

Semantic Web Adoption and Applications

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Last update: 2012-06-11

Significant buzz...

- ▶ There is quite a buzz around “Semantics”, “Semantic Technologies”, “Semantic Web”, “Web 3.0”, “Data Web”, etc, these days
- ▶ New applications, companies, tools, etc, come to the fore frequently

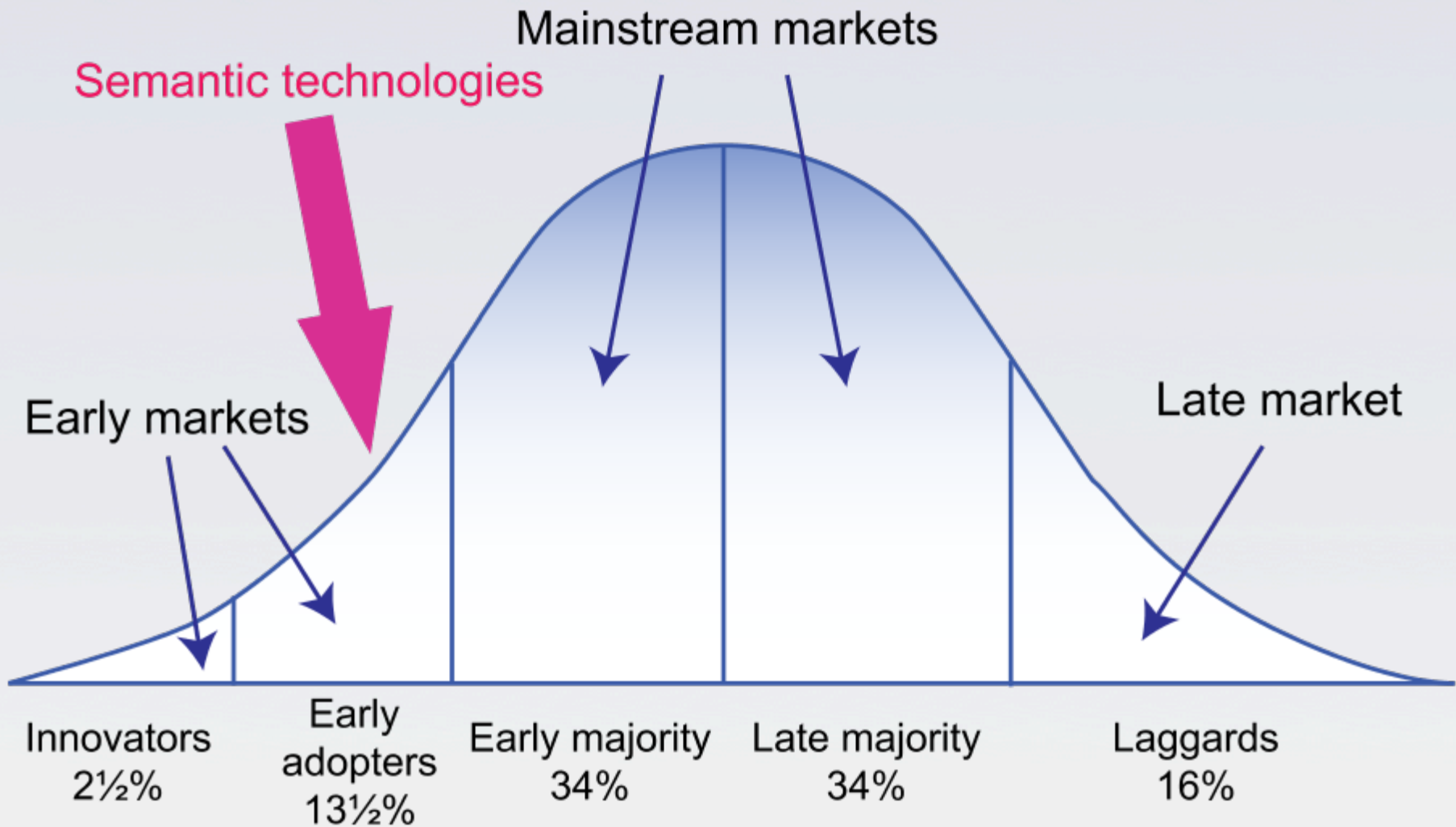
Significant buzz...

- ▶ It is, of course, not always clear what these terms all mean:
 - ▶ “Semantic Web” is a way to specify data and data relationships; it is also a collection of specific technologies (RDF, OWL, GRDDL, SPARQL, ...)
 - ▶ “Semantic Technologies”, “Web 3.0” often mean more, including intelligent agents, usage of complex logical procedures, etc

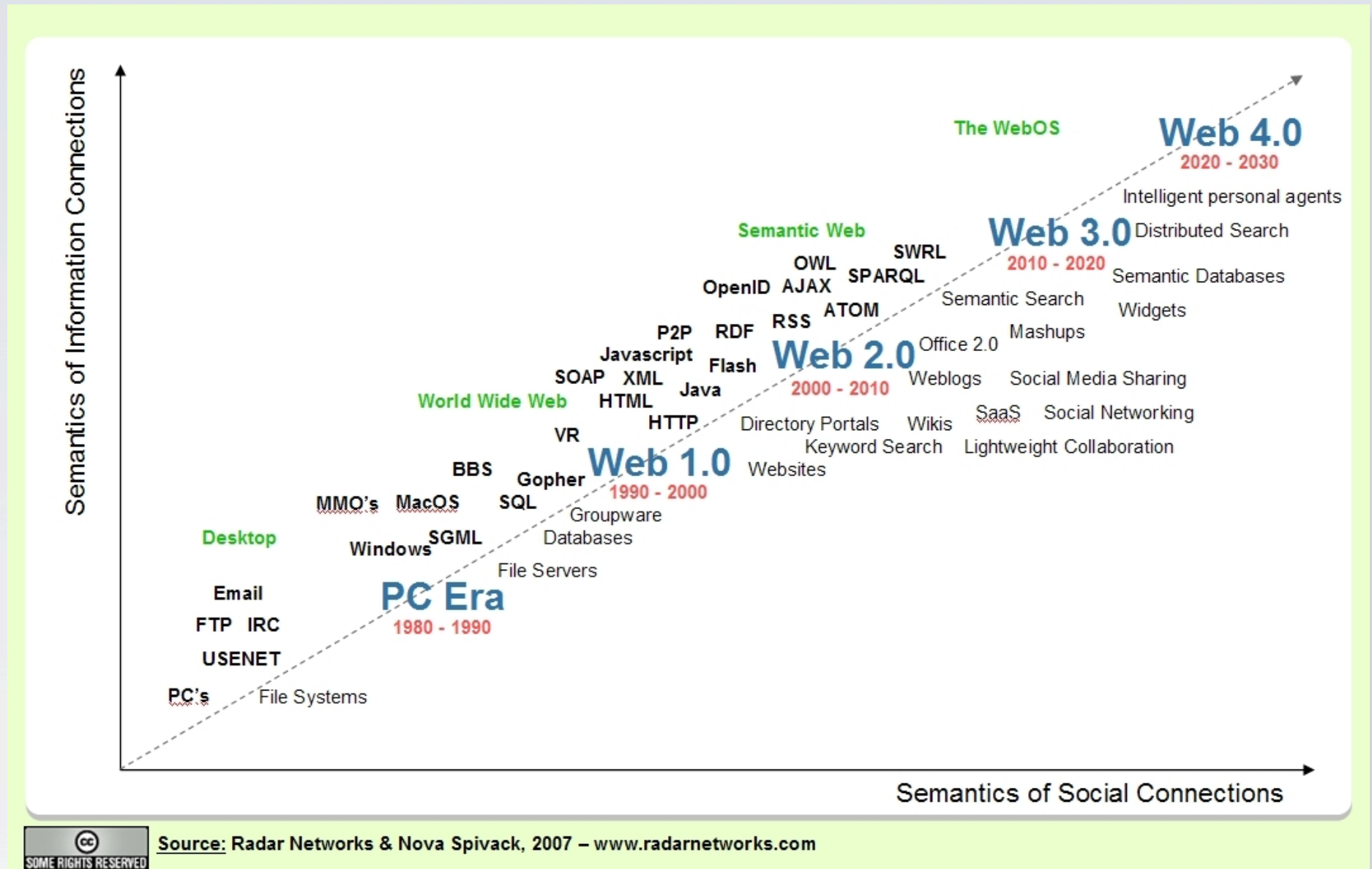
Significant buzz... (cont.)

- ▶ Predicting the exact evolution in terms of Web 3.0, Web 4.0, etc, is a bit as looking into a crystal ball
- ▶ But the Semantic Web technologies are already here, are used and deployed
- ▶ They are at the basis of further evolution

Technology adoption life cycle



A vision on the evolution...



Source: Radar Networks & Nova Spivack, 2007 – www.radarnetworks.com

(this Web 3.0 is not identical to the “journalistic” Web3.0; merely timing)

The 2007 Gartner predictions

During the next 10 years, Web-based technologies will improve the ability to embed semantic structures [... it] will occur in multiple evolutionary steps...

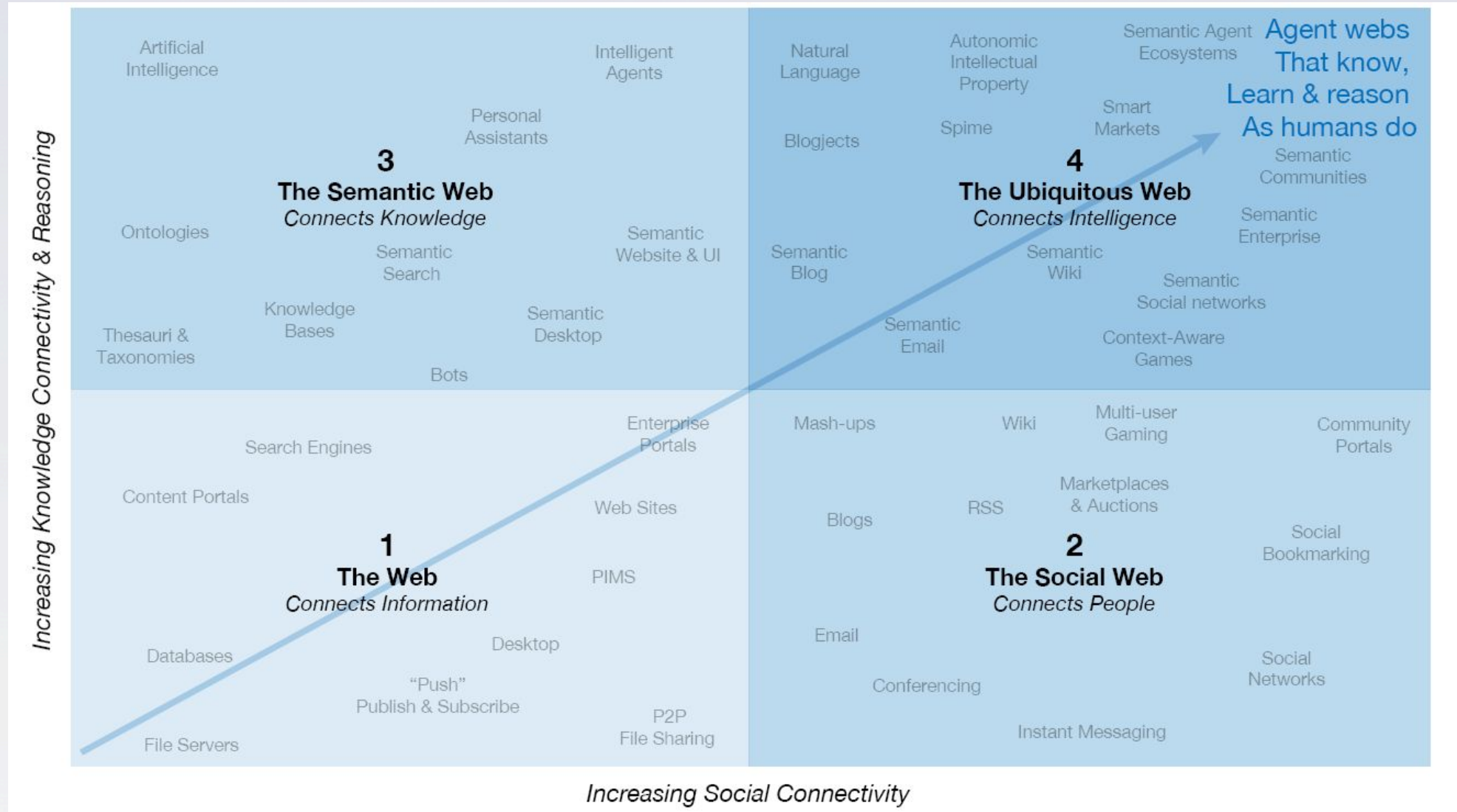
By 2017, we expect the vision of the Semantic Web [...] to coalesce [...] and the **majority of Web pages are decorated with some form of semantic hypertext.**

By **2012, 80% of public Web sites will use some level of semantic hypertext to create SW documents [...]** 15% of public Web sites will use more extensive Semantic Web-based ontologies to create semantic databases

(note: “semantic hypertext” refers to, eg, RDFa, microformats with possible GRDDL, etc.)

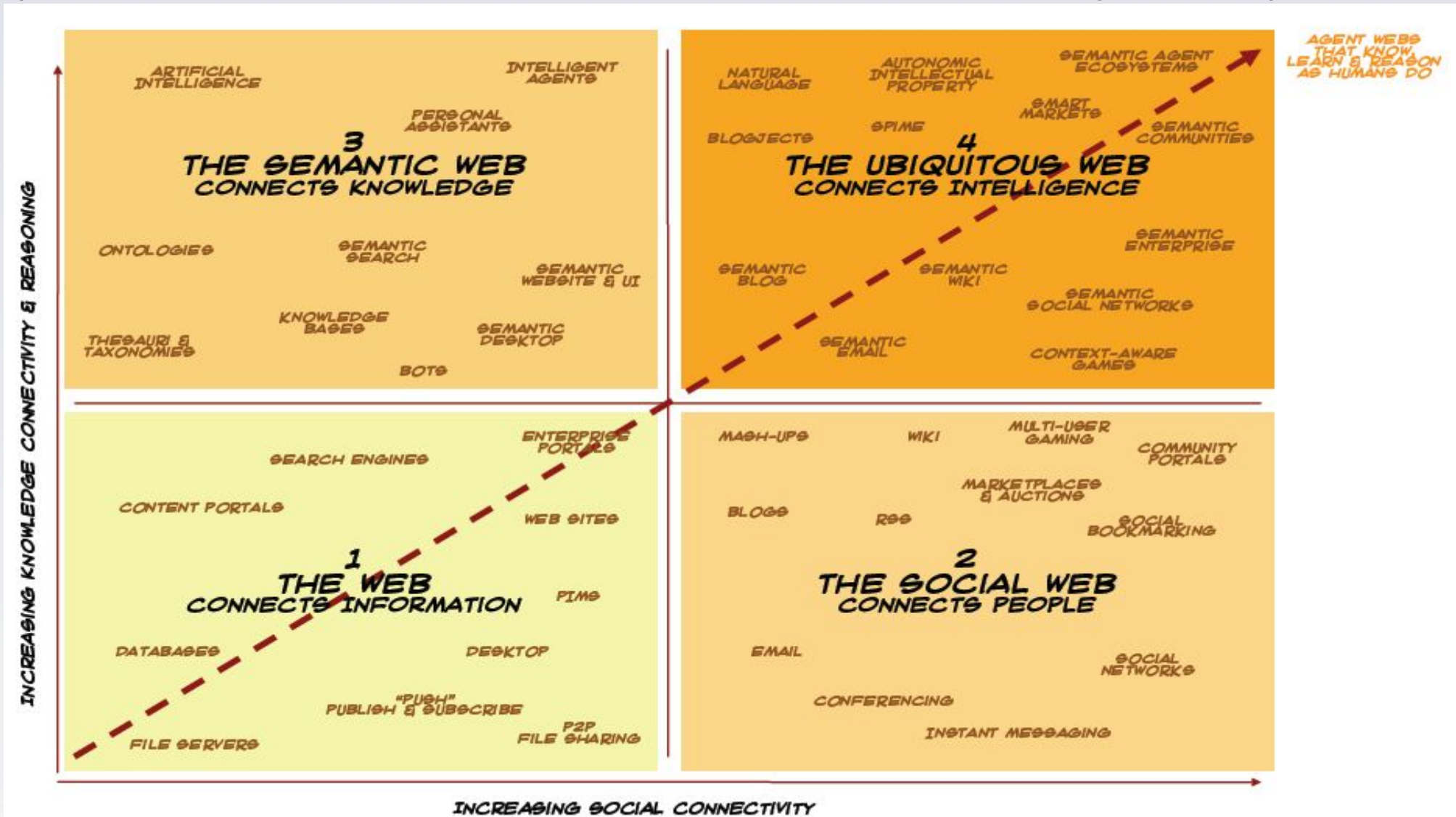
Another longer term vision...

(from the “Semantic Wave 2008” report, from Project10X)



Another longer term vision...

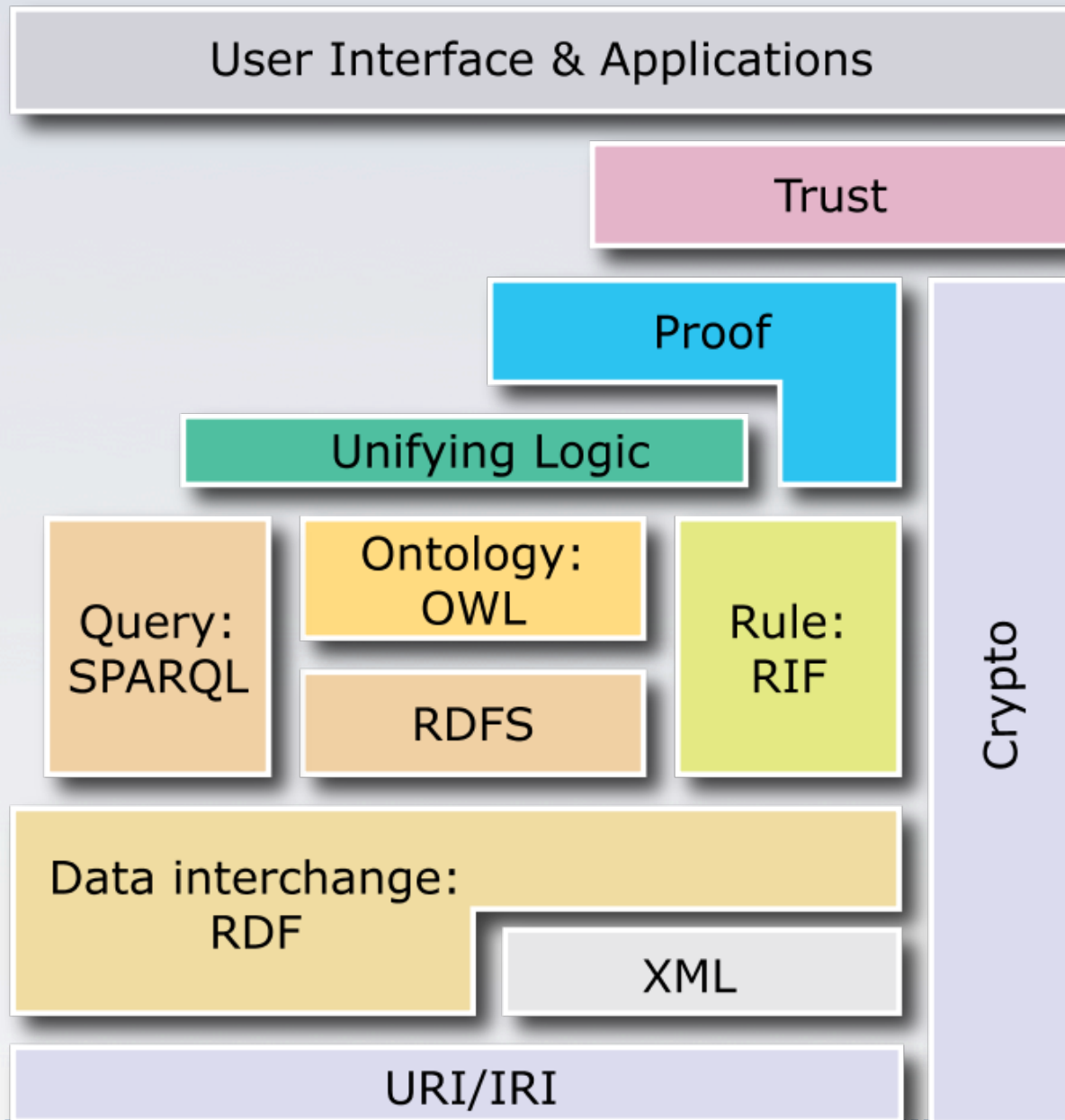
(from the “Semantic Wave 2008” report, from Project10X)



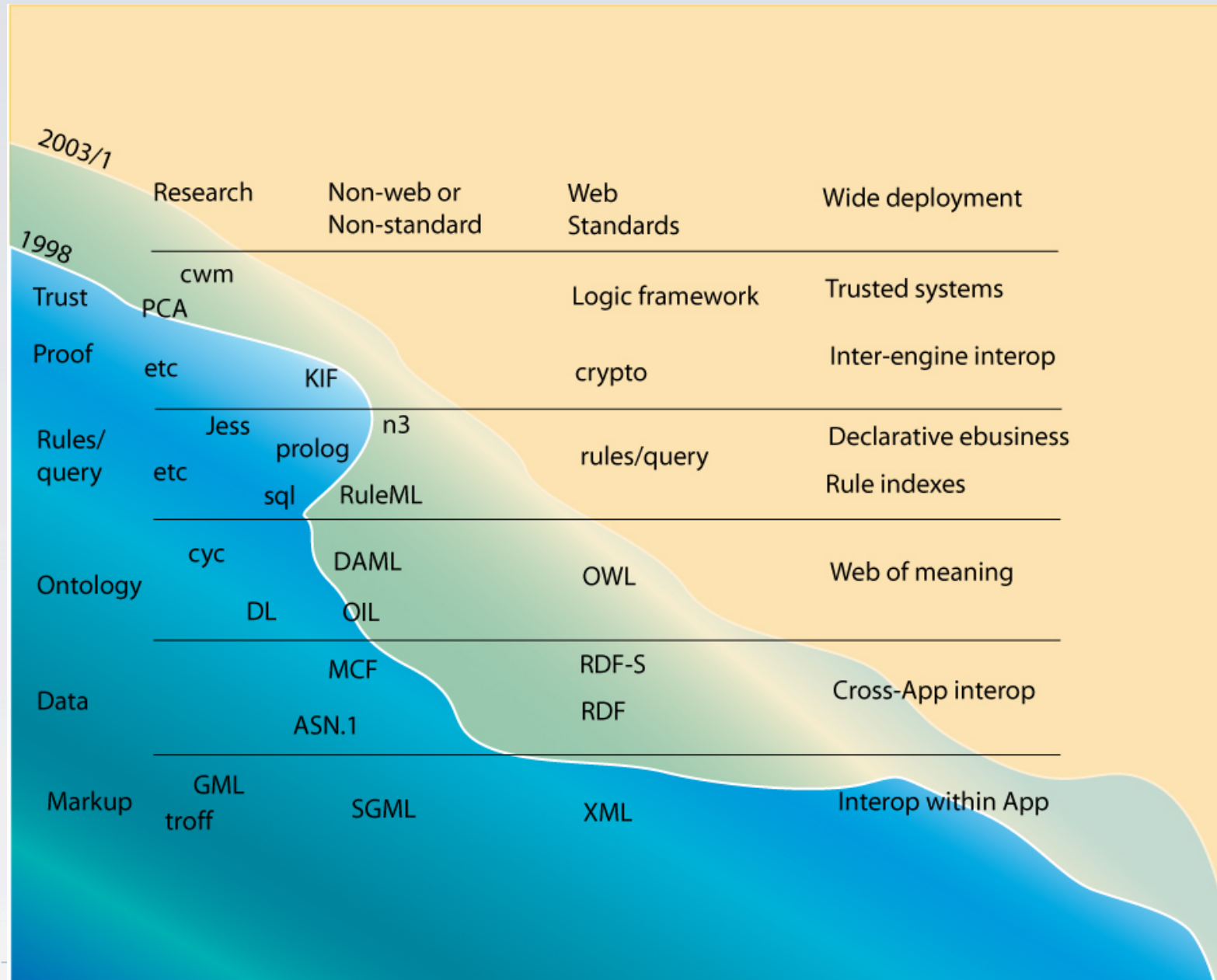
Let us keep to the Semantic Web for now...

- ▶ **In what follows we will restrict ourselves to the Semantic Web**
 - ▶ a way to specify data and data relationships
 - ▶ allows data to be shared and reused across application, enterprise, and community boundaries
 - ▶ emphasis on the Web aspect:
 - ▶ scale, inherent lack of knowledge, possible inconsistencies
 - ▶ possibility to combine everything that can be identified via a URI
 - ▶ a collection of fundamental technologies (RDF/S, OWL, GRDDL, SPARQL, ...)

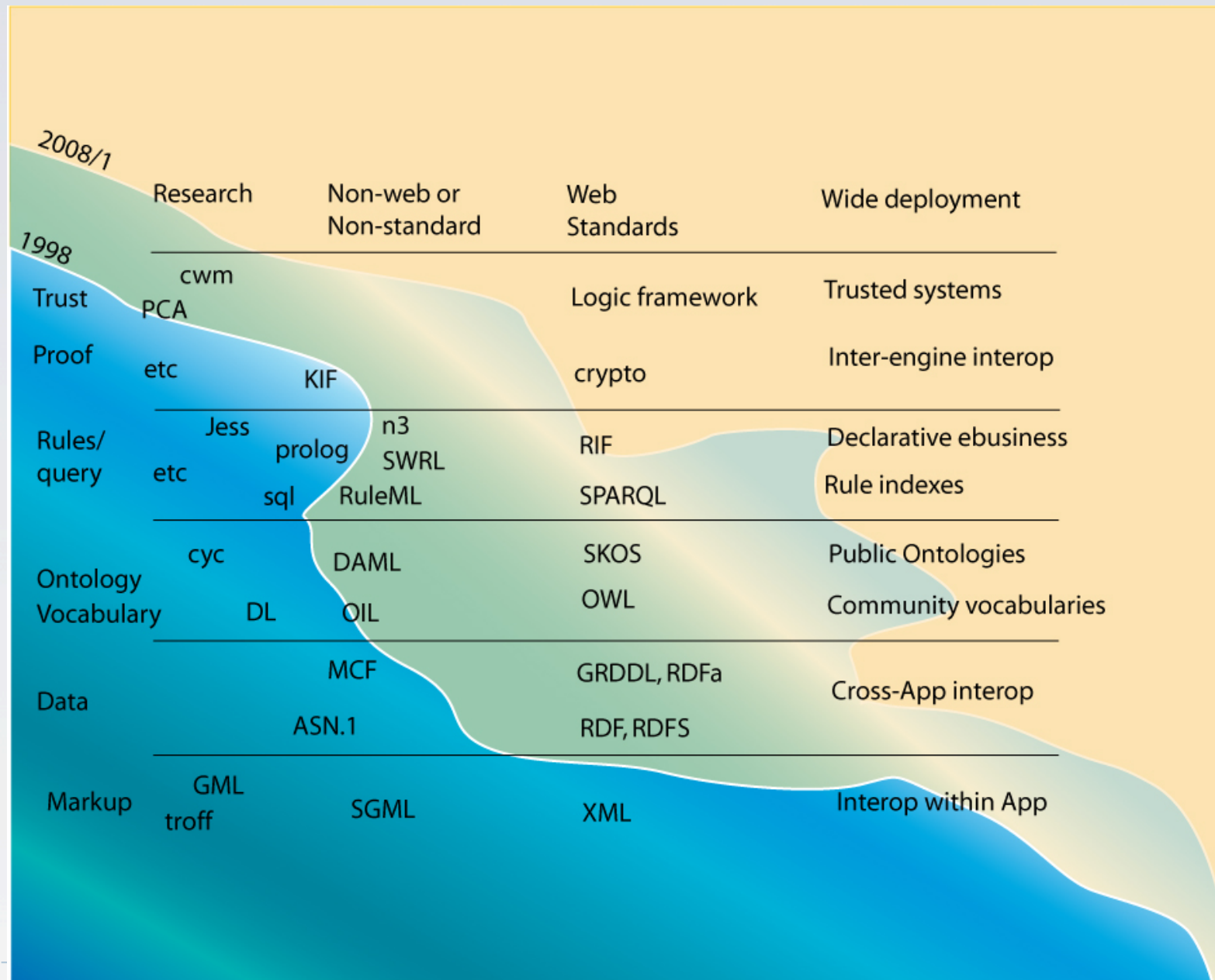
The (latest) Semantic Web Stack...



Tim Berners-Lee's Semantic Wave (2003)



Tim Berners-Lee's Semantic Wave (2008)



The “corporate” landscape is moving

- ▶ Major companies offer (or will offer) Semantic Web tools or systems using Semantic Web: Adobe, Oracle, IBM, HP, Software AG, GE, Northrop Gruman, Altova, Microsoft, ...
- ▶ Others are using it (or consider using it) as part of their own operations: Novartis, Pfizer, Telefónica, ...
- ▶ Some of the names of active participants in W3C SW related groups: HP, Agfa, SRI International, Fair Isaac Corp., Oracle, Boeing, IBM, Chevron, Siemens, Nokia, Pfizer, Eli Lilly, ...

Lots of Tools (not an exhaustive list!)

► Categories:

- Triple Stores
- Inference engines
- Converters
- Search engines
- Middleware
- CMS
- Semantic Web browsers
- Development environments
- Semantic Wikis
- ...

► Some names:

- Jena, AllegroGraph, Mulgara, Sesame, flickurl, ...
- TopBraid Suite, Virtuoso, Falcon, Drupal 7, Redland, Pellet, ...
- Disco, Oracle 11g, RacerPro, IODT, Ontobroker, OWLIM, Talis Platform, ...
- RDF Gateway, RDFLib, Open Anzo, Zitgist, Protégé, ...
- Thetus publisher, SemanticWorks, SWI-Prolog, RDFStore...

May start with specific communities

- ▶ The needs of a deployment application area:
 - ▶ have serious problem or opportunity
 - ▶ have the intellectual interest to pick up new things
 - ▶ have motivation to fix the problem
 - ▶ its data connects to other application areas
 - ▶ have an influence as a showcase for others
- ▶ The high energy physics community played this role for the Web in the 90's

Some deployment communities

- ▶ Major communities pick the technology up: digital libraries, defence, eGovernment, energy sector, financial services, health care, oil and gas industry, life sciences ...
- ▶ Semantic Web also appear in the “Web 2.0/ Web 3.0” applications (whatever that means 😊)
 - ▶ exchange of social data, personal “space” applications
 - ▶ dynamic Web site backends, multimedia asset management
 - ▶ etc

W3C's use case collection

- ▶ **W3C is actively collecting SW use cases and case studies**
 - ▶ use case: prototype applications within the enterprise
 - ▶ case study: deployed applications, either in an enterprise, community, governmental, etc sites

W3C's use case collection

- ▶ At present there are
 - ▶ 29 case studies and 13 use cases (July 2010)
 - ▶ from 12 different countries around the globe
 - ▶ activity areas of submitters include: automotive, broadcasting, financial institution, health care, oil & gas industry, pharmaceutical, public and governmental institutions, publishing, telecommunications, ...
 - ▶ usage areas include: data integration, portals with improved local search, business organization, B2B integration, ...
- ▶ Remember this URI: <http://www.w3.org/2001/sw/UseCases/>

So how do applications look like?

Application patterns

- ▶ It is fairly difficult to “categorize” applications
- ▶ With this caveat, some of the application patterns:
 - ▶ data integration
 - ▶ intelligent (specialized) Web sites (portals) with improved local search based on vocabularies and ontologies
 - ▶ content and knowledge organization
 - ▶ knowledge representation, decision support
 - ▶ X2X integration (often combined with Web Services)
 - ▶ data registries, repositories
 - ▶ collaboration tools (eg, social network applications)

Applications are not always very complex...

- ▶ Eg: simple semantic annotations of data provides easy integration (eg, with MusicBrainz, Wikipedia, geographic data sets, etc)
- ▶ What is needed: some simple vocabularies, simple annotation
 - ▶ annotation can be generated by a server automatically, or
 - ▶ added by the user via some user interface
- ▶ This extra data can be in some microformats, in RDFa, ...

A typical RDFa usage...

Bitmunk: Collection: Bartok Solo Piano Works, Volume 5 by June de Toth - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://bitmunk.com/media/6071604

bitmunk audio news downloads help



Bartok Solo Piano Works, Volume 5

June de Toth

June de Toth's interpretation of Bartok's solo piano music is decidedly her own. She expresses a lyrical and romantic vision of his early poetic works, which were very much influenced by the French impressionist composer Claude Debussy.

Purchase

WebBuy directly from Bitmunk

WebBuy for **USD \$8.15**

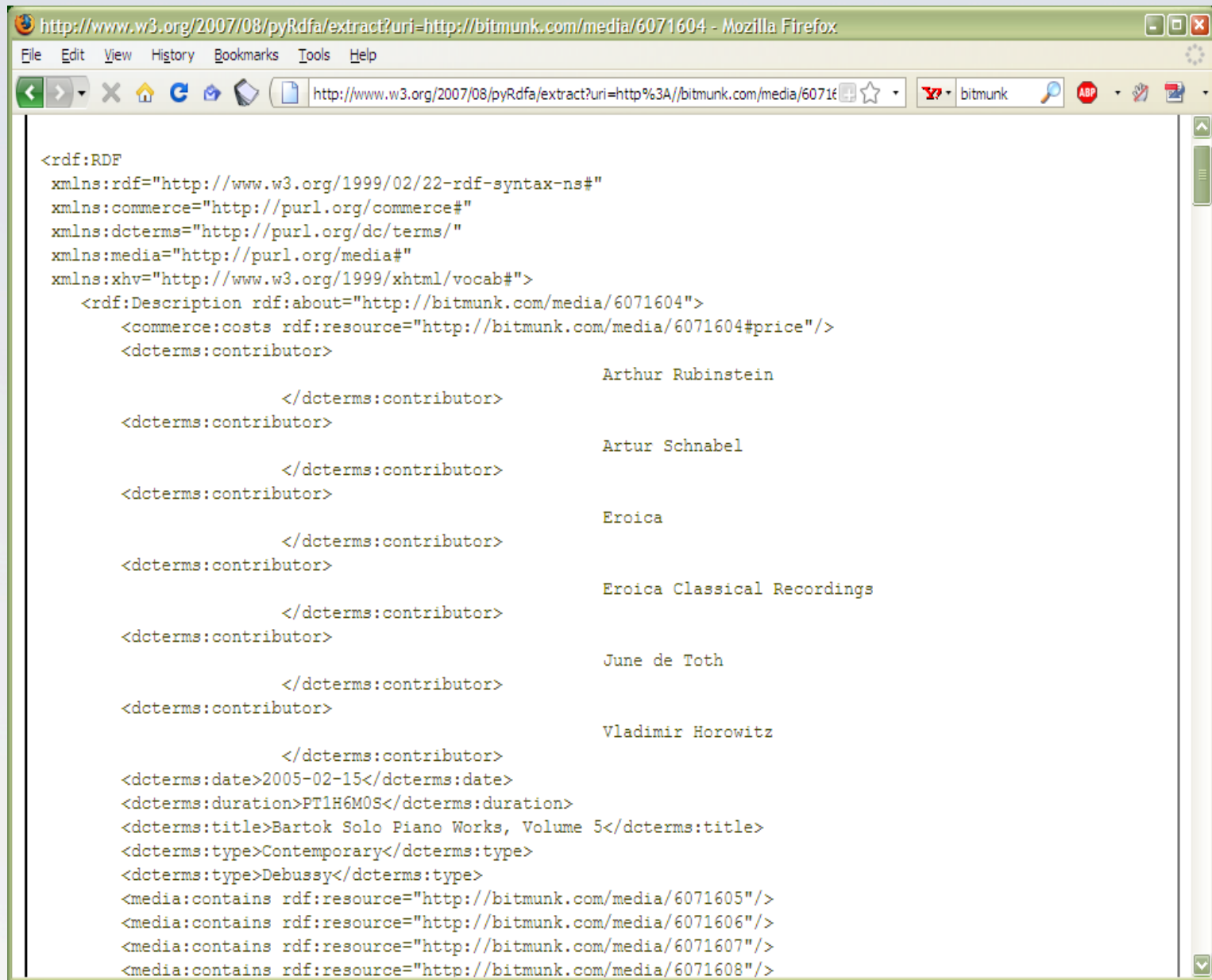
Sample

Play all samples in this collection.

