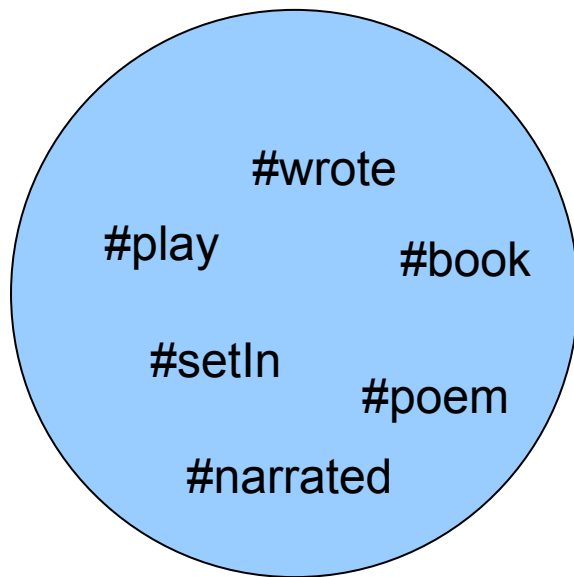
`xmlns:lit=http://www.mun.ca/lit.owl`

`lit:book`
`lit:poem`
`lit:wrote`

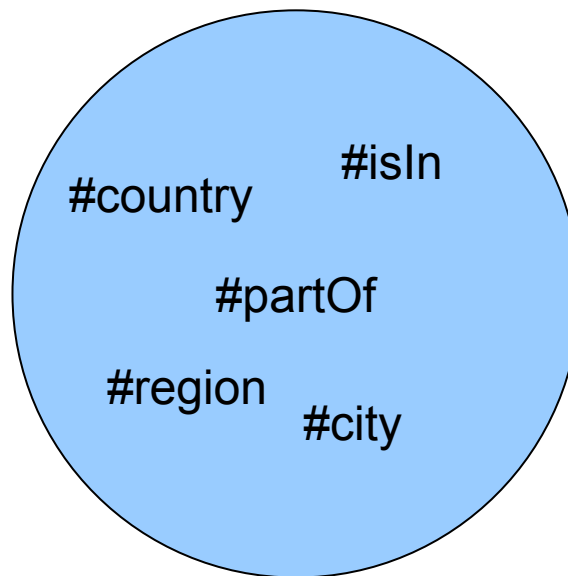
<http://www.mun.ca/lit.owl>

Shared Vocabularies

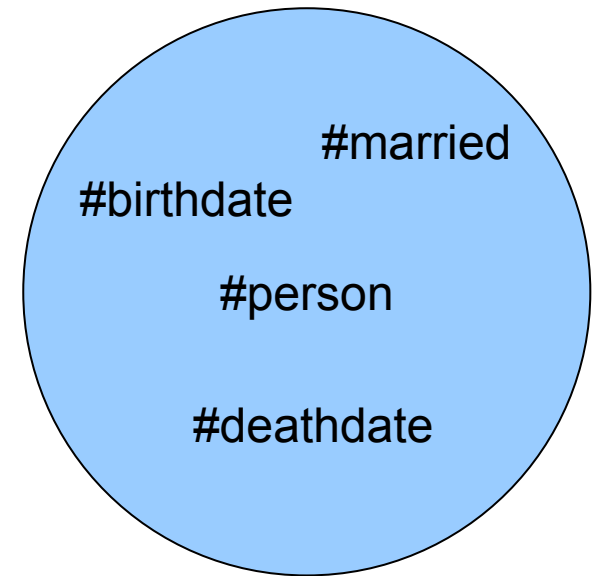
Namespaces allow us to combine several vocabularies while maintaining distinct meaning of each element.



<http://mun.ca/lit.owl>



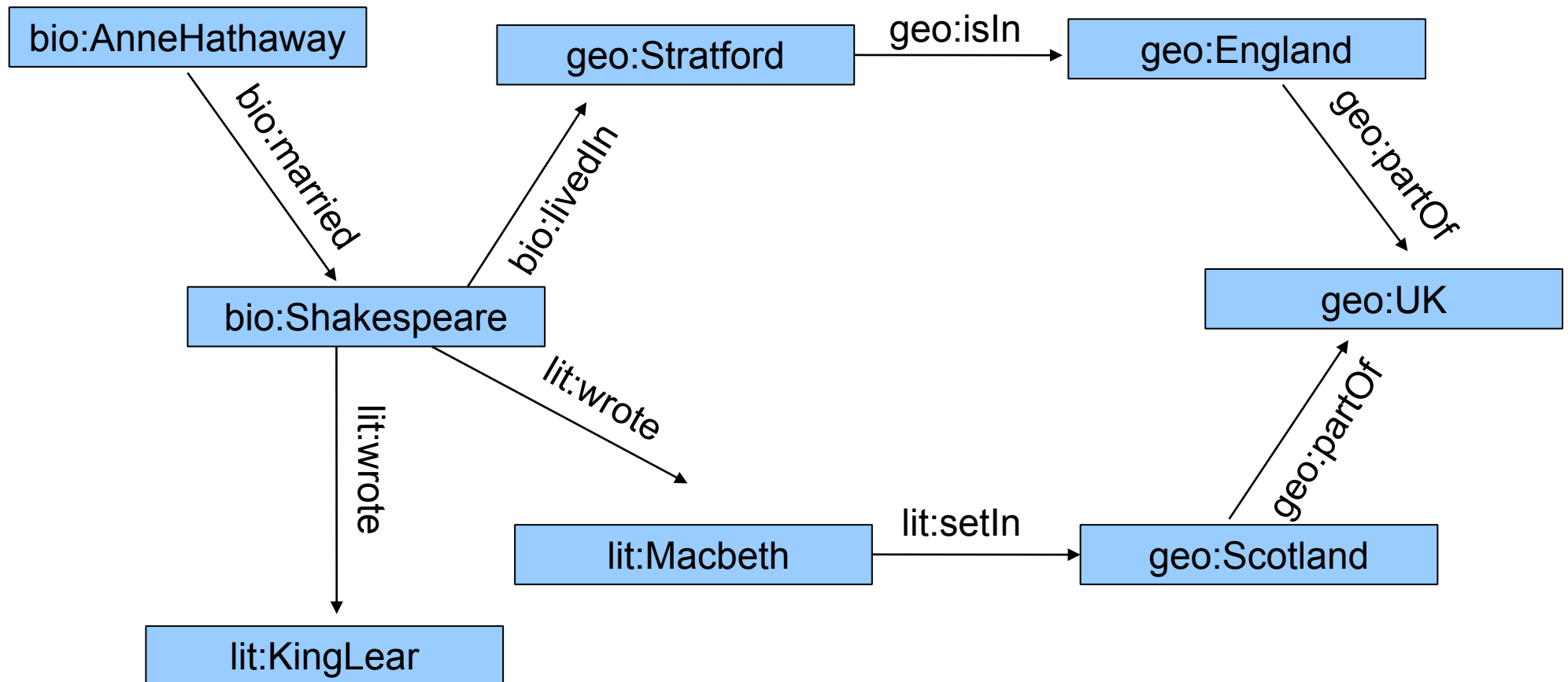
<http://mit.edu/geo.rdf>



<http://gmue.edu/bio.owl>

RDF: Semantic Net & Namespaces

xmlns:geo=http://mit.edu/geo.rdf
xmlns:bio=http://gmu.edu/bio.owl
xmlns:lit=http://mun.ca/lit.owl



*In RDF namespace URIs always resolve.

FOAF: People



```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:rdfs="http://www.w3.org/2000/01/rdf-schema#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/"
<foaf:Person rdf:ID="me">
<foaf:name>Lisa Goddard</foaf:name>
<foaf:title>Ms.</foaf:title>
<foaf:givenname>Lisa</foaf:givenname>
<foaf:family_name>Goddard</foaf:family_name>
<foaf:homepage rdf:resource="http://twitter.com/lisagoddard"/>
<foaf:workplaceHomepage rdf:resource="http://www.library.mun.ca"/>
<foaf:schoolHomepage rdf:resource="http://www.queensu.ca"/>
<foaf:knows>
  <foaf:Person>
    <foaf:name>Gillian Byrne</foaf:name>
    <foaf:mbox rdf:resource="mailto:gbyrne@mun.ca"/></foaf:Person></foaf:knows>
<foaf:knows>
  <foaf:Person>
    <foaf:name>Dianne Keeping</foaf:name>
    <foaf:mbox rdf:resource="mailto:dckee@mun.ca"/>
    </foaf:Person></foaf:knows>
</foaf:Person>
</rdf:RDF>
```

Resolvable URIs

xmlns:foaf="http://xmlns.com/foaf/0.1/"

```
<foaf:Person rdf:ID="me">  
  <foaf:name>Lisa Goddard</foaf:name>  
  <foaf:workplaceHomepage  
    rdf:resource="http://www.library.mun.ca"/>  
</foaf:Person>
```

http://xmlns.com/foaf/0.1/#term_workplaceHomepage

Resolvable URIs

Property: foaf:workplaceHomepage

workplace homepage - A workplace homepage of some person; the homepage of an organization they work for.

Status: testing

Domain: having this property implies being a [Person](#)

Range: every value of this property is a [Document](#)

The [workplaceHomepage](#) of a [Person](#) is a [Document](#) that is the [homepage](#) of a [Organization](#) that they work for.

By directly relating people to the homepages of their workplace, we have a simple convention that takes advantage of a set of widely known identifiers, while taking care not to confuse the things those identifiers identify (ie. organizational homepages) with the actual organizations those homepages describe.

For example, Dan Brickley works at W3C. Dan is a [Person](#) with a [homepage](#) of <http://danbri.org/>; W3C is a [Organization](#) with a [homepage](#) of <http://www.w3.org/>. This allows us to say that Dan has a [workplaceHomepage](#) of <http://www.w3.org/>.

```
<foaf:Person>
  <foaf:name>Dan Brickley</foaf:name>
  <foaf:workplaceHomepage rdf:resource="http://www.w3.org/" />
</foaf:Person>
```

Note that several other FOAF properties work this way; [schoolHomepage](#) is the most similar. In general, FOAF often indirectly identifies things via Web page identifiers where possible, since these identifiers are widely used and known. FOAF does not currently have a term for the name of the relation (eg. "workplace") that holds between a [Person](#) and an [Organization](#) that they work for.

Web Ontology Language: OWL



An ontology describes a particular domain of knowledge (e.g. bikes, whiskey).

- Establishes controlled vocabulary.
- Models relationships between entities & concepts.
- Built-in rules and datatypes that support reasoning.

Reasoning: Ontologies

OWL Reasoning: Inverse

Axiom

lit:wrote owl:inverseOf lit:writtenBy
lit:settingFor owl:inverseOf lit:setIn

Explicit
Fact

bio:Shakespeare lit:wrote lit:Macbeth
lit:Macbeth lit:setIn geo:Scotland

Implicit
Fact

lit:Macbeth lit:writtenBy bio:Shakespeare
geo:Scotland lit:settingFor lit: Macbeth

OWL Reasoning: Transitive

Axiom

hasParent rdfs:subpropertyOf hasAncestor
hasAncestor rdf:type owl:TransitiveProperty

Explicit
Facts

Lisa hasParent Geoffrey
Geoffrey hasParent Elizabeth
Elizabeth hasParent Beatrix

Implicit
Facts

Lisa hasAncestor Geoffrey
Geoffrey hasAncestor Elizabeth
Lisa hasAncestor Elizabeth
Geoffrey hasAncestor Beatrix
Lisa hasAncestor Beatrix

OWL Reasoning: Symmetrical

Axiom

bio:married rdf:type owl:SymmetricProperty

Explicit
Fact

bio:AnneHathaway bio:married bio:Shakespeare

Implicit
Fact

bio:Shakespeare bio:married bio:AnneHathaway

OWL Reasoning: Equivalent

Axiom

act:borrow owl:equivalentProperty lib:checkedout
lit:WilliamShakespeare owl:sameAs bio:Shakespeare

Explicit
Facts

bio:Lisa act:borrow lib:book
bio:Shakespeare lit:wrote lit:Macbeth

Implicit
Facts

bio:Lisa lib:checkedout lib:book
lit:WilliamShakespeare lit:wrote lit:Macbeth

Finding Ontologies

Welcome to the Protege Ontology Library!

This page is organized into the following groupings:

- [OWL ontologies](#)
- [Frame-based ontologies](#)
- [Ontologies in other formats \(e.g., DAML+OIL, RDF Schema, etc.\)](#)

If your ontology is available in multiple formats, please feel free to link to it from multiple sections.

Please make insertions in alphabetical order. Thank you !!!

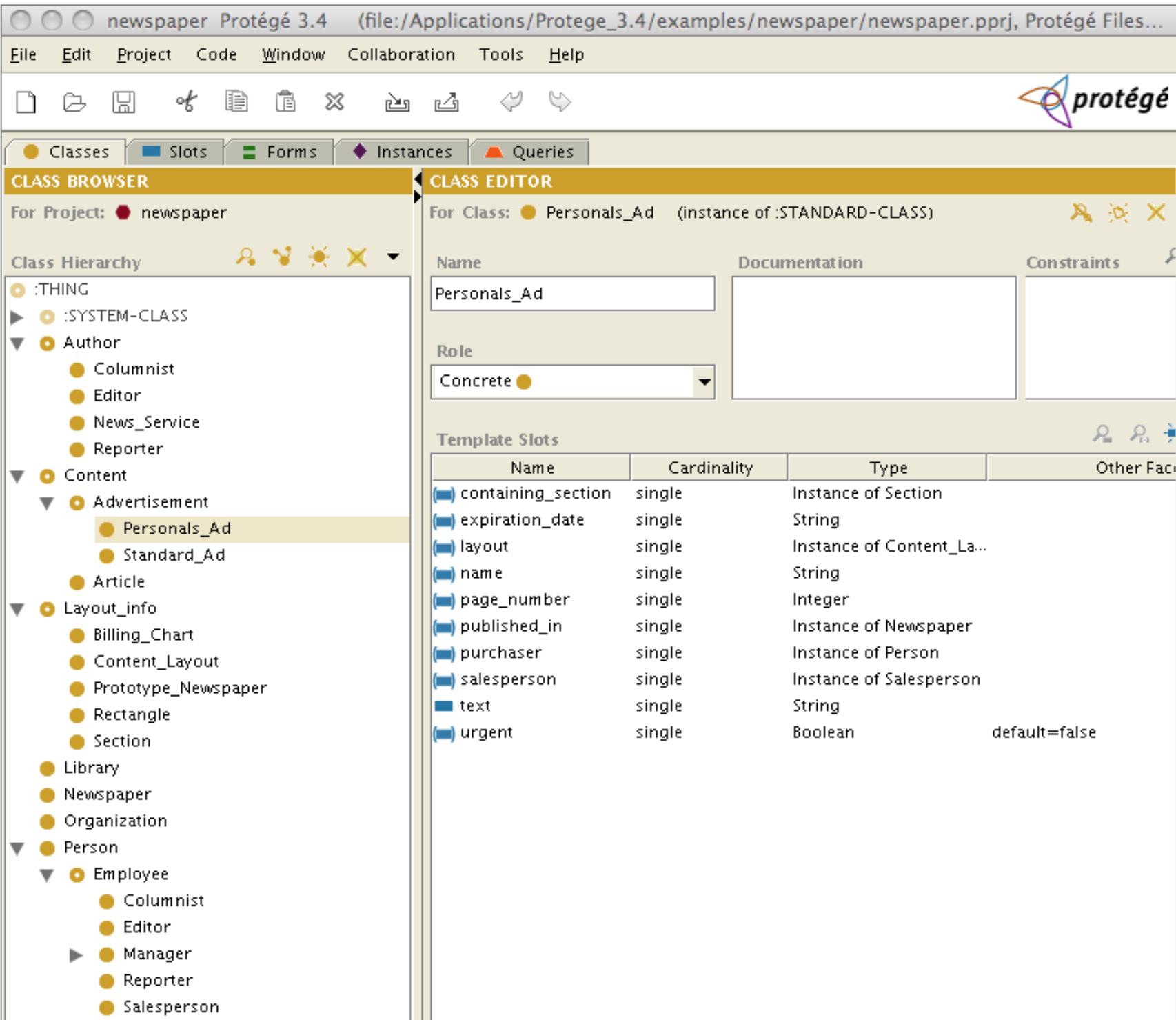
OWL ontologies

Information on how to open OWL files from the [Protege-OWL editor](#) is available on the main Protege Web site. See the [Creating and Loading Projects](#) section of the [Getting Started with Protege-OWL](#) Web page. Other ways to search for OWL ontologies include using Google: <http://www.google.com/search?q=filetype:owl+owl>, or the new Semantic Web search engine called [Swoogle](#).

- [AIM@SHAPE Ontologies](#): Ontologies pertaining to digital shapes. Source: [AIM@SHAPE NoE](#) - Advanced and Innovative Models And Tools for the development of Semantic-based systems for Handling, Acquiring, and Processing knowledge Embedded in multidimensional digital objects.
- [amino-acid.owl](#): A small OWL ontology of amino acids and their properties. Source: [Amino Acid Ontology Web site](#).
- [Basic Formal Ontology \(BFO\)](#)
- [bhakti.owl](#): An OWL ontology for the transcendental states of consciousness experienced by practitioners of bhakti-yoga, a form of Vedic consciousness engineering.
- [Biochemical Ontologies](#): Over 30 ontologies for knowledge representation and reasoning across scientific domains. Ontologies are

Tabulator RDF Browser

▼ http://protege.cim3.net/file/pub/ontologies/family.swrl.owl/family.swrl.owl				
http://a.com/ontology	type imports	Ontology http://swrl.stanford.edu/ontologies/3.3/swrla.owl http://swrl.stanford.edu/ontologies/built-ins/3.3/abox.owl http://swrl.stanford.edu/ontologies/built-ins/3.3/query.owl http://swrl.stanford.edu/ontologies/built-ins/3.3/swrlx.owl http://swrl.stanford.edu/ontologies/built-ins/3.3/tbox.owl http://swrl.stanford.edu/ontologies/built-ins/3.3/temporal.owl A SWRL Namespace http://www.w3.org/2003/11/swrlb		
Daughter	type disjointWith equivalentClass	Class Son	Class Child Woman	
Child	type	Class Class Class Class		
	equivalentClass	type intersectionOf	Class type minCardinality onProperty Person	Restriction 1 Parent
Woman	type	Class Class Class Class Class Class Class		
	equivalentClass	type intersectionOf	Class type hasValue onProperty Person	Restriction Female Sex



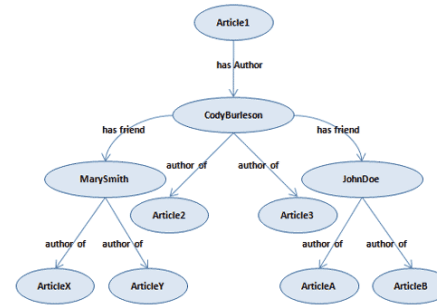
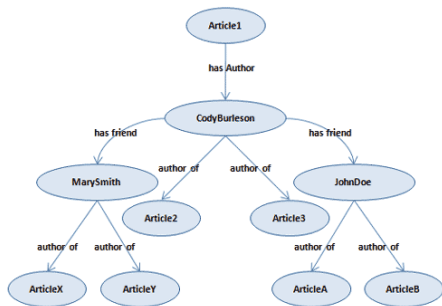
Protege editor to develop Ontologies.

Free download.

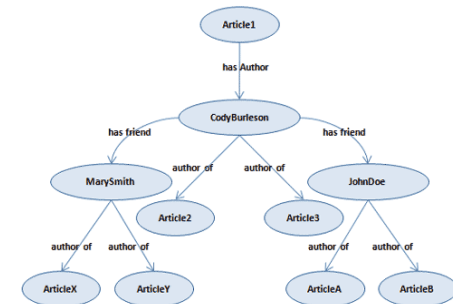
Developed by Stanford

Linking Distributed Data

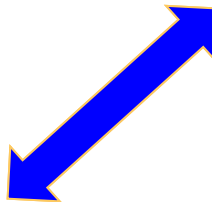
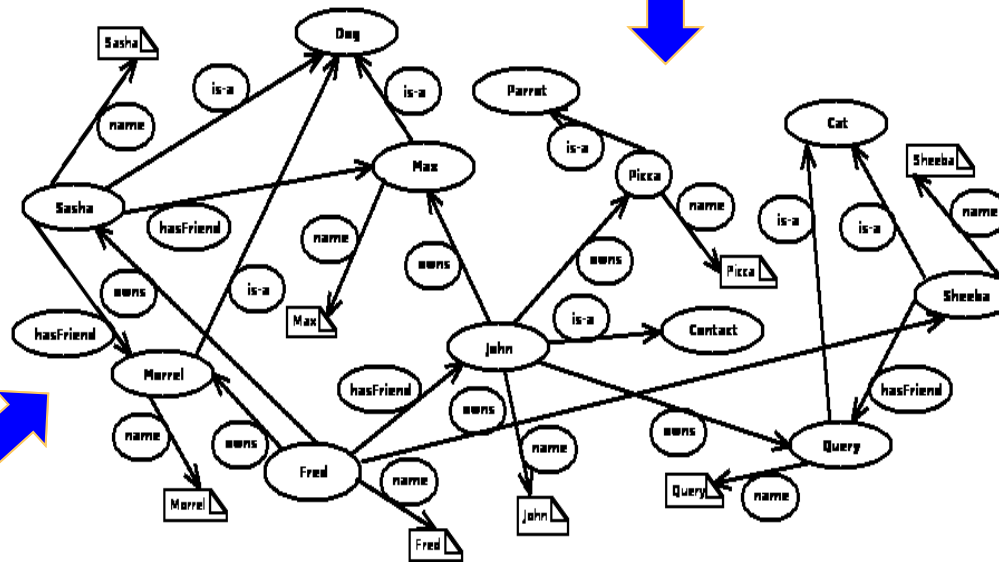
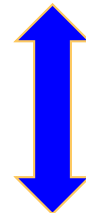
Linking Data