Details

Type	Collection (audio)
Copyright Owner	Eroica
Music Label	Eroica
Performer	June de Toth
Publisher	Eroica Classical Recordings
Similar Artist	Vladimir Horowitz Arthur Rubinstein Artur Schnabel
Released	2005-02-15
Genre	Audio > Debussy Audio > Contemporary
Items	27 (1:06:00)
Owner	cdbaby

A typical RDFa usage...



```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:commerce="http://purl.org/commerce#"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:media="http://purl.org/media#"
  xmlns:xhv="http://www.w3.org/1999/xhtml/vocab#"
  <rdf:Description rdf:about="http://bitmunk.com/media/6071604">
    <commerce:costs rdf:resource="http://bitmunk.com/media/6071604#price"/>
    <dcterms:contributor>
      Arthur Rubinstein
    </dcterms:contributor>
    <dcterms:contributor>
      Artur Schnabel
    </dcterms:contributor>
    <dcterms:contributor>
      Eroica
    </dcterms:contributor>
    <dcterms:contributor>
      Eroica Classical Recordings
    </dcterms:contributor>
    <dcterms:contributor>
      June de Toth
    </dcterms:contributor>
    <dcterms:contributor>
      Vladimir Horowitz
    </dcterms:contributor>
    <dcterms:date>2005-02-15</dcterms:date>
    <dcterms:duration>PT1H6M0S</dcterms:duration>
    <dcterms:title>Bartok Solo Piano Works, Volume 5</dcterms:title>
    <dcterms:type>Contemporary</dcterms:type>
    <dcterms:type>Debussy</dcterms:type>
    <media:contains rdf:resource="http://bitmunk.com/media/6071605"/>
    <media:contains rdf:resource="http://bitmunk.com/media/6071606"/>
    <media:contains rdf:resource="http://bitmunk.com/media/6071607"/>
    <media:contains rdf:resource="http://bitmunk.com/media/6071608"/>
  </rdf:Description>
</rdf:RDF>
```


Another relatively simple application

- ▶ Goal: reuse of older experimental data
- ▶ Keep data in databases or XML, just export key “fact” as RDF
- ▶ Use a faceted browser to visualize and interact with the result

Internal Compound Repurposing Example

Welcome, Allergy & Respiratory Team Member

This tool allows you to identify opportunities for additional uses of compounds from other teams within your project. It combines internal data, public data and the results of data mining experiments to provide testable hypotheses.

Control Panel & Item Filtering

Area: 29 Pain, 16 Metabolic Disease, 8 Cancer, 3 Sexual Health, 2 Infectives, 1 Urogenitals

Approach: 57 Antibody, 1 Recombinant, 18 SM_Agonist, 12 SM_Antagonist, 21 SM_Inhibitor

Term+Reason: 37 ACTIVE, 12 BICMARKER, 51 EFFICACY, 11 MARKET, 11 REORG, 10 TOXIC

Max_Stage_Reached: 17 Max_Stage_Reached, 10 Discovery, 41 Exploratory, 10 HTS, 11 Phase I, 13 Phase III, 41 Screening

Literature Links: 0 - 50

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51 items filtered from 710 originally (Reset All Filters)

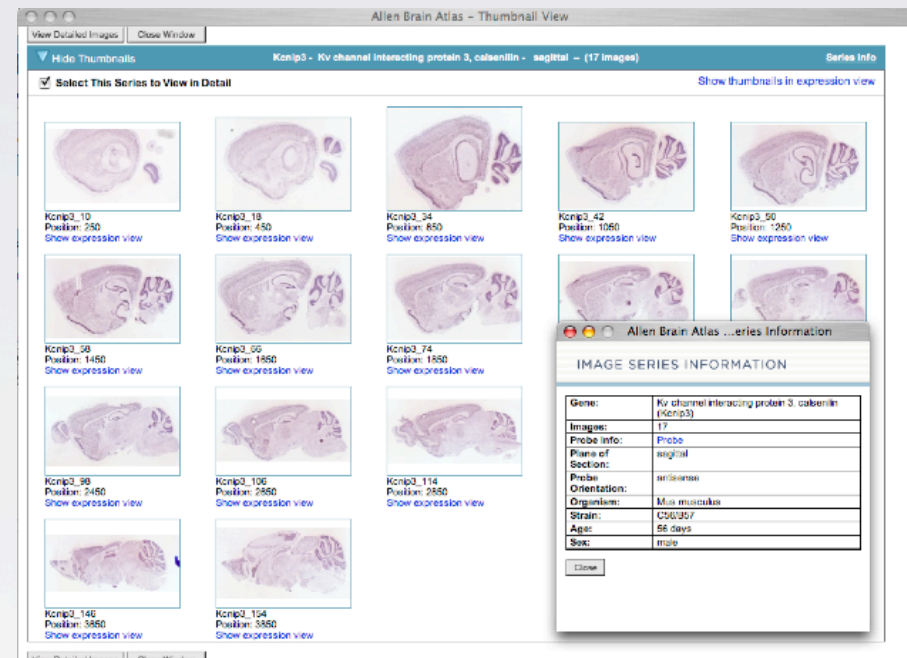
Area	Original + Indication	Target Name	Approach	Start	Term+Reason	Max_Stage_Reached	Owner	OMIM Lit	All Lit	2007 Lit	Nech	IMA	GED	Pathway	Compounds
Metabolic Disease	Diabetes	Liver glycogen phosphorylase	SM_Inhibitor	2007-Q2	EFFICACY	Candidate	P. Person								SW-030072
Sexual Health	Erectile Dysfunction	Integrin alpha-3 (Galactoprotein B3)(VLA-3) (CD49C)	SM_Antagonist	2006-Q3	EFFICACY	Candidate	P. Person						1		SW-029782
Sexual Health	Erectile Dysfunction	Leukotriene C4 synthase	SM_Agonist	2006-Q3	EFFICACY	Candidate	M. Manager				1	1			SW-029638
Sexual Health	Erectile Dysfunction	transcription elongation factor A (SII)-like 4	SM_Inhibitor	2005-Q2	EFFICACY	Candidate	P. Person								SW-029926
Infectives	HIV	Putative four repeat ion channel (Iv)	SM_Inhibitor	2006-Q2	EFFICACY	Candidate	L. Leader								SW-029994
Infectives	HIV	Voltage-gated potassium channel protein Kv1.2 (Iv)	SM_Agonist	2007-Q1	EFFICACY	Candidate	A. Scientist							1	SW-029653
Urogenitals	Incontinence	Human RNA binding motif (RBM) gene, partial cds	SM_Agonist	2007-Q3	EFFICACY	Candidate	L. Leader							1	SW-029684
Pain	Migraine	Monocarboxylate transporter homologue 2 (SLC16A4) (Iv)	SM_Inhibitor	2007-Q3	EFFICACY	Candidate	L. Leader	18							SW-030085

The “HCLS Demo”

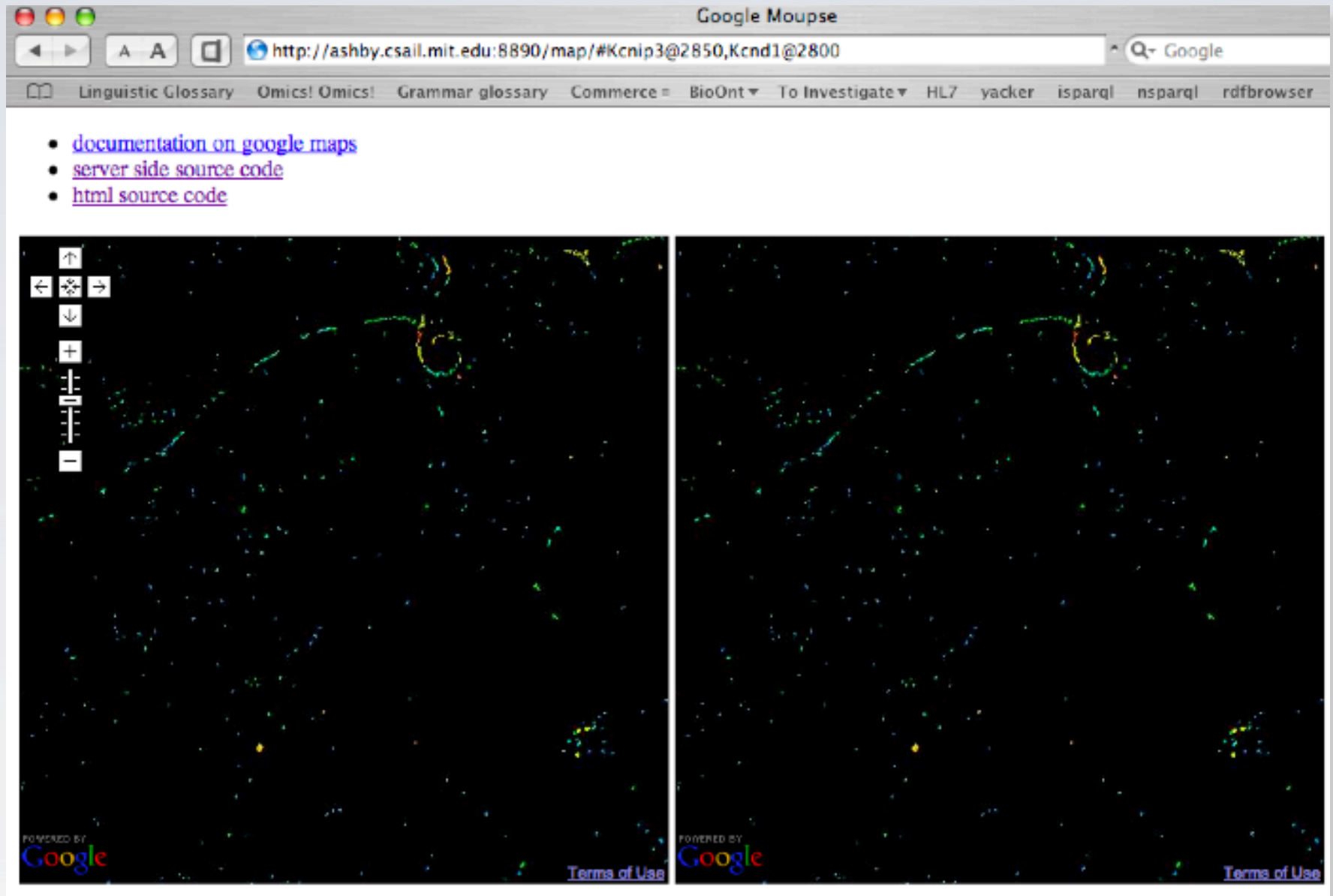
- ▶ The W3C Health Care and Life Sciences Interest Group (“HCLS”) has developed few demonstrations on SW usage
- ▶ Goal is to show:
 - ▶ the HCLS community how Semantic Web can be used
 - ▶ the SW community how this technology can be useful in this application area
 - ▶ it is a good example of Semantic Web usage in general in a non-trivial setting
- ▶ Prevailing paradigm is data integration

HCLS Demo: The Allen Brain Atlas

- ▶ Mouse brains cut in slices and stained for the presence of gene expression: 20,000 genes, 400,000 images at high resolution
- ▶ Currently available only through an HTML interface....

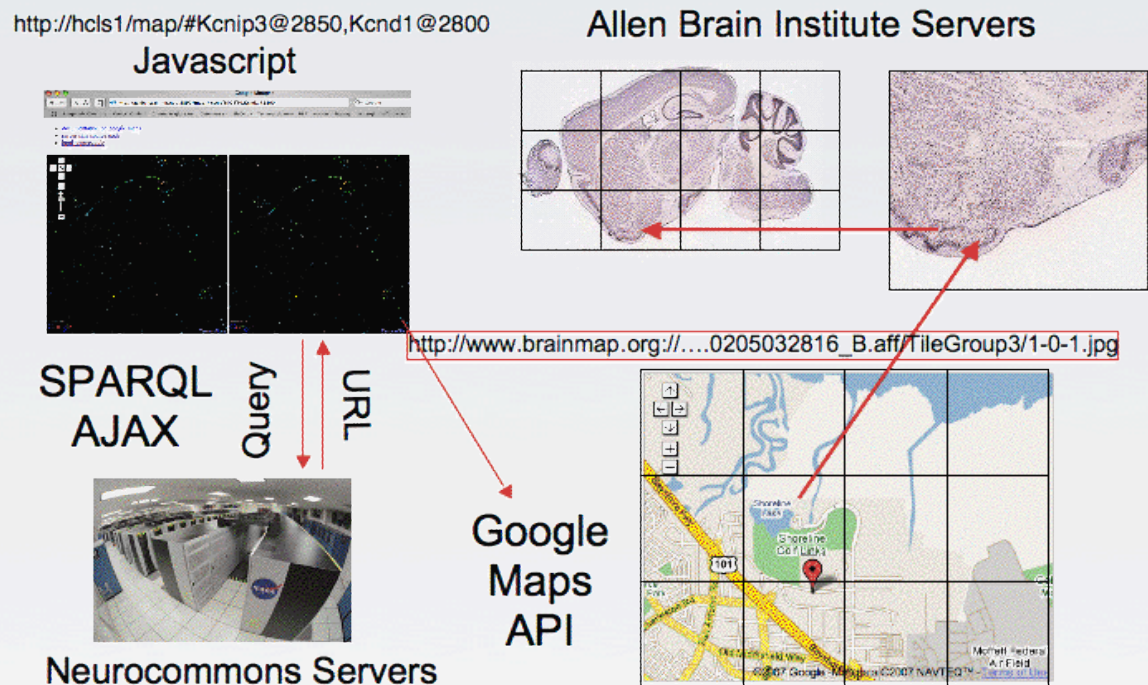


Brain Atlas “mashed up” with Google maps



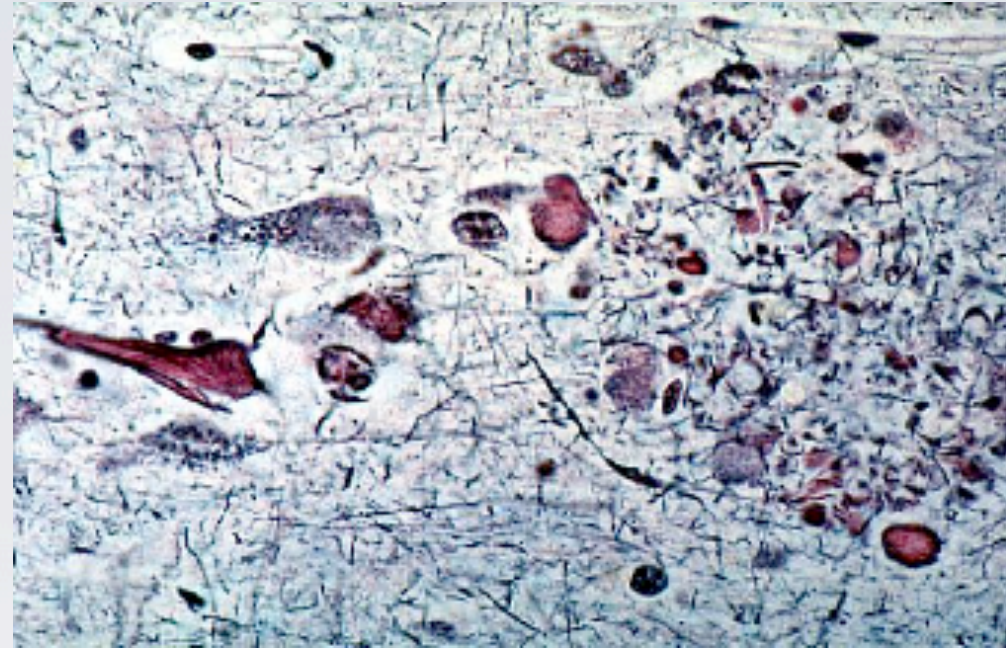
How is it done?

- ▶ Scrape 80K of Brain Atlas web pages to extract the information (images references, metadata, etc), turn this into RDF
- ▶ Combine it (SPARQL, Ajax, Google maps,...)



HCLS demo: looking for Alzheimer's targets

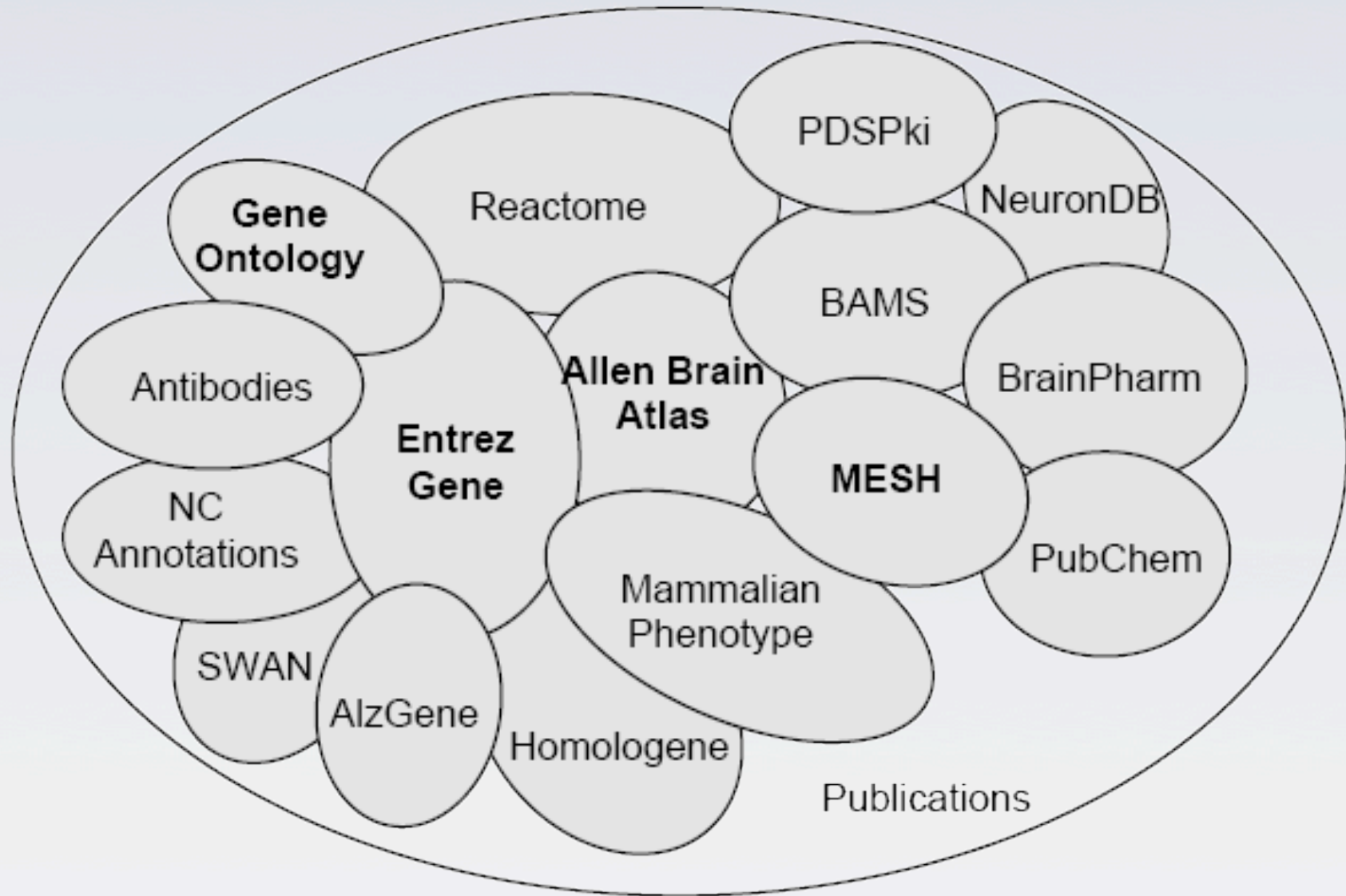
- ▶ Signal transduction pathways are considered to be rich in proteins that might respond to chemical therapy
- ▶ CA1 Pyramidal Neurons are known to be particularly damaged in Alzheimer's disease
- ▶ Can we find candidate genes known to be involved in signal transduction and active in Pyramidal Neurons?



To answer: integrate datasets

- ▶ W3C HCLS IG has already integrated a number of public datasets and ontologies
 - ▶ assign URI-s to bio entities
 - ▶ data converted or made reachable in RDF
 - ▶ use reasoners to infer extra triples to increase expressiveness
 - ▶ query the data with SPARQL and visualization tools
 - ▶ around 400M triples (in May 2007)

The datasets



Use SPARQL to integrate...

```
prefix go: <http://purl.org/obo/owl/GO#>
prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>
prefix owl: <http://www.w3.org/2002/07/owl#>
prefix mesh: <http://purl.org/commons/record/mesh/>
prefix sc: <http://purl.org/science/owl/sciencecommons/>
prefix ro: <http://www.obofoundry.org/ro/owl#>

select ?genename ?processname
where
{
  graph <http://purl.org/commons/hcls/pubmesh>
  {
    ?paper ?p mesh:D017966 .
    ?article sc:identified_by_pmid ?paper.
    ?gene sc:describes_gene_or_gene_product_mentioned_by ?article.
  }
  graph <http://purl.org/commons/hcls/goa>
  {
    ?protein rdfs:subClassOf ?res.
    ?res owl:onProperty ro:has_function.
    ?res owl:someValuesFrom ?res2.
    ?res2 owl:onProperty ro:realized_as.
    ?res2 owl:someValuesFrom ?process.
  }
  graph <http://purl.org/commons/hcls/20070416/classrelations>
  {
    {{?process <http://purl.org/obo/owl/obo#part_of> go:GO_0007166}}
    union
    {{?process rdfs:subClassOf go:GO_0007166 }}
    ?protein rdfs:subClassOf ?parent.
    ?parent owl:equivalentClass ?res3.
    ?res3 owl:hasValue ?gene.
  }
  graph <http://purl.org/commons/hcls/gene>
  {
    ?gene rdfs:label ?genename
  }
  graph <http://purl.org/commons/hcls/20070416>
  {
    ?process rdfs:label ?processname
  }
}
```

Mesh: Pyramidal Neurons



Pubmed: Journal Articles



Entrez Gene: Genes



GO: Signal Transduction

Inference required

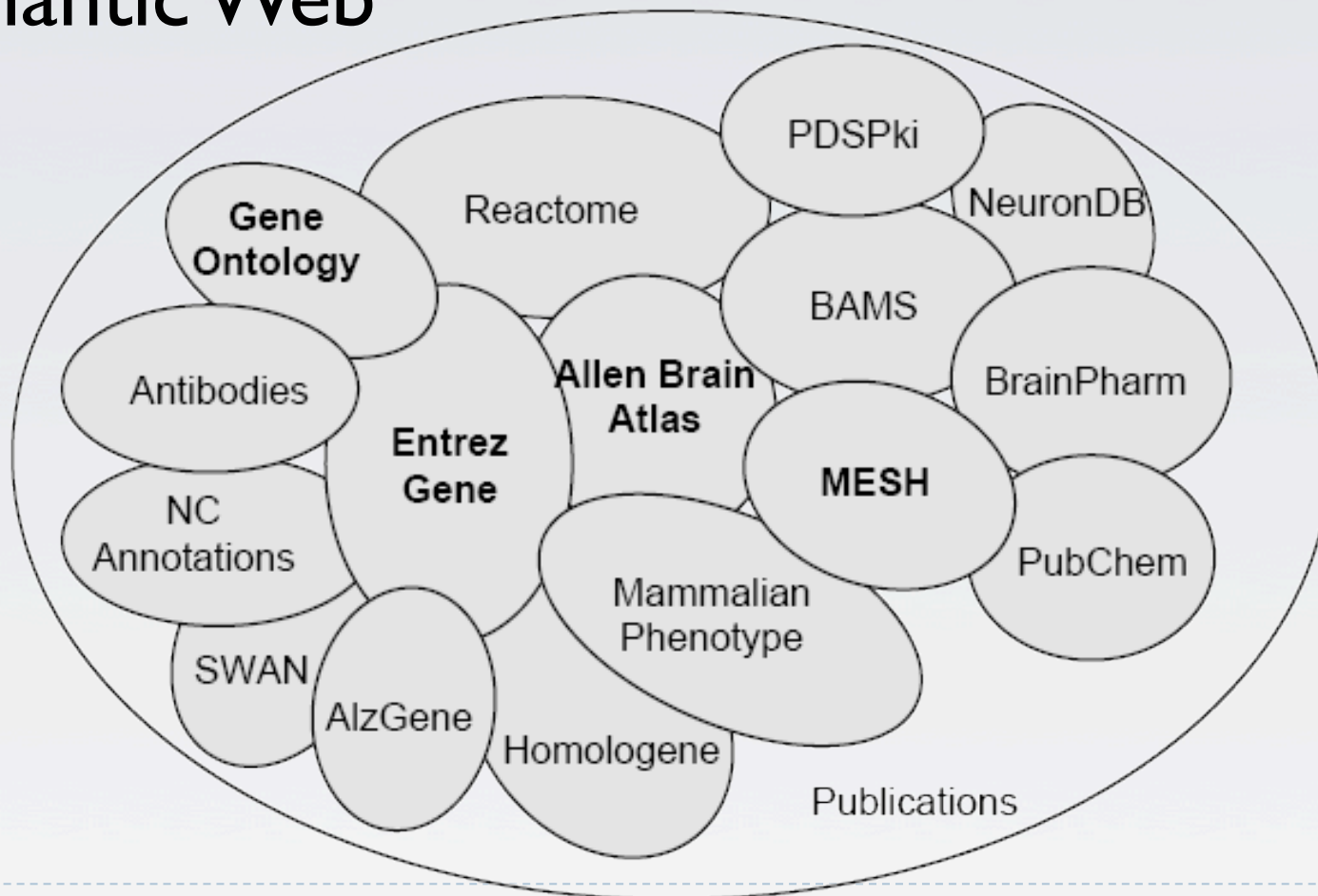
Yielding results to the query...

Many of the genes are indeed related to Alzheimer's Disease through gamma secretase (presenilin) activity

▶	DRD1, 1812	adenylate cyclase activation
▶	ADRB2, 154	adenylate cyclase activation
▶	ADRB2, 154	arrestin mediated desensitization of G-protein coupled receptor protein signaling pathway
▶	DRD1IP, 50632	dopamine receptor signaling pathway
▶	DRD1, 1812	dopamine receptor; adenylate cyclase activating pathway
▶	DRD2, 1813	dopamine receptor; adenylate cyclase inhibiting pathway
▶	GRM7, 2917	G-protein coupled receptor protein signaling pathway
▶	GNG3, 2785	G-protein coupled receptor protein signaling pathway
▶	GNG12, 55970	G-protein coupled receptor protein signaling pathway
▶	DRD2, 1813	G-protein coupled receptor protein signaling pathway
▶	ADRB2, 154	G-protein coupled receptor protein signaling pathway
▶	CALM3, 808	G-protein coupled receptor protein signaling pathway
▶	HTR2A, 3356	G-protein coupled receptor protein signaling pathway
▶	DRD1, 1812	G-protein signaling, coupled to cyclic nucleotide second messenger
▶	SSTR5, 6755	G-protein signaling, coupled to cyclic nucleotide second messenger
▶	MTNR1A, 4543	G-protein signaling, coupled to cyclic nucleotide second messenger
▶	CNR2, 1269	G-protein signaling, coupled to cyclic nucleotide second messenger
▶	HTR6, 3362	G-protein signaling, coupled to cyclic nucleotide second messenger
▶	GRIK2, 2898	glutamate signaling pathway
▶	GRIN1, 2902	glutamate signaling pathway
▶	GRIN2A, 2903	glutamate signaling pathway
▶	GRIN2B, 2904	glutamate signaling pathway
▶	ADAM10, 102	integrin-mediated signaling pathway
▶	GRM7, 2917	negative regulation of adenylate cyclase activity
▶	LRPI, 4035	negative regulation of Wnt receptor signaling pathway
▶	ADAM10, 102	Notch receptor processing
▶	ASCL1, 429	Notch signaling pathway
▶	HTR2A, 3356	serotonin receptor signaling pathway
▶	ADRB2, 154	transmembrane receptor protein tyrosine kinase activation (dimerization)
▶	PTPRG, 5793	transmembrane receptor protein tyrosine kinase signaling pathway
▶	EPHA4, 2043	transmembrane receptor protein tyrosine kinase signaling pathway
▶	NRTN, 4902	transmembrane receptor protein tyrosine kinase signaling pathway
▶	CTNND1, 1500	Wnt receptor signaling pathway

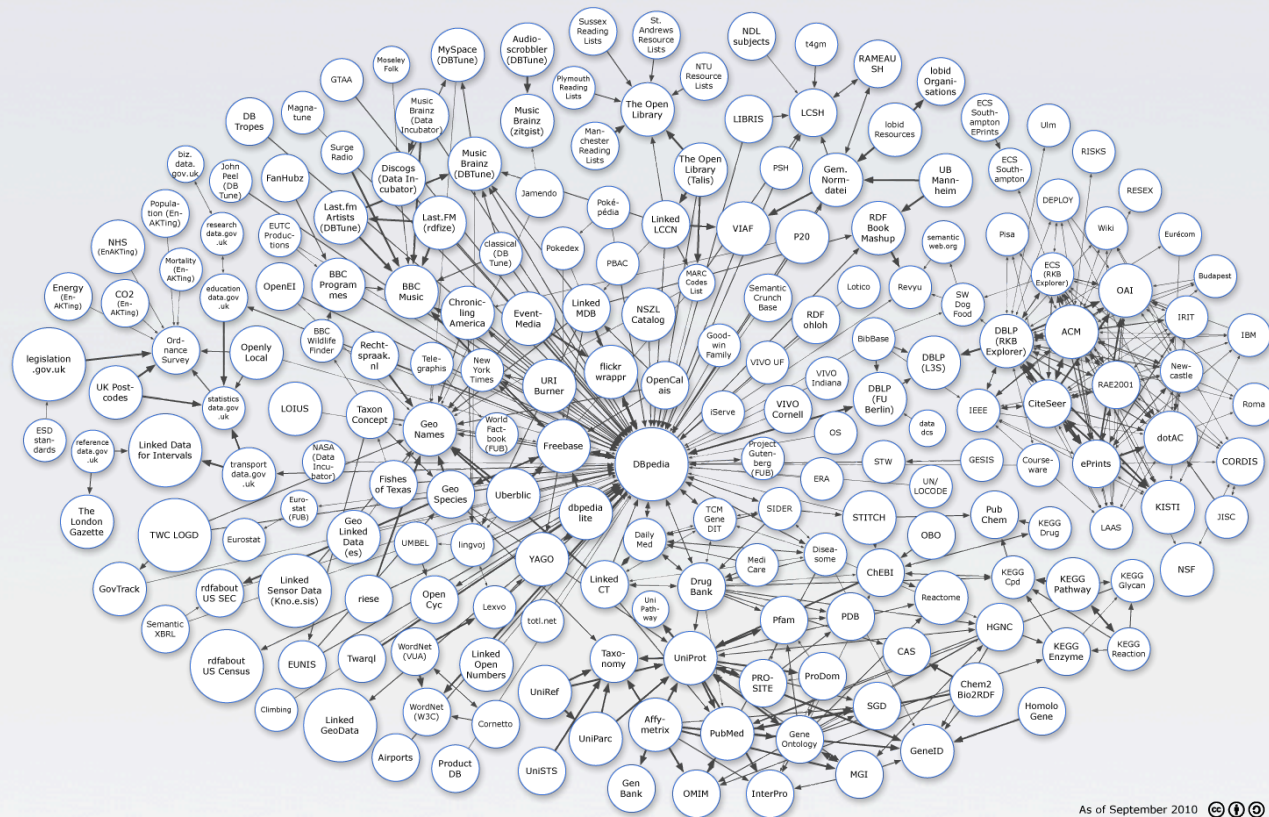
The “core”...

- ▶ The “core” of the HCLS demo was the access and integration of public datasets via the Semantic Web



Linking Open Data Project

- ▶ Goal: “expose” open datasets in RDF
- ▶ Set RDF links among the data items from different datasets
- ▶ Set up SPARQL endpoints
- ▶ Billions of triples, millions of “links”



As of September 2010

Example data source: DBpedia

- ▶ DBpedia is a community effort to
 - ▶ extract structured (“infobox”) information from Wikipedia
 - ▶ provide a SPARQL endpoint to the dataset
 - ▶ interlink the DBpedia dataset with other datasets on the Web



UNIVERSITÄT LEIPZIG



Extracting structured data from Wikipedia

```
@prefix dbpedia <http://dbpedia.org/resource/>.
@prefix dbterm  <http://dbpedia.org/property/>.
```

dbpedia:**Amsterdam**

```
dbterm:officialName "Amsterdam" ;
dbterm:longd  "4" ;
dbterm:longm  "53" ;
dbterm:longs  "32" ;
dbterm:website  <http://www.amsterdam.nl> ;
dbterm:populationUrban  "1364422" ;
dbterm:areaTotalKm  "219" ;
...
```

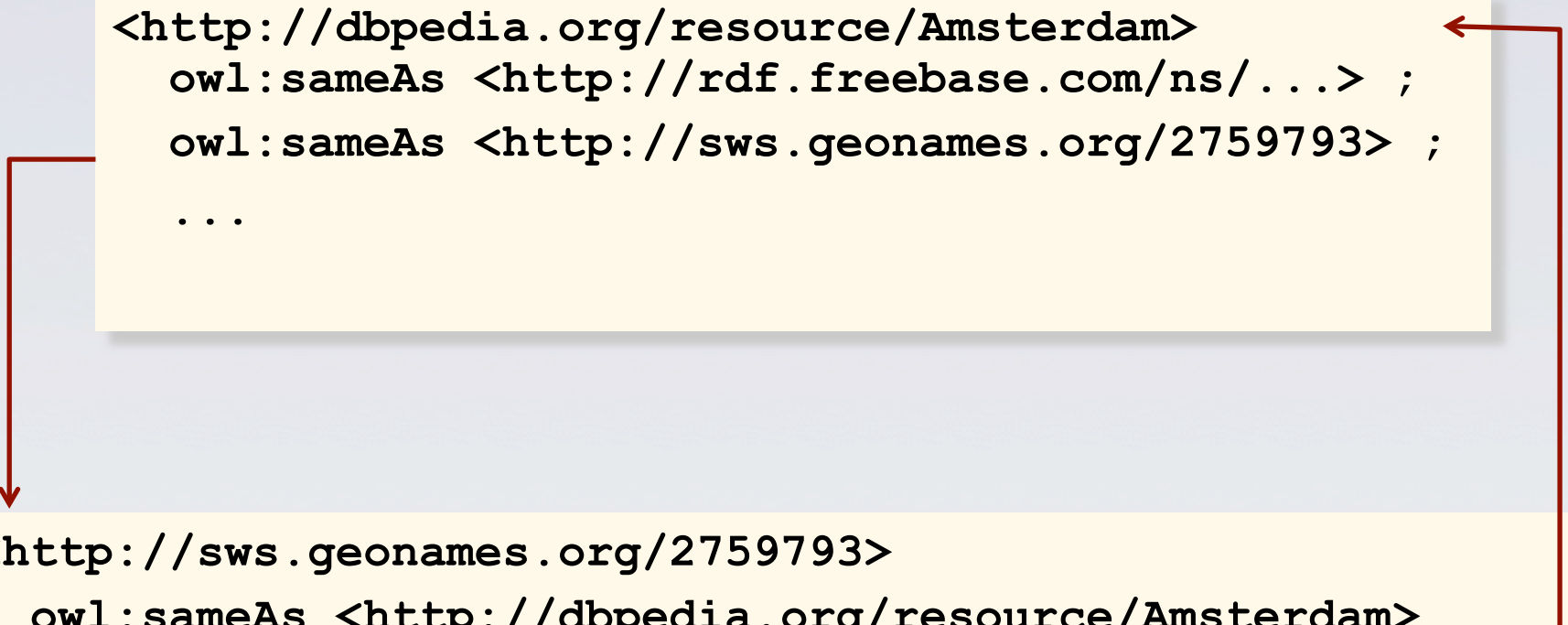
dbpedia:**ABN_AMRO**

```
dbterm:location dbpedia:Amsterdam ;
...
```

Amsterdam	
— Municipality / City —	
	
Coordinates:  52°22′23″N 4°53′32″E	
Country	Netherlands
Province	North Holland
COROP	Amsterdam
Boroughs	Boroughs
Government 	
 - Mayor	Eberhard van der Laan (PvdA)
 - Aldermen	Carolien Gijkiels Hans Gerson Maarten van Poelgeest Freek Ossel Marjke Vos
 - Secretary	Henk de Jong
Area ^{[1][2]}	
 - Municipality / City	219 km ² (84.6 sq mi)
 - Land	166 km ² (64.1 sq mi)
 - Water	53 km ² (20.5 sq mi)
 - Urban	1,003 km ² (387.3 sq mi)
 - Metro	1,815 km ² (700.8 sq mi)
Elevation ^[3]	2 m (7 ft)
Population (June 2009) ^{[4][5]}	
 - Municipality / City	762,057
 - Density	4,459/km ² (11,548.8/sq mi)
 - Urban	1,364,422
 - Metro	2,158,372
 - Demonym	Amsterdammer
Time zone	CET (UTC+01)
 - Summer (DST)	CEST (UTC+02) (UTC)
Postal codes	1011–1109
Area code(s)	020
Website	www.amsterdam.nl 

Automatic links among open datasets

```
<http://dbpedia.org/resource/Amsterdam>  
  owl:sameAs <http://rdf.freebase.com/ns/...> ;  
  owl:sameAs <http://sws.geonames.org/2759793> ;  
  ...
```



```
<http://sws.geonames.org/2759793>  
  owl:sameAs <http://dbpedia.org/resource/Amsterdam>  
  wgs84_pos:lat "52.3666667" ;  
  wgs84_pos:long "4.8833333" ;  
  geo:inCountry <http://www.geonames.org/countries/#NL> ;  
  ...
```

Processors can switch automatically from one to the other...