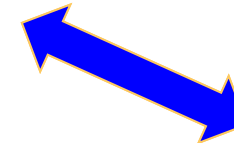
The New York Times
ON THE WEB



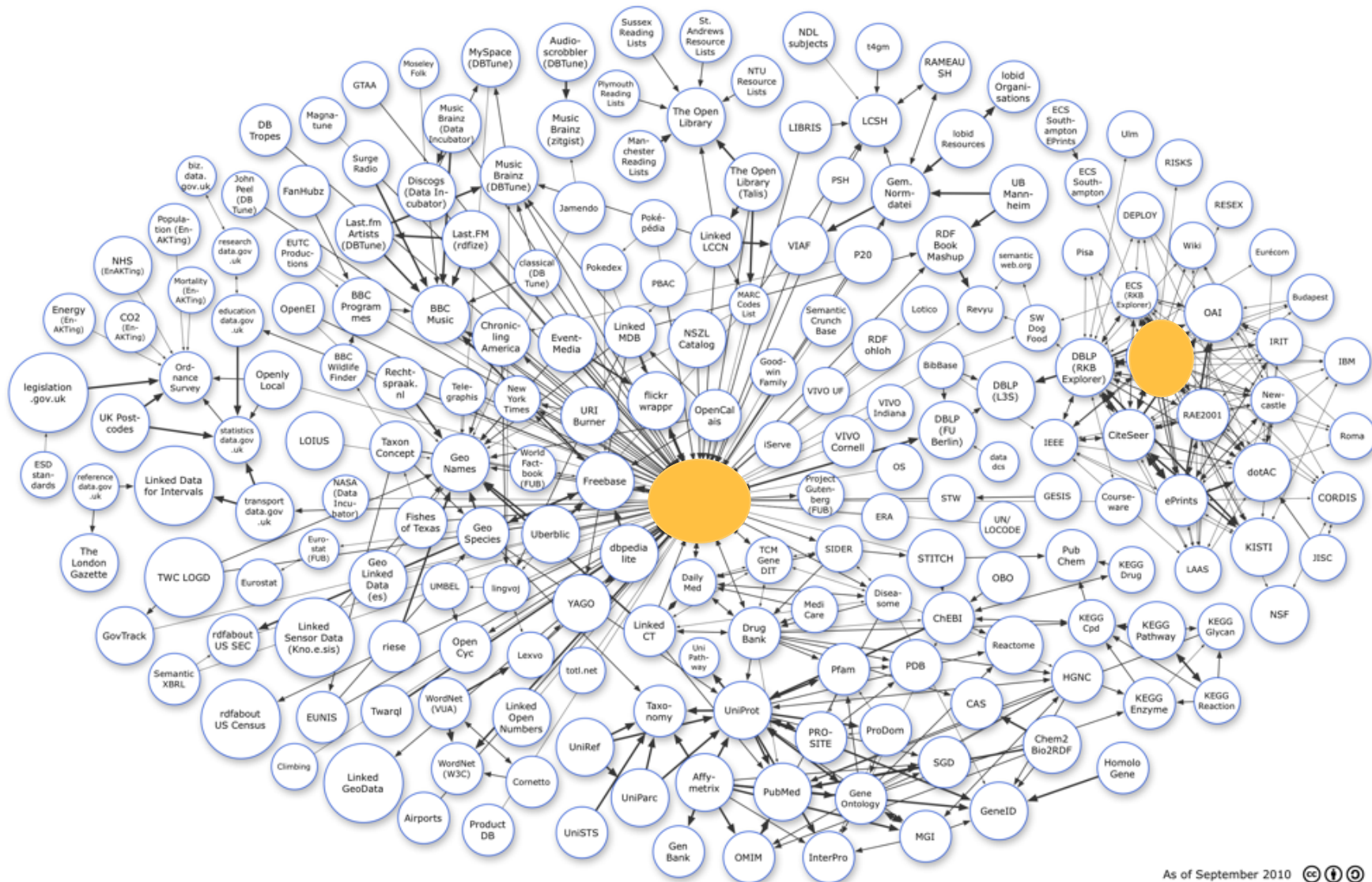
Linking Data



The New York Times
ON THE WEB



Linking Hubs



Semantic Linking Hubs



Link Discovery

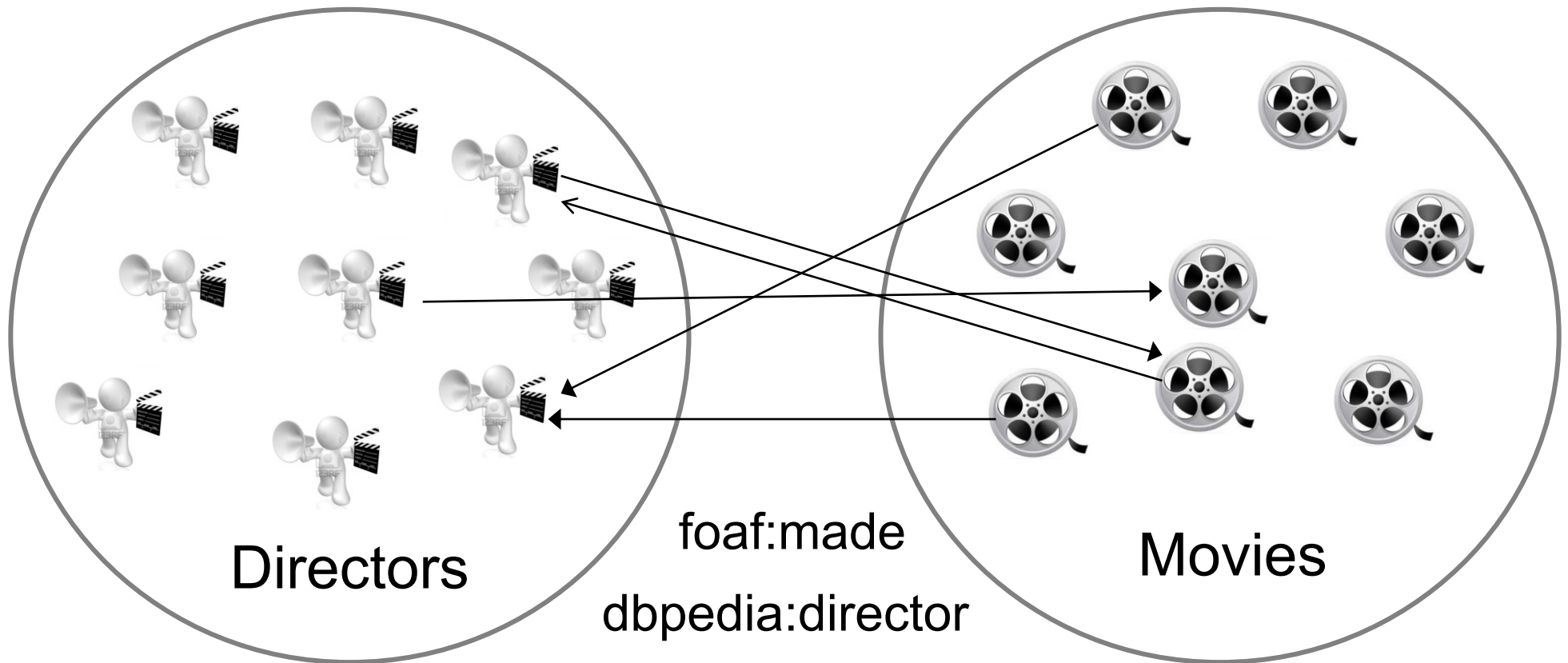
Discover other representations of an object.

(tw:lisagoddard owl:sameas fb:lgoddard)

Discover related resources.

(e.g. Person <-> Publication)

Link Discovery: Silk Server



Natural Language Processing

Identify people, places, things, concepts in unstructured text files.

Disambiguate terms.  $\neq$ 

Suggest links to existing entities.



Shedding Light on the Web of Documents

Demo

To win government approval to take over [\[\[NBC Universal\]\]](#) last month, cable giant [\[\[Comcast\]\]](#) Corp. agreed to let online rivals license NBC programming, including hit shows such as "[\[\[30 Rock\]\]](#)" and "[\[\[The Office\]\]](#)." Comcast also agreed not to block its 17 million broadband subscribers from watching video online through [\[\[Netflix\]\]](#), [\[\[Apple\]\]](#)'s [iTunes](#) and other rivals yet to come.

Confidence

Support

Annotate

Disambiguate

Clear



Types:

- ☒ ☒ owl#Thing
 - ☒ Colour
 - ☒ Disease
 - ☒ Beverage
 - ☒ Event
 - ☒ Species
 - ☒ ChemicalCompound
 - ☒ Painting
 - ☒ PersonFunction
 - ☒ Activity
 - ☒ Infrastructure
 - ☒ Website
 - ☒ MeanOfTransportation
 - ☒ OlympicResult
 - ☒ SupremeCourtOfTheUnitedStates
 - ☒ Award
 - ☒ GovernmentType
 - ☒ Place
 - ☒ Planet
 - ☒ Organisation
 - ☒ Currency
 - ☒ EthnicGroup



Shedding Light on the Web of Documents

Demo

To [win](#) government approval to take over [NBC Universal](#) last month, cable giant [Comcast Corp.](#) agreed to let [online](#) rivals [license NBC](#) programming, including hit shows such as "[30 Rock](#)" and "The Office." [Comcast](#) also agreed not to block its 17 million [broadband subscribers](#) from watching [video online](#) through [Netflix](#), [Apple's iTunes](#) and other rivals yet to come.

[Back](#)

Confidence: 0.5 Support: 30

Types: Place, Person, Work, Organisation, Species, all other types, untyped

version 0.1

About: [Apple Inc.](#)

An Entity of Type : [Public company](#), from Named Graph : <http://dbpedia.org>, within Data Space : [dbpedia.org](#)



Apple Inc. is an American multinational corporation that designs and markets consumer electronics, computer software, and personal computers. The company's best-known hardware products include the Macintosh line of computers, the iPod, the iPhone and the iPad.

Property	Value
dbpedia-owl:abstract	■ Apple Inc. [ˈæpəl.ɪŋk] (früher Apple Computer Inc.) ist ein Unternehmen mit Hauptsitz in Cupertino, Kalifornien, das Computer und Unterhaltungselektronik sowie Betriebssysteme und Anwendungssoftware herstellt. Apple gehörte in den 1970er-Jahren zu den ersten Herstellern von Personal Computern und trug zu ihrer Verbreitung bei. Bei der kommerziellen Einführung der grafischen Benutzeroberfläche und der Maus in den 1980er-Jahren nahm Apple eine Vorreiterrolle ein. Mit dem Erscheinen des iPods 2001, des iPhones 2007 und des iPads 2010 weitete Apple sein Geschäft nach und nach auf andere Produktbereiche aus. Laut der Marktforschungsgruppe Millward Brown liegt Apple mit einem Wert von rund 83,15 Milliarden US-Dollar auf Platz drei der wertvollsten Marken der Welt. ■ Apple Inc. is an American multinational corporation that designs and markets consumer electronics, computer software, and personal computers. The company's best-known hardware products include the Macintosh line of computers, the iPod, the iPhone and the iPad. Apple software includes the Mac OS X operating system; the iTunes media browser; the iLife suite of multimedia and creativity software; the iWork suite of productivity software; Aperture, a professional photography package; Final Cut Studio, a suite of professional audio and film-industry software products; Logic Studio, a suite of music production tools and its iOS Mobile Operating System. As of August 2010, the company operates 301 retail stores in ten countries, and an online store where hardware and software products are sold. Established on April 1, 1976 in Cupertino, California, and incorporated January 3, 1977, the company was previously named Apple Computer, Inc. , for its first 30 years, but removed the word "Computer" on January 9, 2007, to reflect the company's ongoing expansion into the consumer electronics market in addition to its traditional focus on personal computers. As of September 26, 2009, Apple had 34,300 full time employees and 2,500 temporary full time employees worldwide and had worldwide annual sales of \$42.91 billion in its fiscal year ending September 26, 2009. For reasons as various as its philosophy of comprehensive aesthetic design to its distinctive advertising campaigns, Apple has established a unique reputation in the consumer electronics industry. This includes a customer base that is devoted to the company and its brand, particularly in the United States. Fortune magazine named Apple the most admired company in the United States in 2008, and in the world in 2008, 2009, and 2010. The company has also received widespread criticism for its contractors' labor, environmental, and business practices.

dbpedia-owl:keyPerson

- dbpedia:Steve_Jobs
- dbpedia:Peter_Oppenheimer
- dbpedia:Chief_executive_officer
- dbpedia:Chairman
- dbpedia:Timothy_D._Cook
- dbpedia:Bob_Mansfield
- dbpedia:Jonathan_Ive
- dbpedia:IPhone

dbpedia-owl:locationCity

- dbpedia:Infinite_Loop_(street)
- dbpedia:Cupertino,_California

dbpedia-owl:netIncome

- 8.24E9

dbpedia-owl:numberOfStaff

- 34300 (xsd:integer)

dbpedia-owl:operatingIncome

- 1.174E10

dbpedia-owl:product

- dbpedia:Macintosh
- dbpedia:IPod_Touch
- dbpedia:IPod_Nano

RDF Publishing Tools

Structured Data Crosswalks

Ok, I'm interested, what RDFizers are there?

[\[edit\]](#)

Here is the list of the RDFizers that we have built so far:

- **JPEG -> RDF** - scans a folder for JPEG files, parses the EXIF and IPCT metadata found in those files and dumps an RDF/N3 representation of it into a file.
- **MARC/MODS -> RDF** - transforms MARC records from Z39.2 format into MODS and then from MODS to an RDF representation of MODS.
- **OAI-PMH -> RDF** - harvests an OAI-PMH repository and transforms the captured metadata in an RDF representation thru pluggable XSLT stylesheets.
- **OCW -> RDF** - harvests metadata from the MIT OpenCourseWare web site and transforms it into an RDF representation of IEEE LOM.
- **Email -> RDF** - transforms email mbox files into RDF/XML.
- **BibTEX -> RDF** - transforms BibTEX files into RDF/XML.
- **POM -> RDF** - transforms Maven POM (Project Object Model) files into RDF/N3.
- **DEB -> RDF** - extracts the metadata from a Debian software package and generates an RDF representation.
- **CRW -> RDF** - extracts the metadata from a Canon RAW image file and generates an RDF representation.
- **Flat -> RDF** - converts classic unix text database files, like /etc/passwd, into RDF/N3.



Drupal 7 CMS

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- ☐ Modules
- ☐ Forums & Issues
- ☐ Themes
- ☐ Groups

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[Get Started with Drupal](#)

Sites Made with Drupal



[iHeartAdoption.org](#) – Educational and social networking site on Drupal 6

Develop with Drupal

7,984 Modules	This week
954 Themes	23,095 Code commits
4,475 Developers	7,139 Issue comments

[Drupal Core](#)
[Security Info](#)
[Developer Docs](#)
[API Docs](#)



DRUPALCON CHICAGO
MARCH 7-11 2011

Semantic MediaWiki

Change view  | Lisagoddard | Log out

GoSearch

[Home](#) **Projects** ▾ **Current project** ▾ **My dashboard** ▾ **Articles and data** ▾

[Main Page](#) > [UserLogin](#) > Lisagoddard

User page Discussion History Edit ? More ▾

Enter person data

First name*:

Last name:

Picture:

Upload file

Email:

Affiliation:

Homepage (include 'http://'):

Homepage label (optional):

Phone number:

Birthday:

People this person knows:

Here you can upload a picture of the user.

The autocompletion will suggest existing organizations in the wiki.

Enter a comma delimited list of persons. (Auto-completes on pages in the category 'Person'.)

Specify the project you are currently working on

Current project:

Semantic MediaWiki

[Home](#) [Projects](#) [Current project](#) [My dashboard](#) [Articles and data](#)

AddData > Lisagoddard 1 > Lisagoddard > AddData > Lisagoddard

User page Discussion History Edit ? More

Testing semantic annotation features in Semantic MediaWiki

I set up this account in order to test the semantic tagging features in mediawiki. I'm going to a conference in Trondheim, Norway next week to do a presentation on semantic web/linked data in libraries. The conference is called Emerging Technologies in Academic Libraries (EMTACL). I'm a systems librarian in St. John's Newfoundland, so that's the sort of thing we do for fun.

So far mediawiki has not offered me any semantic annotations, so I will probably have to go and read the docs. Maybe I need to install some browser plugins.

What if I throw in a few phrases like the social web, natural language processing, and humanities computing? Drupal 7? Semantic web? Linked Data?

It might be better if I threw in a couple of names. Let's try Kingsley Idehen, Paul Miller, and Richard Cyganiak, all actively involved in linked data architecture and evangelism.

Lisa Goddard vCard



First name: Lisa

Last name: Goddard

Email: lgoddard@mun.ca

Affiliation: [Memorial University of Newfoundland](#)

Homepage: [Twitter Feed](#)

Phone: (555) 555-5555

Birthday: 1972/04/30

Projects

Projects: *not a member in a project*

Active Tasks (0) [Add new task](#)

- no active tasks*

Biographic data for Tim Berners-Lee [Click to change this...](#)

Birth date: 1955-06-08 00:00:00.0

Education: The Queen's College, Oxford

Occupation: Computer Scientist

See also: http://en.wikipedia.org/wiki/Tim_Berners-Lee

Sir Timothy John Berners-Lee, OM, KBE, FRS, FREng, FRSA (London, 8 June 1955), is an

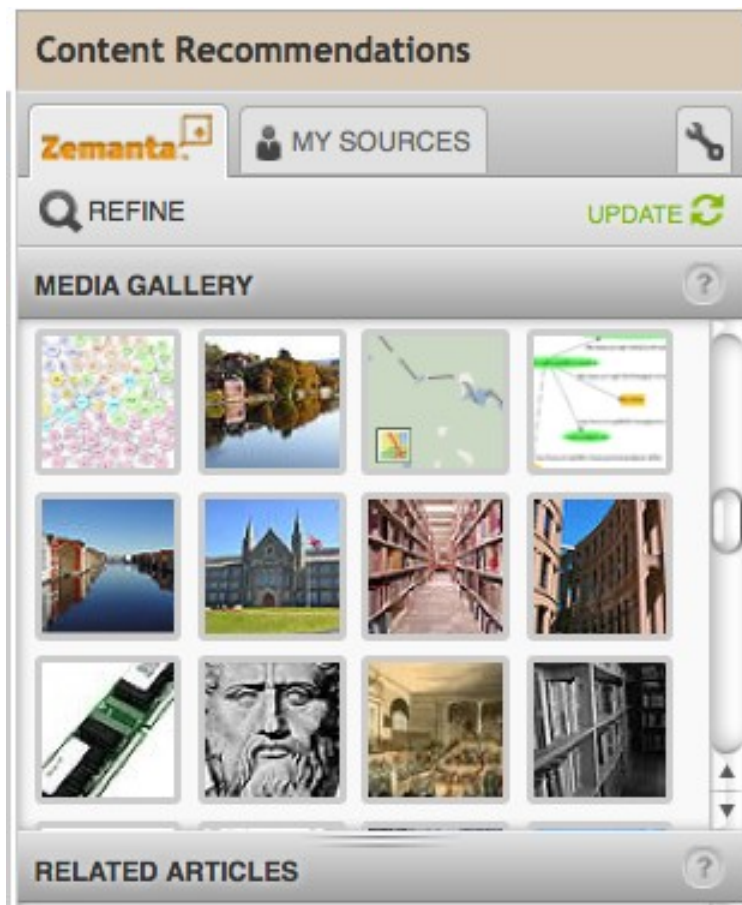
Semantic MediaWiki

Facts about Lisagoddard

RDF feed

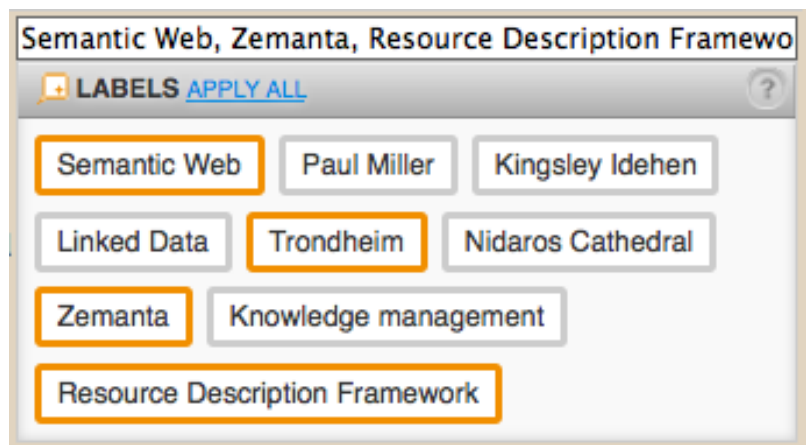
Affiliation	Memorial University of Newfoundland
Birth date	30 April 1972
Current project	Libraries & Linked Data
Firstname	Lisa
HasCategory	Category:Person
HasGeocoordinates	49°27′25.181″N, 48°36′42.694″W
Homepage	http://twitter.com/lisagoddard
Knows	Jennifer Lokash , Gillian Byrne , and Tim Berners-Lee
Lastname	Goddard
Location	Pedagogues Close, St. John's, Newfoundland
Mbox	lgoddard@mun.ca
Name	Lisa Goddard
Phone	(555) 555-5555
User image	

Semantic Blogging: Zemanta

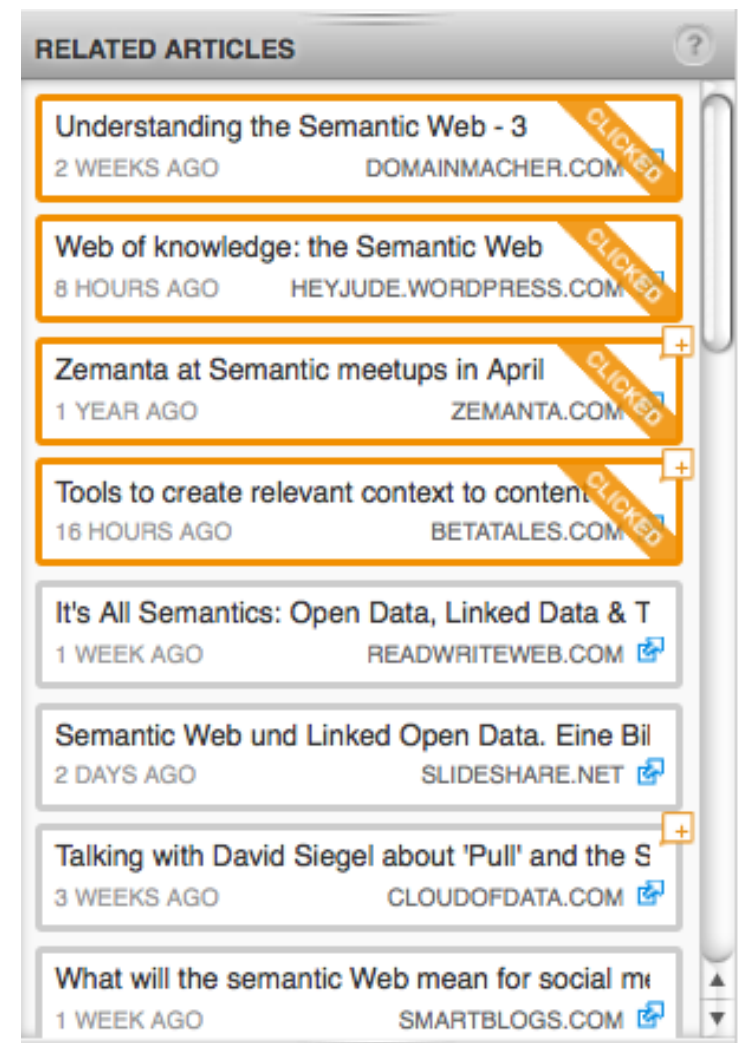


Related Media

Related Articles

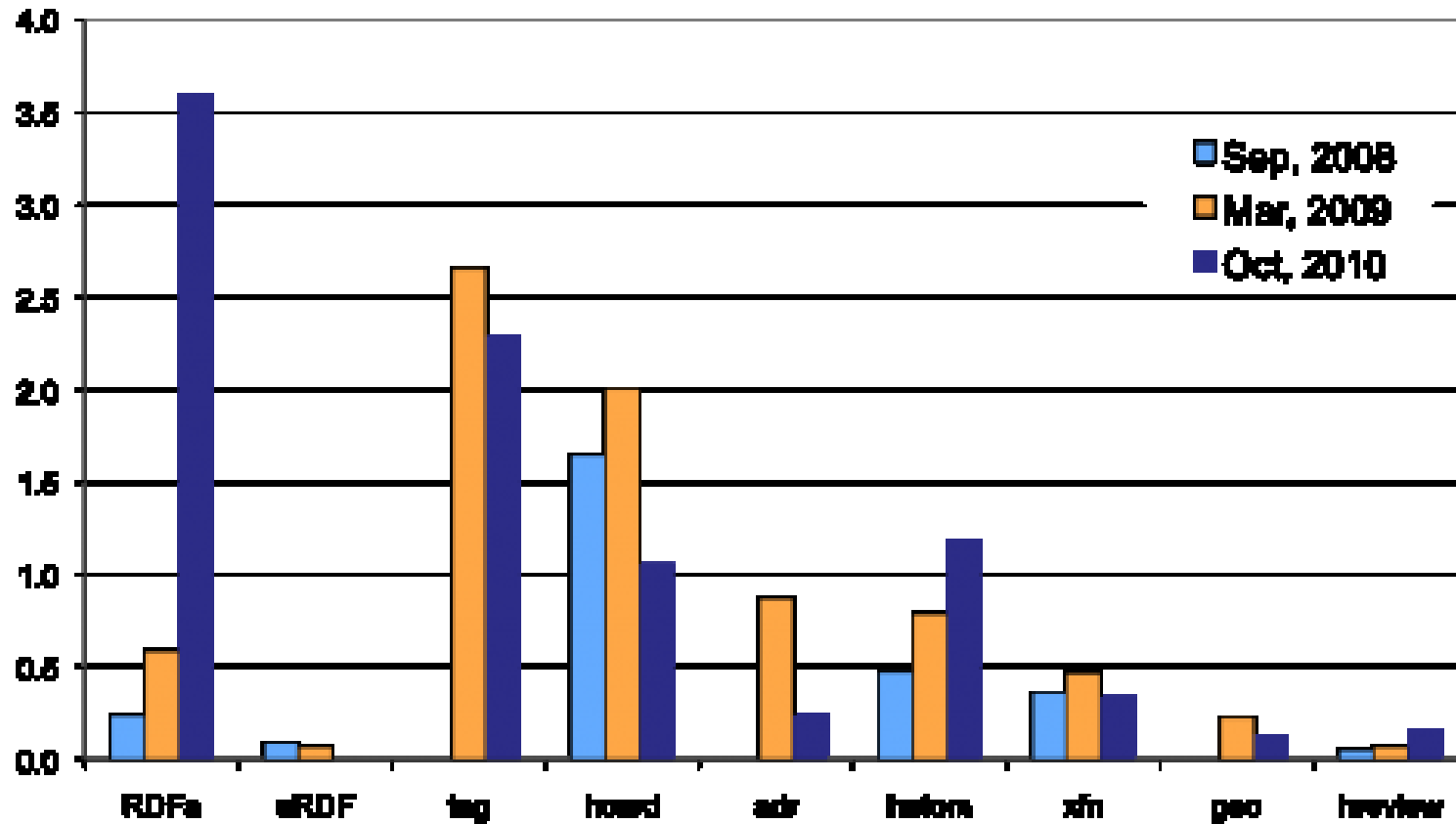


Related Tags



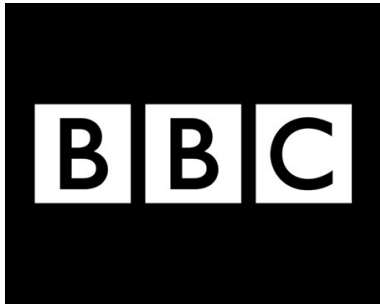
Mainstream Linked Data

Growth of RDFa



Usage of RDFa increased 510% between Mar 2009 and Oct 2010

Websites with RDF(a)



O'REILLY®





fish tacos



Search

About 47,500 results (0.38 seconds)

[Advanced search](#)

Everything

Images

Videos

News

Shopping

Recipes

More

Ingredients

Yes No

lime ☐ ☐

sea bass ☐ ☐

tomatillos ☐ ☐

chipotle ☐ ☐

tortillas ☐ ☐

tilapia ☐ ☐

cod ☐ ☐

lard ☐ ☐

Any cook time

[Less than 15 min](#)

[Less than 30 min](#)

[Less than 60 min](#)

Any calories

[Less than 100 cal](#)

[Less than 300 cal](#)

[Less than 500 cal](#)

Fish Tacos



★★★★★ 91 reviews - 1 hr 45 mins

Food Network invites you to try this **Fish Tacos** recipe from Bobby Flay.