It is not only for Wikipedia...

The screenshot shows a web browser window with the address bar displaying `zhishi.me/zhwiki/resource/中国`. The page features the Zhishi.me logo and an RDF icon. The main content area displays the resource `zhwiki:中国` with its `foaf:page` and `zhishi:resourceID`. A sidebar on the right lists related resources like `dbpedia:China`, `hudong:中国`, `baidu:中国`, and `zhwiki:中国 (this)`, along with a `MERGE PAGE` button. Below the main heading, there is an `Index` section with links to `zhishi:abstract`, `dcterms:subject`, `zhishi:thumbnail`, `zhishi:internalLink`, and `zhishi:alias`. The `zhishi:abstract` section contains a detailed paragraph about China in Chinese, mentioning its history, geography, and cultural heritage.

zhwiki:中国

foaf:page <http://zh.wikipedia.org/wiki/%E4%B8%AD%E...i/%E4%B8%AD%E5%9B%BD>
zhishi:resourceID 263

Index

- `zhishi:abstract`
- `dcterms:subject`
- `zhishi:thumbnail`
- `zhishi:internalLink`
- `zhishi:alias`

zhishi:abstract

中国（汉语拼音：）是位于亚洲东部的一个广大地域或国度，也是世界上最古老的文明之一，对周边国家和民族的文化产生深远影响。历史上的中国版图最大之时不仅包括了今天的大中华地区，在不同的历史时期还包括越南中北部、缅甸东北部、克什米尔一部、朝鲜半岛北部、外蒙古，以及中亚、西亚和西伯利亚的部分地区。居于中国疆域内的各个民族统称为中华民族，亦称“中国人”或“华人”、“华族”，移居境外的华人多被称为“海外华人”。汉族是中国人口最多，地域分布最广的民族。在少数民族当中，人口过500万（2000年人口普查）的有壮、满、回、苗、维吾尔、彝、土家、蒙古和藏等9大民族。根据中华人民共和国国家统计局《人口普查公报》、参考中华民国行政院主计处登载有关资料推算，通用汉语，少数民族地区往往使用各民族自己的语言。中国的传统艺术形式有国乐、戏曲、书法和国画等，传统娱乐活动有象棋、围棋和麻将等。中国的格斗术武术举

Accessing the cloud

- ▶ Applications can access the data directly (via the URI-s)
- ▶ There are several “instantiations” of part of the cloud that user can access
 - ▶ these store copies of several “blobs”
 - ▶ possibly with some inferred triples based on, eg, OWL
 - ▶ often offering a SPARQL endpoint to query to cloud

Example for cloud exploration

Linked Data Semantic Repository

http://ldsr.ontotext.com/resource/dbpedia/Amsterdam

Netvibes Feedly Social Private Mailing lists SW Python RDFa it! Bookmarkslets Add Zemanta bit.ly To Mendeley TinyURL To Faviki

LDSR ^{Beta} RDF Search and Explore SPARQL Query About Contact

Amsterdam RDF Rank

Amsterdam is the capital and largest city of the Netherlands, located in the province of North Holland in the west of the country. The city, which had a population of 1...

Source: <http://dbpedia.org/resource/Amsterdam>

Same as: <fb:guid.9202a8c04000641f8000000000004475>, <http://sws.geonames.org/2759793/>, <yago:Amsterdam>, <umbel-en:Amsterdam>, <http://sws.geonames.org/2759794/>, yago:VOC_ship_Amsterdam, dbpedia:VOC_ship_Amsterdam

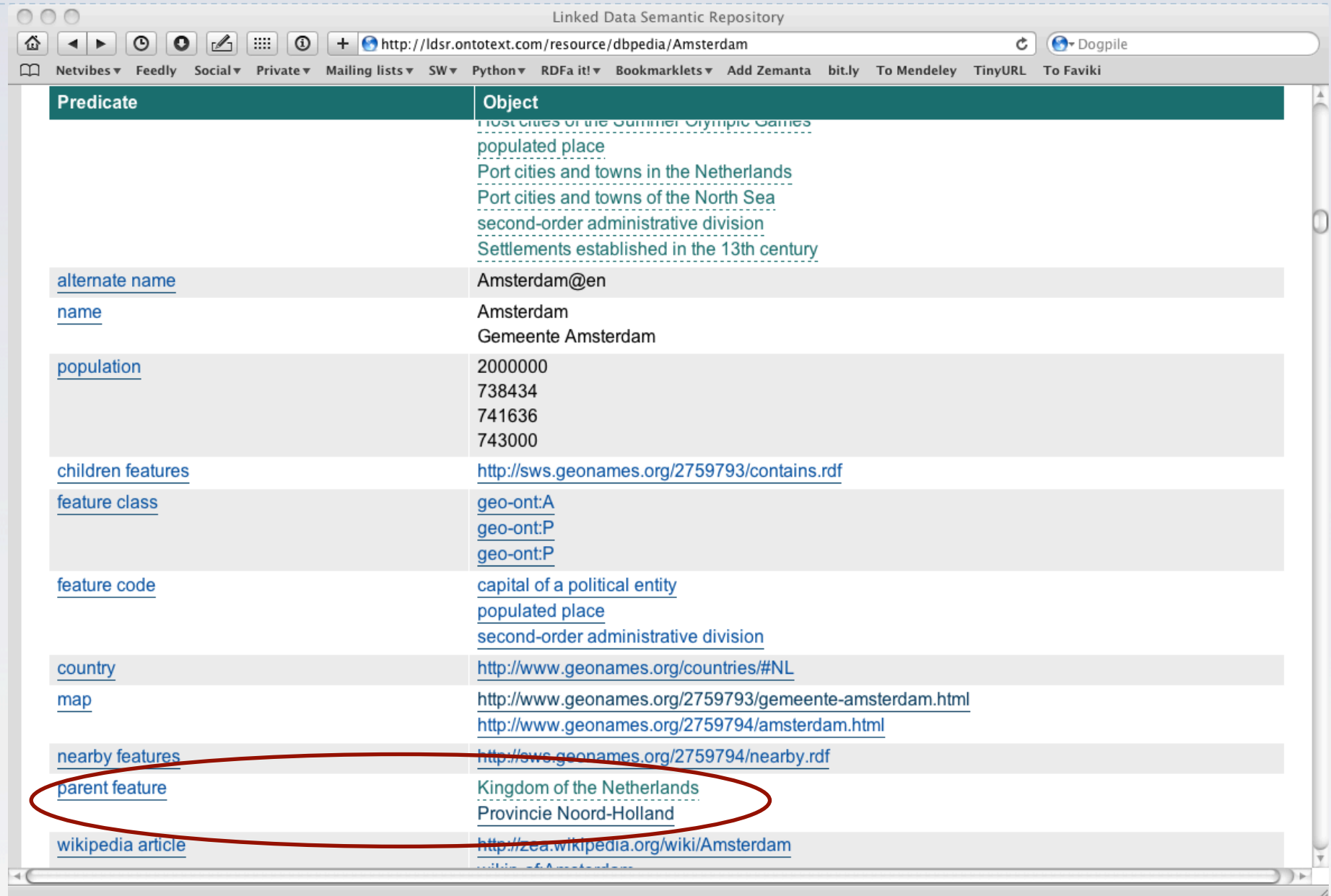
RDF Search and Explore:

Subject (100 of 3140) Predicate Object All View as [Graph](#) | [Tabulator](#) Download in [JSON](#) | [RDF](#) | [Turtle](#) | [N3](#) | [NTriples](#)

Statements in which the resource exists as a subject. Named Graph: All Locale: English Inference: Explicit and implicit

Predicate	Object
rdf:type	Agent
	Agent, generic
	Agent, generic
	Agent, partially tangible
	Area
	Boundary, underspecified
	Capital city of region
	Capital city of region
	City
	City
	Enduring thing, localized
	Feature
	geo-pos:Point
	geo-pos:SpatialThing
	Geographical agent
	Geographical place

Example for cloud exploration



Linked Data Semantic Repository

http://ldsr.ontotext.com/resource/dbpedia/Amsterdam

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Predicate	Object
	Host cities of the Summer Olympic Games populated place Port cities and towns in the Netherlands Port cities and towns of the North Sea second-order administrative division Settlements established in the 13th century
alternate name	Amsterdam@en
name	Amsterdam Gemeente Amsterdam
population	2000000 738434 741636 743000
children features	http://sws.geonames.org/2759793/contains.rdf
feature class	geo-ont:A geo-ont:P geo-ont:P
feature code	capital of a political entity populated place second-order administrative division
country	http://www.geonames.org/countries/#NL
map	http://www.geonames.org/2759793/gemeente-amsterdam.html http://www.geonames.org/2759794/amsterdam.html
nearby features	http://sws.geonames.org/2759794/nearby.rdf
parent feature	Kingdom of the Netherlands Provincie Noord-Holland
wikipedia article	http://zea.wikipedia.org/wiki/Amsterdam

Example for cloud exploration

Linked Data Semantic Repository

http://ldsr.ontotext.com/resource/http%3A%252F%252Fsws%252Egeonames%252Eorg%252F2749879%252F

Netvibes Feedly Social Private Mailing lists SW Python RDFa it! Bookmarks Add Zemanta bit.ly To Mendeley TinyURL To Faviki

LDSR ^{Beta} RDF Search and Explore | SPARQL Query | About | Contact

Provincie Noord-Holland RDF Rank

4.9166667 North Holland 52 <http://sws.geonames.org/2749879/> d Северная Голландия Hollande-Septentrionale Nord-Holland Noord-Holland 2498931 Noord-Holland /
Source: <http://sws.geonames.org/2749879/>

RDF Search and Explore:

Subject (29) Predicate Object All View as [Graph](#) | [Tabulator](#) Download in [JSON](#) | [RDF](#) | [Turtle](#) | [N3](#) | [NTriples](#)

Statements in which the resource exists as a subject. Named Graph: Locale: Inference:

Predicate	Object
rdf:type	Boundary, underspecified Feature geo-pos:SpatialThing Location, underspecified Location, underspecified Region, underspecified Region, underspecified Resource Spatial thing, localized Thing
has subject	first-order administrative division geo-ont:A
Subject	first-order administrative division geo-ont:A
alternate name	Noord-Holland North Holland@en
name	Provincie Noord-Holland

Go to "http://ldsr.ontotext.com/resource/http%3A%252F%252Fsws%252Egeonames%252Eorg%252F2749879%252F"


Example for cloud exploration

Linked Data Semantic Repository

http://ldsr.ontotext.com/resource/dbpedia/Amsterdam?role=object Loading... X Dogpile

Netvibes Feedy Social Private Mailing lists SW Python RDFa it! Bookmarks Add Zemanta bit.ly To Mendeley TinyURL To Faviki

LDSR ^{Beta} RDF Search and Explore | SPARQL Query | About | Contact

 **Amsterdam** RDF Rank

Amsterdam is the capital and largest city of the Netherlands, located in the province of North Holland in the west of the country. The city, which had a population of 1...

Source: <http://dbpedia.org/resource/Amsterdam>

Same as: <fb:guid.9202a8c04000641f8000000000004475>, <http://sws.geonames.org/2759793/>, <yago:Amsterdam>, <umbel-en:Amsterdam>, <http://sws.geonames.org/2759794/>, yago:VOC_ship_Amsterdam, dbpedia:VOC_ship_Amsterdam

RDF Search and Explore:

Subject Predicate **Object (100 of 1)** All

View as [Graph](#) | [Tabulator](#) Download in [JSON](#) | [RDF](#) | [Turtle](#) | [N3](#) | [NTriples](#)

Statements in which the resource exists as an object. Named Graph: Locale: Inference:

Subject	Predicate
Amsterdam	same as
Amsterdam	
Amsterdam	
Amsterdam	
Amsterdam	
Amsterdam	
Amsterdam	
Amsterdam	
Amsterdam	
http://upload.wikimedia.org/wikipedia/commons/6/6a/Sights_in_Amsterdam2.jpg	depicts
http://bat-smg.wikipedia.org/wiki/Amsterdams	topic
http://be-x-old.wikipedia.org/wiki/Амстэрдам	
http://www.amsterdam.nl	
http://www.amsterdam.nl/	
http://zh-yue.wikipedia.org/wiki/阿姆斯特丹	
http://en.wikipedia.org/wiki/Amsterdam	

Loading "http://ldsr.ontotext.com/resource/dbpedia/Amsterdam?role=object", completed 2 of 3 items

Example for cloud exploration

Linked Data Semantic Repository

http://ldsr.ontotext.com/resource/dbpedia/Amsterdam?role=object

Netvibes Feedy Social Private Mailing lists SW Python RDFa it! Bookmarklets Add Zemanta bit.ly To Mendeley TinyURL To Faviki

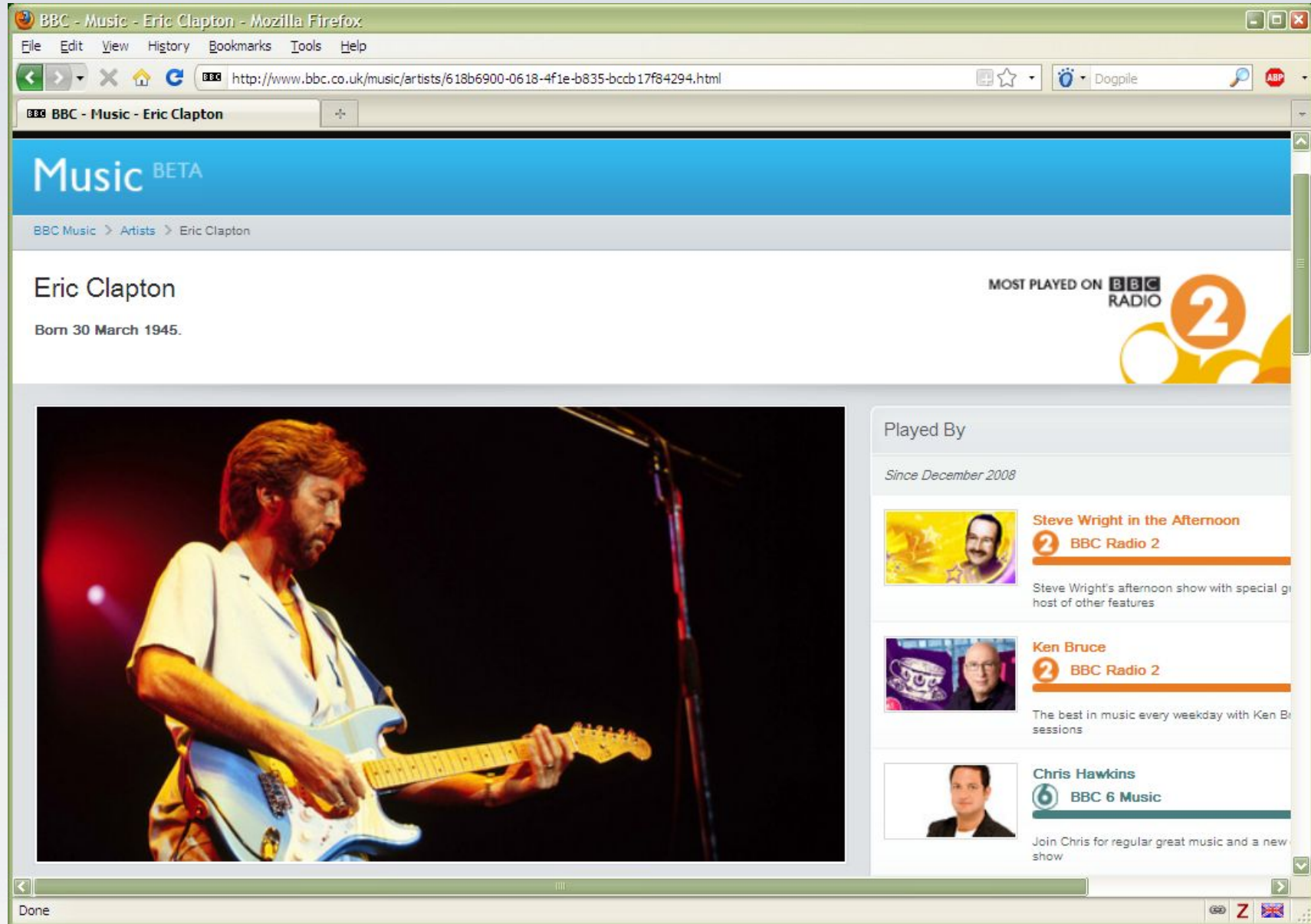
Subject	Predicate
Settlements established in the 13th century	
Kingdom of the Netherlands	capital
Netherlands	
Netherlands	
Netherlands	
Netherlands	
Kingdom of the Netherlands	capital
Netherlands	
Netherlands	
Netherlands	
Netherlands	
A-Film Distribution B.V.	location
ABN AMRO Holding N.V.	
Akzo Nobel N.V.	
Amsterdamse Trade Bank N.V.	
APX B.V.	
Armada Music	
Barlaeus Gymnasium	
Bugaboo International B.V.	
Celtel	
Central European Media Enterprises Ltd.	
CNH Global N.V.	
Commodore Gaming BV	
Corporate Express N.V.	
dance4life	
De Bijenkorf	
De Meer Stadion	
Delta Lloyd Groep N.V.	

Linking Open Data Project (cont)

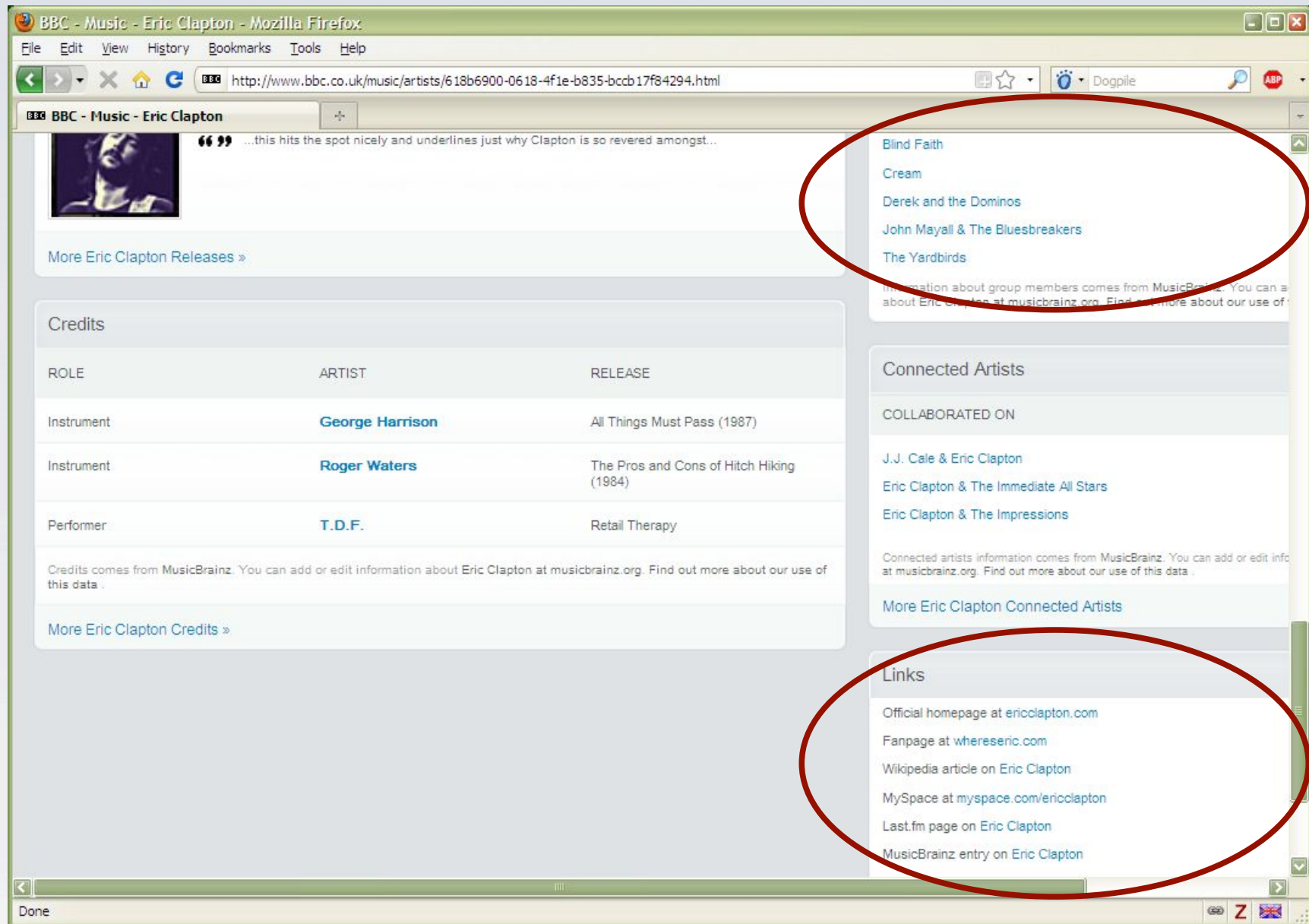
- ▶ This is a major community project
 - ▶ anybody can participate; to subscribe to the list:
 - ▶ <http://lists.w3.org/Archives/public/public-lod/>
 - ▶ or look at the project site:
 - ▶ <http://esw.w3.org/topic/SweolG/TaskForces/CommunityProjects/LinkingOpenData>
 - ▶ if you know of open data sets: contact the project to incorporate it with the rest!
- ▶ Applications using this set of data in real-life setting are coming up



Using the LOD to build Web site: BBC



Using the LOD to build Web site: BBC



The screenshot shows the BBC Music website for Eric Clapton. The page is viewed in a Mozilla Firefox browser window. The URL in the address bar is <http://www.bbc.co.uk/music/artists/618b6900-0618-4f1e-b835-bccb17f84294.html>. The page features a header with the BBC logo and the title "BBC - Music - Eric Clapton". Below the header, there is a quote: "...this hits the spot nicely and underlines just why Clapton is so revered amongst...". A small image of Eric Clapton is shown next to the quote. Below the quote, there is a link "More Eric Clapton Releases »".

The "Credits" section is a table with three columns: ROLE, ARTIST, and RELEASE.

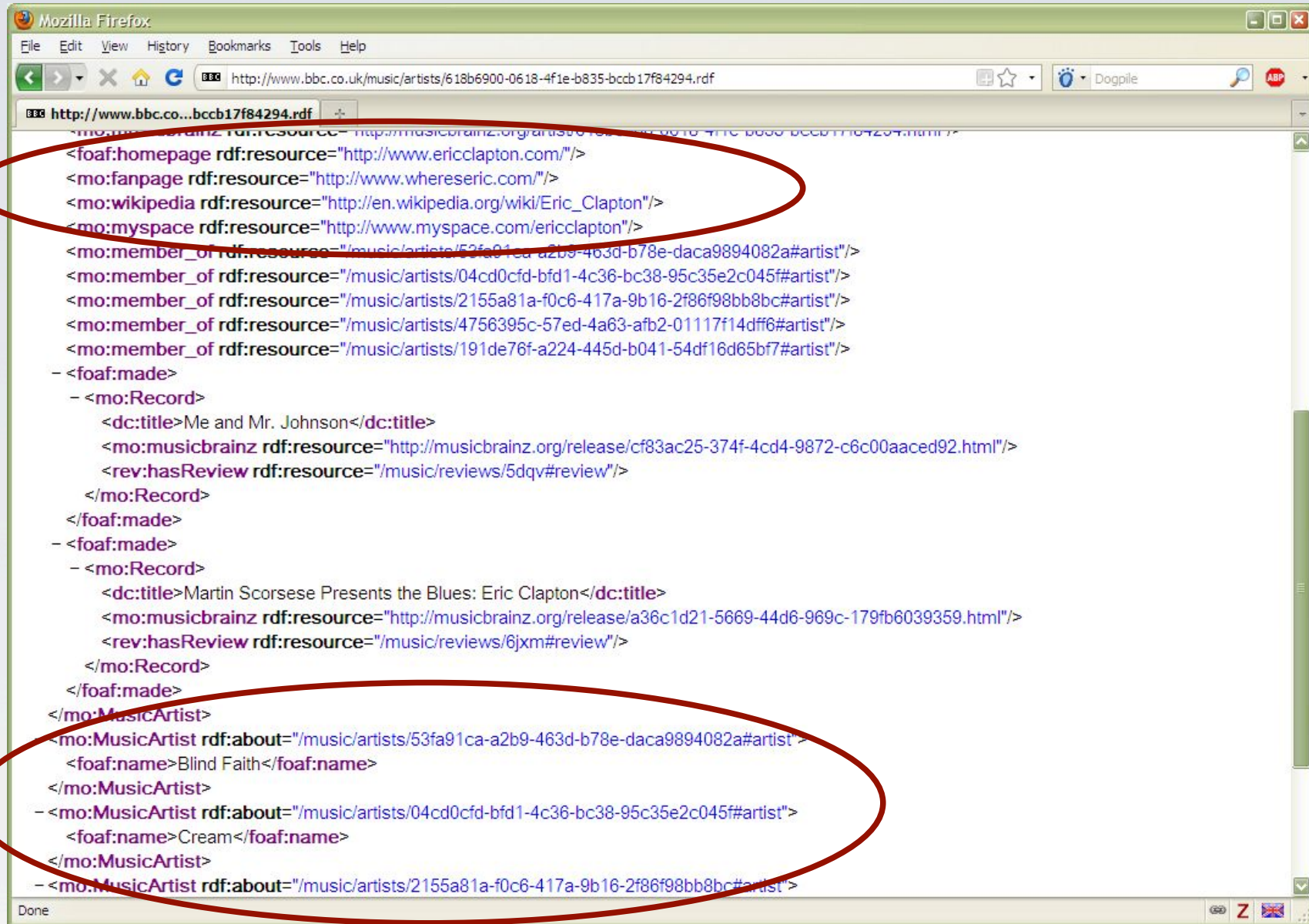
ROLE	ARTIST	RELEASE
Instrument	George Harrison	All Things Must Pass (1987)
Instrument	Roger Waters	The Pros and Cons of Hitch Hiking (1984)
Performer	T.D.F.	Retail Therapy

Below the table, there is a note: "Credits comes from MusicBrainz. You can add or edit information about Eric Clapton at musicbrainz.org. Find out more about our use of this data." and a link "More Eric Clapton Credits »".

The "Connected Artists" section is titled "Connected Artists" and "COLLABORATED ON". It lists the following artists: J.J. Cale & Eric Clapton, Eric Clapton & The Immediate All Stars, and Eric Clapton & The Impressions. Below the list, there is a note: "Connected artists information comes from MusicBrainz. You can add or edit info at musicbrainz.org. Find out more about our use of this data." and a link "More Eric Clapton Connected Artists".

The "Links" section is titled "Links" and lists the following links: Official homepage at ericclapton.com, Fanpage at whereseric.com, Wikipedia article on [Eric Clapton](#), MySpace at myspace.com/ericclapton, Last.fm page on [Eric Clapton](#), and MusicBrainz entry on [Eric Clapton](#).

Using the LOD to build Web site: BBC



```
http://www.bbc.co.uk/music/artists/618b6900-0618-4f1e-b835-bccb17f84294.rdf
http://www.bbc.co.uk/music/artists/618b6900-0618-4f1e-b835-bccb17f84294.rdf
<foaf:homepage rdf:resource="http://www.ericclapton.com"/>
<mo:fanpage rdf:resource="http://www.whereseric.com"/>
<mo:wikipedia rdf:resource="http://en.wikipedia.org/wiki/Eric_Clapton"/>
<mo:myspace rdf:resource="http://www.myspace.com/ericclapton"/>
<mo:member_of rdf:resource="/music/artists/53fa91ca-a2b9-463d-b78e-daca9894082a#artist"/>
<mo:member_of rdf:resource="/music/artists/04cd0cfd-bfd1-4c36-bc38-95c35e2c045f#artist"/>
<mo:member_of rdf:resource="/music/artists/2155a81a-f0c6-417a-9b16-2f86f98bb8bc#artist"/>
<mo:member_of rdf:resource="/music/artists/4756395c-57ed-4a63-afb2-01117f14dff6#artist"/>
<mo:member_of rdf:resource="/music/artists/191de76f-a224-445d-b041-54df16d65bf7#artist"/>
- <foaf:made>
- <mo:Record>
  <dc:title>Me and Mr. Johnson</dc:title>
  <mo:musicbrainz rdf:resource="http://musicbrainz.org/release/cf83ac25-374f-4cd4-9872-c6c00aaced92.html"/>
  <rev:hasReview rdf:resource="/music/reviews/5dqy#review"/>
</mo:Record>
</foaf:made>
- <foaf:made>
- <mo:Record>
  <dc:title>Martin Scorsese Presents the Blues: Eric Clapton</dc:title>
  <mo:musicbrainz rdf:resource="http://musicbrainz.org/release/a36c1d21-5669-44d6-969c-179fb6039359.html"/>
  <rev:hasReview rdf:resource="/music/reviews/6jxm#review"/>
</mo:Record>
</foaf:made>
</mo:MusicArtist>
<mo:MusicArtist rdf:about="/music/artists/53fa91ca-a2b9-463d-b78e-daca9894082a#artist">
  <foaf:name>Blind Faith</foaf:name>
</mo:MusicArtist>
- <mo:MusicArtist rdf:about="/music/artists/04cd0cfd-bfd1-4c36-bc38-95c35e2c045f#artist">
  <foaf:name>Cream</foaf:name>
</mo:MusicArtist>
- <mo:MusicArtist rdf:about="/music/artists/2155a81a-f0c6-417a-9b16-2f86f98bb8bc#artist">
```

Feedback



51

Same dataset, another site

Feedback

Eric Clapton – seevl.net

http://seevl.net/entity/QwznaqLQ

Bing

TR 2011 Read it later▼ To...▼ Social▼ Private▼ Mailing lists▼ Python▼ SW▼ RDFa it!▼ Bookmarklets▼ Wolfram

seevl

REINVENTING MUSIC DISCOVERY

about / blog / FAQ / jobs / dev zone


Semantic search

Eric Clapton

Like

Tweet 0


Share 0




Eric Patrick Clapton, CBE (born 30 March 1945) is an English guitarist, vocalist, and songwriter. Clapton is the only three-time inductee to the Rock and Roll Hall of Fame: once as a solo artist, ...

[read more](#)

Videos



powered by 

Fact sheet

Birth(s): 1945-03-30

Birth place(s): England
Ripley, Surrey

Related bands and artists

George Harrison

[Show the relations !](#)

- Both have been signed on the same **label**: [Apple Records](#)
- Both **collaborated with**: [Jim Gordon](#)
- Both have similar **topic**:
 - [1980s singers](#)
 - [1960s singers](#)
 - [Grammy Award winners](#)
 - [Slide guitarists](#)
 - [1970s singers](#)
 - [English rock guitarists](#)
 - [2000s singers](#)
 - [Rock and Roll Hall of Fame inductees](#)
 - [1990s singers](#)
 - [English singer-songwriters](#)
 - [English male singers](#)
 - [Lead guitarists](#)
- Both play the same **genre**:
 - [Singing](#)
 - [Rock music](#)
 - [Psychedelic rock](#)
- Both play the same **instrument**:
 - [Guitar](#)
 - [Fender Stratocaster](#)
 - [Slide guitar](#)
 - [Gibson Les Paul](#)

Loading "http://seevl.net/entity/QwznaqLQ", completed 26 of 27 items

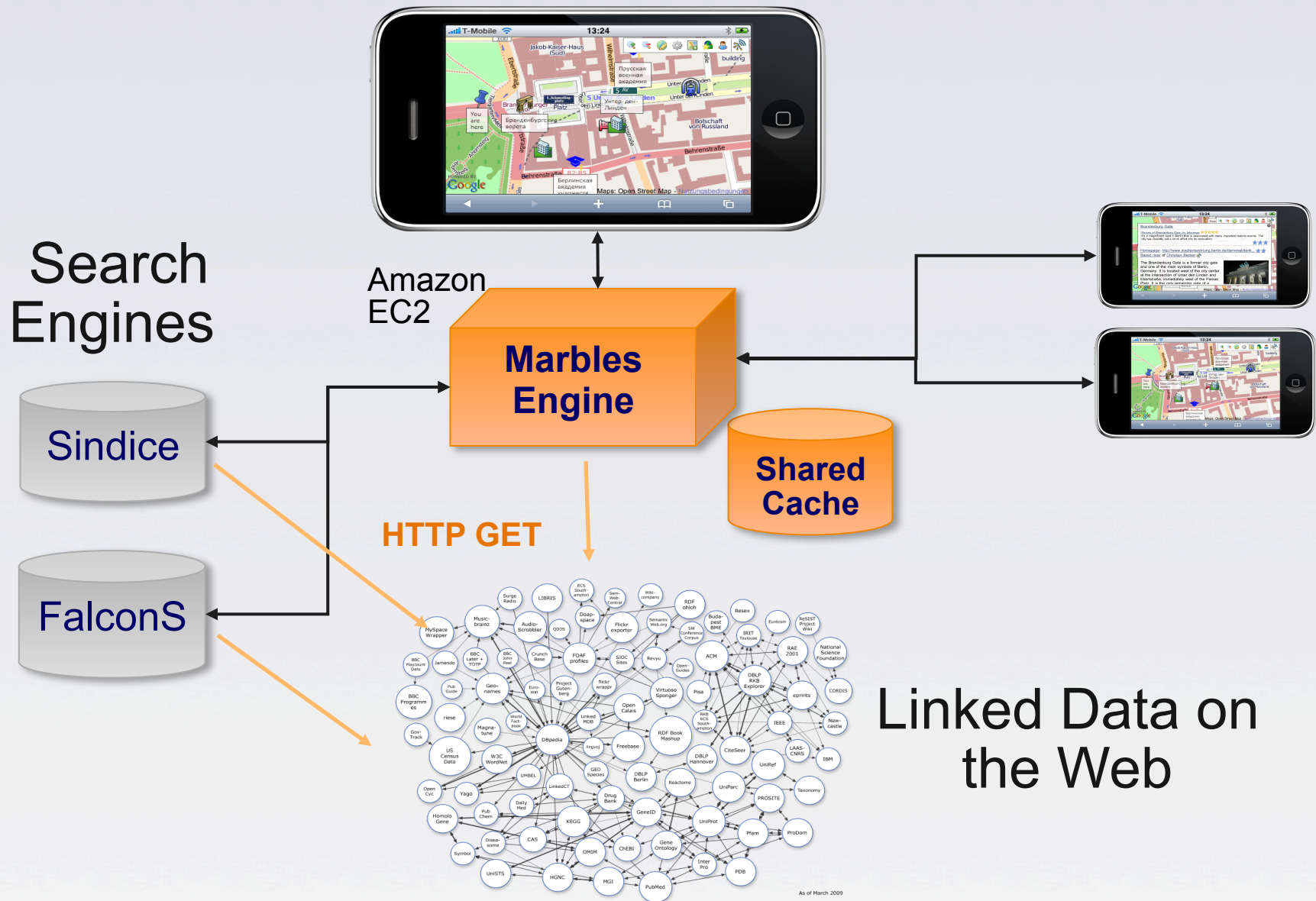
Using the LOD cloud on an iPhone



Using the LOD cloud on an iPhone



Using the LOD cloud on an iPhone



NYT articles on university alumni

Who Went Where

Hirek Social Private Mailing lists SW Python RDFa it! Bookmarklets bit.ly To Mendeley TinyURL To Faviki Dokuwiki MID

Who Went Where

The New York Times

Linked Open Data BETA

[View Application Source](#)

Alumni In The News

Enter a school name below and see our coverage of that school's alumni.

Harvard University

Henry Kissinger
Born: May 27, 1923

Henry Kissinger Is Released From Hospital in South Korea - March 15, 2010
Got Your Back - July 19, 2009
SPORTS OF THE TIMES; Kissinger's Soccer Diplomacy - March 31, 2009
THE TV WATCH; A Question Reprised, but the Words Come None Too Easily for Palin - September 26, 2008
OP-ED COLUMNIST; Park Avenue Diplomacy - September 24, 2008
Palin Will Meet With Kissinger and Foreign Leaders - September 22, 2008
Using Star Power to Repair Nigeria's Image - July 10, 2008
OP-ED CONTRIBUTOR; Listening to Compromise - July 08, 2008
EDITORIAL OBSERVER; Thinking the Unthinkable: A World Without Nuclear Weapons - June 30, 2008
ON THE WHITE HOUSE; One Trip, Dual Purposes - April 27, 2008

Jacques Chirac
Born: November 29, 1932

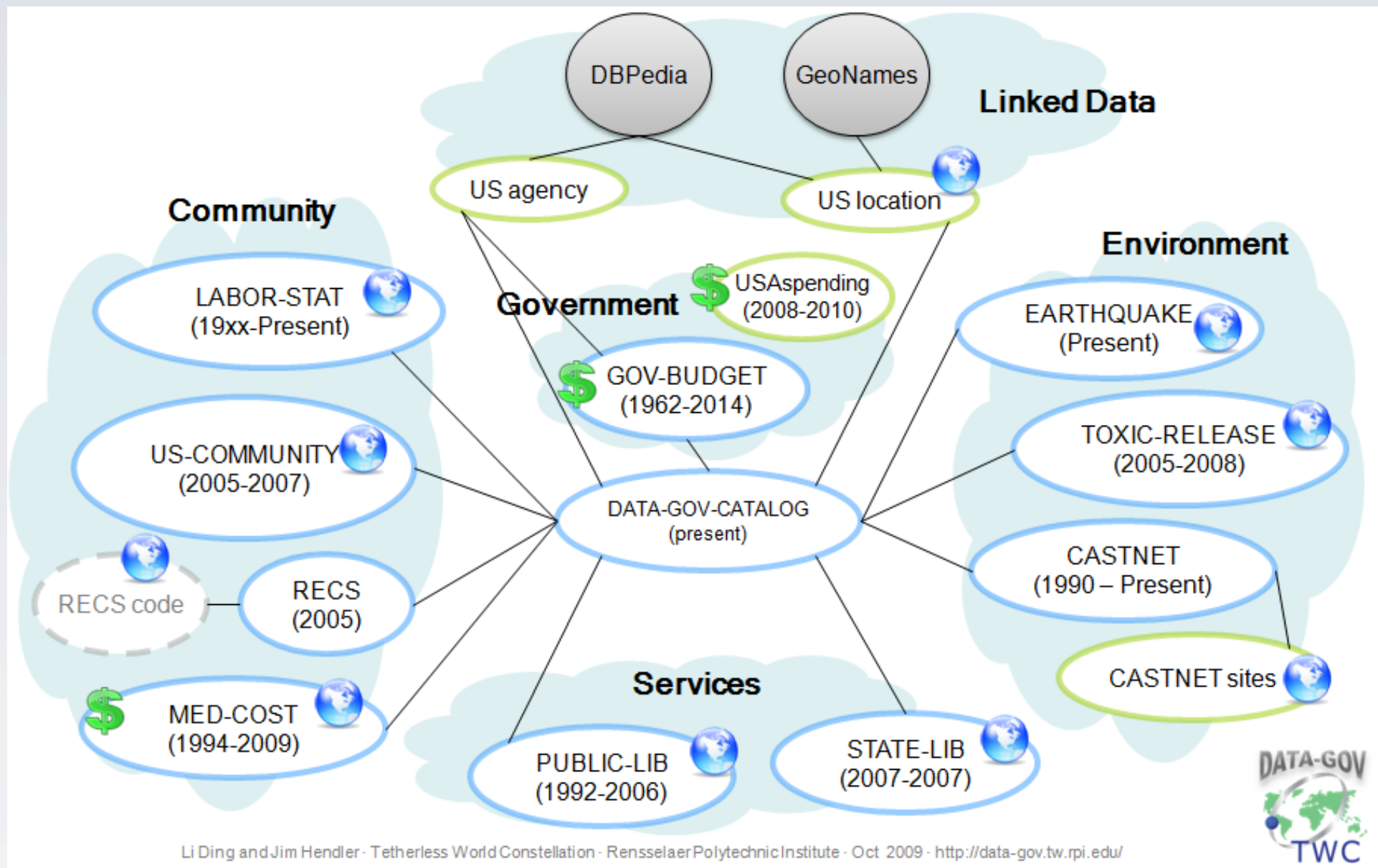
Chirac Faces New Inquiry On Charges Of Corruption - December 19, 2009
Ex-Leader Of France Faces Trial - October 31, 2009
French Power Elite Face a Fall From Grace - October 28, 2009
French President Raises Eyebrows With Remark on a Contentious Political Trial - September 25, 2009
INSIDE EUROPE; Order to Pay Back Farm Subsidies Comes at a Bad Time for France - August 11, 2009
WORLD BRIEFING | EUROPE; France: Chirac Creates Foundation - June 10, 2008
Putin Maintains Presidential Air in Paris Trip - May 31, 2008
A Statesman Without Borders - February 03, 2008
Chirac Under Investigation for Misuse of Funds as Paris Mayor - November 22, 2007
Correction: For the Record - November 05, 2007

Kennedy, John Fitzgerald
Born: May 29, 1917

ESSAY; The Making of the President, Then and Now - March 21, 2010
Lost in Time, Letters Capture American Grief For a President - March 09, 2010

Done

Linked Open eGov Data



You publish the raw data...

Browser window showing the Data.gov website. The address bar displays "Data.gov" and the URL "http://www.data.gov/". The page features a navigation menu with links: HOME, DATA, TOOLS, COMMUNITY, METRICS, and DIALOGUE. The main content area includes a large banner with the text "LINKING OPEN GOVERNMENT DATA" and a "VIEW MORE" button. To the right, a section titled "Most Popular Datasets" lists five datasets: 1. Worldwide M1+ Earthquakes, Past 7 Days; 2. U.S. Overseas Loans and Grants (Greenbook); 3. Latest Volumes of Foreign Relations of the...; 4. MyPyramid Food Raw Data; 5. (SUPERSEDED) 1:2,000,000-scale Hydrologic... Below this is a search bar labeled "SEARCH OUR CATALOGS" with a "SEARCH" button. The page is divided into three columns: APPS, COMMUNITY, and SEMANTIC WEB. The APPS column shows a map of the United States with green dots representing data points. The COMMUNITY column contains text about democratizing public sector data and driving innovation. The SEMANTIC WEB column discusses the evolution of the Web of linked documents and the potential of Semantic Web technologies.

DATA.gov
EMPOWERING PEOPLE

HOME DATA TOOLS COMMUNITY METRICS DIALOGUE

LINKING OPEN GOVERNMENT DATA

VIEW MORE

Most Popular Datasets

1. Worldwide M1+ Earthquakes, Past 7 Days
2. U.S. Overseas Loans and Grants (Greenbook)
3. Latest Volumes of Foreign Relations of the...
4. MyPyramid Food Raw Data
5. (SUPERSEDED) 1:2,000,000-scale Hydrologic...

SEARCH OUR CATALOGS

Search our catalogs.. SEARCH

APPS

COMMUNITY

SEMANTIC WEB

With so much government data to work with, developers are creating a wide variety of applications, mashups, and visualizations. From crime statistics by neighborhood to the best towns to find a job to seeing the environmental health of your community—these applications arm citizens with the information they need to

Data.gov is leading the way in democratizing public sector data and driving innovation. The data is being surfaced from many locations making the Government data stores available to researchers to perform their own analysis. Developers are finding good uses for the datasets, providing interesting and useful applications that allow for new views and public analysis. This is a work in progress, but this movement is spreading to cities, states, and other countries. After just one year a community is born around open government data.

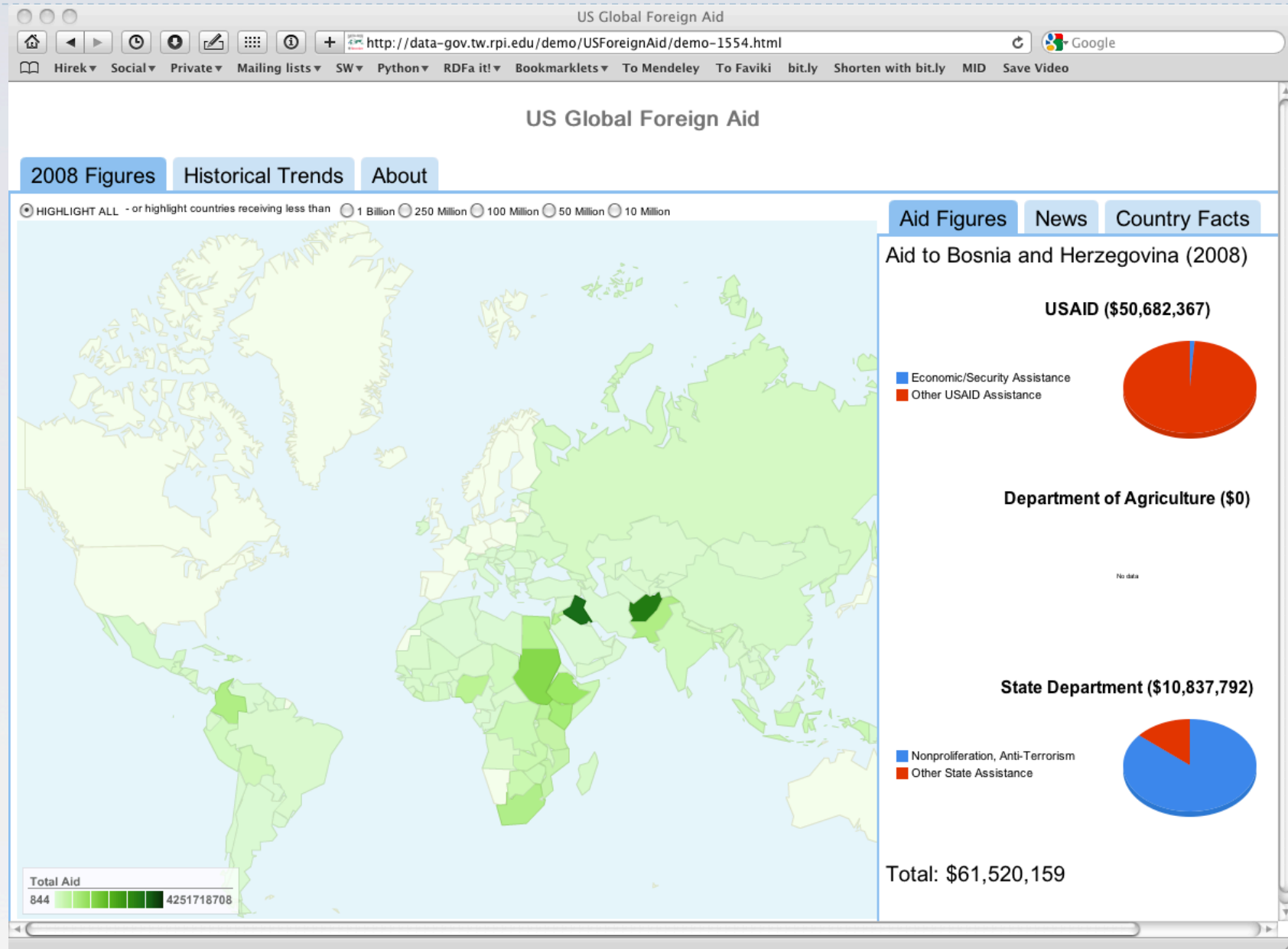
Just look at the numbers:

- 6 Other nations establishing open data
- 8 States now offering data sites

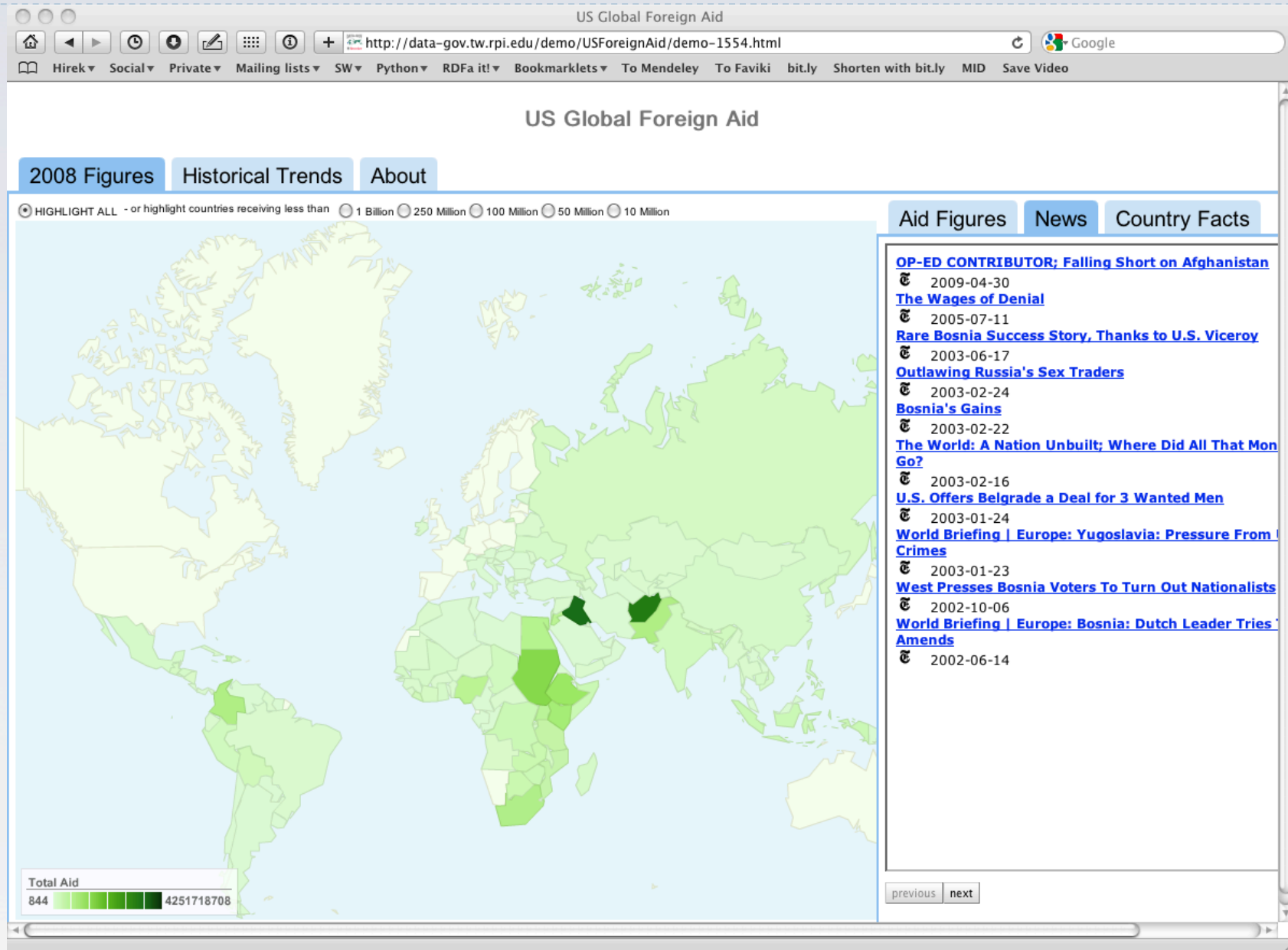
As the Web of linked documents evolves to include the Web of linked data, we're working to maximize the potential of Semantic Web technologies to realize the promise of Linked Open Government Data.

Thanks to our collaboration with the **Tetherless World Constellation** at the **Rensselaer Polytechnic Institute**, Data.gov is now hosting one of the largest open collections of RDF datasets in the world! Check out some of their

... and others can use it



... and others can use it



Another eGov data set

The screenshot shows the data.gov.uk website in a web browser. The browser's address bar displays 'http://data.gov.uk/'. The website header includes the HM Government logo and the text 'data.gov.uk'. A navigation bar contains links for Home, Blog, Data, SPARQL, Apps, Ideas, Forum, Wiki, Resources, and About. A search bar is located on the right side of the navigation bar. The main content area features a large banner with the text 'Unlocking innovation' and 'Working with UK Public Sector information and data', accompanied by a blue molecular structure graphic. Below the banner, there is a paragraph of text about the site's purpose and a 'User login' section with fields for Username and Password, and a 'Log In' button. To the right of the login section is a 'Subscribe by RSS' button and a 'SHARE' button with social media icons. At the bottom, there are sections for 'Search Data' (with a search bar and 'Search' button), 'Browse for Data' (with links for 'List all datasets' and 'Common tags'), and 'Most Recent Apps' (with a 'View all apps +' link). A sidebar on the right contains a section titled 'What is the Semantic Web?' with a brief explanation and a 'Read more' button.

Unlocking innovation | data.gov.uk

http://data.gov.uk/

Netvibes Feedly Social Private Mailing lists SW Python RDFa it! Bookmarklets Add Zemanta bit.ly To Mendeley TinyURL To Faviki

HM Government data.gov.uk

Home Blog Data SPARQL Apps Ideas Forum Wiki Resources About

Unlocking innovation

Working with UK Public Sector information and data

Advised by Sir Tim Berners-Lee and Professor Nigel Shadbolt and others, government are opening up data for reuse. This site seeks to give a way into the wealth of government data and is under constant development. We want to work with you to make it better.

We're very aware that there are more people like you outside of government who have the skills and abilities to make wonderful things out of public data. These are our first steps in building a collaborative relationship with you.

Search Data

Enter keyword(s)

e.g. education, NHS, crime, transport, environment

Powered by: CKAN

Browse for Data

[List all datasets](#)

[Common tags](#)




User login

Username:

Password:

[Request new password](#)

Subscribe by RSS

SHARE   

What is the Semantic Web?

Combining different data sources has never been easy but the Semantic Web will enable data to be joined easily across boundaries.

Most Recent Apps [View all apps +](#)

A nice usage of uk government data

[Data.gov.uk Newspaper](#) | [Newspaper Club](#)

[http://blog.newspaperclub.co.uk/2009/10/16/data-gov-uk-newspaper/](#)
[RSS](#)
[Dogpile](#)

[Netvibes](#)
[Feedly](#)
[Social](#)
[Private](#)
[Mailing lists](#)
[SW](#)
[Python](#)
[RdFa it!](#)
[Bookmarklets](#)
[Add Zemanta](#)
[bit.ly](#)
[To Mendeley](#)
[TinyURL](#)
[To Faviki](#)

Newspaper Club

Data.gov.uk Newspaper

Friday, October 16th 2009

This is a post by Tom from the **Newspaper Club Blog**. File under [case studies](#).

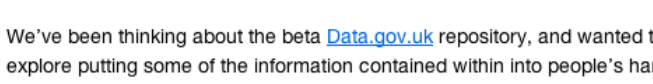
We're building a service to help people make their own newspapers. This is the blog where we're alarmingly honest about where it's all going wrong. And occasionally smug about where it's going right.

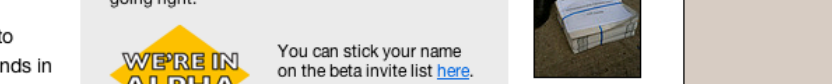
You can stick your name on the beta invite list [here](#).

Over the last three days we've been working on a side project. A design exercise if you like.

We've been thinking about the beta [Data.gov.uk](#) repository, and wanted to explore putting some of the information contained within into people's hands in a form that is accessible, timely, and relevant.

And perhaps unsurprisingly, we thought a good way to do that was with a newspaper. So here it is, the Postcode Paper:





WE'RE IN ALPHA

Search

[Subscribe](#)

Archives

[January 2010](#)

[December 2009](#)

[November 2009](#)

[October 2009](#)

[September 2009](#)

[August 2009](#)

[July 2009](#)

[June 2009](#)

Filed under

[4ip](#) (3)

[art](#) (8)

[case studies](#)

[engineering](#)

[fulfillment et](#)

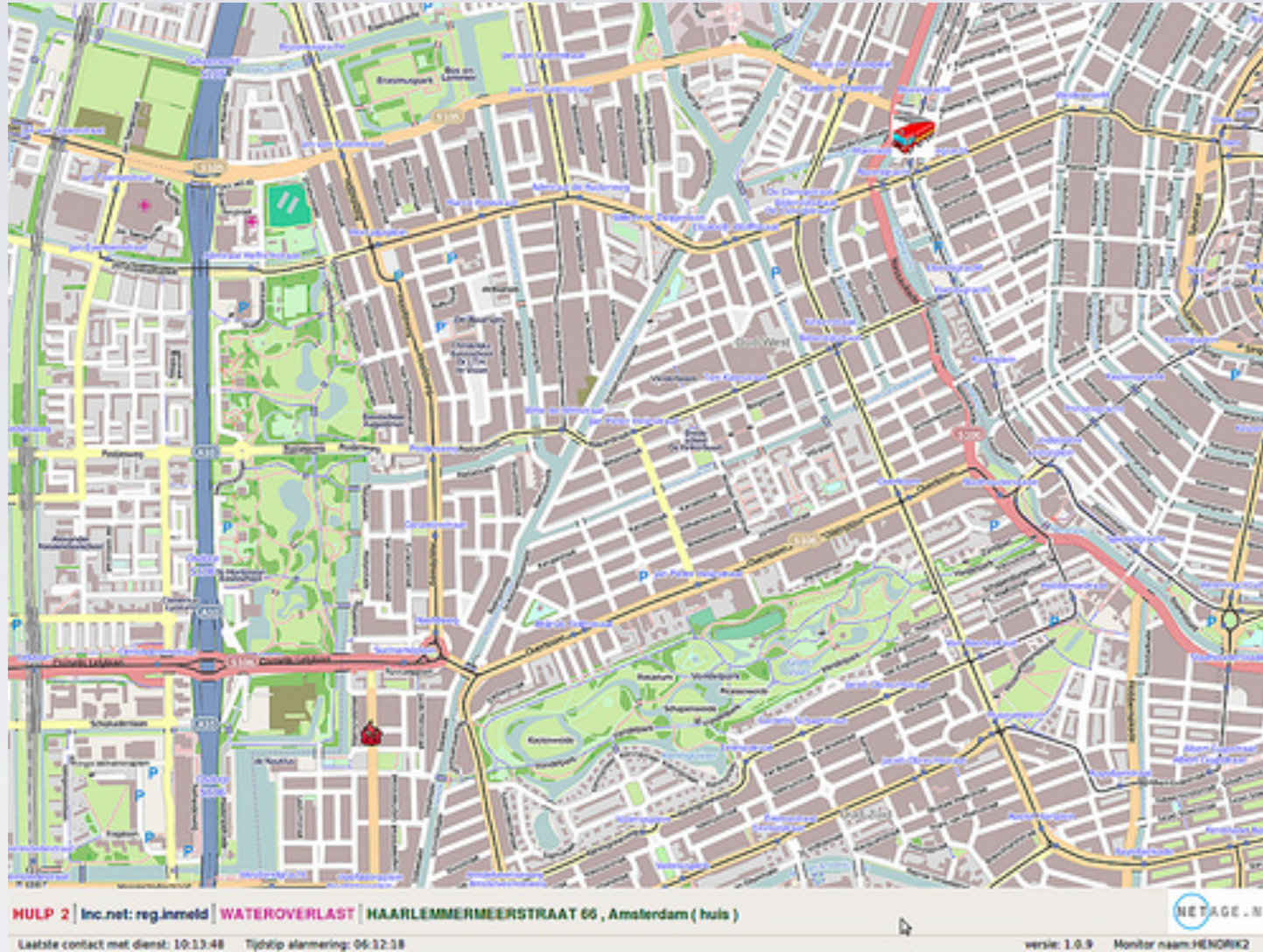
[investors](#) (2)

[media](#) (1)

[printers](#) (6)

[Uncategorized](#) (31)

Amsterdam fire brigade routing



- ▶ Find the best possible route from the station to the fire
 - ▶ e.g., where are the roadblocks?
- ▶ Use available city data
- ▶ Republish the structured data for others to use!

Publication of data (with RDFa): London Gazette

Search Results - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.gazettes-online.co.uk/ViewGazetteDocument.aspx?atdocid=5437822&Ge Wikia Search

Search archive Enter keyword Search Advanced Search

The London Gazette

Change edition: [Edinburgh](#) / [Belfast](#)

[Home](#)

[About the Gazette](#)

[Browse](#)

[Search Tools](#)

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Search Results

Results 0 of 14 gazette documents

[Back to results](#)

Documents: [Previous](#) [10](#) [11](#) [12](#) [13](#) [14](#) [Next](#)

Date: 31 October 2008 Issue Number: 58870 Page number: 16858

Publication Date: *Friday, 31 October 2008*

Notice Code: **1901**

Water Resources

Environment Agency

Done

RDFa

Publication of data (with RDFa): London Gazette

The screenshot shows a web browser window with the following details:

- Address Bar:** `http://www.w3.org/2007/08/pyRdfa/extract?url=http://www.gazettes-online.co.uk/ViewGazetteDocument.aspx?atdocid=5437822&GeoType=...`
- Search Results:** `http://www.w3.org/2007/08/pyRdfa/extract?url=http://www.gazettes-online.co.uk/ViewGazetteDocument.aspx?atdocid=5437822&GeoType=London&categorydocids=144&lastissuecount=10`
- Page Content:**
 - URL:** `http://www.gazettes-online.co.uk/ViewGazetteDocument.aspx?atdocid=5437822&GeoType=London&categorydocids=144&lastissuecount=10`
 - Title:** London Gazette: Issue dated 31 October 2008: Notice 650554
 - Metadata:**

Property	Value
Creator	TSO (The Stationery Office)
Identifier	<code>http://www.london-gazette.co.uk/issues/2008-10-31/notices/650554</code>
Language	Member Of ISO 639-2 value eng
Publisher	TSO (The Stationery Office), St Crispins, Duke Street, Norwich, NR3 1PD, 01603 622211, customer.services@tso.co.uk
Subject	Member Of IPSV value Water Resources
Title	London Gazette: Issue dated 31 October 2008: Notice 650554
Date Issued	2008-10-31
Date Modified	2008-08-20
Administrator	Grant Wilson
Authority	Environment Agency
Category Code	1901
Notice Number	650554
Publication Date	2008-10-31
is In Issue	<code>http://www.london-gazette.co.uk/issues/2008-10-31</code>
type	Water Resources Notice
Issue Number	58870
Publication Date	2008-10-31
is Known As	Environment Agency
type	Authority Public Institution
Forename	Grant
Surname	Wilson
type	Person

Publication of data (with RDFa): SlideShare

The screenshot shows a SlideShare presentation page in a web browser. The browser's address bar displays the URL: http://www.slideshare.net/ivan_herman/what-is-the-semantic-web-in-15-minutes-presentation. The SlideShare logo and navigation menu (Home, Browse, My Slidespace, Upload, Community, Widgets) are at the top. A search bar is on the right. Below the navigation, there are three featured links: "Real World Semantic Apps", "NLP framework for .NET", and "Ajax". The main presentation area is titled "What is the Semantic Web (in 15 minutes...)" and includes logos for W3C and Internet Society, along with text about ISOC Nieuwjaarsreceptie 2009. The presentation is by Ivan Herman. On the right, there are sections for "Categories" (Technology, Change Category), "Tags" (web semantic), "Groups / Events" (opensource, dev, howto), and "Ads by Google" (RDF Web, WPF Framework, Mapping Web, Semantics Web). Below these are "Related Presentations" and "More by user" sections. The presentation controls at the bottom show a progress bar and a "full" button.

What is the Semantic Web (in 15 minutes...) Edit Presentation

Share Favorite Download + Group/Event

W3C WORLD WIDE WEB consortium Benelux Kantoor

Internet Society

What is the Semantic Web? (In 15 minutes...)

ISOC Nieuwjaarsreceptie 2009

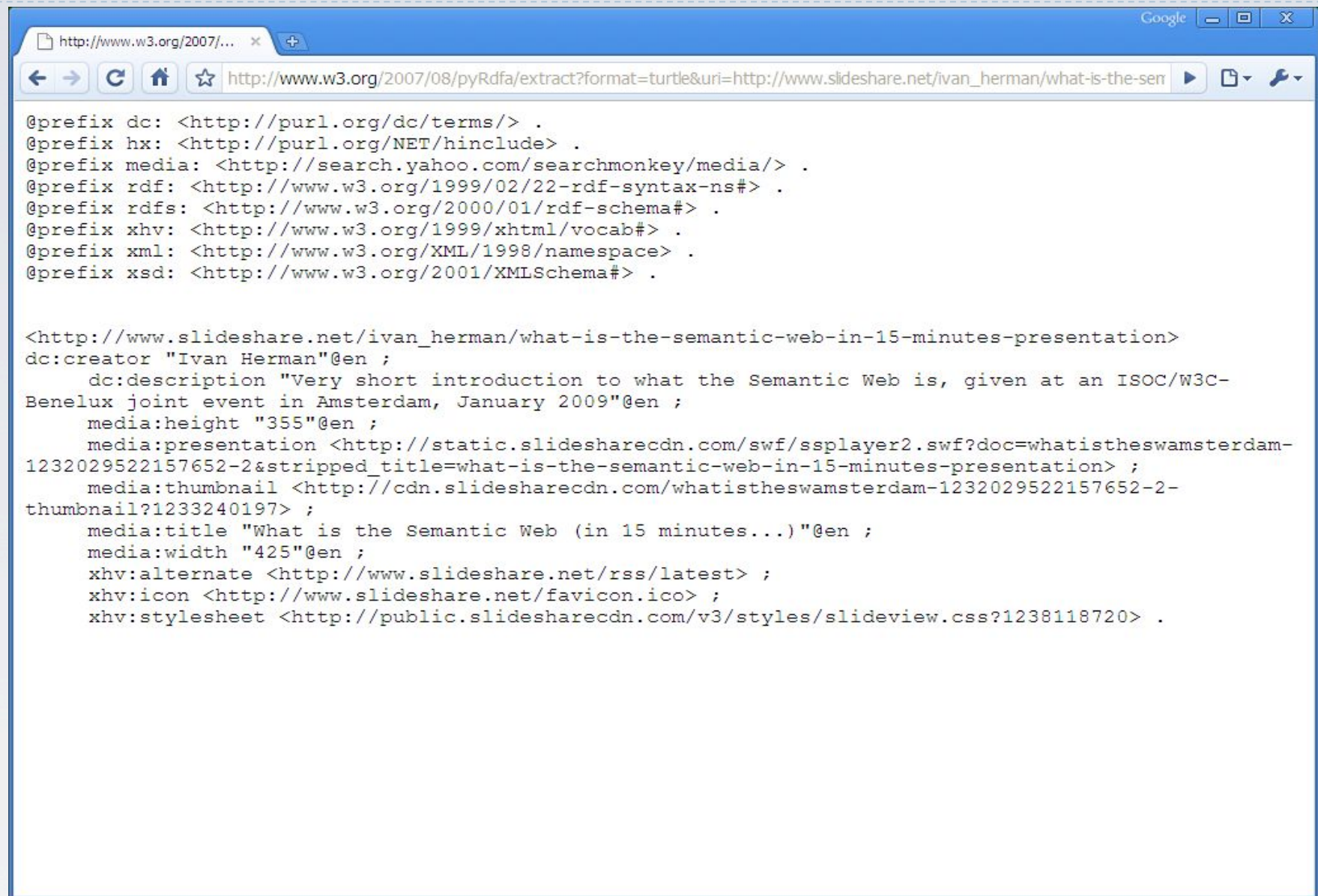
2009-01-15, Amsterdam, The Netherlands

Ivan Herman, W3C

1 / 54 full

PRESENTATION LOAD

Publication of data (with RDFa): SlideShare



The screenshot shows a web browser window with the address bar displaying a URL from www.w3.org. The main content area displays an RDFa extract in Turtle format. The extract defines several prefixes (dc, hx, media, rdf, rdfs, xhv, xml, xsd) and then describes a presentation on SlideShare. The presentation is titled "What is the Semantic Web (in 15 minutes...)" and is created by Ivan Herman. It includes a description, a thumbnail, and a presentation URL. The extract also includes alternate links for the presentation, such as an RSS feed and a favicon.

```
<http://www.w3.org/2007/08/pyRdfa/extract?format=turtle&uri=http://www.slideshare.net/ivan_herman/what-is-the-sen>

@prefix dc: <http://purl.org/dc/terms/> .
@prefix hx: <http://purl.org/NET/hinclud> .
@prefix media: <http://search.yahoo.com/searchmonkey/media/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix xhv: <http://www.w3.org/1999/xhtml/vocab#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

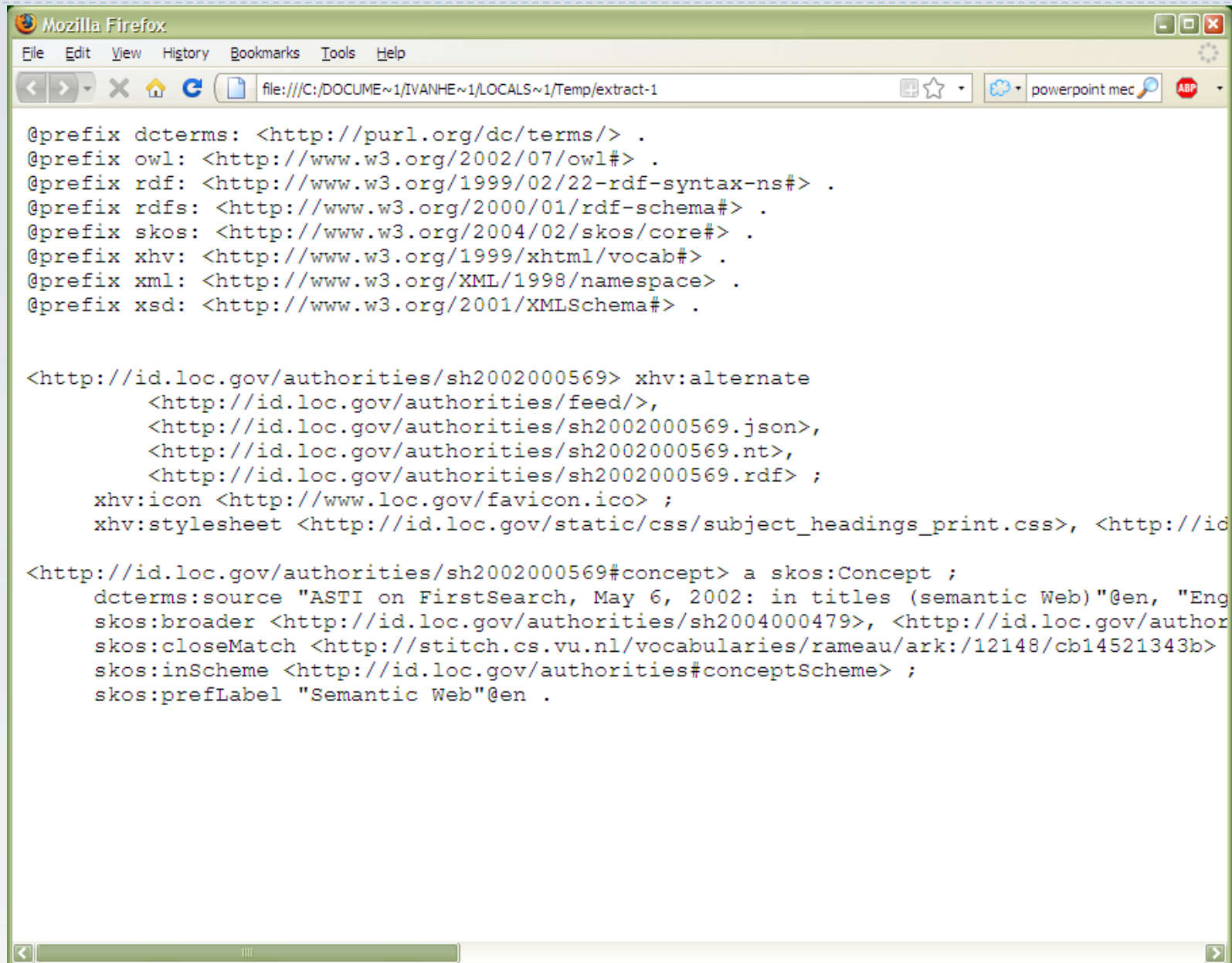
<http://www.slideshare.net/ivan_herman/what-is-the-semantic-web-in-15-minutes-presentation>
dc:creator "Ivan Herman"@en ;
  dc:description "Very short introduction to what the Semantic Web is, given at an ISOC/W3C-
Benelux joint event in Amsterdam, January 2009"@en ;
  media:height "355"@en ;
  media:presentation <http://static.slidesharecdn.com/swf/ssplayer2.swf?doc=whatistheswamsterdam-
1232029522157652-2&stripped_title=what-is-the-semantic-web-in-15-minutes-presentation> ;
  media:thumbnail <http://cdn.slidesharecdn.com/whatistheswamsterdam-1232029522157652-2-
thumbnail?1233240197> ;
  media:title "What is the Semantic Web (in 15 minutes...)"@en ;
  media:width "425"@en ;
  xhv:alternate <http://www.slideshare.net/rss/latest> ;
  xhv:icon <http://www.slideshare.net/favicon.ico> ;
  xhv:stylesheet <http://public.slidesharecdn.com/v3/styles/slideview.css?1238118720> .
```