Ingredients: canola oil, lime, chili powder, jalapeño, coriander, tortillas ...

[www.foodnetwork.com](#) > ... > Kid Friendly - [Cached](#) - [Similar](#)

Fish Tacos



★★★★★ 873 reviews - 1 hr

I'm from San Diego and these taste just like home! Chunks of cod are fried in a beer batter, and served in corn tortillas with shredded cabbage and a zesty ...

[allrecipes.com/recipe/fish-tacos/](#) - [Cached](#)

Fish Tacos with Lime-Cilantro Crema



★★★★☆ 69 reviews - 394 cal

Cumin, coriander, and paprika lend these **fish tacos** a delightfully warm, smoky flavor. They're the perfect foundation for the zippy sour cream sauce.

Ingredients: onion, coriander, mayonnaise, sour cream, lime, lime juice, garlic ...

[find.myrecipes.com/recipes/recipefinder.dyn?action...](#)

Fish Tacos

★★★★☆ 9 reviews - 10 mins

Find the recipe for **Fish Tacos** and other tortillas recipes at Epicurious.com.

Ingredients: flounder, olive oil, pepper, mayonnaise, yoghurt, chipotle ...

[www.epicurious.com/.../Fish-Tacos-233251](#) - [Cached](#) - [Similar](#) - [Add to iGoogle](#)

Fish Taco

★★★★★ 17 reviews - 38 mins

Food Network invites you to try this **Fish Taco** recipe from Alton Brown.

Ingredients: garlic, coriander, lime, cumin, pepper, tequila, tilapia, olive ...

[www.foodnetwork.com](#) > Recipes > Seafood - [Cached](#)

Fish Tacos

★★★★☆ 21 reviews

Find the recipe for **Fish Tacos** and other fish recipes at Epicurious.com.

Google Faceted Recipe Search

Ingredients

Yes No

lime

☐☐

sea bass

☐☐

tomatillos

☐☐

chipotle

☐☐

tortillas

☐☐

tilapia

☐☐

cod

☐☐

lard

☐☐

Any cook time

[Less than 15 min](#)

[Less than 30 min](#)

[Less than 60 min](#)

Any calories

[Less than 100 cal](#)

[Less than 300 cal](#)

[Less than 500 cal](#)

Google Place Pages



komi restaurant washington

About 41,500 results (0.16 seconds)

Everything

Images

Videos

News

Books

Places

Blogs

Realtime

Discussions

Fewer

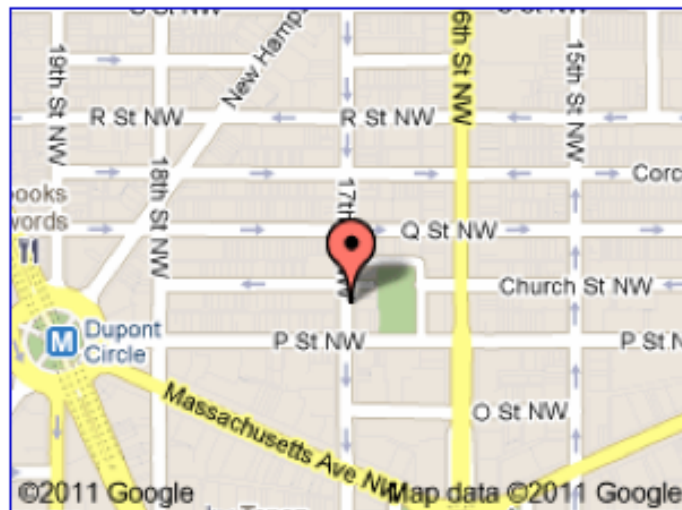
St. John's, NL

[Change location](#)

Komi » Washington DC

Private Events. Contact Us. Hours. Menu. 1509 17th Street **Washington** DC. Private Events. Reservations (202) 332-9200 ...

komirestaurant.com/ - [Cached](#) - [Similar](#)



Komi
[Place page](#)

1509 17th St NW # 1
Washington D.C., DC 20036-6262, United States

(202) 332-9200

Subway: [Dupont Circle Station](#)

[Get directions](#) - [Is this accurate?](#)

Open Tue-Sat 5:30pm-9:45pm

★★★★★ 504 reviews

"One of the best dining experiences I've ever had was at Komi. I had called 3 ..."

- citysearch.com

Semantic Technologies



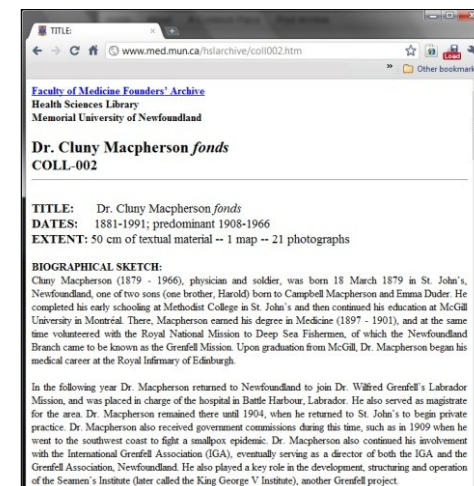
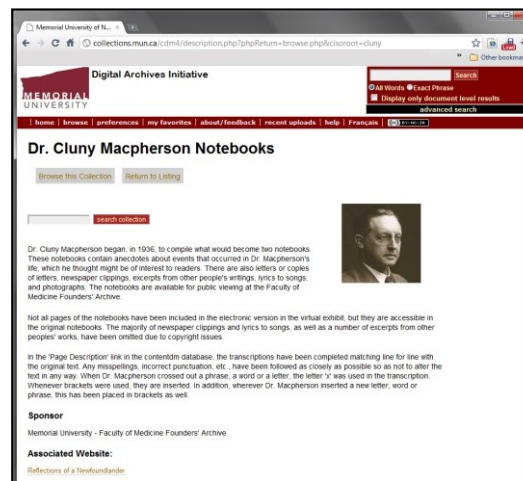
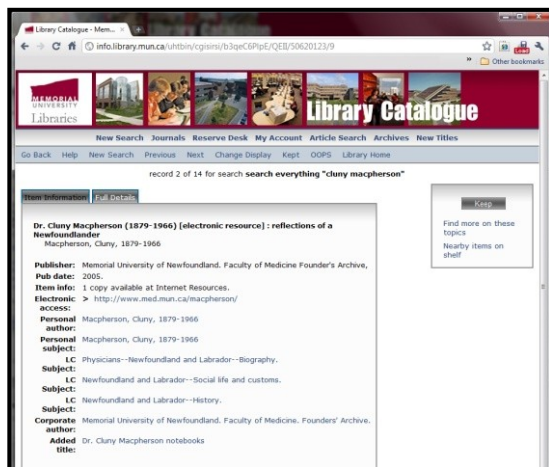
Library Linked Data

Disconnected Data

Silos in the Library



Source: Provincial Archives of Newfoundland & Labrador



Lost Cor

Library Catalogue - Mem... x

info.library.mun.ca/ukthin/zoicici/b32mC66

MEMORIAL UNIVERSITY Libraries

New S

Go Back Help New Sea

Item Information Full De

Dr. Cluny Macpherson
Newfoundlander
Macpherson, Cluny,

Publisher: Memorial U
Pub date: 2005.
Item info: 1 copy ava
Electronic access: > http://
Personal author: Macpherso
Personal subject: Macpherso
LC Subject: Physicians
LC Subject: Newfoundl
LC Subject: Newfoundl
Corporate author: Memorial U
Added title: Dr. Cluny M

Dr. Cluny Macpherson b
These notebooks contai
life, which he thought m
of letters, newspaper cli
and photographs. The n
Medicine Founders' Arc

Not all pages of the not
the original notebooks. T
peoples' works, have be

In the 'Page Description'
the original text. Any mis
text in any way. When D
Whenever brackets were p
phrase, this has been pl

Sponsor
Memorial University - Fa

Associated Website
Reflections of a Newfoundl

Colonel Dr. Cluny Macph... x

www.heritage.nf.ca/greatwar/articles/enlarge/a24155

Library and Archives Bibliothèque et Archives

HOME SEARCH SITE MAP

Newfoundland and The Great War



Colonel Dr. Cluny Macpherson in Egypt, September 1915.
Courtesy of the Provincial Archives of Newfoundland and Labrador (PANL Macpherson Collection A-24-155), St. John's, Newfoundland.
Much Larger Version 1000x764 pixels (92 Kb)

BACK TO ARTICLE - TOP OF PAGE

HOME - SEARCH - SITE MAP

NEWFOUNDLAND AND LABRADOR HERITAGE WEB SITE DIGITAL COLLECTION

Gas Mask - Incredible Inve... x

www.collectionscanada.gc.ca/cool/002027-2004-e.html

Library and Archives Bibliothèque et Archives

Canada

Library and Archives Canada
www.collectionscanada.gc.ca

Contact Us Help Search canada.gc.ca

ntions

Macpherson (1879-1966)

World War the German army used poison gas for the first time, as at Ypres, France in 1915. A soldier's only protection was to bandkerchief or other small piece of fabric soaked in urine.



Source
Colonel Dr. Cluny Macpherson in Egypt, September 1915



Source
The Macpherson gas mask

Doctor Cluny Macpherson, from St. John's, Newfoundland, quickly came up with the idea of a gas mask made of fabric and metal. Using a helmet taken from a German prisoner, he added a canvas hood with eyepieces and a small tube. The helmet was treated with chemicals that would absorb the effects of gas attacks. He had invented the world's first gas mask. After a while, Colonel Macpherson's helmet became the first gas mask to be used in the First World War.

vention was the most important protective device of the First World War.

brador
magistrate
private
then he
vement
and the
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Weak Links

Title:	Deviance and crime in colleges and universities: What goes on in the halls of ivy.	
Authors:	Hickson, Mark, III Roebuck, Julian B.	Deviance and crime in colleges and universities : what goes on in the halls of ivy Personal Author: Hickson, Mark. Title: Deviance and crime in colleges and universities : what goes on in the halls of ivy / by Mark Hickson III and Julian B. Roebuck. Publication info: Springfield, Ill. : Charles C Thomas, c2009. Physical descrip: xiv, 253 p. ; 26 cm. Subject term: Universities and colleges--United States--Sociological aspects. Subject term: Universities and colleges--Corrupt practices--United States. Subject term: College discipline--United States. Subject term: Deviant behavior--United States. Subject term: College students--United States--Psychology. Bibliography note: Includes bibliographical references and index. Added author: Roebuck, Julian B. ISBN: 9780398078799 (hard) ISBN: 0398078793 (hard) ISBN: 9780398078805 (pbk.) ISBN: 0398078807 (pbk.)
Source:	Springfield, IL, US: Cha	
ISBN:	978-0-398-07879-9 (Ha 978-0-398-07880-5 (Pa	
Language:	English	
Keywords:	interdisciplinary typolog drinking; date rape; as	
Abstract:	(from the cover) This <i>book</i> discusses the prevalence of shootings were aberrant behavior, binge drinking, date rape, <i>behavior</i> and crime in colleges and universities, including coaching <i>behavior</i> , sexual issues, commercialism at the expense of learning, pressures of external grade point average deviance and crime that the academic would rather ignore. All rights reserved)	
Subjects:	*Antisocial Behavior ; *Colleges ; *Criminal Behavior ; *School Environment ; *Taxonomies ; Campuses ; Classroom Environment ; Crime ; Educational Administration ; Higher Education ; Morality ; Social Behavior	
Classification:	Classroom Dynamics & Student Adjustment & Attitudes (3560) Criminal <i>Behavior</i> & Juvenile Delinquency (3236)	
Population:	Human (10)	
Age Group:	Adulthood (18 yrs & older) (300)	
Intended Audience:	Psychology: Professional & Research (PS)	
Format Covered:	Print	
Publication Type:	<i>Book</i> ; Authored <i>Book</i>	
Release Date:	20100118	
Accession Number:	2009-17252-000	

Missed Opportunities

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  <course2>HIST 2300</course2>
  <course3>ENGL 1001</course3>
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[New Search](#)
[Library Home](#)

Full Reserve View: Bezzina, Edwin for Introduction to History

[Item Information](#)
[Full Details](#)

The Making of the West: Peoples and Cultures
Hunt, Lynn, et. al.

Item info: 2 reserve copies available. 2 copies total on reserve.
2 copies total in all locations

Personal author: Hunt, Lynn, et. al.

Holdings

Grenfell	Copy	Material	Reserve desk	Circ rule	Location
RESERVE NO. P51	1	BOOK	SWGCRESV	2H0R0-0	RESERVE
	2	BOOK	SWGCRESV	2H0R0-0	RESERVE

What's our value?

- 2.0 thinking: our value is linked to our data
- 3.0 thinking: our value is linked to our (re)useable, shareable data?

Making the Connection

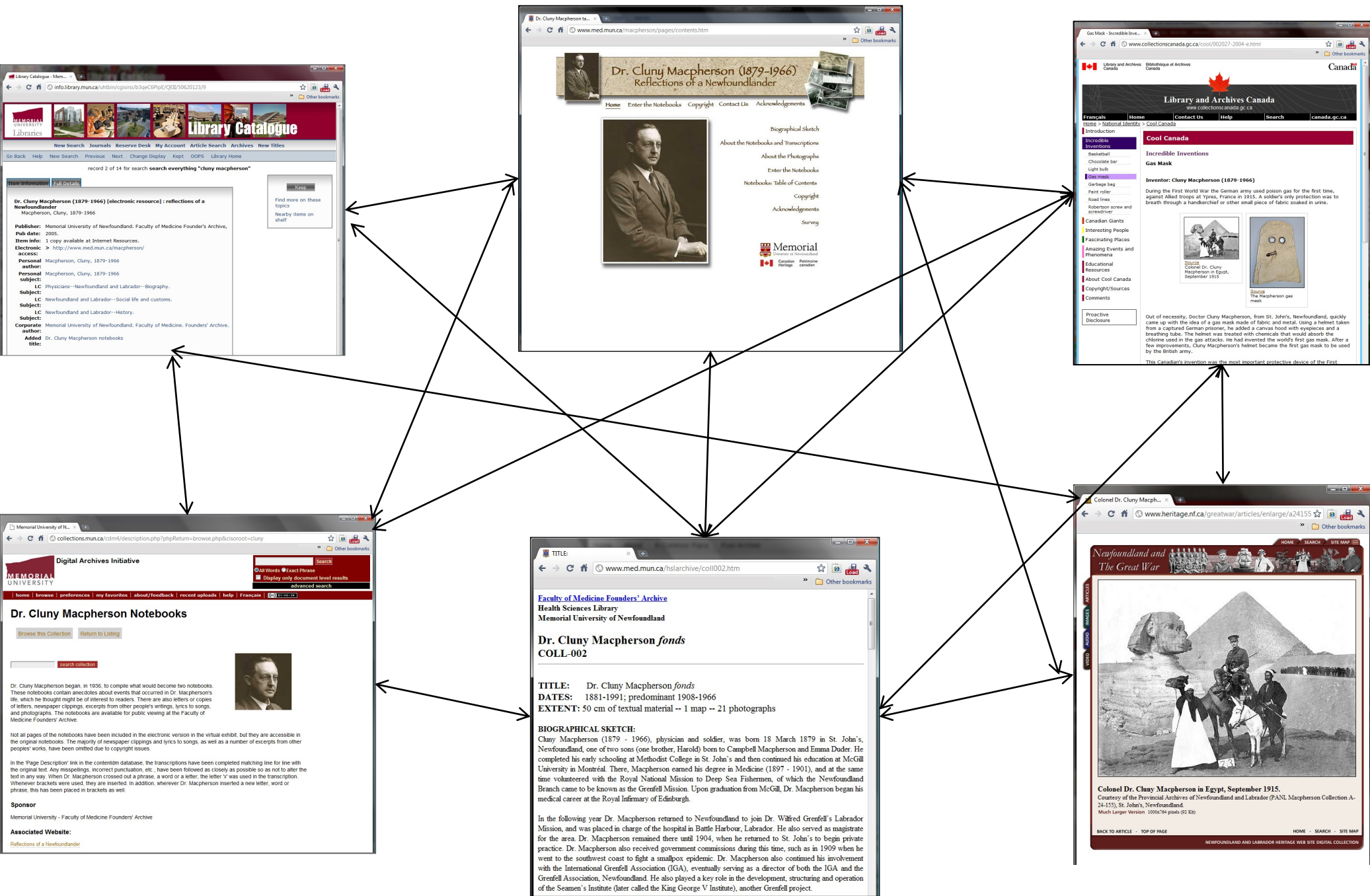
Enhanced Linking

```
2 <RDF:RDF xml:base="http://viaf.org/"
3 xmlns:rdaEnt="http://RDVocab.info/uri/schema/FRBrentitiesRDA/"
4 xmlns:rdaGr2="http://RDVocab.info/ElementsGr2/"
5 xmlns:skos="http://www.w3.org/2004/02/skos/core#"
6 xmlns:skosxl="http://www.w3.org/2008/05/skos-xl#"
7 xmlns:foaf="http://xmlns.com/foaf/0.1/"
8
9
10
11
12 /></SKOS:CONCEPT><VIAF:NAMEAUTHORITYCLUSTER
13 rdf:about="viaf/76097050"><SKOS:INSCHEME rdf:resource="authorityScheme/VIAF"
14 /><FOAF:FOCUS rdf:resource="viaf/76097050/#foaf:Person" /><FOAF:FOCUS
15 rdf:resource="viaf/76097050/#rdaEnt:Person" /><VIAF:HASESTABLISHEDFORM
16 rdf:resource="viaf/76097050/#Macpherson,+Cluny,+1879-1966" /><SKOS:EXACTMATCH
17 rdf:resource="viaf/sourceID/LC%7Cno2007073587#skos:Concept"
18 /></VIAF:NAMEAUTHORITYCLUSTER><SKOS:CONCEPT
19 rdf:about="viaf/sourceID/LC%7Cno2007073587#skos:Concept"><SKOS:INSCHEME
20 rdf:resource="authorityScheme/LC" /><SKOSXL:PREFLABEL
21 rdf:resource="viaf/76097050/#Macpherson,+Cluny,+1879-1966"
22 /></SKOS:CONCEPT><VIAF:HEADING
23 rdf:about="viaf/76097050/#Macpherson,+Cluny,+1879-1966"><SKOSXL:LITERALFORM><HTML><HEAD>
24 <META content="text/html; charset=windows-1252" http-equiv=Content-Type>
25 <META name=GENERATOR content="MSHTML 9.00.7930.16406"></HEAD>
26 <BODY>Macpherson, Cluny, 1879-1966</SKOSXL:LITERALFORM> <SKOS:INSCHEME
27 rdf:resource="authorityScheme/LC" /></VIAF:HEADING><FOAF:PERSON
28 rdf:about="viaf/76097050/#foaf:Person"><OWL:SAMEAS
29 rdf:resource="viaf/76097050/#rdaEnt:Person" /><FOAF:PAGE
30 rdf:resource="http://en.wikipedia.org/wiki/Cluny_MacPherson" /><OWL:SAMEAS
31 rdf:resource="http://dbpedia.org/resource/Cluny_MacPherson"
32 /><FOAF:NAME>Macpherson, Cluny, 1879-1966</FOAF:NAME>
33 </FOAF:PERSON><RDAENT:PERSON
34 rdf:about="viaf/76097050/#rdaEnt:Person"><RDAGR2:PREFERREDNAMEFORTHEPERSON>Macpherson,
35 Cluny, 1879-1966</RDAGR2:PREFERREDNAMEFORTHEPERSON>
36 <RDAGR2:DATEOFBIRTH>1879</RDAGR2:DATEOFBIRTH>
37 <RDAGR2:DATEOFDEATH>1966</RDAGR2:DATEOFDEATH>
38 </RDAENT:PERSON></RDF:RDF></BODY></HTML>
```

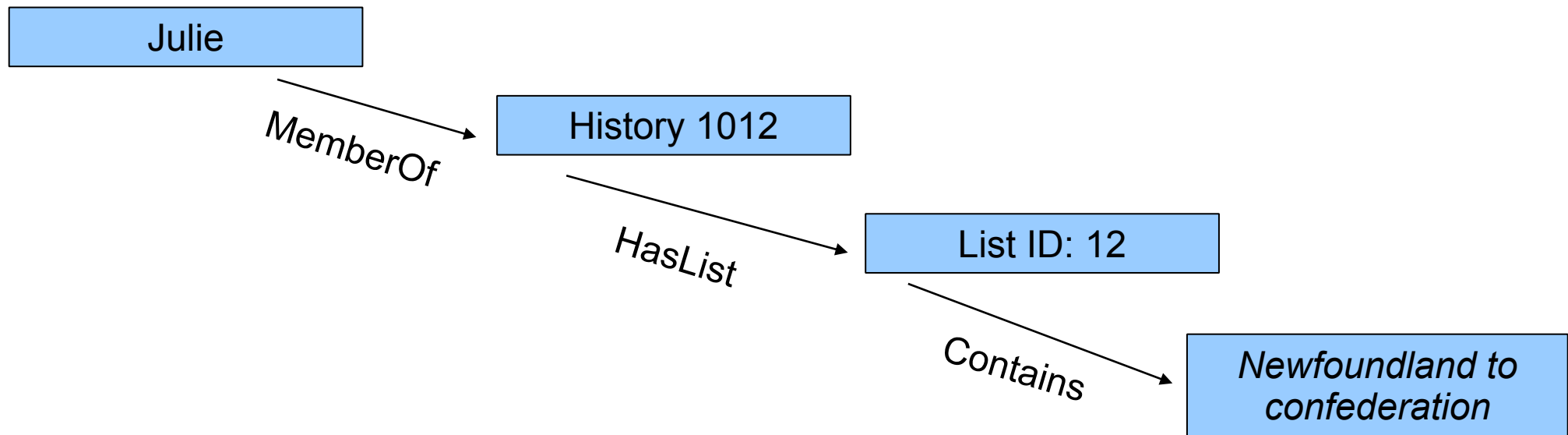
<http://info.library.mun.ca/uhtbin/cgisirsi/dMp3Asia73/QEII/269560141/18/X100/XAUTHOR/Macpherson,+Cluny,+1879-1966>

<http://viaf.org/viaf/76097050>

Enhanced Content



Enhanced personalization



@prefix aiiso: <http://purl.org/vocab/aiiso/schema#> .
@prefix resource: <http://purl.org/vocab/resourcelist/schema#> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
@prefix bibo: <http://purl.org/ontology/bibo/> .
@prefix dcterms: <http://purl.org/dc/terms/> .