Publication of data: Library of Congress Subject Headings

The screenshot shows a Mozilla Firefox browser window displaying the 'Authorities & Vocabularies' page for the URI `http://id.loc.gov/authorities/sh2002000569`. The page is titled 'Authorities & Vocabularies' and includes a search bar with the text 'Enter search terms...' and a 'GO' button. Below the search bar, there are two tabs: 'Details' and 'Visualize'. The 'Details' tab is selected, showing the following information:

- Semantic Web**
- URI:** `<http://id.loc.gov/authorities/sh2002000569#concept>`
- Type:** Topical Term
- Broader Terms:**
 - Semantic integration (Computer systems)
 - Semantic networks (Information theory)
 - World Wide Web
- Sources:**
 - Work cat.: 2002070545: The Semantic Web--ISWC 20002, 2002.
 - ASTL on FirstSearch, May 6, 2002; in title (semantic Web)

Publication of data: Library of Congress Subject Headings

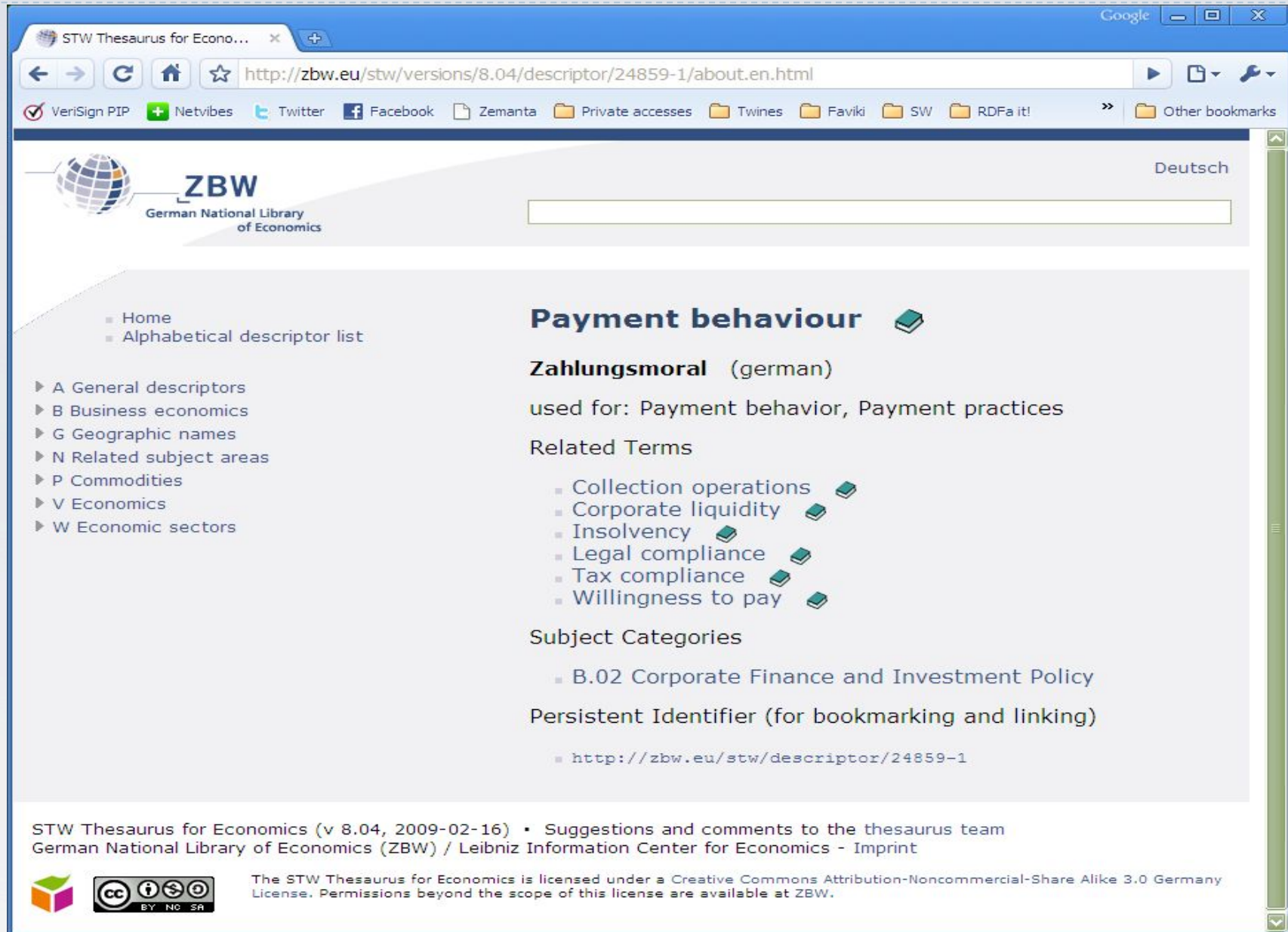


```
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix xhv: <http://www.w3.org/1999/xhtml/vocab#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

<http://id.loc.gov/authorities/sh2002000569> xhv:alternate
    <http://id.loc.gov/authorities/feed/>,
    <http://id.loc.gov/authorities/sh2002000569.json>,
    <http://id.loc.gov/authorities/sh2002000569.nt>,
    <http://id.loc.gov/authorities/sh2002000569.rdf> ;
xhv:icon <http://www.loc.gov/favicon.ico> ;
xhv:stylesheet <http://id.loc.gov/static/css/subject_headings_print.css>, <http://id

<http://id.loc.gov/authorities/sh2002000569#concept> a skos:Concept ;
dcterms:source "ASTI on FirstSearch, May 6, 2002: in titles (semantic Web)"@en, "Eng
skos:broader <http://id.loc.gov/authorities/sh2004000479>, <http://id.loc.gov/author
skos:closeMatch <http://stitch.cs.vu.nl/vocabularies/rameau/ark:/12148/cb14521343b>
skos:inScheme <http://id.loc.gov/authorities#conceptScheme> ;
skos:prefLabel "Semantic Web"@en .
```


Publication of data: Economics Thesaurus



The screenshot shows a web browser window with the address bar displaying <http://zbw.eu/stw/versions/8.04/descriptor/24859-1/about.en.html>. The page header includes the ZBW logo (German National Library of Economics) and a search bar. The main content area is titled "Payment behaviour" and includes the following information:

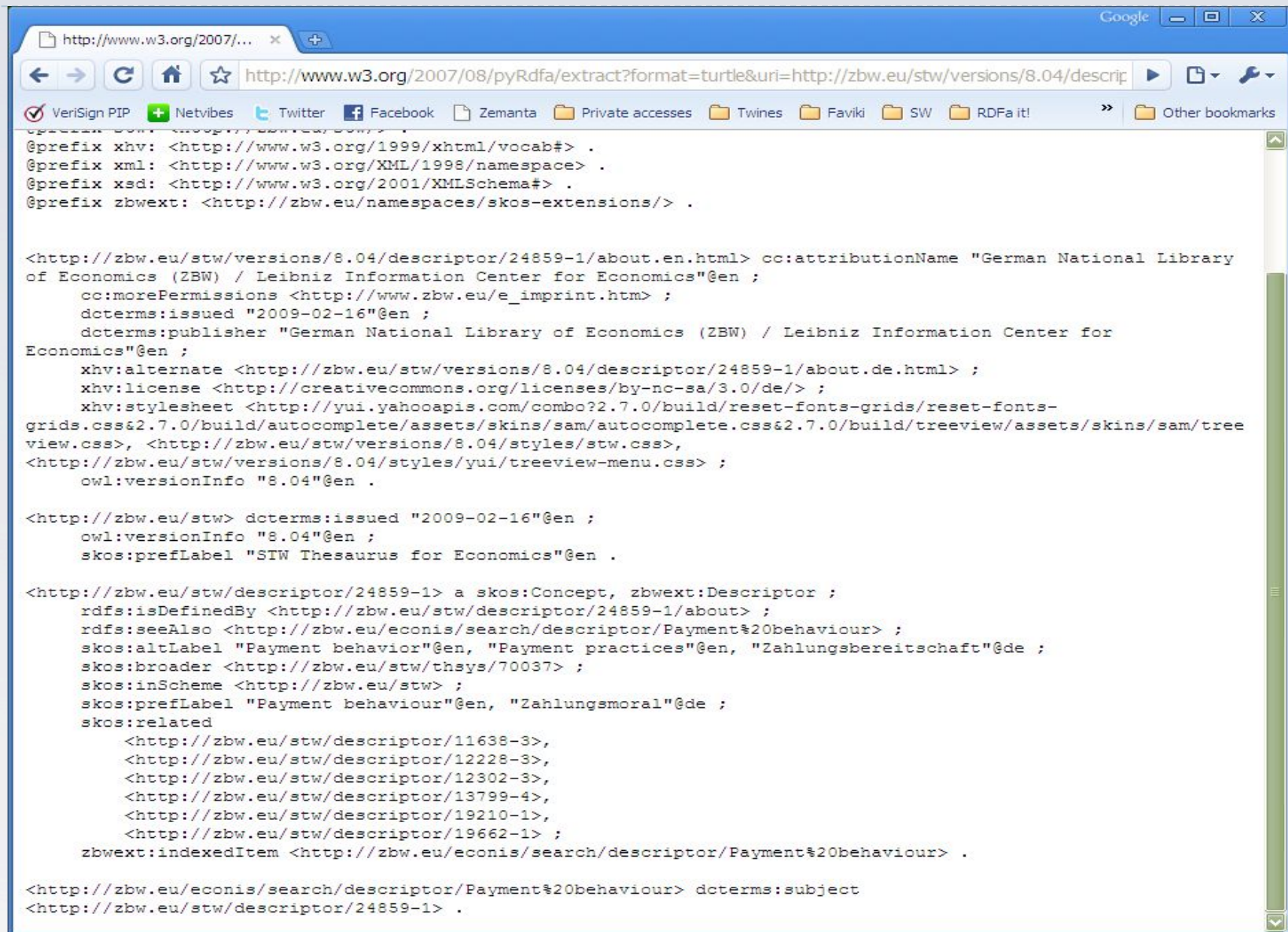
- Zahlungsmoral (german)**
- used for: Payment behavior, Payment practices
- Related Terms**
 - Collection operations
 - Corporate liquidity
 - Insolvency
 - Legal compliance
 - Tax compliance
 - Willingness to pay
- Subject Categories**
 - B.02 Corporate Finance and Investment Policy
- Persistent Identifier (for bookmarking and linking)**
 - <http://zbw.eu/stw/descriptor/24859-1>

The footer contains the following text:

STW Thesaurus for Economics (v 8.04, 2009-02-16) • Suggestions and comments to the thesaurus team
German National Library of Economics (ZBW) / Leibniz Information Center for Economics - Imprint

The footer also includes the Creative Commons Attribution-Noncommercial-Share Alike 3.0 Germany License logo and the text: "The STW Thesaurus for Economics is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 Germany License. Permissions beyond the scope of this license are available at ZBW."

Publication of data: Economics Thesaurus



The screenshot shows a web browser window with the address bar displaying the URL: `http://www.w3.org/2007/08/pyRdfa/extract?format=turtle&uri=http://zbw.eu/stw/versions/8.04/descrip`. The browser's bookmark bar includes links to VeriSign PIP, Netvibes, Twitter, Facebook, Zemanta, Private accesses, Twines, Faviki, SW, RDFa it!, and Other bookmarks. The main content area displays an RDF Turtle file, which is a text-based format for representing semantic data. The file includes several prefixes, a description of the German National Library of Economics (ZBW) / Leibniz Information Center for Economics, and a list of related concepts in the STW Thesaurus for Economics.

```
@prefix xhv: <http://www.w3.org/1999/xhtml/vocab#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix zbwext: <http://zbw.eu/namespaces/skos-extensions/> .

<http://zbw.eu/stw/versions/8.04/descriptor/24859-1/about.en.html> cc:attributionName "German National Library
of Economics (ZBW) / Leibniz Information Center for Economics"@en ;
    cc:morePermissions <http://www.zbw.eu/e_imprint.htm> ;
    dcterms:issued "2009-02-16"@en ;
    dcterms:publisher "German National Library of Economics (ZBW) / Leibniz Information Center for
Economics"@en ;
    xhv:alternate <http://zbw.eu/stw/versions/8.04/descriptor/24859-1/about.de.html> ;
    xhv:license <http://creativecommons.org/licenses/by-nc-sa/3.0/de/> ;
    xhv:stylesheet <http://yui.yahooapis.com/combo?2.7.0/build/reset-fonts-grids/reset-fonts-
grids.css&2.7.0/build/autocomplete/assets/skins/sam/autocomplete.css&2.7.0/build/treeview/assets/skins/sam/tree
view.css>, <http://zbw.eu/stw/versions/8.04/styles/stw.css>,
<http://zbw.eu/stw/versions/8.04/styles/yui/treeview-menu.css> ;
    owl:versionInfo "8.04"@en .

<http://zbw.eu/stw> dcterms:issued "2009-02-16"@en ;
    owl:versionInfo "8.04"@en ;
    skos:prefLabel "STW Thesaurus for Economics"@en .

<http://zbw.eu/stw/descriptor/24859-1> a skos:Concept, zbwext:Descriptor ;
    rdfs:isDefinedBy <http://zbw.eu/stw/descriptor/24859-1/about> ;
    rdfs:seeAlso <http://zbw.eu/econis/search/descriptor/Payment%20behaviour> ;
    skos:altLabel "Payment behavior"@en, "Payment practices"@en, "Zahlungsbereitschaft"@de ;
    skos:broader <http://zbw.eu/stw/thsys/70037> ;
    skos:inScheme <http://zbw.eu/stw> ;
    skos:prefLabel "Payment behaviour"@en, "Zahlungsmoral"@de ;
    skos:related
        <http://zbw.eu/stw/descriptor/11638-3>,
        <http://zbw.eu/stw/descriptor/12228-3>,
        <http://zbw.eu/stw/descriptor/12302-3>,
        <http://zbw.eu/stw/descriptor/13799-4>,
        <http://zbw.eu/stw/descriptor/19210-1>,
        <http://zbw.eu/stw/descriptor/19662-1> ;
    zbwext:indexedItem <http://zbw.eu/econis/search/descriptor/Payment%20behaviour> .

<http://zbw.eu/econis/search/descriptor/Payment%20behaviour> dcterms:subject
<http://zbw.eu/stw/descriptor/24859-1> .
```


Publication of data: Economics Thesaurus



- ▶ Autosuggest search based on the thesaurus

BestBuy Example for RDFa Usage


My Account | Order Status | Customer Service | Español


BEST BUY Weekly Ad Store Locator Outlet Center Services ▾ Gifts ▾  Items

TV & VIDEO AUDIO CAR & GPS CAMERAS & CAMCORDERS COMPUTERS MOBILE PHONES & OFFICE MUSIC, MOVIES & BOOKS VIDEO GAMES & GADGETS HOME & APPLIANCES

Search Keyword or Item # Credit Cards Reward Zone®

Best Buy - Carbondale

 Print



1270 E Main St
Carbondale, IL 62901
Phone: 618-351-1700
GEO: 37.732719, -89.192314


Customer Reviews:
☆☆☆☆☆
[Be the first to write a store review.](#)

[Maps & Directions](#) | [Weekly Ad](#)

Store Hours
Mon: 10-9; Tue: 10-9; Wed: 10-9; Thurs: 10-9; Fri: 10-9; Sat: 10-9; Sun: 11-7;
4/4 - 4/10, 2010
Mon: 10-9; Tues: 10-9; Wed: 10-9; Thurs: 10-9; Fri: 10-9; Sat: 10-9; Sun: Closed

Events

Avatar Midnight Release!




The biggest movie of 2009 is coming to Best Buy on April 22nd! Carbondale Best Buy is hosting a special midnight release! We will open the doors at 12:00am on 4/22! We'll have door prizes including movie posters available only to those in attendance at the midnight release! Local band "Ravenhill" will be playing, as well! You don't want to miss this special event! Check back for more information as we get closer to the release date!


Local Selections


Check out these special product selections at our store.


Open Box Items (25) [View All](#)


At This Location

 **Geek Squad**
Computer setup & services, plus home theater, appliance and car installation.

 **Best Buy Mobile**
Get informed advice from noncommissioned mobile phone specialists.


 **Small Business Solutions**
Featuring Professional Series products and trained staff to help with small business needs.

 **Apple Shop**
Mac, iPod and more at this Apple store-within-a-store.

 **Electronics Recycling**
We offer electronics recycling at this and all other U.S. stores.


BestBuy Example for RDFa Usage


My Account | Order Status | Customer Service | Español

BEST BUY Weekly Ad Store Locator Outlet Center Services ▾ Gifts ▾  Items

TV & VIDEO AUDIO CAR & GPS CAMERAS & CAMCORDERS COMPUTERS MOBILE PHONES & OFFICE MUSIC, MOVIES & BOOKS VIDEO GAMES & GADGETS HOME & APPLIANCES

Search Keyword or Item # Credit Cards Reward Zone®

Best Buy - Carbondale store name  Print

store image

1270 E Main St
Carbondale, IL 62901
Phone: 618-351-1700
GEO: 37.732719, -89.192314

addressphonegeo

Customer Reviews:
☆☆☆☆☆
Be the first to write a store review.

review data

Maps & Directions | Weekly Ad


Store Hours
Mon: 10-9; Tue: 10-9; Wed: 10-9; Thurs: 10-9; Fri: 10-9; Sat: 10-9; Sun: 11-7;
4/4 - 4/10, 2010
Mon: 10-9; Tues: 10-9; Wed: 10-9; Thurs: 10-9; Fri: 10-9; Sat: 10-9; Sun: Closed

store hours

Events

event data

Avatar Midnight Release!



The biggest movie of 2009 is coming to Best Buy on April 22nd! Carbondale Best Buy is hosting a special midnight release! We will open the doors at 12:00am on 4/22! We'll have door prizes including movie posters available only to those in attendance at the midnight release! Local band "Ravenhill" will be playing, as well! You don't want to miss this special event! Check back for more information as we get closer to the release date!

Local Selections
Check out these special product selections at our store.

Open Box Items (25)

At This Location

Geek Squad
Computer setup & services, plus home theater, appliance and car installation.

services
Best Buy mobile
Get informed advice from noncommissioned mobile phone specialists.

Small Business Solutions
Featuring Professional Series products and trained staff to help with small business needs.

Apple Shop
Mac, iPod and more at this Apple store-within-a-store.

Electronics Recycling
We offer electronics recycling at this and all other U.S. stores.

BestBuy Example for RDFa Usage

My Account | Order Status | Customer Service | Español

BEST BUY Weekly Ad Store Locator Outlet Center Services Gifts cart Items

TV & VIDEO AUDIO CAR & GPS CAMERAS & CAMCORDERS COMPUTERS MOBILE PHONES & OFFICE MUSIC, MOVIES & BOOKS VIDEO GAMES & GADGETS HOME & APPLIANCES

Search All Categories

Best Buy - Carbondale

1270 E Main St
Carbondale, IL 62901
Phone: 618-351-1700
GEO: 37.732719, -89.192314

Customer Reviews:
★★★★★
Be the first to write a store review.

Store Hours
Mon: 10-9; Tue: 10-9; Wed: 10-9; Thurs: 10-9; Fri: 10-9; Sat: 10-9; Sun: 11-7;

The biggest movie of 2009 is coming to Best Buy on April 22nd! Carbondale Best Buy is hosting a special midnight release! We will open the doors at 12:00am on 4/22! We'll have door prizes including movie posters available only to those in attendance at the midnight release! Local band "Ravenhill" will be playing, as well! You don't want to miss this special event! Check back for more information as we get closer to the release date!

Apple Shop
Mac, iPod and more at this Apple store-within-a-store.

Electronics Recycling
We offer electronics recycling at this and all other U.S. stores.

Reward Zone

Geeky Ad

Photo

Video

Audio

Car & GPS

Cameras & Camcorders

Computers

Mobile Phones & Office

Music, Movies & Books

Video Games & Gadgets

Home & Appliances

```
<div class="fn n" property="foaf:name rdfs:label vcard:fn gr:legalName"> Reward Zone</div>
<h1 class="org" property="geo:lat_long" content="37.732719,-89.192314">Best Buy - Carbondale</h1>
</div>

<div class="adr" rel="vcard:adr">
<div typeof="vcard:Address">
<div class="street-address"
property="vcard:street-address">1270 E Main St</div>
<span class="locality"
property="vcard:locality">Carbondale</span>,
<span class="region"
property="vcard:region">IL</span> <span
class="postal-code" property="vcard:postal-code">62901</span> </div>
<div class="tel"
property="vcard:tel" class="phone-number">618-351-1700</span>
</div>
<div class="geo" rel="vcard:geo">GEO:
<span class="latitude"
property="vcard:latitude">37.732719</span>,
<span class="longitude"
property="vcard:longitude">-89.192314</span>
</div>

<span rel="rdfs:seeAlso foaf:depiction"></span>

<div class="hours" rel="gr:hasOpeningHoursSpecification">
<div typeof="gr:OpeningHoursSpecification" about="#regularhours">
<span typeof="gr:OpeningHoursSpecification">
<span rel="gr:hasOpeningHoursDayOfWeek" resource="http://purl.org/goodrelations/v1#Monday" class="dow">Mon:</span>
<span property="gr:opens" datatype="xsd:time">10</span>
<span property="gr:closes" datatype="xsd:time">9</span>
</span>
</div>
</div>

The biggest movie of 2009 is coming to Best Buy on April 22nd! Carbondale Best Buy is hosting a special midnight release! We will open the doors at 12:00am on 4/22! We'll have door prizes including movie posters available only to those in attendance at the midnight release! Local band "Ravenhill" will be playing, as well! You don't want to miss this special event! Check back for more information as we get closer to the release date!
```



Search by Keyword, SKU # or Item #

[Español](#) | [My Account](#) | [Order Status](#) | [Customer Service](#)[Store Locator](#) | [Weekly Deals](#) | [Credit Cards](#) | [Reward Zone](#)

PRODUCTS

SERVICES

SHOPS & DEALS

GIFTS

Welcome.
Please create an account or Sign in.

0 Items

**GET IT SAME DAY** Free store pickup when you buy online. [Learn more >](#)

FIND IT AT A BEST BUY STORE

[Back](#)

CHECK AVAILABILITY

Enter your ZIP code or city and state to see where you can pick up this item.

ZIP Code

OR

City

State

SEARCH**Apple® - iPad® 2 with Wi-Fi - 16GB - Black**

Model: MC769LL/A | SKU: 1945531

STORE PICKUP

Show: ☒ BEST BUY STORES ☒ BEST BUY MOBILE SPECIALTY STORES

STORES

AVAILABILITY

CAMBRIDGE MA100 CAMBRIDGESIDE PL, CAMBRIDGE, MA
02141-2218[Map & Directions](#)**SHIP TO STORE**Usually **ships to store** in 3 to 5 days **ADD TO CART**

BEST BUY MOBILE SPECIALTY

CAMBRIDGESIDE GALERI100 CAMBRIDGESIDE PL, CAMBRIDGE, MA
02141-2224[Map & Directions](#)**AVAILABLE NOW**

Pick up 04/09/2012

ADD TO CART

Overstock.com example

[Shopping](#) [Community](#) [Cars](#) [Real Estate](#) [Auctions](#) [We Recommend](#) [My Account](#)


Welcome To **overstocktober™**
11 Years


Free Shipping on your orders over \$50


Shop All Departments

[Online Shopping](#) [Electronics](#) [Cameras & Photo](#) [Camcorders](#) [Digital Camcorders](#)






[Photos](#)



View larger 



Bell and Howell DV550UW 12MP Digital Video Camera with Underwater Housing

Rating 3.8      10 reviews
[Read Reviews](#) / [Write a review](#)

Today: \$68.99

Get 5% Back With Club O
[View Details](#)



Brief Description **Item#: 12403958**

- Take great videos with the Bell + Howell digital video camera
- Digital video camera has ultra compact body and features a flip-up USB
- Camcorder includes waterproof underwater housing to take video underwater (up to 33 ft)


Sold out!

This product is not in stock.
We will notify you when this product is in stock.
Please enter your email address below, then

Compare to these
[This?](#)

People Who Viewed



SVP Underwater
5MP Digital Video
Camera
Today: \$75.99
[Review](#)

Overstock.com example



http://www.w3.org/2007/08/pyRdfa/extract?format=turtle&uri=http%3A//www.overstock.co...d-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#myoffer> .

<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#reviews.html> v:count "10" .

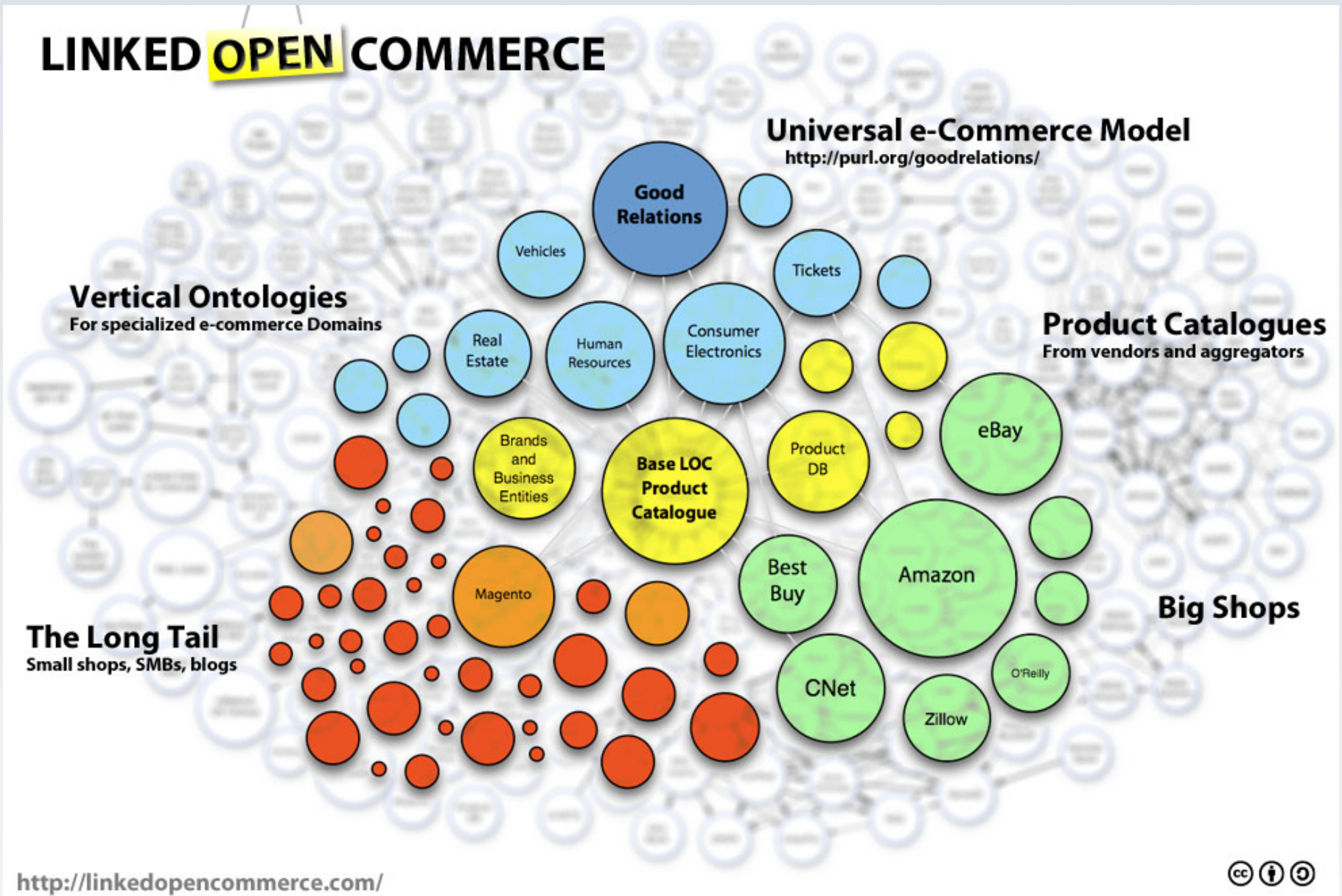
<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#myoffer> xhv:icon <http://ak1.ostkcdn.com/favicon.ico> ;
xhv:stylesheet <http://ak1.ostkcdn.com/css/ProductPageC.css>, <http://ak1.ostkcdn.com/css/os_master.less>, <http://ak1.ostkcdn.com/css/productPageImgGallery.css> .

<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#TypeAndQuantityNode> a gr:TypeAndQuantityNode ;
gr:hasUnitOfMeasurement "C62"^^xsd:string ;
gr:typeOfGood <http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#product> .

<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#UnitPriceSpecification> a gr:UnitPriceSpecification .

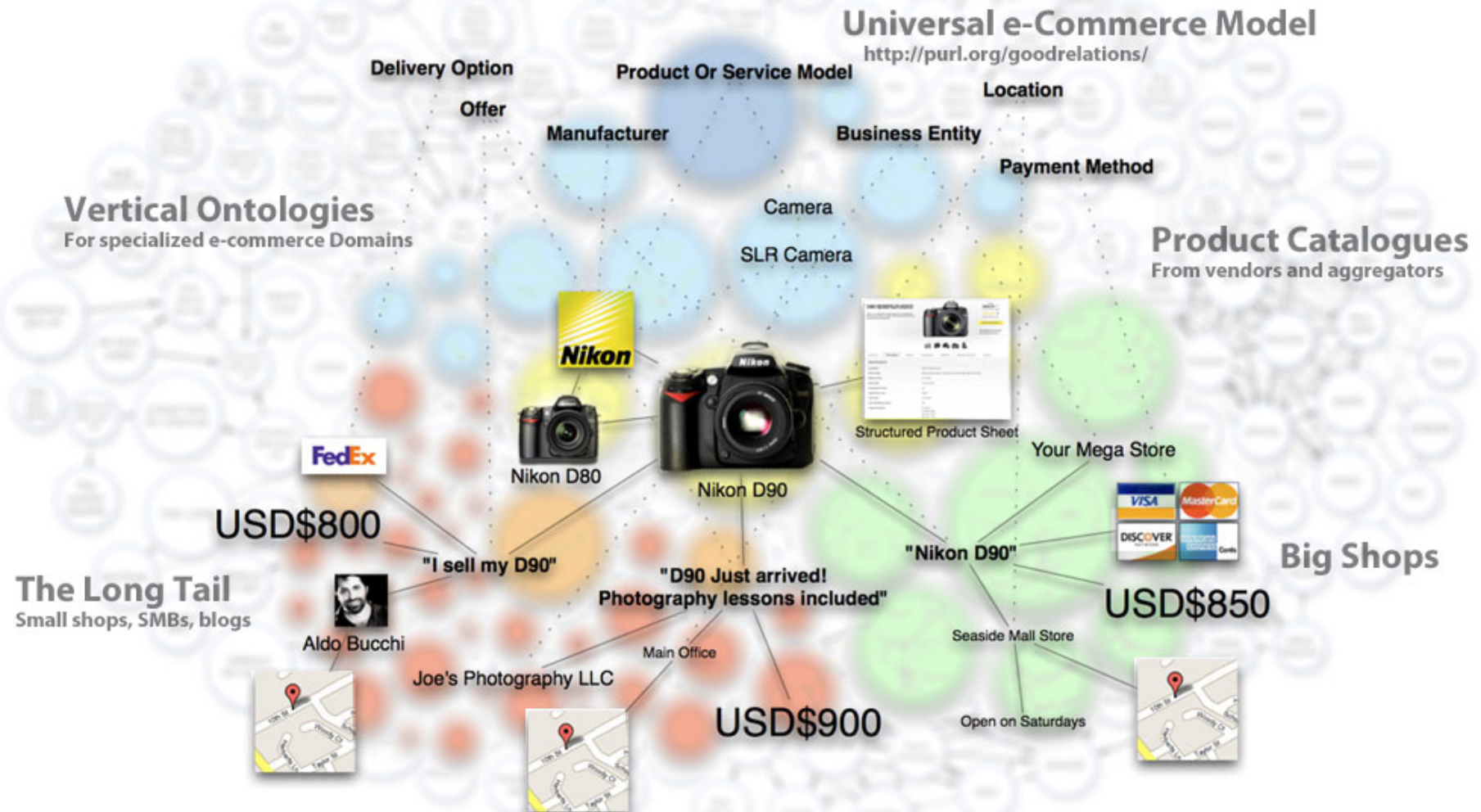
<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#myoffer> a gr:Offering ;
gr:hasBusinessFunction gr:Sell ;
gr:hasPriceSpecification
[gr:hasCurrency "USD"^^xsd:string ;
gr:hasCurrencyValue "68.99"^^xsd:float
] ;
<http://www.overstock.com/Electronics/Bell-and-Howell-DV550UW-12MP-Digital-Video-Camera-with-Underwater-Housing/4450313/product.html#UnitPriceSpecification> .