Obstacles

Competing Vocabularies

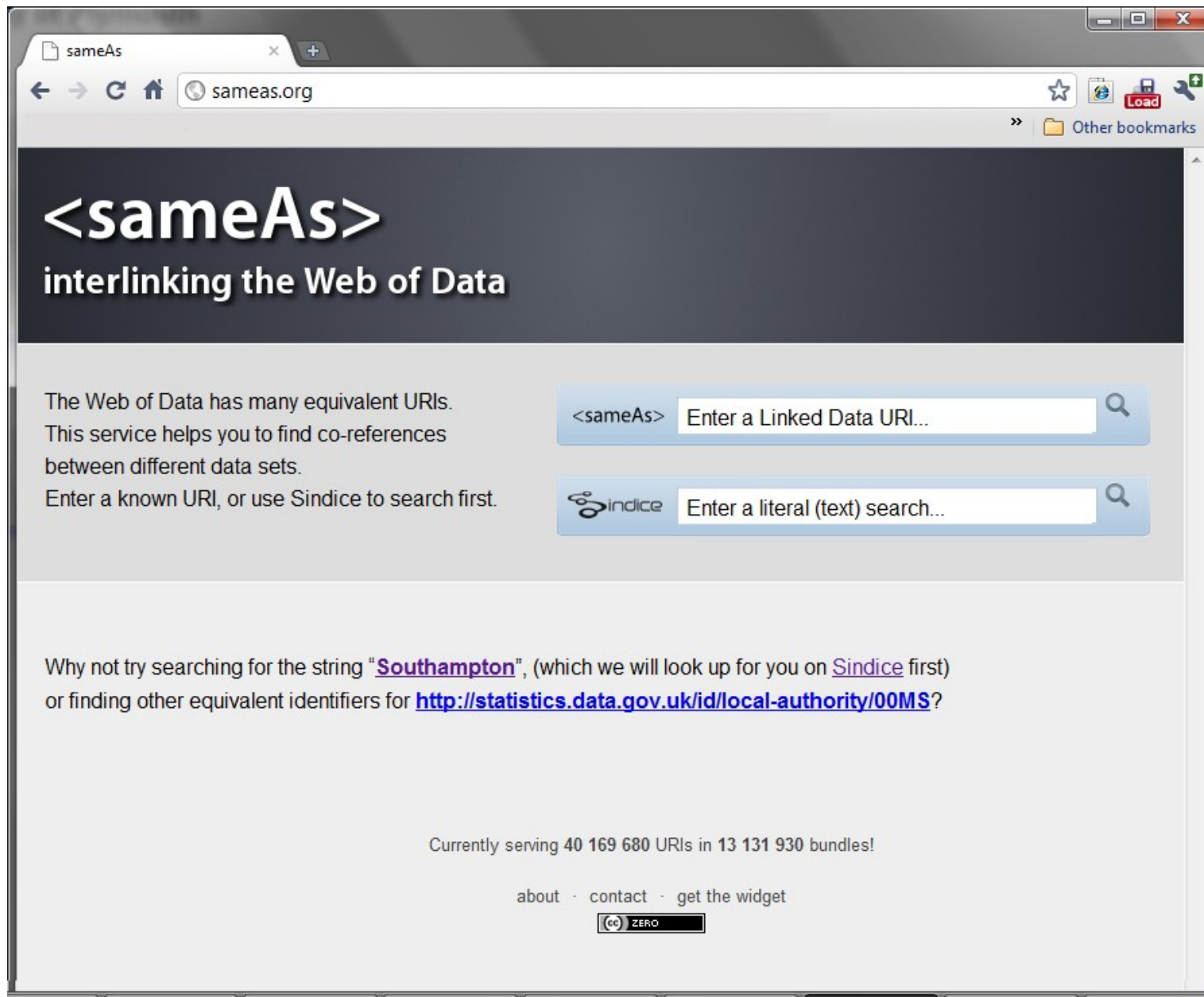
*...how many ways to describe a book,
journal article or a place?*

Ian Millard, Hugh Glaser, Manuel Salvadores, Nigel Shadbolt

<http://eprints.ecs.soton.ac.uk/21681/5/cold2010-slides.pdf>

Co-referencing

1. http://dbpedia.org/resource/Cluny_MacPherson
2. http://dbpedia.org/resource/Dr._Cluny_MacPherson
3. http://mpii.de/yago/resource/Cluny_MacPherson
4. <http://rdf.freebase.com/ns/guid.9202a8c04000641f80000000005e34c1>
5. <http://viaf.org/viaf/76097050>
6. http://umbel.org/umbel/ne/wikipedia/Cluny_MacPherson



Discovering

- Lots (and lots and lots) of linked data out there
- How to find it?

Home - CKAN - the Data ...

ckan.net

Other bookmarks

CKAN - the Data Hub

The easy way to get, use and share data

[Home](#) [Add a dataset](#) [Groups](#) [About](#) [Help](#)

Search CKAN – the Data Hub

1705 registered dataset collections available.

Recently changed

Linked Scotland

api/sparql

 **License Not Open**

This package is a collection and common access point to a group of Linked Data datasets related to Scotland. It was set up as an initiative of the Scottish Linked Data interest group and...

University of Isfahan DataSet

 **License Not Open**

University of Isfahan is an educational institution in Isfahan, Iran.

Southampton Jargon Dictionary (University of Southampton)

application/rdf+xml text/turtle

 **License Not Open**

Dataset from University of Southampton Open Data Service. This dictionary is created by a number of volunteers in iSolutions and other professional services to help people learn the terms...

UK Public Bodies

CSV PDF ODS

Recent Comments

**MHaas** He what Drug release does th package use? It that e.g. the DB entry is incons what can curre found on DrugB. E.g. the pharmacoeco section is...
<http://www.ckan.nberlin-drugbank> · ago

**Egon Willi** is unclear what data this end point is exp Not all STITCH d Open, suggestir SPARQL end poi exposes a subs data, rather tha STITCH.
<http://www.ckan.nberlin-stitch> · 3 we

Querying

The screenshot shows a web browser window with the address bar displaying `www.w3.org/2005/Incubator/Ild/wiki/Authority_SPARQL_Examples`. The page title is "Authority SPARQL Examples". The page has a navigation bar with tabs: "page" (selected), "discussion", "view source", and "history". The W3C logo is in the top left. On the left side, there is a "navigation" section with links: "Main page", "Community portal", "Current events", "Recent changes", "Random page", and "Help". Below that is a "search" section with a text input field and "Go" and "Search" buttons. At the bottom left is a "toolbox" section with links: "What links here", "Related changes", "Special pages", "Printable version", and "Permanent link". The main content area has the title "Authority SPARQL Examples" and a sub-header "Selecting an LC authority preferred label for a DBpedia entity using VIAF". Below this, it says "SPARQL query for selecting the Library of Congress preferred label for a person identified in DBpedia ([Jane Austen](#)):". A dashed box contains the following SPARQL query:

```
SELECT ?prefLiteral
WHERE {
  ?concept foaf:focus <http://dbpedia.org/resource/Jane\_Austen> ;
    skos:inScheme <http://viaf.org/authorityScheme/LC> ;
    skosxl:prefLabel ?prefLabel .
  ?prefLabel skosxl:literalForm ?prefLiteral .
}
```

Below the query is another sub-header "Listing available preferred labels for a DBpedia entity using VIAF". It says "SPARQL query for listing all available preferred labels for DBpedia's Jane Austen:". A dashed box contains the following SPARQL query:

```
SELECT ?schemeName ?prefLiteral
WHERE {
  ?concept skosxl:prefLabel ?prefLabel ;
    skos:inScheme ?scheme ;
    foaf:focus <http://dbpedia.org/resource/Jane\_Austen> .
  ?prefLabel skosxl:literalForm ?prefLiteral .
  ?scheme dcterms:title ?schemeName .
}
```

University of Plymouth | ... x +

lists.lib.plymouth.ac.uk

University of Plymouth

Search for lists

Browse

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Search | University of Ply... x +

lists.lib.plymouth.ac.uk/se

University of Plymouth

Search

history

Displaying results 1-10 of 14

- [HIST241 - German history](#)
Module
- [HIST255 - Chinese History](#)
Module
- [German history](#)
List
- [Chinese History](#)
List
- [HIST145 - History methods \(Wills\)](#)
Module
- [HIST348 - The history of European integration](#)
Module
- [History methods \(Wills\)](#)
List
- [HIST 151 What is History?](#)
List
- [The history of European integration](#)
List
- [HIST373 Japanese History](#)
List

Chinese History | Universi... x +

lists.lib.plymouth.ac.uk/lists/hist255.html

University of Plymouth

Chinese History

[Recent changes](#) | [Export to CSV](#) | [Export citations](#)

Linked to: HIST255

Table of contents [show]

24 items Group by: Section | Type

Recommended reading (5 items)

- [The complete history of China](#) - Roberts, J. A. G., 2003.
Book
- [A History of China](#) - Roberts, J. A. G., 2006.
Book
- [The Cambridge illustrated history of China](#) - Ebrey, Patricia Buckley., 1996. [Preview Available](#)
Book
- [China : a new history](#) - Fairbank, John King., Goldman, Merle, 2006. [Preview Available](#)
Book
- [Twentieth-century China : new approaches](#) - Wasserstrom, Jeffrey N., 2003. [Preview Available](#)
Book

Other reading (17 items)

- [Chinese civilization : a sourcebook](#) - Ebrey, Patricia Buckley., c1993. [Preview Available](#)
Book
- [The Sino-Japanese War of 1894-1895 : perceptions, power and primacy](#) - Paine, S. C. M., 2005.
Book
- [People's China : a brief history](#) - Dietrich, Craig., 1994.
Book
- [China at war, 1901-1949](#) - Dreyer, Edward L., 1995.
Book
- [China : a new history](#) - Fairbank, John King., Goldman, Merle, 2006. [Preview Available](#)
Book
- [Japan and China : mutual representations in the modern era](#) - Wataru, Masuda., 2000. [Preview Available](#)
Book

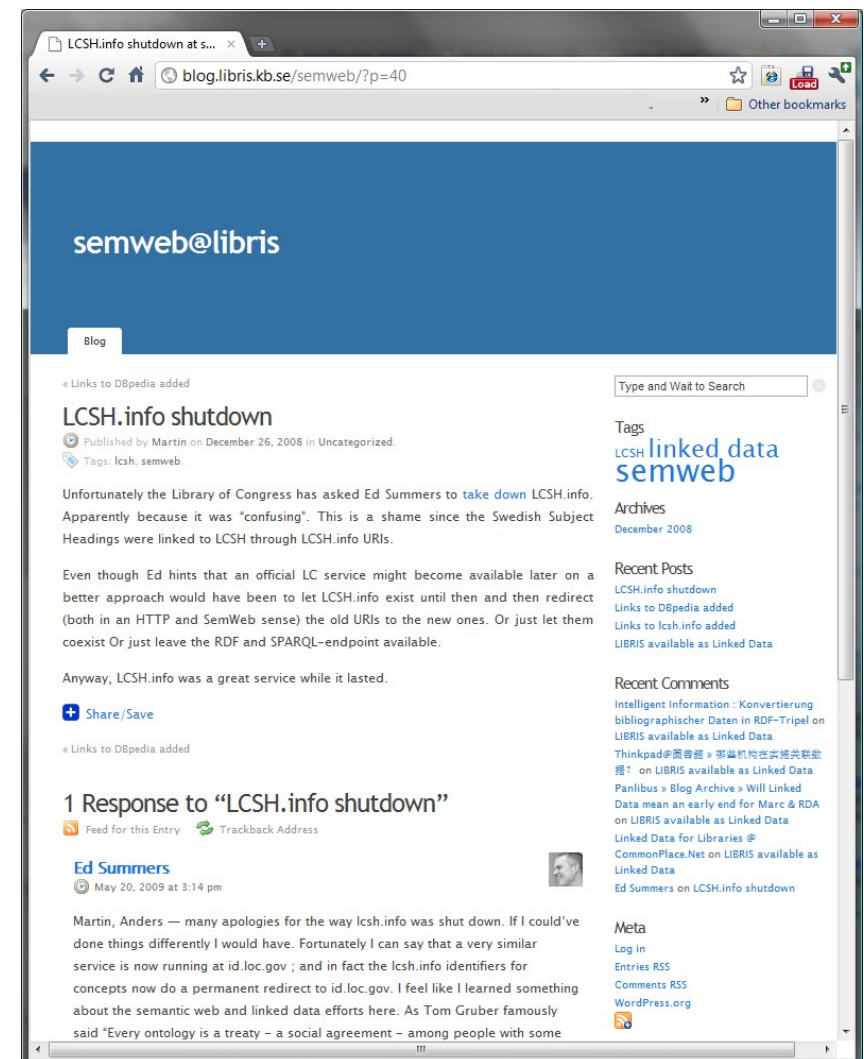
Trust

The largest hurdle to library adoption of Linked Data, though, may not be educational or technological ... The sticking point for librarians may be an issue of trust.

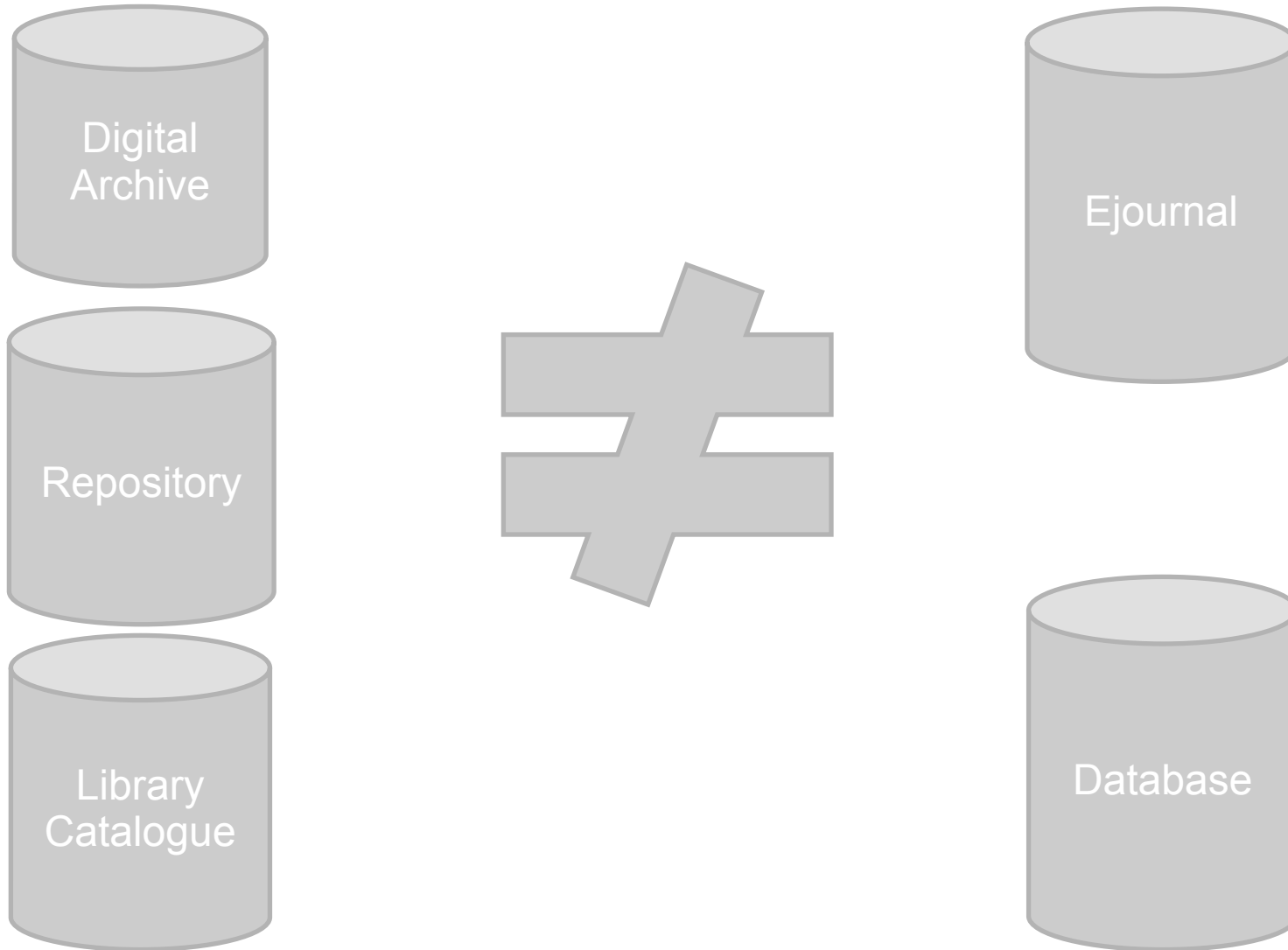
- Ross Singer, "Linked Data Now!"

Preservation

What happens when a dataset or linking hub disappears?



Data ownership



Licensing

“You shall not use the data made available through the GC Open Data Portal in any way which, in the opinion of Canada, may bring disrepute to or prejudice the reputation of Canada.”

VoID

- **schema to describe linked datasets**

```
:DBpedia a void:Dataset ;  
dcterms:license  
  <http://www.gnu.org/copyleft/fdl.html> .
```

Oh - One more thing...

“who’s minding the ranch?”

RDA

- Works with in MARC, but also works as a linked data Metadata Vocabulary

The Registry! :: RDA Grou... x

← → ↻ 🏠 🌐 metadataregistry.org/schemaprop/list/schema_id/1.html

☆ 📄 Load 🛠️

» 📁 Other bookmarks

sign in / register | about

Search

open metadata registry

Supporting Metadata Interoperability

Element Sets: Show detail for RDA Group 1 Elements

Detail Elements History Maintainers

Label	Type	URI	Status	Updated	Last Updated by	Actions
Title	property	.../Elements/title	New-Proposed	2009-08-09 14:46	DianeH	
Edition statement	property	.../Elements/editionStatement	New-Proposed	2009-08-13 13:25	DianeH	
Place of production	property	.../Elements/placeOfProduction	New-Proposed	2009-08-09 14:14	DianeH	
Date of production	property	.../Elements/dateOfProduction	New-Proposed	2009-08-09 14:29	DianeH	
Copyright date	property	.../Elements/copyrightDate	New-Proposed	2009-08-10 14:42	DianeH	
Identifier for the manifestation	property	.../IdentifierForTheManifestation	New-Proposed	2009-08-11 9:48	DianeH	
Publisher's number for music	subproperty	.../publishersNumberForMusic	New-Proposed	2009-08-20 12:10	DianeH	
Plate number for music	subproperty	.../Elements/plateNumberForMusic	New-Proposed	2009-08-20 12:12	DianeH	
Media type	property	.../Elements/mediaType	New-Proposed	2009-08-20 9:46	DianeH	
Carrier type	property	.../Elements/carrierType	New-Proposed	2009-08-10 14:44	DianeH	
Extent	property	.../Elements/extent	New-Proposed	2009-07-09 12:03	DianeH	
Dimensions	property	.../Elements/dimensions	New-Proposed	2009-06-15 9:49	DianeH	
Base material	property	.../Elements/baseMaterial	New-Proposed	2009-08-20 14:23	DianeH	
Applied material	property	.../Elements/appliedMaterial	New-Proposed	2009-08-20 14:36	DianeH	
Form of work	property	.../Elements/formOfWork	New-Proposed	2009-09-21 13:55	DianeH	
Date of work	property	.../Elements/dateOfWork	New-Proposed	2009-09-21 13:53	DianeH	

Browse...

[Resource Owners](#)
[Vocabularies](#)
[Element Sets](#)
[SPARQL](#)

Feedback

RDF Converters

Ok, I'm interested

Here is the list of the

- [JPEG -> RDF](#) - s found in those fi

github
SOCIAL CODING

rsinger / marc2r

Source

Commits

Switch Branches (1) ▾ S

A set of Ruby scripts for ta

Read-Only

HTTP Rea

Removed the "too-cl



rsinger (author)

August 19, 2009

[marc2rdf-modeler](#) / README



Dublin Core[®] Metadata Initiative

Making it easier to find information.

[Home](#)

[Metadata Basics](#)

[DCMI Specifications](#)

[Community and Events](#)

[About Us](#)

Enter keyword

Search

Expressing Dublin Core metadata using the Resource Description Framework (RDF)

Creator: [Mikael Nilsson](#)

KMR Group, NADA, KTH (Royal Institute of Technology), Sweden

[Andy Powell](#)

Eduserv Foundation, UK

[Pete Johnston](#)

Eduserv Foundation, UK

[Ambjörn Naeve](#)

KMR Group, NADA, KTH (Royal Institute of Technology), Sweden

Date Issued: 2008-01-14

Identifier: <http://dublincore.org/documents/2008/01/14/dc-rdf/>

Replaces: <http://dublincore.org/documents/2007/06/04/dc-rdf/>

Replaces: <http://dublincore.org/documents/2002/07/31/dcmes-xml/>

Replaces: <http://dublincore.org/documents/2002/05/15/dcq-rdf-xml/>

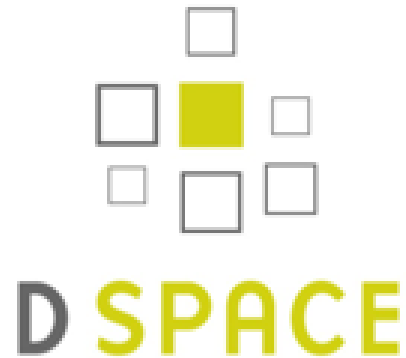
Latest Version: <http://dublincore.org/documents/dc-rdf/>

Status of Document: This is a DCMI [Recommendation](#).

Description of Document: This document provides recommendations for expressing Dublin Core metadata using RDF, the Resource Description Framework.

parent [a0b131af4e3adc36cceed2689586b539277b6c90](#)

Publishing Tools



Where we are now

Age of Chaotic Innovation?

Virtual International Authority File

Dewey Decimal Classification

BIBSYS' authority files

Thesaurus for Economics

Rameau

Swedish Subject Headings

German Subject Headings

Metadata Authority Description
Schema (MADS)

LIBRIS (Swedish Union
Catalog)

Library of Congress (LCSH,
OSI)

German National Library

Hungarian National Library

British Library

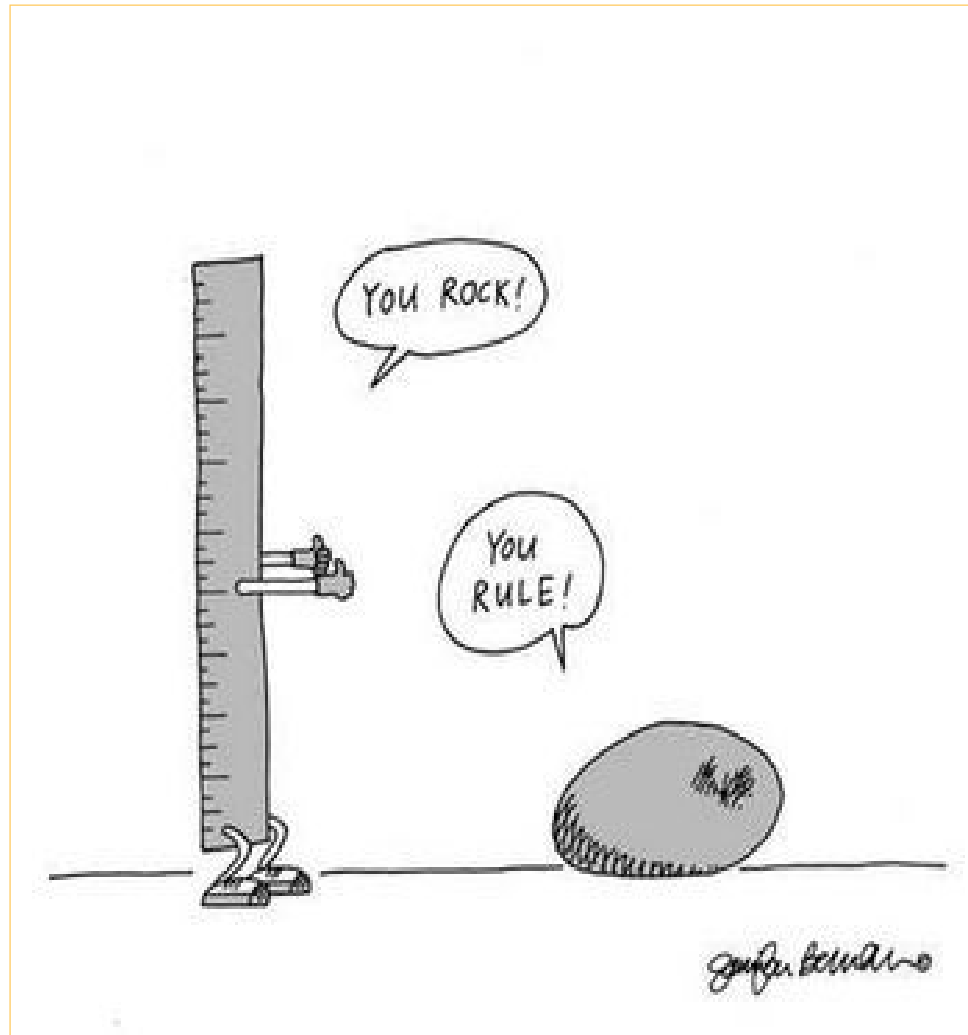
Europeana

Linked Periodicals Data

The Chaos Tamers

- [W3C Linked Library Data Incubator Group](#)
- IFLA Semantic Web Interest Group
- [CKAN Linked Library Data Group](#)
- LITA/ALCTS Linked Library Data Interest Group

Questions?



Source: <http://www.jenniferbetman.com>