More general: “linked open commerce”



More general: “linked open commerce”

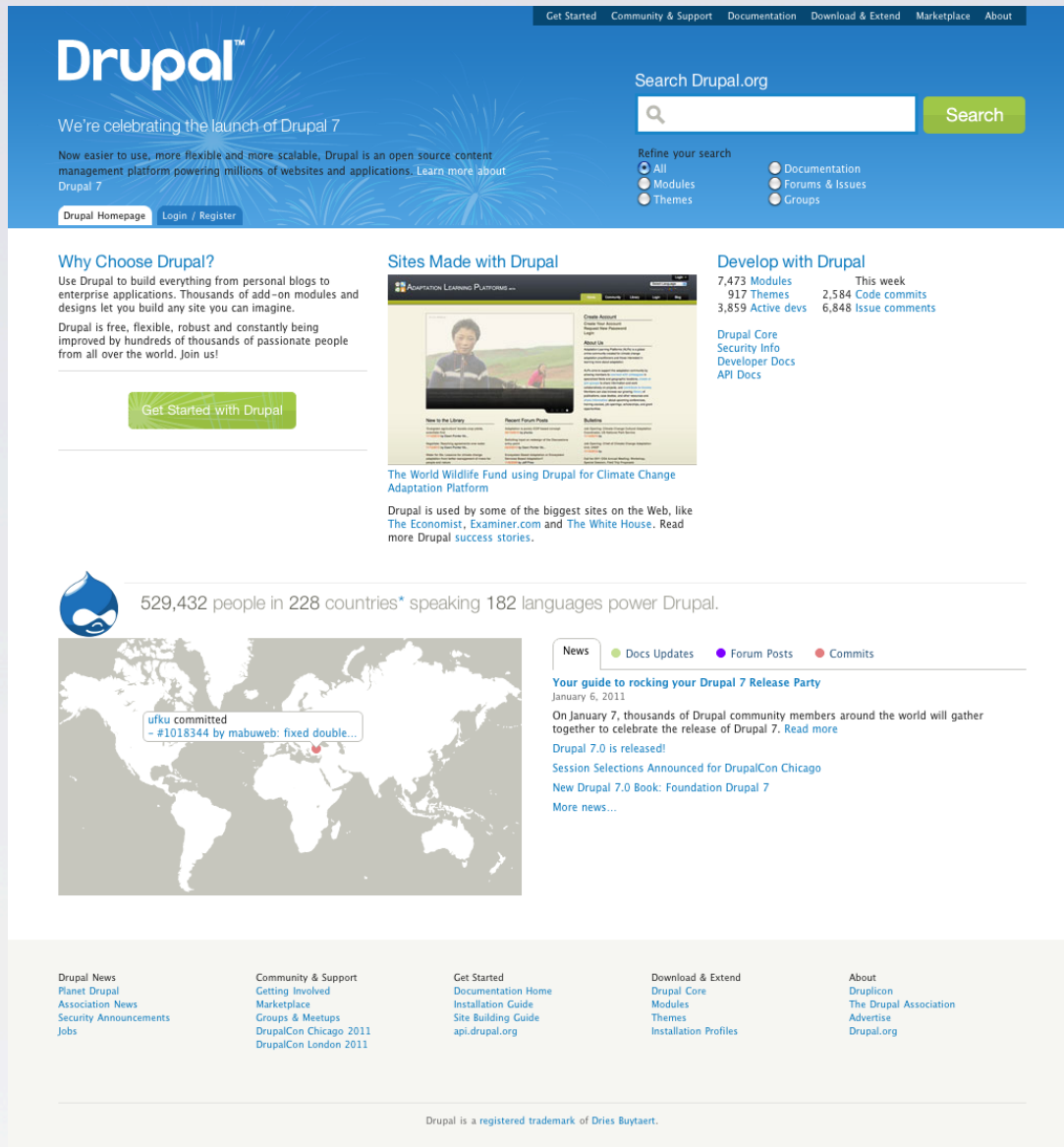
LINKED **OPEN** COMMERCE



<http://linkedopencommerce.com/>



The huge step forward: Drupal 7



The screenshot shows the Drupal 7 homepage with a blue header. The main content area includes sections for 'Why Choose Drupal?', 'Sites Made with Drupal' (featuring a video of a person using a laptop), 'Develop with Drupal' (listing 7,473 modules, 917 themes, 2,584 code commits, and 3,859 active developers), and a world map showing global usage statistics. A sidebar on the right contains a search bar and a 'Refine your search' section. The footer lists various links for news, support, documentation, and more.

Drupal™

We're celebrating the launch of Drupal 7

Now easier to use, more flexible and more scalable, Drupal is an open source content management platform powering millions of websites and applications. [Learn more about Drupal 7](#)

[Drupal Homepage](#) [Login / Register](#)

Search Drupal.org

Refine your search

- All
- Modules
- Themes
- Documentation
- Forums & Issues
- Groups

Why Choose Drupal?

Use Drupal to build everything from personal blogs to enterprise applications. Thousands of add-on modules and designs let you build any site you can imagine.

Drupal is free, flexible, robust and constantly being improved by hundreds of thousands of passionate people from all over the world. Join us!

[Get Started with Drupal](#)

Sites Made with Drupal

[Adaptation Learning Platforms ...](#)

[The World Wildlife Fund using Drupal for Climate Change Adaptation Platform](#)

Drupal is used by some of the biggest sites on the Web, like [The Economist](#), [Examiner.com](#) and [The White House](#). Read [more Drupal success stories](#).

Develop with Drupal

7,473 Modules
917 Themes
3,859 Active devs

This week
2,584 Code commits
6,848 Issue comments

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

529,432 people in 228 countries* speaking 182 languages power Drupal.

[ufku committed - #1018344 by mabuweb: fixed double...](#)

News

- Docs Updates
- Forum Posts
- Commits

Your guide to rocking your Drupal 7 Release Party

January 6, 2011

On January 7, thousands of Drupal community members around the world will gather together to celebrate the release of Drupal 7. [Read more](#)

Drupal 7.0 is released!

[Session Selections Announced for DrupalCon Chicago](#)

[New Drupal 7.0 Book: Foundation Drupal 7](#)

[More news...](#)

Drupal News
[Planet Drupal](#)
[Association News](#)
[Security Announcements](#)
[Jobs](#)

Community & Support
[Getting Involved](#)
[Marketplace](#)
[Groups & Meetups](#)
[DrupalCon Chicago 2011](#)
[DrupalCon London 2011](#)

Get Started
[Documentation Home](#)
[Installation Guide](#)
[Site Building Guide](#)
[api.drupal.org](#)

Download & Extend
[Drupal Core](#)
[Modules](#)
[Themes](#)
[Installation Profiles](#)

About
[Drupalcon](#)
[The Drupal Association](#)
[Advertise](#)
[Drupal.org](#)

Drupal is a registered trademark of Dries Buytaert.

- ▶ Major CMS system
- ▶ Has RDF at his core, pages contain RDFa
- ▶ In one step millions of pages of additional RDF data!

The Examiner.com (2 days after Drupal 7 was released...)

**examiner.com™** National
the insider source for local

CHANGE CITY

Google™ Custom Search

SEARCH

HOME

ENTERTAINMENT ▾

SPORT & RECREATION ▾

FAMILY & HOME ▾

LIFESTYLE ▾

HEALTH & BEAUTY ▾

NEWS & INFO ▾

Log In

Sheriff Dupnik names Angle and Palin as two responsible for 'vitriol' (Video)



Yesterday Pima County Sheriff Charles Dupnik took the bold step of naming Sharon Angle and Sarah Palin as two individuals responsible for the kind of toxic 'political vitriol' which he believes must end in light of the recent shooting in Tucson, Arizona. Dupnik's comments came in an interview with Geraldo Rivera of Fox News. Earlier in the day Dupnik had been interviewed by Megyn Kelly of Fox News, who accused the Sheriff of inserting politics where it did not belong. In the Rivera interview, Dupnik stands by his earlier comments, and goes further in identifying two Republicans as the source...

Ryan Witt
Political Buzz Examiner
[Browse more Politics articles](#)

Sheriff Dupnik names Angle and Palin as two responsible...

Missed field goals by Eagles kicker David Akers makes him...

FDA outlawing natural cancer cure to further destroy...

Eco-Travel Tip: Use an e-book reader to lighten your...

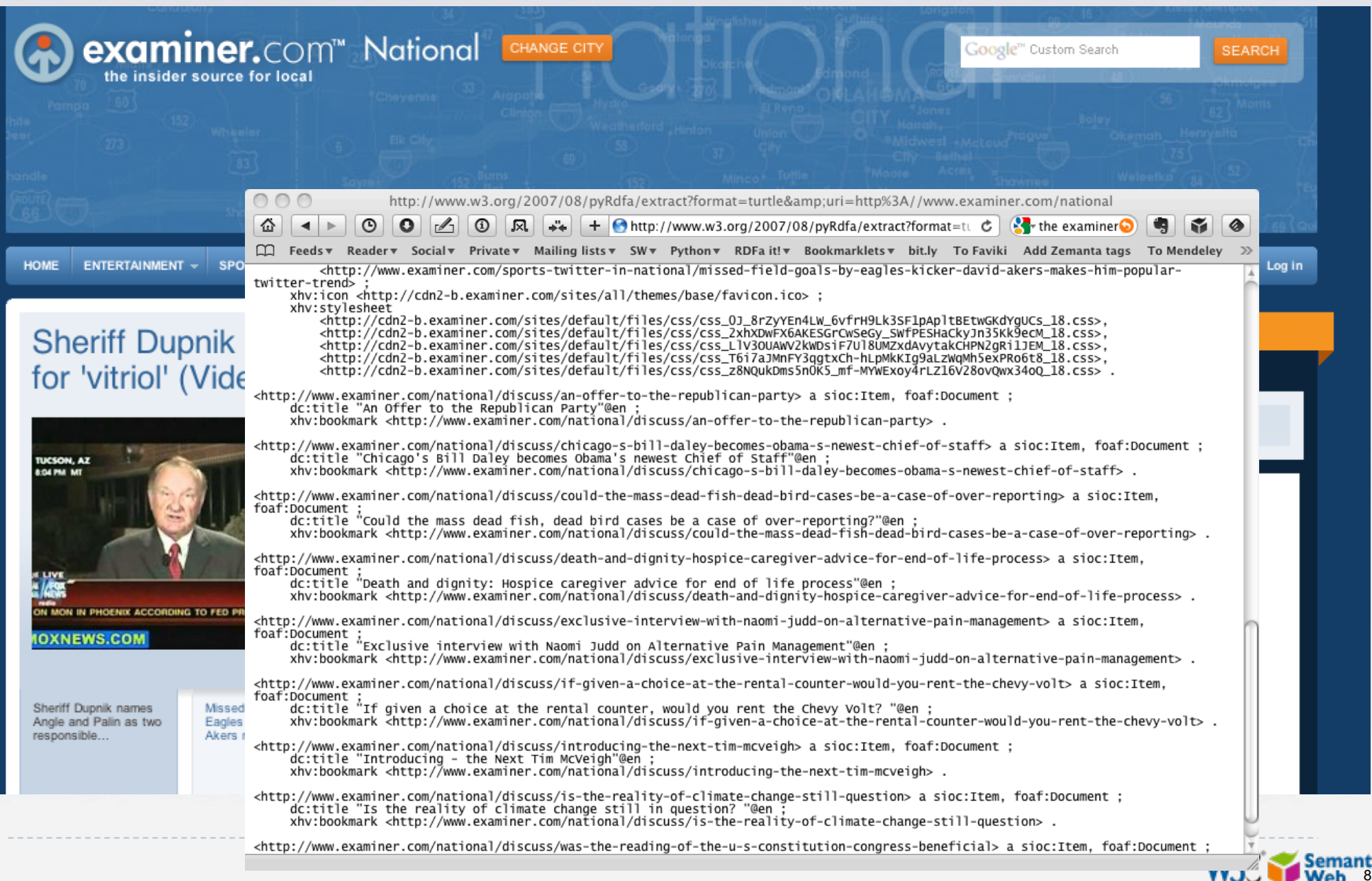
Lyndon Johnson and the Great Society...

WRITE FOR US! ➤

SLIDESHOW

SLIDESHOW

The Examiner.com (2 days after Drupal 7 was released...)



The screenshot displays the Examiner.com website interface. At the top, the logo "examiner.com™ National" is visible, along with a "CHANGE CITY" button and a Google Custom Search bar. Below the header, a navigation menu includes links for HOME, ENTERTAINMENT, and SPORTS. A video player on the left shows a news segment titled "Sheriff Dupnik for 'vitriol' (Video)". The main content area features a list of RSS feeds, each with a title, a description, and a link to the full article. The feeds are organized by date and topic, including news about a missed field goal by David Akers, a discussion on the Republican Party, and a report on Chicago's Bill Daley becoming Obama's newest Chief of Staff.

examiner.com™ National
the insider source for local

CHANGE CITY

Google™ Custom Search SEARCH

HOME ENTERTAINMENT SPORTS

Sheriff Dupnik for 'vitriol' (Video)

TUCSON, AZ
8:04 PM MT

LIVE
ON MON IN PHOENIX ACCORDING TO FED PR
FOXNEWS.COM

Sheriff Dupnik names Angle and Palin as two responsible...

Missed Eagles Akers

http://www.w3.org/2007/08/pyRdfa/extract?format=turtle&uri=http%3A//www.examiner.com/national

Feeds Reader Social Private Mailing lists SW Python RDFa it! Bookmarks bit.ly To Faviki Add Zemanta tags To Mendeley Log In

<http://www.examiner.com/sports-twitter-in-national/missed-field-goals-by-eagles-kicker-david-akers-makes-him-popular-twitter-trends>;
xhv:icon <http://cdn2-b.examiner.com/sites/all/themes/base/favicon.ico>;
xhv:stylesheet
<http://cdn2-b.examiner.com/sites/default/files/css/css_0J_8rZyYen4LW_6vfrH9Lk3SF1pAplTBETwGkdYgUCs_18.css>;
<http://cdn2-b.examiner.com/sites/default/files/css/css_2xhXDWfX6AKESGrCwSeGy_SWfPEShaCkyJn35Kk9ecM_18.css>;
<http://cdn2-b.examiner.com/sites/default/files/css/css_L1V3OUAWV2KWDsIF7U18UMZxdAvyTakCHPN2gRI1JEM_18.css>;
<http://cdn2-b.examiner.com/sites/default/files/css/css_T6i7aJmFY3qgtXCh-hLpMkKIg9aLzWqMh5exPRO6t8_18.css>;
<http://cdn2-b.examiner.com/sites/default/files/css/css_z8NqkDms5n0K5_mf-MYwExoy4rLZ16V28ovQwx34oQ_18.css> .

<http://www.examiner.com/national/discuss/an-offer-to-the-republican-party> a sioc:Item, foaf:Document ;
dc:title "An Offer to the Republican Party"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/an-offer-to-the-republican-party> .

<http://www.examiner.com/national/discuss/chicago-s-bill-daley-becomes-obama-s-newest-chief-of-staff> a sioc:Item, foaf:Document ;
dc:title "Chicago's Bill Daley becomes Obama's newest Chief of Staff"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/chicago-s-bill-daley-becomes-obama-s-newest-chief-of-staff> .

<http://www.examiner.com/national/discuss/could-the-mass-dead-fish-dead-bird-cases-be-a-case-of-over-reporting> a sioc:Item, foaf:Document ;
dc:title "Could the mass dead fish, dead bird cases be a case of over-reporting?"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/could-the-mass-dead-fish-dead-bird-cases-be-a-case-of-over-reporting> .

<http://www.examiner.com/national/discuss/death-and-dignity-hospice-caregiver-advice-for-end-of-life-process> a sioc:Item, foaf:Document ;
dc:title "Death and dignity: Hospice caregiver advice for end of life process"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/death-and-dignity-hospice-caregiver-advice-for-end-of-life-process> .

<http://www.examiner.com/national/discuss/exclusive-interview-with-naomi-judd-on-alternative-pain-management> a sioc:Item, foaf:Document ;
dc:title "Exclusive interview with Naomi Judd on Alternative Pain Management"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/exclusive-interview-with-naomi-judd-on-alternative-pain-management> .

<http://www.examiner.com/national/discuss/if-given-a-choice-at-the-rental-counter-would-you-rent-the-chevy-volt> a sioc:Item, foaf:Document ;
dc:title "If given a choice at the rental counter, would you rent the Chevy volt?"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/if-given-a-choice-at-the-rental-counter-would-you-rent-the-chevy-volt> .

<http://www.examiner.com/national/discuss/introducing-the-next-tim-mcveigh> a sioc:Item, foaf:Document ;
dc:title "Introducing - the Next Tim McVeigh"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/introducing-the-next-tim-mcveigh> .

<http://www.examiner.com/national/discuss/is-the-reality-of-climate-change-still-question> a sioc:Item, foaf:Document ;
dc:title "Is the reality of climate change still in question?"@en ;
xhv:bookmark <http://www.examiner.com/national/discuss/is-the-reality-of-climate-change-still-question> .

<http://www.examiner.com/national/discuss/was-the-reading-of-the-u-s-constitution-congress-beneficial> a sioc:Item, foaf:Document ;

Semantic Web 83

Pain research forum

Pain Research Forum | Progress through collaboration

http://www.painresearchforum.org/

Delicious TR 2011 To... Social Private Mailing lists Python SW RDFa it! Bookmarklets Wolfram Programme TNT ...

Pain Research Forum | Progress t...

PAINRESEARCHFORUM
Progress through collaboration

CONTACT | SUPPORT US | NEWSLETTER | RSS FEED

WELCOME GUEST | LOG IN | JOIN | WHY JOIN?

About News Papers of The Week Forums Members & Community Research Resources

Search...

Where Are Glia Going?

Glia conspire with neurons to produce pain. Will they offer up new therapeutic targets?

Read more

1 2 3

Image: R-R Ji, Brigham and Women's Hospital

Welcome to the Pain Research Forum

Join the only web community dedicated to pain research.

BECOME A MEMBER

News

AUG 02 2011 **TRPs Through Time and Space**
Developmental trajectory, tissue specificity of TRPV1, TRPA1 reveal new complexity of nociceptors

RESEARCH

JUL 26 2011 **Asthma Study Dissects Placebo Effects**
Sham treatments alleviate patient-reported symptoms while

Forums

AUG 03 2011 **Pain Communications**
Ali Khatibi
Pain is not just an internal experience, it is shared with others in a number of ways. Observers can see, evaluate and interpret peoples' painful...

DISCUSSION

MOST POPULAR CONTENT

COMMENTED ON	VIEWED	EMAILED
IOM Report Calls for Cultural Shift in Pain Treatment, Prevention, Research		
What Is the Reason for Lack of Translation in the Pain Field?		
Unexpected Role for Laminin in Skin Sensation		
Sunburn Pain? Check Your Chemokines		

Pain research forum

The image shows a screenshot of a web browser displaying the Pain Research Forum website and an XML editor window.

Pain Research Forum Website:

- Header:** PAINRESEARCH Progress through collaboration
- Navigation:** About, News, Papers of The Week
- Featured Article:** "Where Are Glia Going?" with a green neuron image. Text: "Glia conspire with neurons to produce pain. Will they offer up new therapeutic targets? Read more".
- News Section:**
 - AUG 02 2011 TRPs Through Time and Space**: Developmental trajectory, tissue specificity of TRPV1, TRP reveal new complexity of nociceptors. RESEARCH
 - JUL 26 2011 Asthma Study Dissects Placebo Effects**: Sham treatments alleviate patient-reported symptoms whi

XML Editor Window (extract-1):

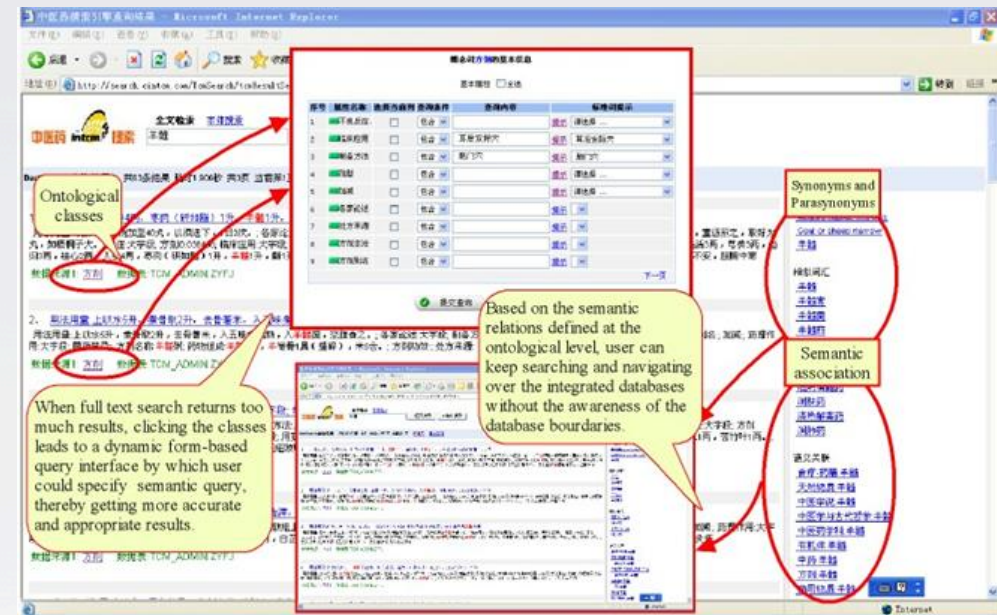
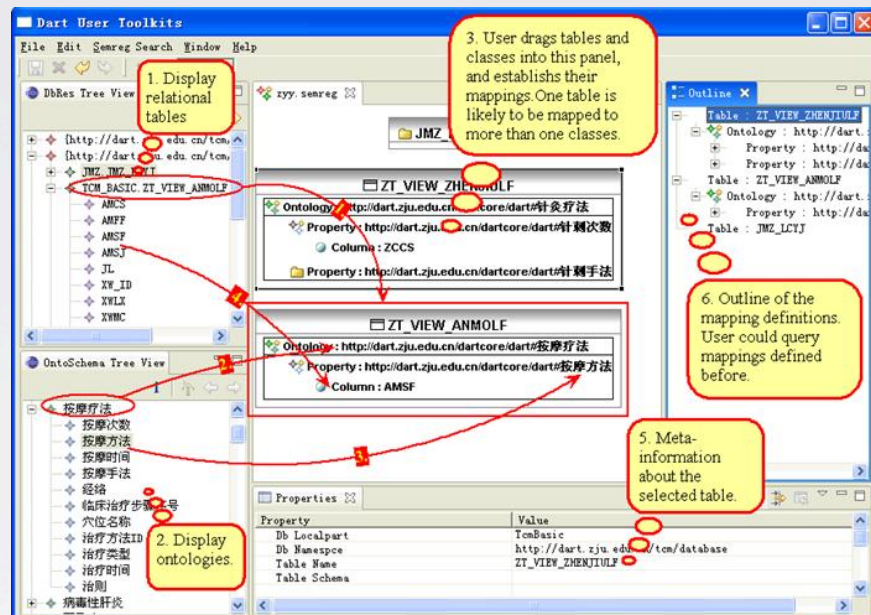
- File Path:** ~/Downloads/extract-1
- Last Saved:** 2011-8-5 09:22:19
- Content:** RDF data in XML format.

```
77 <http://www.painresearchforum.org/members/directory/user/542> a sioc:UserAccount ;
78   foaf:name "Martin Schmelz" .
79
80
81 <http://www.painresearchforum.org/members/directory/user/551> a sioc:UserAccount ;
82   foaf:name "Chih-Cheng Chen" .
83
84 <http://www.painresearchforum.org/members/directory/user/575> a sioc:UserAccount ;
85   foaf:name "Paul DeCaen" .
86
87 <http://www.painresearchforum.org/members/directory/user/577> a sioc:UserAccount ;
88   foaf:name "Uhtaek Oh" .
89
90 <http://www.painresearchforum.org/node/2206> a sioc:Item, foaf:Document ;
91   content:encoded "" <p xml:lang="en" xmlns="http://www.w3.org/1999/xhtml">Information for the
... new researcher or veteran in the field,<a href="/resources/pain-101">Pain 101</a> is our
... collection of topical articles on important issues in pain research--check out our inaugural
... articles on modeling pain in lower organisms and the role of glia in chronic pain. Our<a
... href="/resources/pain-gene-resource">Pain Genes </a>Resource will have the most up-to-date
... information on the genetics of pain sensitivity, risk of chronic pain and response to
... analgesics, presented in a format that makes it easy to keep current. We're in the process of
... pulling together data on the first 53 genes--you can help this resource grow by submitting
... new genes and studies. Stay tuned for more resources to come, including our Drug Pipeline
... database.</p>
92   ""^^rdf:XMLLiteral .
93
94 <http://www.painresearchforum.org/node/2207> a sioc:Item, foaf:Document ;
95   content:encoded "" <p xml:lang="en" xmlns="http://www.w3.org/1999/xhtml">PRF members have
... full access to our Members and Community resources. They can view colleague profiles in the
... PRF<a href="/members/directory">Directory</a>, and find <a
```


Applications examples...

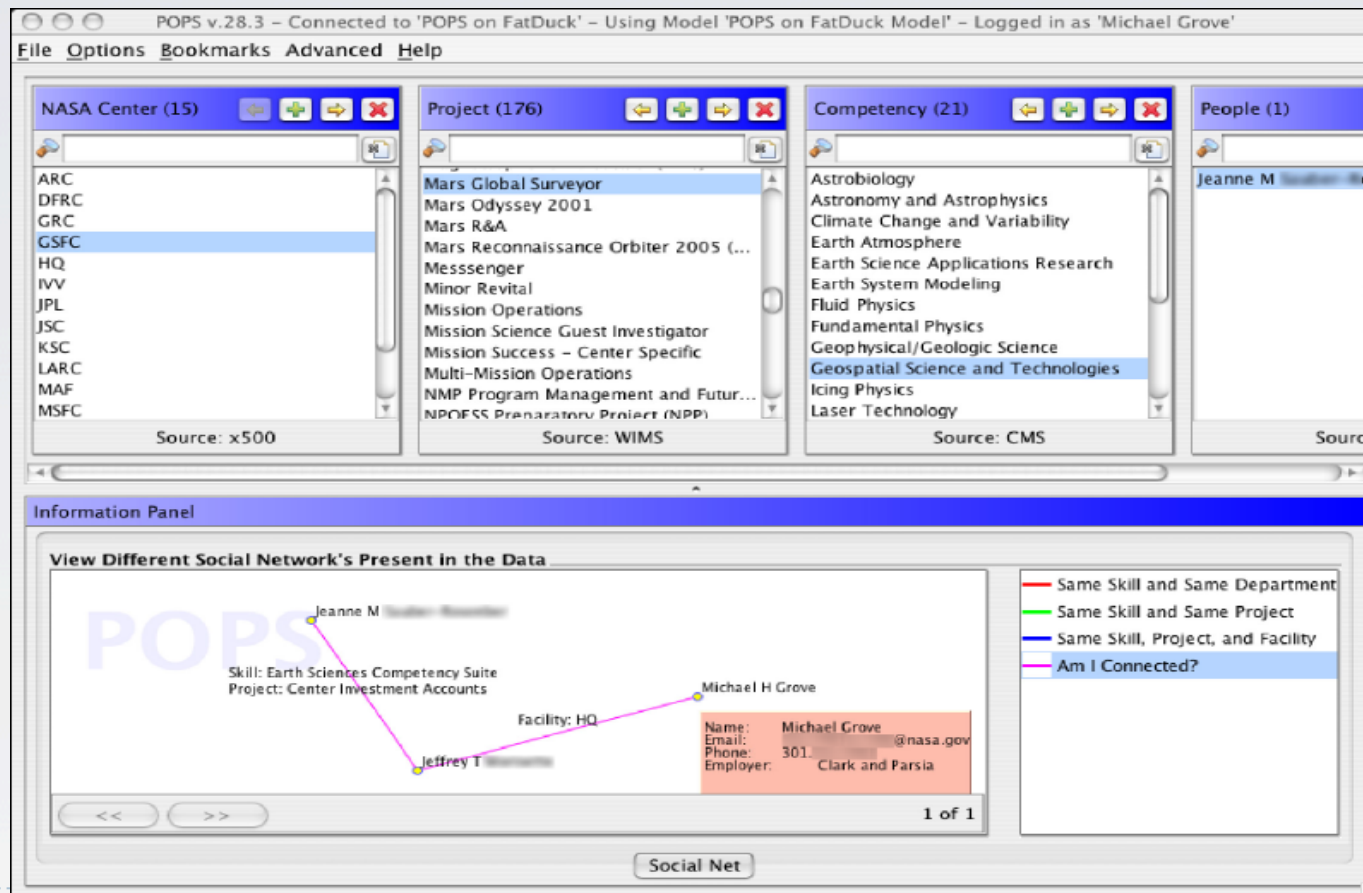
Integrate knowledge for Chinese Medicine

- ▶ Integration of a large number of TCM databases
 - ▶ around 80 databases, around 200,000 records each
- ▶ A visual tool to map databases to the semantic layer using a specialized ontology
- ▶ Form based query interface for end users



Find the right experts at NASA

- ▶ Expertise locator for nearly 70,000 NASA civil servants, using RDF integration techniques over 6 or 7 geographically distributed databases, data sources, and web services...



Find the right experts at Vodafone

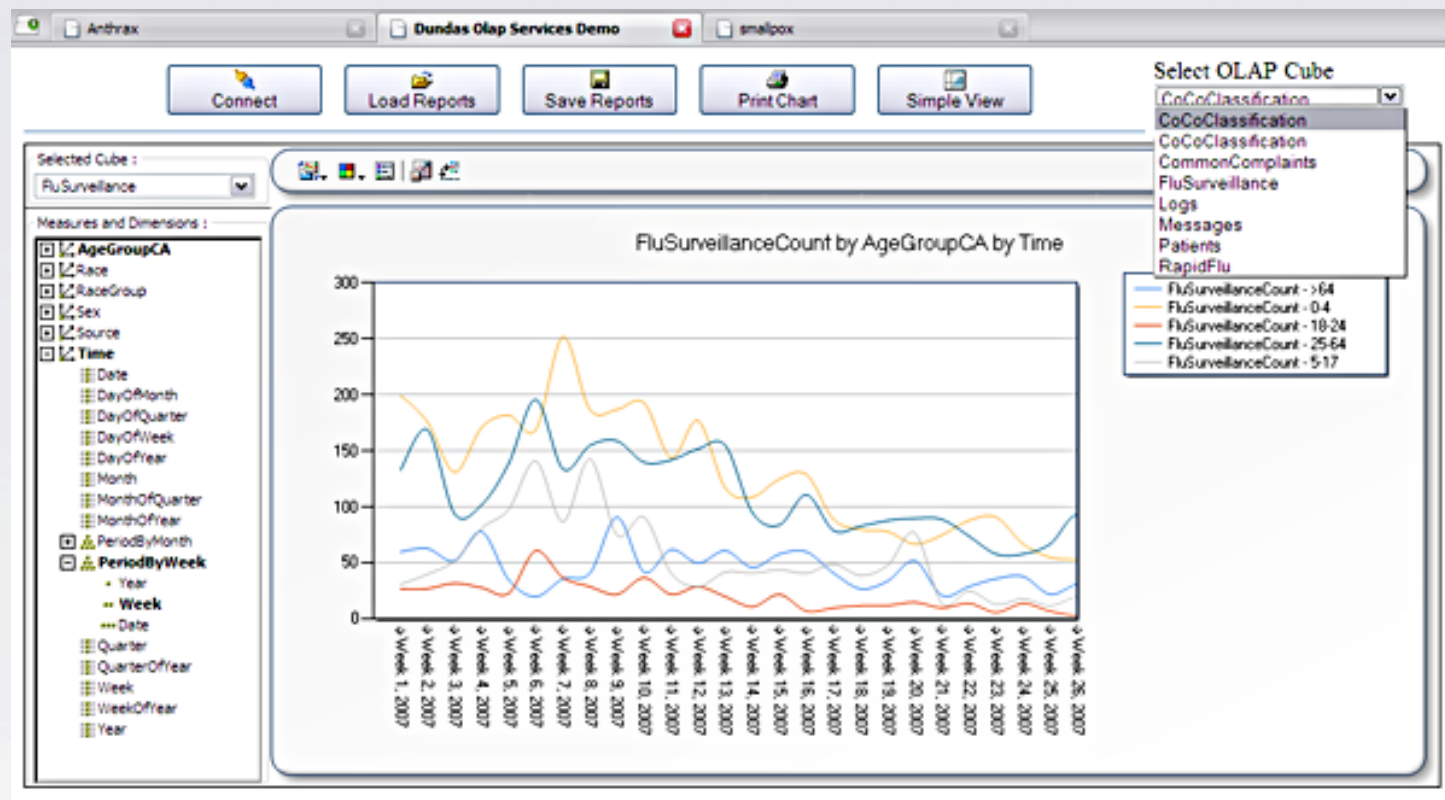
- ▶ Very similar to the NASA application, though with different technologies...

The left screenshot shows the search results for the query "Who is working in project Charcoal?". It displays three external persons and two internal persons, each with their name, role, and company.

The right screenshot shows the main interface of the Vodafone Semantic Search Engine. It features a search bar, a "Search by topics" section with a topic selection menu, and a form for searching by topics. The topic selection menu includes options like "Physical Entity", "Object", "Agent", "Person", "External Person", "Internal Person", "Person", "Organization", and "Non Physical Entity". The form includes fields for email, login, name, phone, photo, position, department, and reports, along with "Search" and "Reset" buttons.

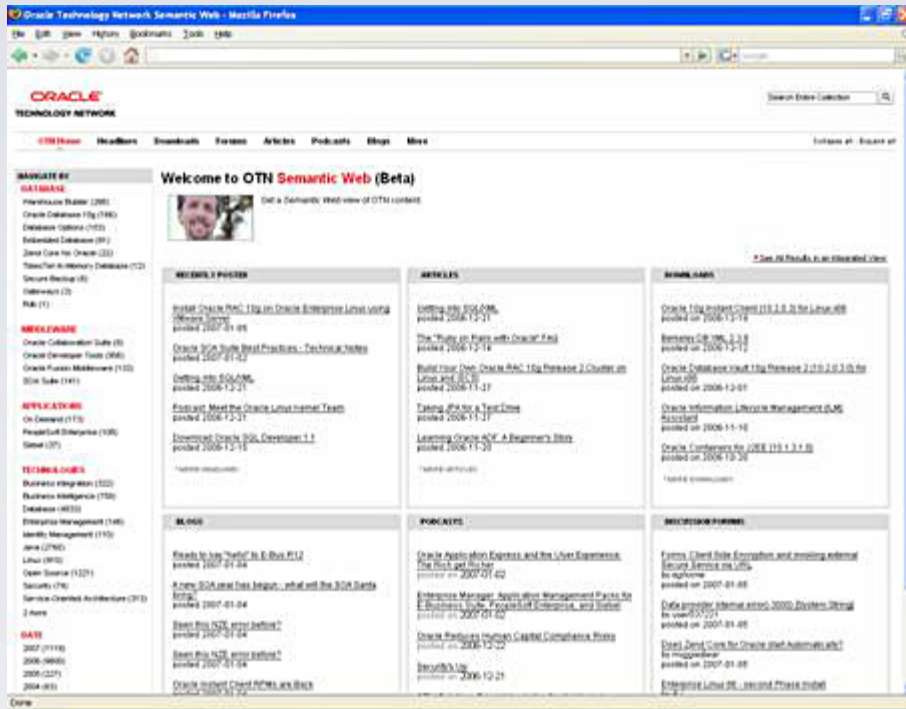
Public health surveillance (Sapphire)

- ▶ Integrated biosurveillance system (biohazards, bioterrorism, disease control, etc)
- ▶ Integrates multiple data sources
 - ▶ new data can be added easily

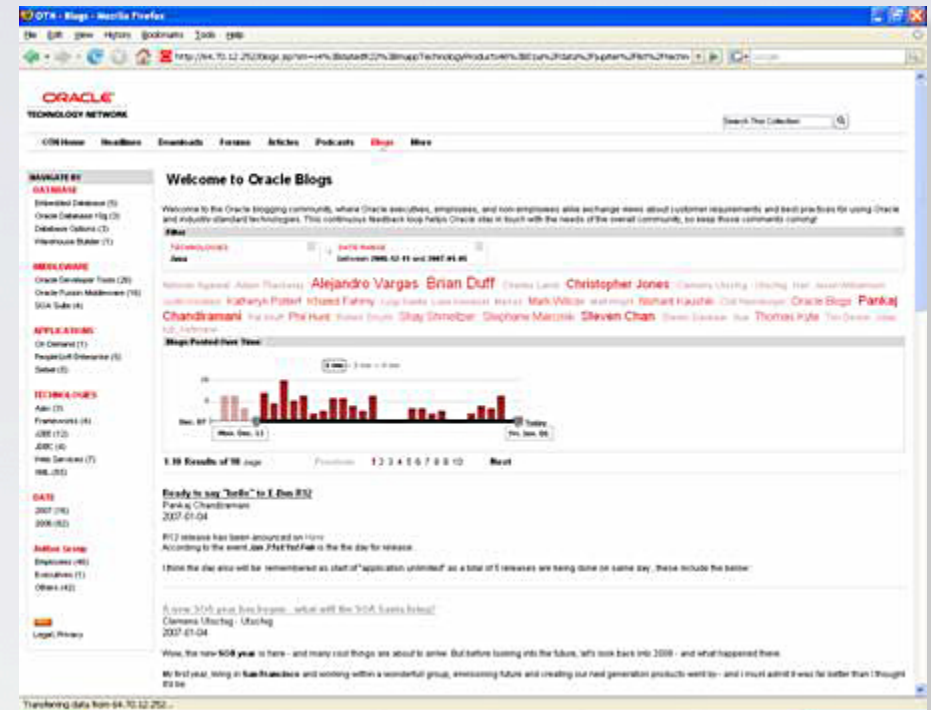


Oracle's Technology Network portal

Aggregates many source of content

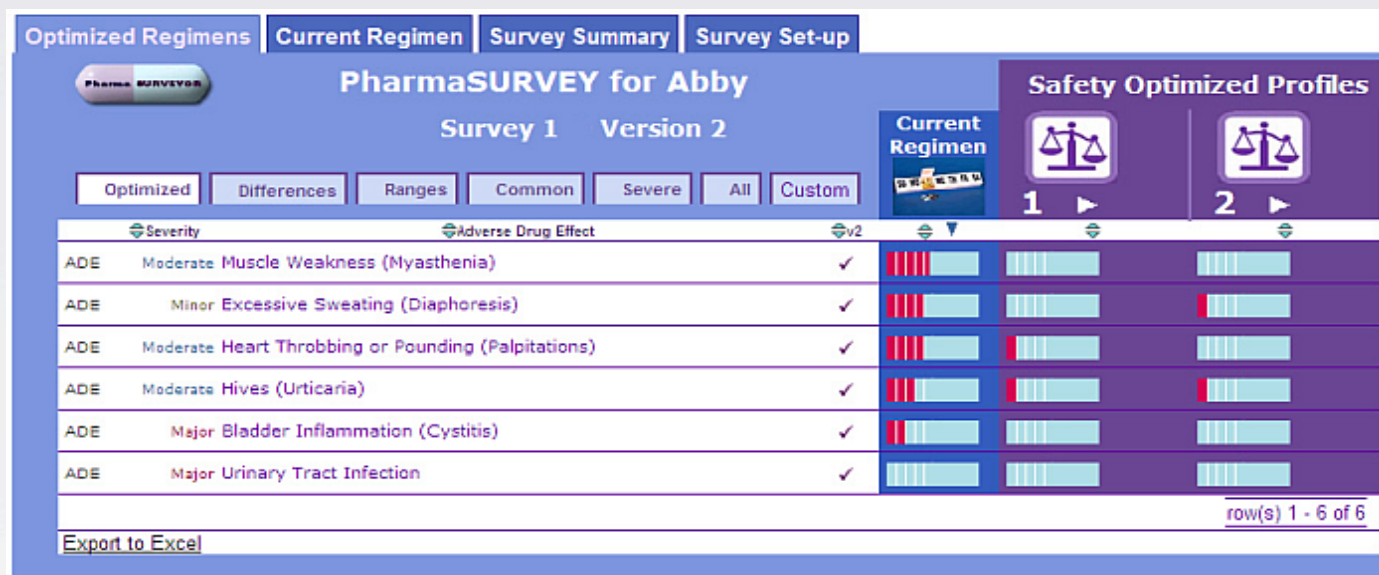


Re-group, categorize, etc content (using a taxonomy)



Help in choosing the right drug regimen

- ▶ Help in finding the best drug regimen for a specific case, per patient
- ▶ Integrate data from various sources (patients, physicians, Pharma, researchers, ontologies, etc)
- ▶ Data (eg, regulation, drugs) change often, but the tool is much more resistant against change



The screenshot displays the PharmaSURVEYOR interface for 'Survey 1' and 'Version 2'. It features a table comparing 'Optimized' and 'Current Regimen' profiles across six ADEs. The 'Optimized' column shows severity levels (Moderate, Minor, Major) and checkmarks indicating presence. The 'Current Regimen' column shows bar charts for two profiles (1 and 2) with red and blue segments. The interface includes tabs for 'Optimized', 'Differences', 'Ranges', 'Common', 'Severe', 'All', and 'Custom'. A 'Safety Optimized Profiles' section on the right shows two balance scale icons. The bottom right corner indicates 'row(s) 1 - 6 of 6' and an 'Export to Excel' button.

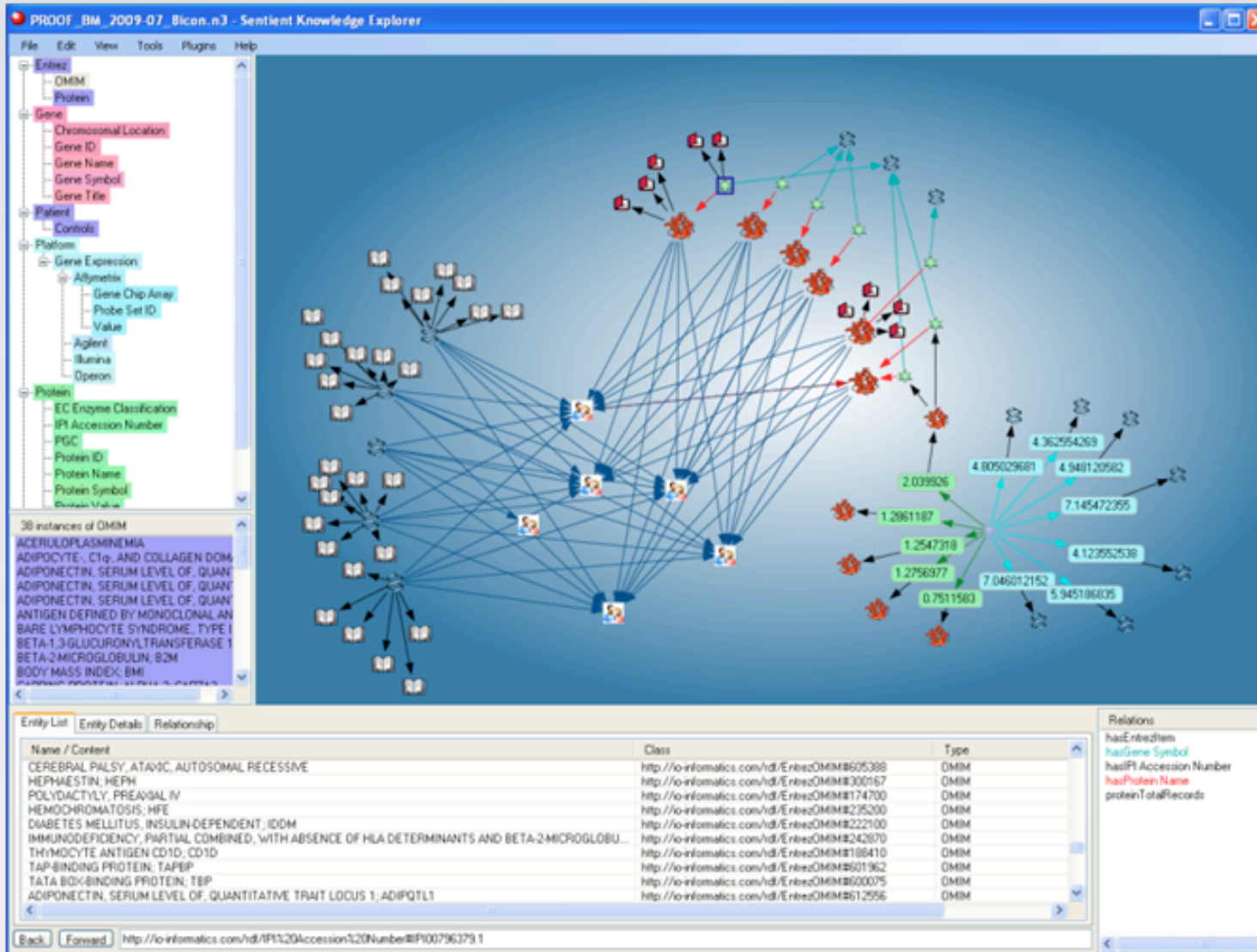
Severity	Adverse Drug Effect	Optimized	Current Regimen
Moderate	Muscle Weakness (Myasthenia)	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)
Minor	Excessive Sweating (Diaphoresis)	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)
Moderate	Heart Throbbing or Pounding (Palpitations)	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)
Moderate	Hives (Urticaria)	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)
Major	Bladder Inflammation (Cystitis)	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)
Major	Urinary Tract Infection	✓	Bar chart (Profile 1: 100% red, Profile 2: 100% blue)

Applying Semantic Integration for Organ Failure Risk Detection

- System by IO Informatics and UBC:
 - data are integrated from experimental data, clinical endpoints, public ontologies, LOD, etc
 - statistical analysis is performed on the integrated data
 - a visual interface to generate ASK SPARQL queries is provided
 - query patterns are stored
 - for clinicians, a simple web-based alerting of “hits” is provided with statistical scores

Courtesy of Robert Stanley, et al, IO Informatics, USA, and UBC, Canada, ([SWEO Case Study](#))

IO Informatics & UBC



Courtesy of Robert Stanley, et al, IO Informatics, USA, and UBC, Canada, ([SWEO Case Study](#))

IO Informatics & UBC

ASK SPARQL Arrays - Windows Internet Explorer

http://hank2008/Sentient/SPARQL/ASK/Arrays.aspx#results

File Edit View Favorites Tools Help

IO Informatics Sentient Suite




Welcome Administrator: Profile Logout




Browse Search Site Administration About



My Queries ASK Arrays Query Builder Custom SQL SPARQL Administration Migration

ASK Arrays

Choose Array: Organ failures Search

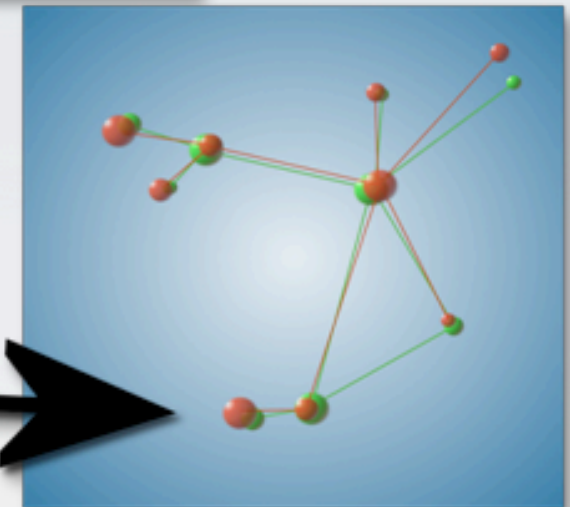
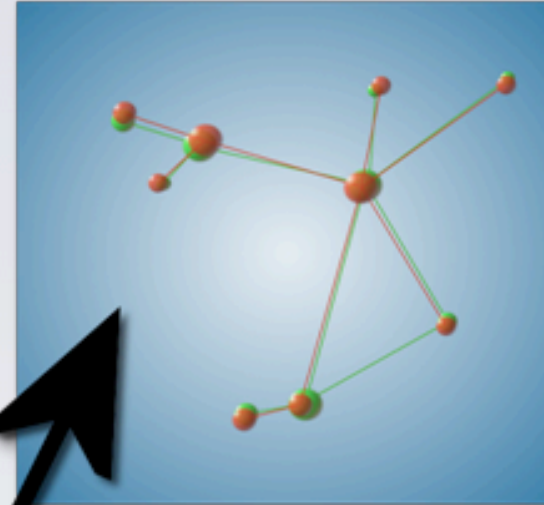



- A Acute Rejection, medium confidence [Gene BMs]
- B Acute Rejection, medium confidence [Protein BMs]
- C Acute Rejection, high confidence [Combinatorial BMs]
- D Acute Rejection, very tight range (ALL Combinatorial BMs)
- E Non Rejection, medium confidence [Protein BMs]
- F Non Rejection, medium confidence [5 Protein BMs, 1 Gene BM]
- G Acute Rejection, low confidence [Gene BMs]
- H Acute Rejection, uncertain [1 weak Gene BM]

Acute Rejection, high confidence [Combinatorial BMs] [Open in Knowledge Explorer](#)

Controls Value	Value1	Value2	Value3	Value4	Protein_Value	Protein_Value1	Protein_Value2	Protein_Value3	Score	
AR2	4.922748721	4.743109483	3.96468382	4.02275853	5.829296888	1.534376	1.0509057	1.164798	0.9107218	0.0579
AR5	5.150558709	4.716695571	3.373487898	5.368614783	5.983364312	1.725311	0.9254474	1.2732773	1.0197685	0.1586

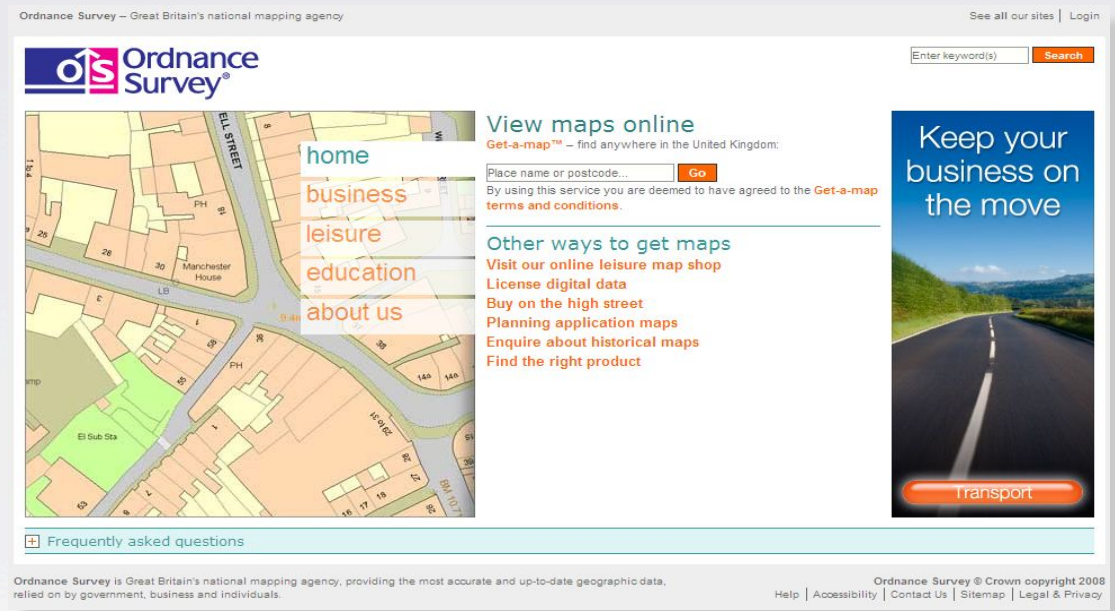
Copyright 2006 - 2008, IO Informatics, Inc. (rev. 2.0.0.475)



Courtesy of Robert Stanley, et al, IO Informatics, USA, and UBC, Canada, ([SWEQ Case Study](#))

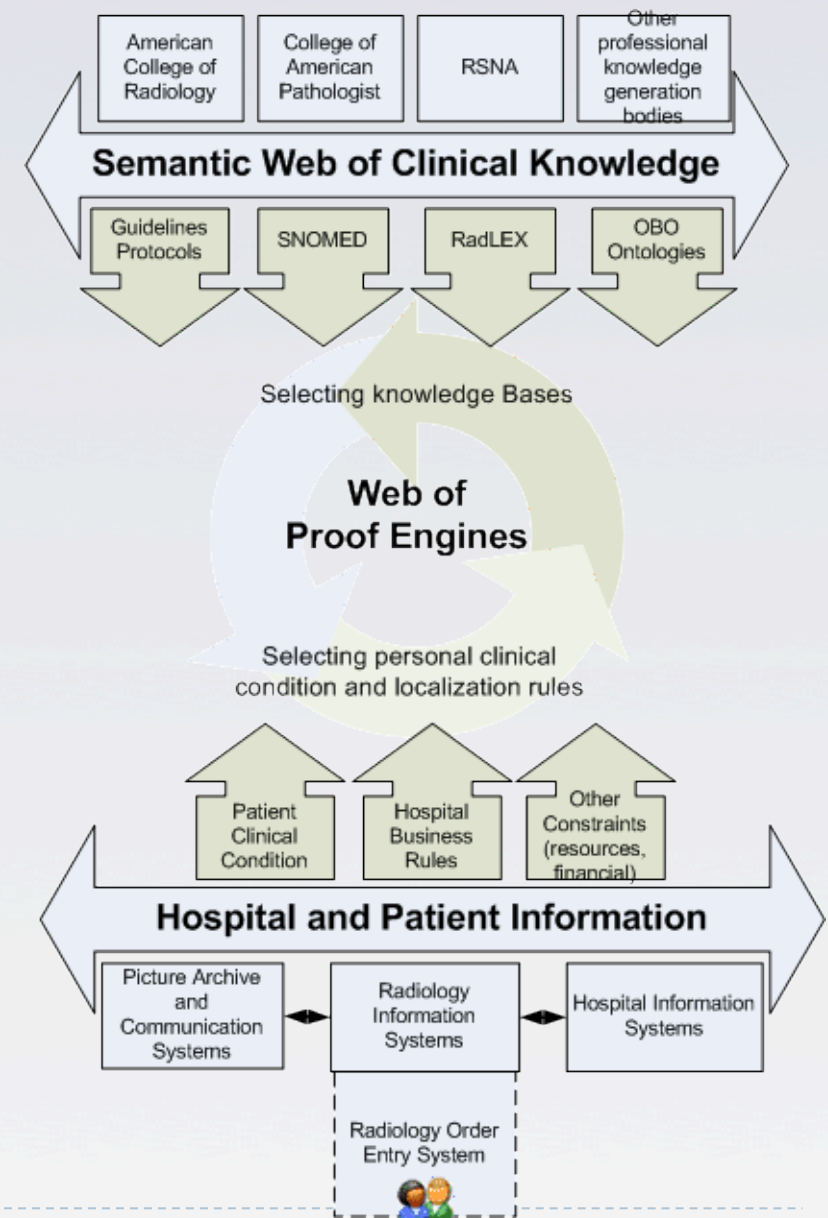
UK's Ordnance Survey

- ▶ Maintains a definitive mapping data of Great Britain
- ▶ Integrates different, semantically diverse source of data
- ▶ General ontologies are used to bridge terminology and for better queries



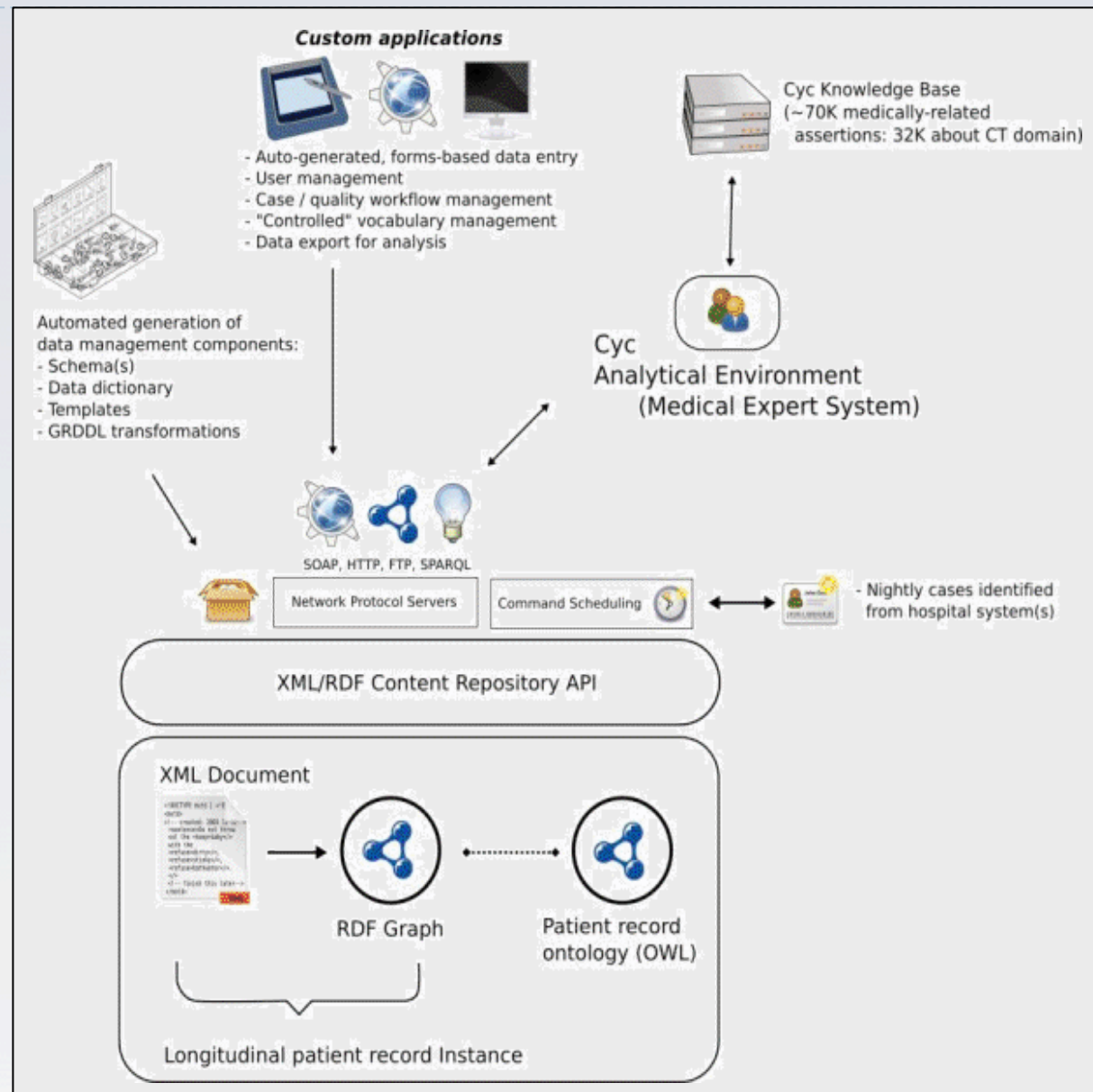
Radiological procedure orders

- ▶ Separates the general knowledge base
- ▶ Eases the burden of developing and maintaining knowledge
- ▶ Ability to trace decision provenance
 - ▶ may prevent, eg, medical errors
 - ▶ helps generating the right radiology order

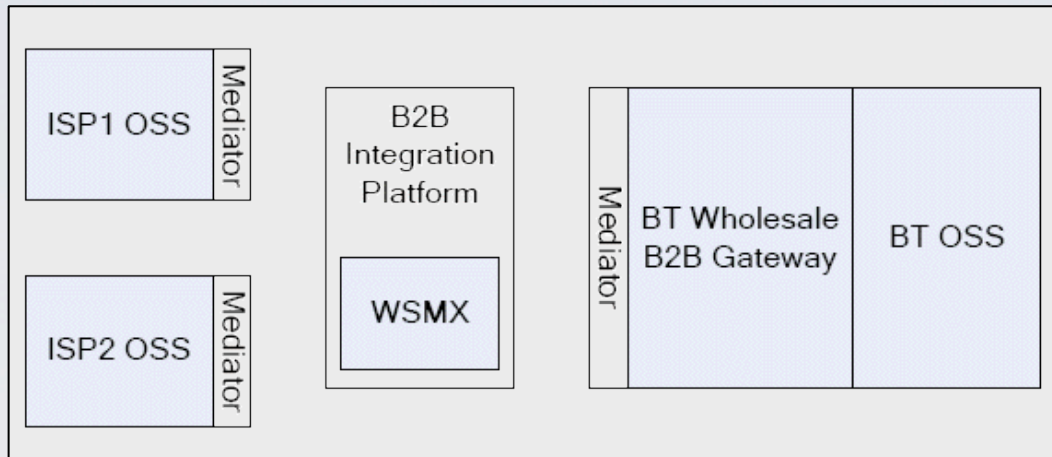


Semantic DB at the Cleveland Clinic

- ▶ Problem: extreme compartmentalization of medical knowledge
- ▶ Unified repository collects and stores various data
- ▶ Usage of OWL and rules allow high level operations on the data



B2B Integration by BT



OSS = Operational Support System

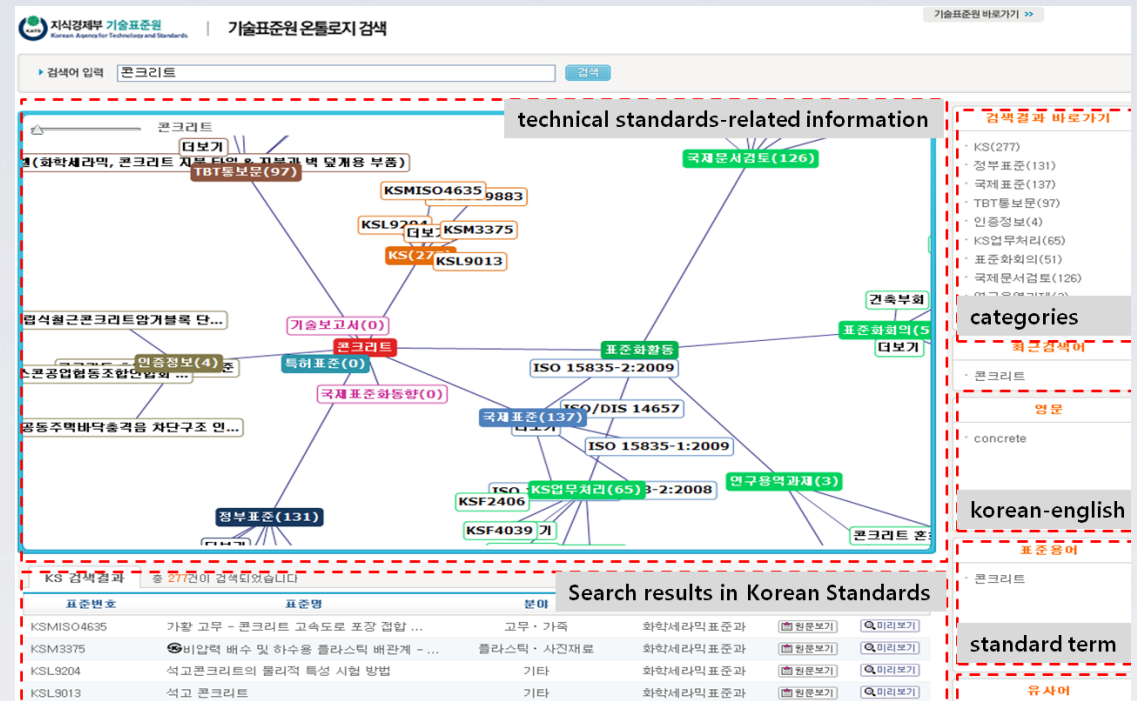
- ▶ Semantic description of system interfaces in BT's supply chain
- ▶ Providers integrate their support system with those of BT
- ▶ Possibility to integrate heterogeneous support systems of partners

A frequent paradigm: intelligent portals

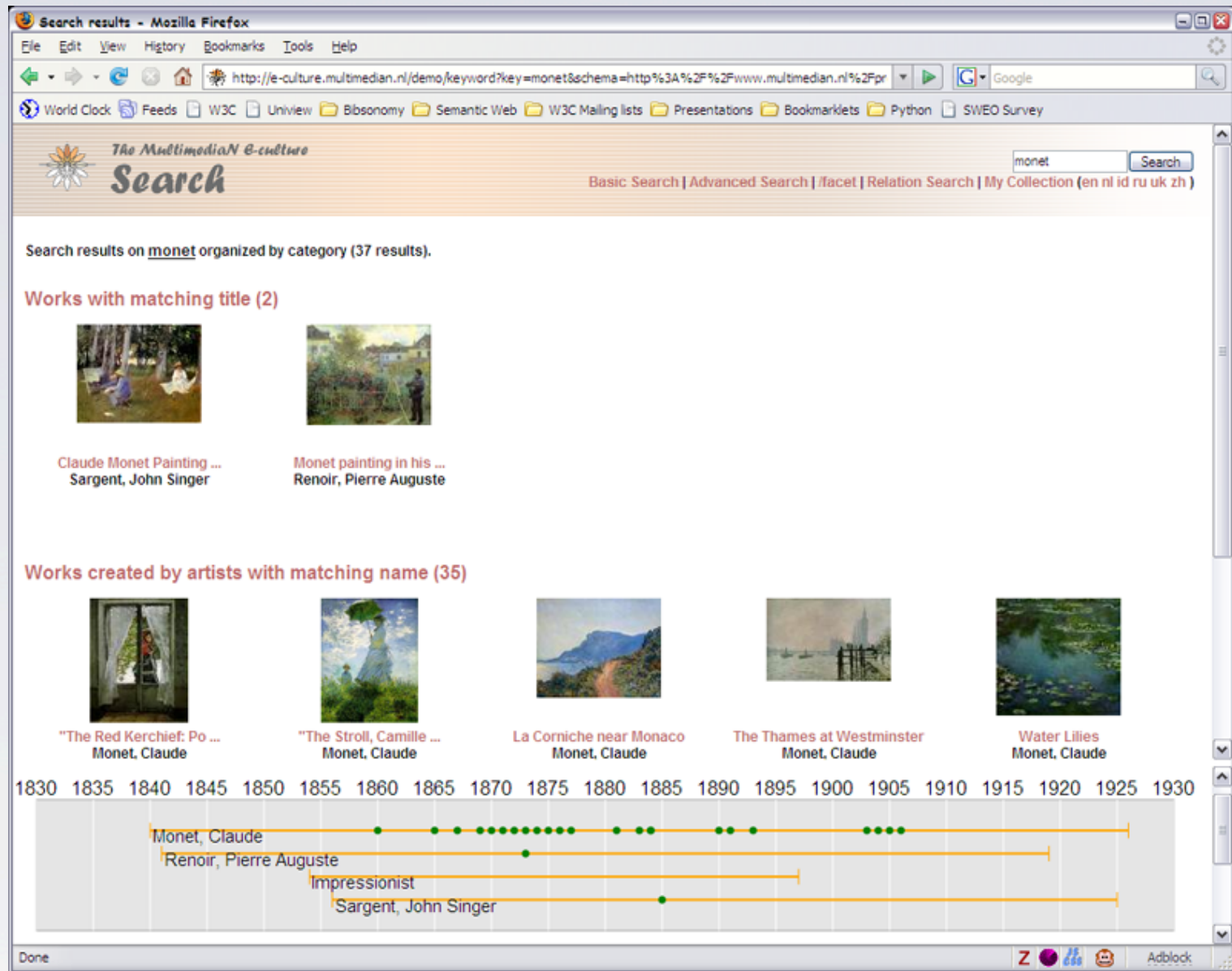
- ▶ “Portals” collecting data and presenting them to users
- ▶ They can be public or behind corporate firewalls Portal’s internal organization makes use of semantic data, ontologies
 - ▶ integration with external and internal data
 - ▶ better queries, often based on controlled vocabularies or ontologies...

Find the right standard easily

- ▶ Problem: find the proper (domestic) standard
- ▶ Search term should be “non-standard” to help users
- ▶ Usage of OWL to model the area, RDF to integrate various datasets



Semantic portal for art collections



Semantic portal for art collections (2)

Search results - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Jacco.van.Ossenbruggen@cwi.nl

http://e-culture.multimedien.nl/demo/keyword?key=taichang iswc

The Multimedien E-culture Search

Basic Search | Advanced Search | /facet | Relation Search | My Collection (en nl id ru uk zh)

Search results on taichang organized by category (47 results).

Works style/period.period has narrower with matching preferred label (46)

5664-2 (dc:creator unknown)

pop: speelgoedpop (dc:creator unknown)

mingqi (dc:creator unknown)

mingqi (dc:creator unknown)

kommetje (dc:creator unknown)

kommetje (dc:creator unknown)

see more>

mingqi (dc:creator unknown)

draagkist (dc:creator unknown)

1360 1380 1400 1420 1440 1460 1480 1500 1520 1540 1560 1580 1600 1620 1640

5664-2

pop: speelgoedpop

Semantic portal for cultural heritage

Patrimonio Cultural **Cantabria** Fundación Marcelino Botín 7 de Marzo de 2007

Inicio > Lugares > Cantabria

Buscador:

Periodos Personas Instituciones Patrimonio Obras/Monumentos El Proyecto

ESPECIAL - Titular del especial

Beato de Liébana
Autor de comentarios al Apocalipsis, compone himno litúrgico
Stephen Dedalus watched through the webbed window the lapidary's fingers prove a timeworn chain. Dust webbed the window and the showtrays. Dust darkened the toiling fingers
with their vulture nails.
más

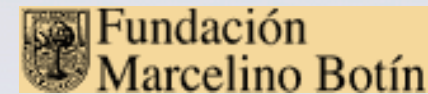
Marcelino Sanz de Sautoula y su hija
descubren las pinturas de las cuevas de Altamira
Lugares y Sitios
Componente de Personas
más

Torre medieval de Agüero
La torre medieval, de estilo gótico, fue construida en el siglo XIII
más

Mapa Interactivo TagCloud Linea del Tiempo

Santander Altamira Santillana del mar Iglesia románica Libro de regla Santa Juliana

Linea del Tiempo



¿LO SABÍA?

Pulse la BARRA ESPACIADORA para visualizar el siguiente resultado de la búsqueda. Pulse SHIFT-SPACE para volver al resultado anterior.

siguiente

TÉRMINOS RELACIONADOS

- ☐ Gobierno de Cantabria
- ☐ Universidad de Cantabria
- ☐ Comunidad Autónoma de Cantabria
- ☐ Caja Cantabria
- ☐ Castro Urdiales
- ☐ San Vicente de la Barquera
- ☐ Norte de España
- ☐ Ciudad de Santander

CATEGORÍAS RELACIONADAS

- Negocios (59%)**
 - Mercado inmobiliario
 - Guías y directorios
- Viajes y turismo (36%)**
 - Rural
- Sociedad (4%)**

UBICACIÓN SITIO WEB

- Europa (72%)**
 - España
- Norteamérica (27%)**

IDIOMA DEL DOCUMENTO

- Español (82%)**
- Inglés (15%)**
- Francés (1%)**

TIPO DE DOCUMENTO

- ☐ PDF ☐ DOC ☐ TXT ☐ XLS ☐ SWF
- ☐ PPT ☐ RTF

MODIFICAR BÚSQUEDA

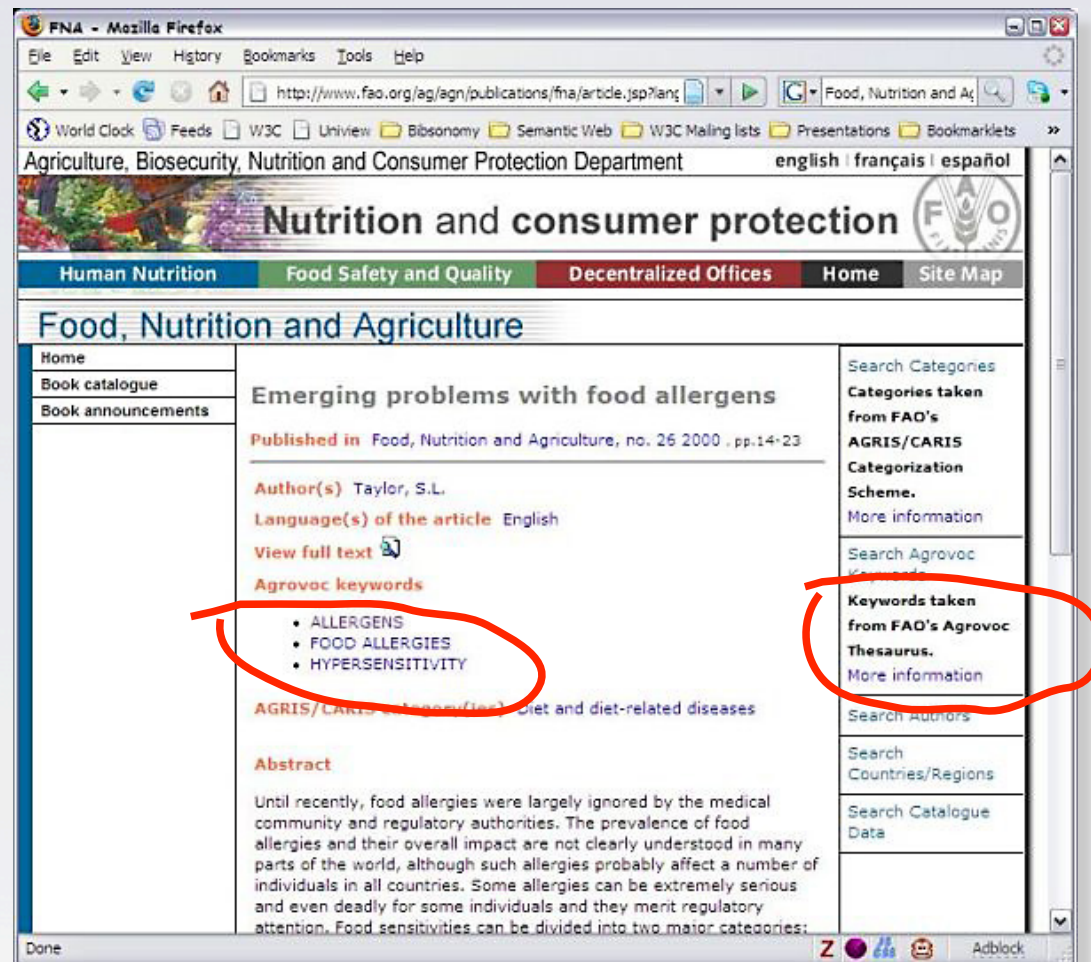
- Búsqueda fonética
- Buscar en los resultados

2000 A.C. ☐ Tiempo acumulado ☐ Tiempo puntual 2500 D.C.

Barra de estado

FAO Journal portal

- ▶ Improved search on journal content based on an agricultural ontology and thesaurus (AGROVOC)



Portal to aquatic resources

AQUARING

Bringing European resources on the aquatic world to you






Home Search Tag cloud Map Exhibitions Video Join About

Language selected: User type selected: None

Select a topic

General Species Land Habitats Fishing areas Vessels Education

Contents:

-  Jumping striped dolphin
Acquario di Genova
[ID: 136]
-  three striped dolphins
Acquario di Genova
[ID: 138]
-  bottlenose dolphin
Acquario di Genova
[ID: 139]
-  bottlenose dolphin with puppy
Acquario di Genova
[ID: 140]
-  Harbour Seal sound

Related topics:

You have selected: MAMMALIA

Select a topic:

ATL.ANTARCTC PHOCIDAE CETOLOGY MARINE MAMMALS

NW PACIFIC MEDITERRANEAN PHOCOENA PHOCOENA ANIMAL POPULATIONS

E INDIAN O. SE ATLANTIC PISCES LIGURIA PINNIPEDIA TEMPERATE

WATERS HALICHOERUS GRYPUS NE ATLANTIC MARINE ENVIRONMENT

MARINE HABITATS DELPHINIDAE BALTIC SEA

MYSTICETI PAC.ANTARCTC EC ATLANTIC MARINE ORGANISMS SPECIES

EXTINCTION NE PACIFIC AMPHIBIA, REPTILIA NW ATLANTIC EC

PACIFIC AQUATIC ANIMALS W/C ATLANTIC CAPTIVITY W/C PACIFIC

Relations:

MAMMALIA

lies in ...

- ESTUARIES
- NE ATLANTIC
- SE ATLANTIC
- EC PACIFIC
- MEDITERRANEAN
- MARINE HABITATS

is studied by ...

- ECOLOGY
- CETOLOGY
- BIOACOUSTICS
- ETHOLOGY
- VERTEBRATE ZOOLOGY
- ENVIRONMENTAL

is affected by ...

- ORGANIC MATTER

French Historical Monuments (Antidot)

- ▶ Antidot's RDF engine integrates various data
 - ▶ official data on historical monuments published by data.gouv.fr
 - ▶ OpenStreetMap data on, eg, metro stations in Paris
 - ▶ official geographical data of the INSEE
 - ▶ photographs via Wikipedia
 - ▶ descriptions of historical monuments on DBPedia
 - ▶ etc
- ▶ Data integrated, extra statements generated
- ▶ Search engine is built on top of the RDF dataset by Antidot's own engines
- ▶ 4 days' work, one person, reusing existing toolset

French Historical Monuments (Antidot)

Monuments historiques – Recherche

Monuments historiques – Recher...

> Affiner

>> Photos du monument ?

☒ Oui 51

>> Région / Département / Ville

☒ Provence-Alpes-Côte D'Azur 51

>> Type de monument

☐ Hôtel 33

☐ Monument 4

☐ Immeuble 4

☐ Maison 3

☐ Château 2

☐ Eglise 2

☐ Fontaine 1

☐ Hôtel de ville 1

☐ Halle 1

>> Période historique


☒ Époque moderne 51

☐ Époque contemporaine 6

> Résultats de la recherche

51 résultats (76ms)


Trier par Pertinence



Mis à disposition sur [Wikimedia Commons](#)

Logis du Bras d'Or ou maison de Darius Milhaud

Type : Maison
Adresse : 2 place Barthélémy-Niollon
Localité : Aix-en-Provence (Bouches-du-Rhône)
Période historique concernée : Époque moderne - Époque contemporaine
Liens externes : [Base Mérimée](#)
Description de l'ensemble inscrit ou classé : La maison en totalité (c. novembre 2002)

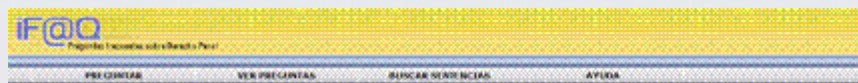


Immeubles formant la place d'Albertas

Type : Immeuble
Adresse : place d' Albertas
Localité : Aix-en-Provence (Bouches-du-Rhône)
Période historique concernée : Époque moderne -
Liens externes : [Base Mérimée](#) - [Wikimedia Commons](#)
Description de l'ensemble inscrit ou classé : Façades et toitures des

Portal to help new judges

- Helps new judges in
 - answering questions
 - jurisprudence search



Help for deep sea drilling operations

- ▶ Integration of experience and data in the planning and operation of deep sea drilling processes
- ▶ Discover relevant experiences that could affect current or planned drilling operations
 - ▶ uses an ontology backed search engine

The screenshot displays the AKSIO search interface. At the top, the AKSIO logo is visible next to a search bar containing the text "leak in barrier elements" and a "search" button. Below the search bar, there are two main sections: "Search filters" and "Results 1 - 7 of 7".

Search filters:

- discipline:** A dropdown menu.
- operation:** A dropdown menu.
- equipment:** A dropdown menu.
- state:** A dropdown menu with options: "select all", "unselect all", "Corrosion (1)", "Erosion (2)", "Lack Of Maintenance (2)", "Leak in barrier elements (5)", "Scale Deposition (4)", "Too High Mud Density (1)", and "Well Integrity Problem (7)".
- keywords_ref:** A dropdown menu.
- wellbore_id_ref:** A dropdown menu.
- field_id:** A dropdown menu with options: "select all", "unselect all", "EXPLORATION (1)", "GULLFAKS (1)", "GULLFAKS SØR (1)", "HEIDRUN (1)", "HULDRA (1)", "MIDGARD (2)", "RIMFAKS (1)", "SNORRE (1)", and "VISUND (2)".

Results 1 - 7 of 7:


- 1. Top plug/20" EZSV**
2002-06-26T10:00:00Z
Description: Experience: In a "standard" OPR design, the upper cement plug would cover the 13 3/8" cut as well as...
EXPLORATION NO 6406/1-1 PA PLUGBACK/KICK-OFF
2007-06-12T07:05:58Z
Cementing Network Sementeringsnettverk Directional Drilling Network Directional Drilling Network Bronnintegritet Well Integrity
Casing Foringsør Deep set tubing plug Deep set tubing plug Liner top packer Liner top packer Mechanical tubular plugs
Well Integrity Problem Well Integrity Problem
55% [annotate](#) [comment](#)
- 2. RIH with drill stem teststring**
2002-06-13T10:00:00Z
Description: RIH with drill stem teststring. Took weight when entering 7" liner with test string. Worked same pas...
RIMFAKS NO 34/10-3-4 M DST DRILL STEM TEST
2007-06-12T07:05:58Z
Bronnintegritet Well Integrity
Snubbing Snubbing
Completion string component Completion string component Downhole tester valve Downhole tester valve Borestreng
Drilling Subsea production tree Subsea test tree Subsea test tree Surface test tree Surface test tree Well test packer
Well test string Well test string Well test string components
Erosion Erosjon Lack Of Maintenance Lack Of Maintenance Leak in barrier elements Leak in barrier elements Well Integrity Problem Well Integrity Problem
50% [annotate](#) [comment](#)
- 3. Flowing well**
2003-02-20T11:00:00Z
Description: The well was temporary handed back to production during changeover from slick line to 5/16" cable fo...
HEIDRUN NO 6507/7-A-20 WIREL Høi Trond OTHER
2007-06-12T07:05:58Z
Cementing Network Sementeringsnettverk Technical Sidetrack Tekniske Sidesteg Bronnintegritet Well Integrity
Snubbing safety head Snubbing safety head UBD none return valve UBD none return valve
Corrosion Corrosion Erosjon Erosjon Lack Of Maintenance Lack Of Maintenance Leak in barrier elements Leak in barrier elements Scale Deposition Scale Deposition Too High Mud Density Too high mud density Well Integrity Problem Well Integrity Problem
47% [annotate](#) [comment](#)
- 4. Fill drop sub assy prior to making up packer for barrier assy to avoid possible trapped pressure**
2002-06-24T10:00:00Z
Description: Fill drop sub assy prior to making up packer for barrier assy to avoid possible trapped pressure...
HULDRA NO 30/2-A-6 8 1/2" Rodvelt Knut T/A PLUGS & MECH. PLUGS
2007-06-12T07:05:58Z
Cementing Network Sementeringsnettverk Bronnintegritet Well Integrity
Deep set tubing plug Deep set tubing plug
Leak in barrier elements Leak in barrier elements Scale Deposition Scale Deposition Well Integrity Problem Well Integrity Problem
39% [annotate](#) [comment](#)

Intelligent search at Volkswagen

- ▶ Use OWL to reason over integrated product data
 - ▶ use public vocabularies when possible
 - ▶ develop local vocabularies when necessary
- ▶ Use a visual interface to SPARQL to query the data via a faceted search

Intelligent search at Volkswagen

Login | Sign up | [28 Book a test drive](#) | [Find a retailer](#) | [Order a brochure](#) |

 **Das Auto.**

[New cars](#) | [Used cars](#) | [Buying guide](#) | [Owners](#) | [Fleet](#) | [Technology](#) | [About us](#)

[Follow us](#) [f](#) [t](#) | [Feedback](#) | [Contact us](#)

Search for:

[Go](#)

Previous searches:





- [golf](#)
- [touareg](#)
- [bluemotion](#)
- [passat](#)
- [polo](#)

Popular searches:

- [polo](#)
- [golf](#)
- [touareg](#)
- [bluemotion](#)
- [passat](#)





▼ Models containing 'golf'

Showing 1 - 4 of 5 [Show all](#)

Model	Price	More info	Configure
	Golf From 15850.0	More info	Configure
	Golf Plus From 17030.0	More info	Configure
	Golf Estate From 17960.0	More info	Configure
	New Golf Cabriolet From 20720.0	More info	Configure

▼ Trims containing 'golf'

Showing 1 - 4 of 15 [Show all](#)

Trim	Price	Which Model?	Configure
	Golf S From 15850.0	Which Model?	Configure
	Golf Plus S From 17030.0	Which Model?	Configure
	Golf Estate S From 17960.0	Which Model?	Configure
	Golf Match From 18515.0	Which Model?	Configure

Pages containing 'golf'

Experience : [Golf : Volkswagen UK](#)

Ensures you can have performance as well as exceptional economy with low emissions.

[Next](#) [Previous](#) [Back](#) [Golf](#) [Common Rail TDI Engine](#) Ensures you can have performance as well

[Golf : Volkswagen UK](#)

View all Volkswagen [Golf](#) models. Compare the specifications, engines and pricing across the range

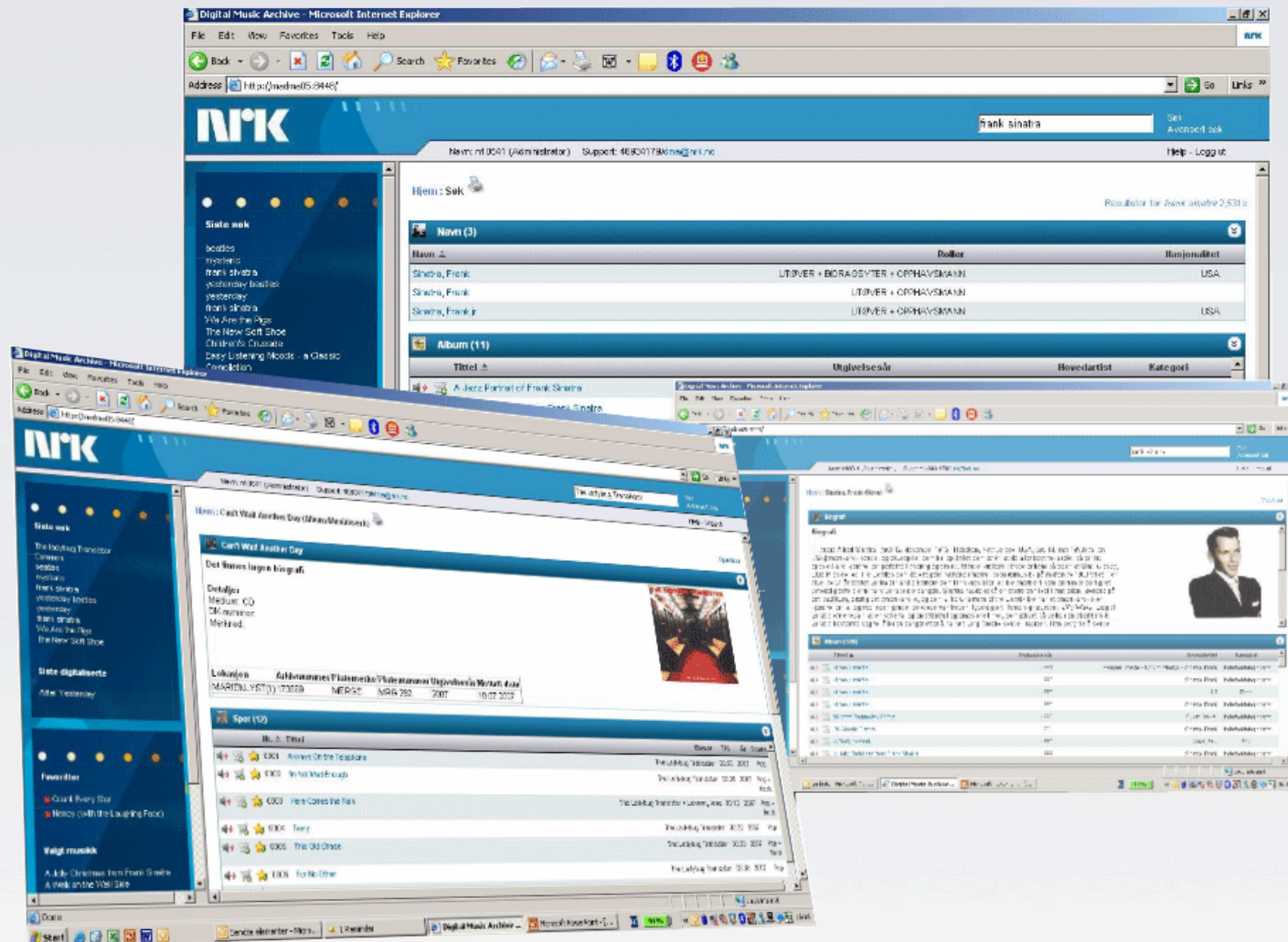
eTourism: provide personalized itinerary

- Integration of relevant data in Zaragoza (using RDF and ontologies)
- Use rules on the RDF data to provide a proper itinerary

The screenshot displays the Zaragoza Turismo website interface. At the top, there's a navigation bar with 'TOURISM' and 'THE CITY COUNCIL' tabs. A sidebar on the left lists various services like 'Tourist Services', 'What to visit', and 'Zaragoza Diary'. The main content area shows a 'Proposed route' for '17/06/08'. It includes a list of 'Morning' and 'Afternoon' tourist sites, each with a red 'X' icon indicating a selection. A map of Zaragoza is shown at the bottom, with a yellow line indicating the proposed route. A detailed view of the 'BASILICA OF THE PILAR' is shown on the left, including a photo and a description. The interface also includes a 'Back to Create' button.

Digital music asset portal at NRK

- Used by program production to find the right music in the archive for a specific show



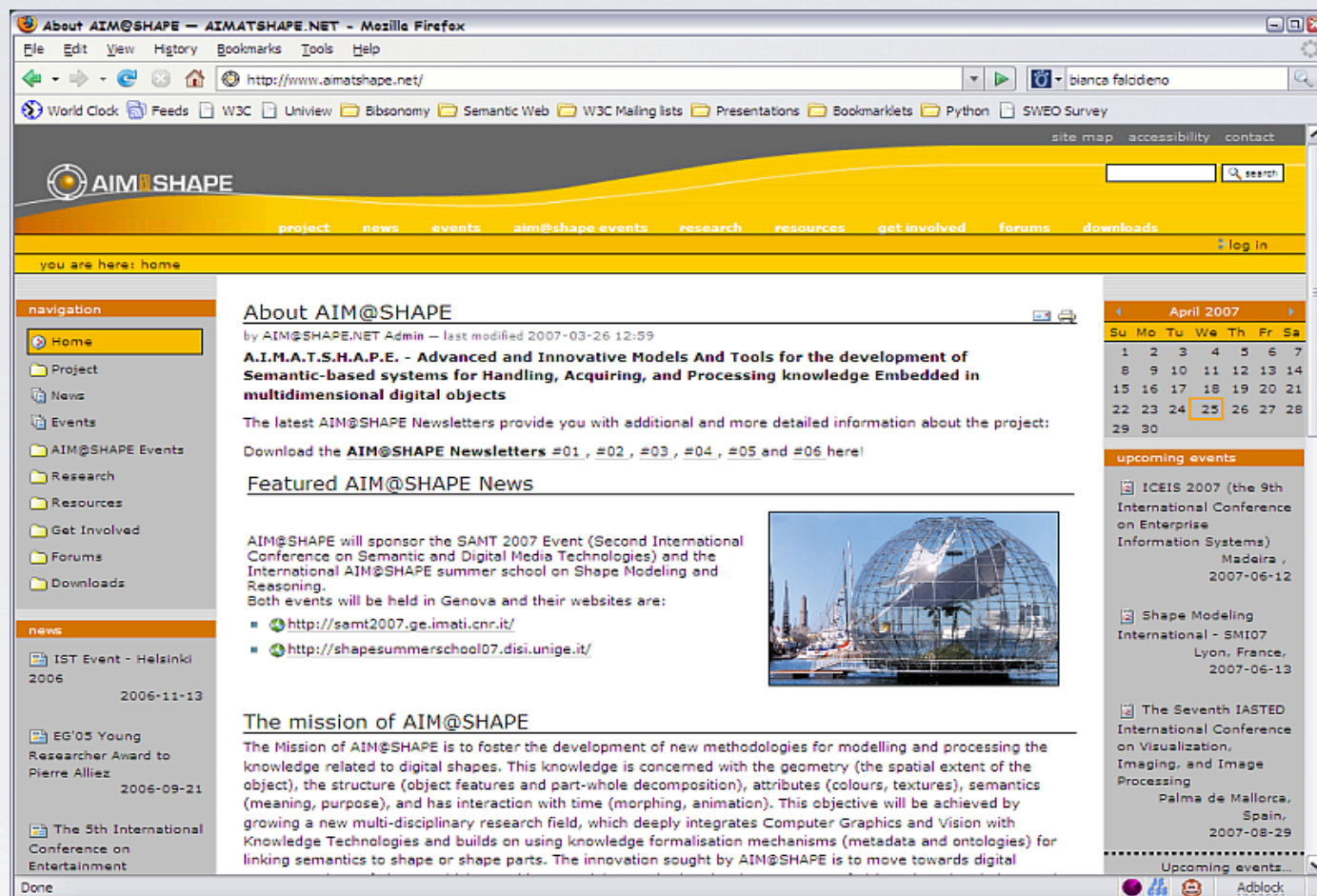
National Archives of Korea

- ▶ Ontology based metadata infrastructure for NAK (over 12 million metadata statements)
- ▶ Usage of rules to retrieve information



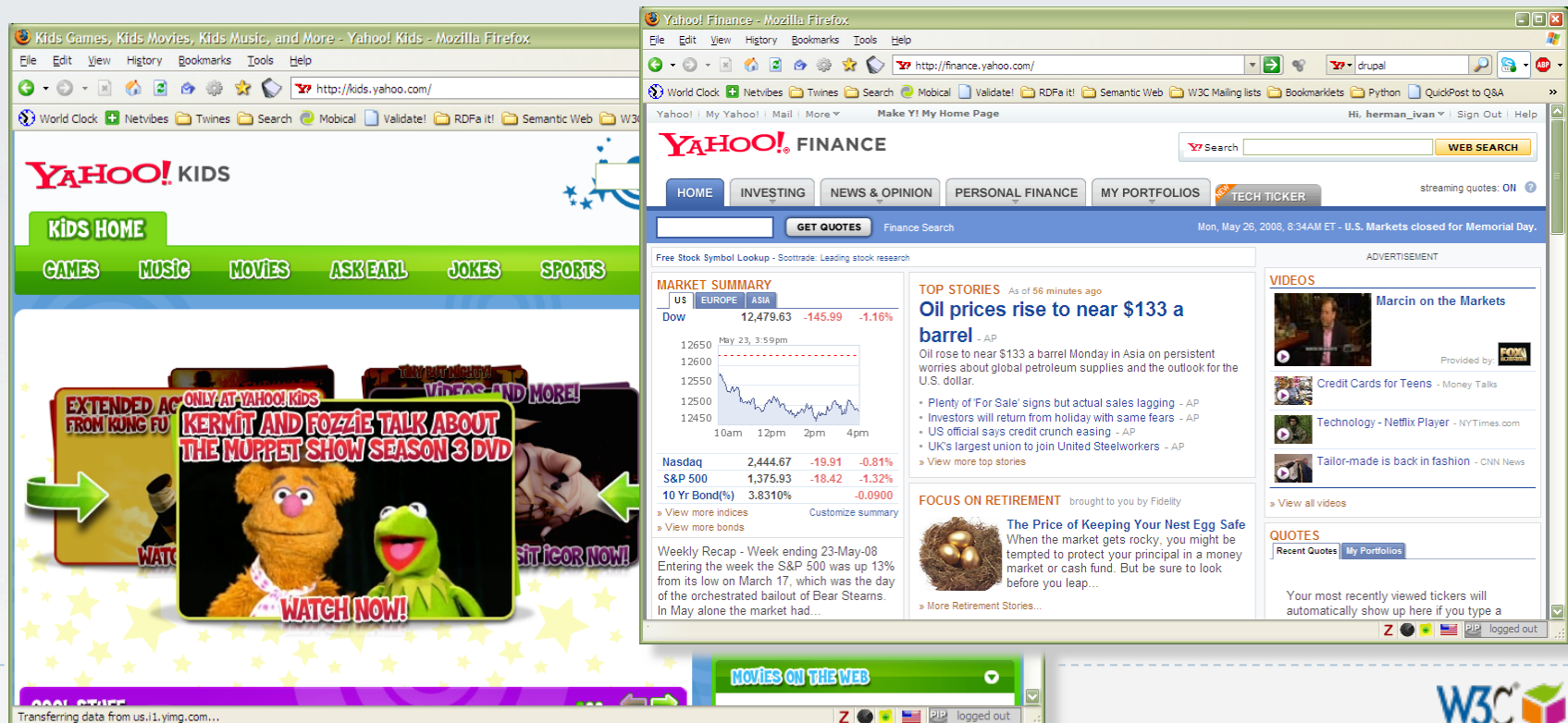
Aim@shape computer graphics portal

- eScience portal for computer graphics (storing digital shapes, surface data, virtual humans' data, tools)



Yahoo! portals

- ▶ “Back-end” is built using SW tools
 - ▶ common (RDF) data model for data, metadata, relationships,...
 - ▶ constraints expressed in OWL, Rules
 - ▶ uses public (DC, PRISM) and private vocabularies



Building the BBC World Cup site

BBC SPORT | Football | World Cup 2010

BBC Home News Sport Weather TV Radio More... Search

SPORT **WORLD CUP 2010** IN ASSOCIATION

SPORT FOOTBALL WORLD CUP 2010 GROUPS & TEAMS FIXTURES & RESULTS



Blogs

David Bond



South Africa kicks off new era
David Bond on how the Rainbow Nation and the World Cup have changed each other forever

Paul Fletcher



Tough night for Webb as Spain triumph
English referee comes under fire from defeated Dutch

Dan Walker



Spain return to rapturous welcome



Spain's victorious World Cup squad return to Madrid amid scenes of joyous celebration in the capital city.

- Netherlands 0-1 Spain (aet)
- Feature: Spain's party of a lifetime

Top scorers

PLAYER	TEAM	GOALS
Muller	 GER	5
Villa	 ESP	5
Sneijder	 NED	5
Forlan	 URU	5
Higuain	 ARG	4

[View full list of goalscorers](#)

Video choice



Liverpool play down Torres injury



Netherlands tactics upset Cruyff



Spain our true heirs, says ex-Netherlands captain Krol

[Watch](#)



Del Bosque tips Spain to dominate



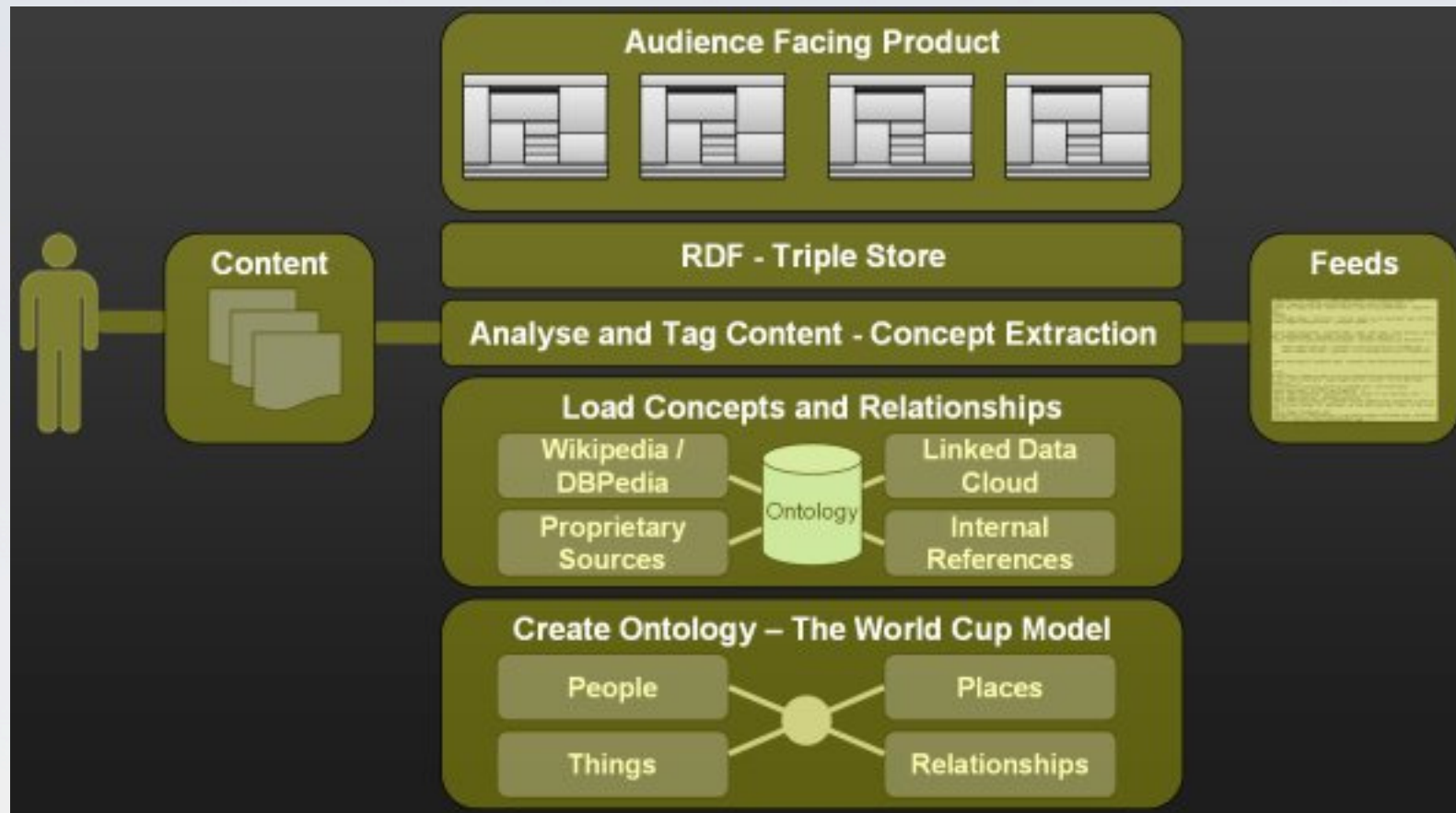
Dutch coach criticises Webb



Lee Dixon on two wheels in South Africa

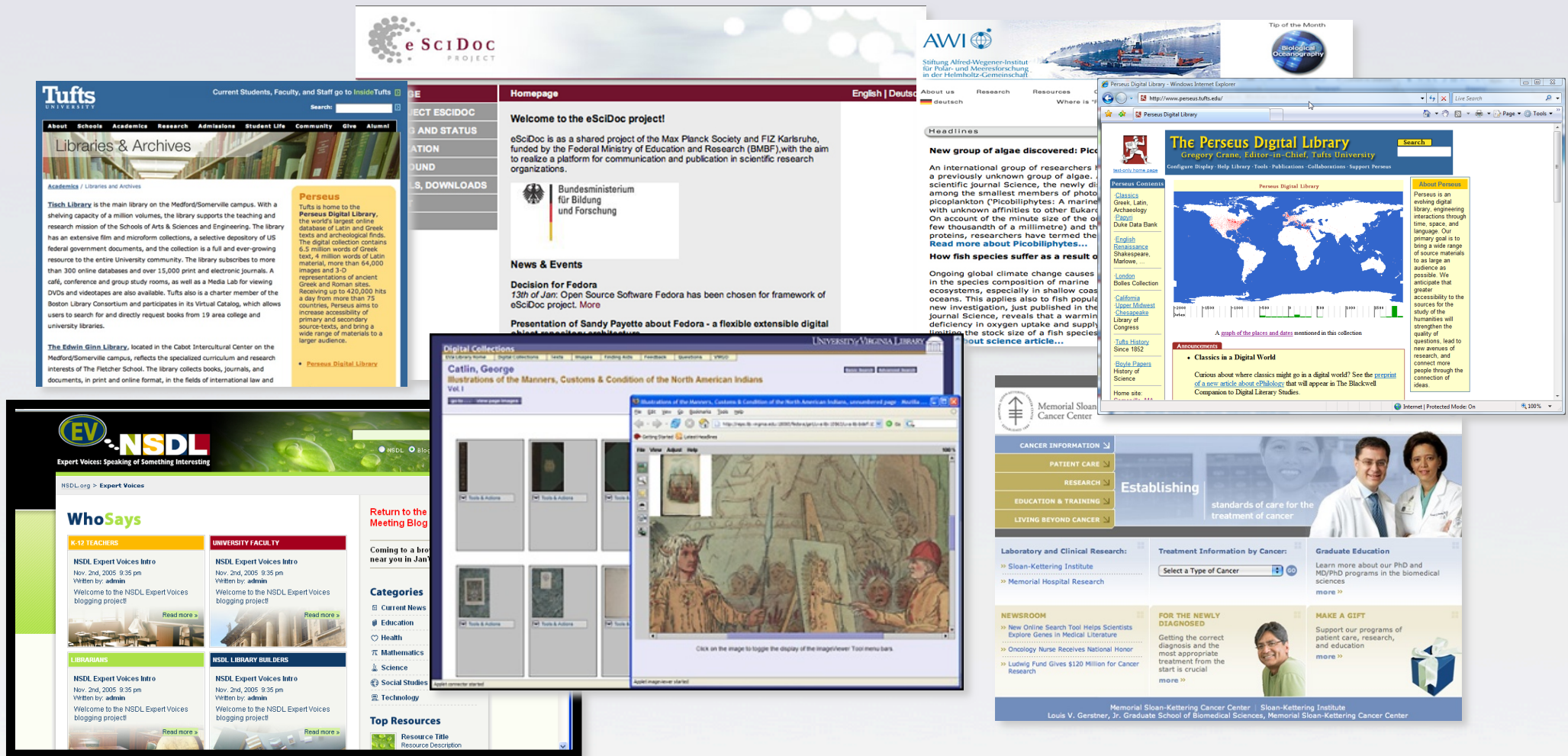
[Watch](#)

Building the BBC World Cup site



Digital assets with metadata (Fedora)

- ▶ Fedora: a general tool for storing digital assets
- ▶ The internal metadata architecture is fully based on RDF



Elsevier's DOPE browser

- ▶ Single interface to multiple data sources (in life sciences)
- ▶ Integration, search, etc, via thesauri and metadata in RDF(S)

The screenshot shows the DOPE Browser interface. On the left, the 'Focus Term' section displays 'Current term: acetylsalicylic acid' and a search box with 'aspirin'. Below this is a 'Co-occurring Terms' list with checkboxes for various categories like 'All relevant documents', 'analytical, diagnostic and therapeutic...', 'biological phenomena and functions', 'chemicals and drugs', 'healthcare', and 'practice guideline'. The 'Term Overlap Display' on the right shows a network diagram with nodes representing terms and their counts: 'mortality (8/37)', 'practice guideline (4/12)', 'warfarin (3/25)', and 'blood clot lysis (23/23)'. At the bottom, the 'Document List' shows 'Documents 1 to 10 out of 23' and lists two documents related to 'blood clot lysis'.

DOPE Browser

File

Focus Term

Current term: acetylsalicylic acid

Search for term: aspirin Go!

Navigate Thesaurus...

Co-occurring Terms

- ☒ All relevant documents 500
- ☒ analytical, diagnostic and therapeutic... 358
- ☒ anatomical concepts 209
- ☒ biological phenomena and functions 221
- ☒ biomedical disciplines, science and art 26
- ☒ chemical, physical and mathematical phe... 85
- ☒ chemicals and drugs 443
- ☒ geographic names 47
- ☒ groups by age and sex 40
- ☒ healthcare 63
 - ☒ physician 12
 - ☒ practice guideline 12
 - ☒ hospital 7
 - ☒ anesthetist 6
 - ☒ emergency ward 5
 - ☒ ambulance 4
 - ☒ dentist 4
 - ☒ general practice 4
 - ☒ long term care 4
 - ☒ medicare 4
 - ☒ coroner 3
 - ☒ general practitioner 2
 - ☒ health maintenance organization 2
 - ☒ hospital management 2

Collapse all Clear all

Ready

Term Overlap Display

mortality (8/37) practice guideline (4/12)

warfarin (3/25) blood clot lysis (23/23)

Document List

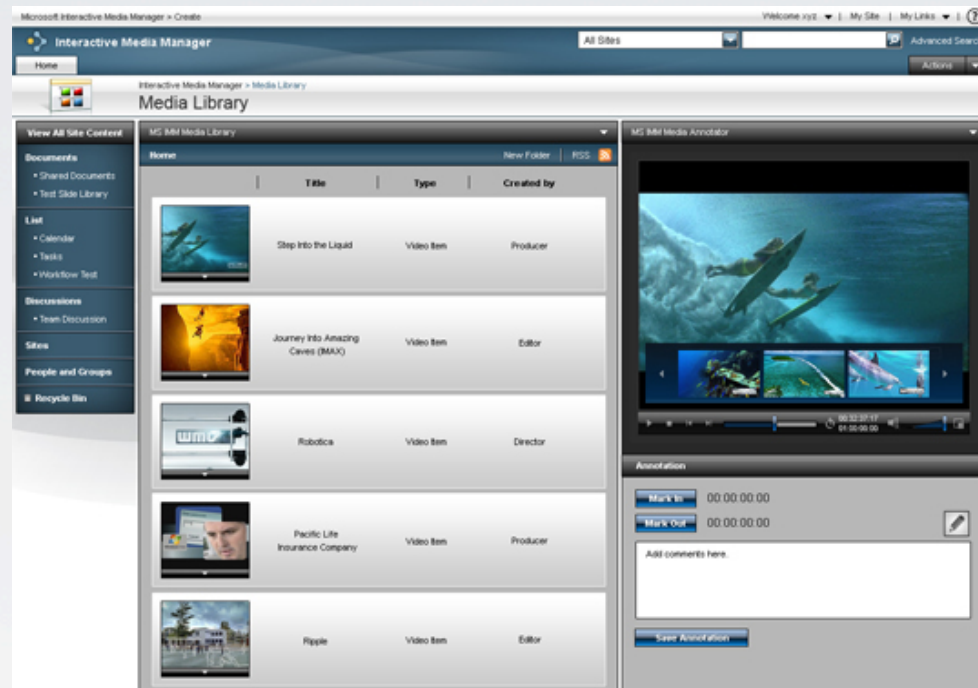
Documents 1 to 10 out of 23 previous next

Contents of "blood clot lysis":

1. Antithrombotic Therapy for Acute Myocardial Infarction.
O'Donnell, C.J.; Riddler, P.M.; Hebert, P.R.; Hennekens, C.H. (1995). Full-length article. Journal of the American College of Cardiology 25 (7), pp. 23S-29S.
[<http://linkinghub.elsevier.com/pii/S073510979500105D>]
2. Can the MADIT Results Be Applied to Myocardial Infarction Patients at Hospital Discharge?

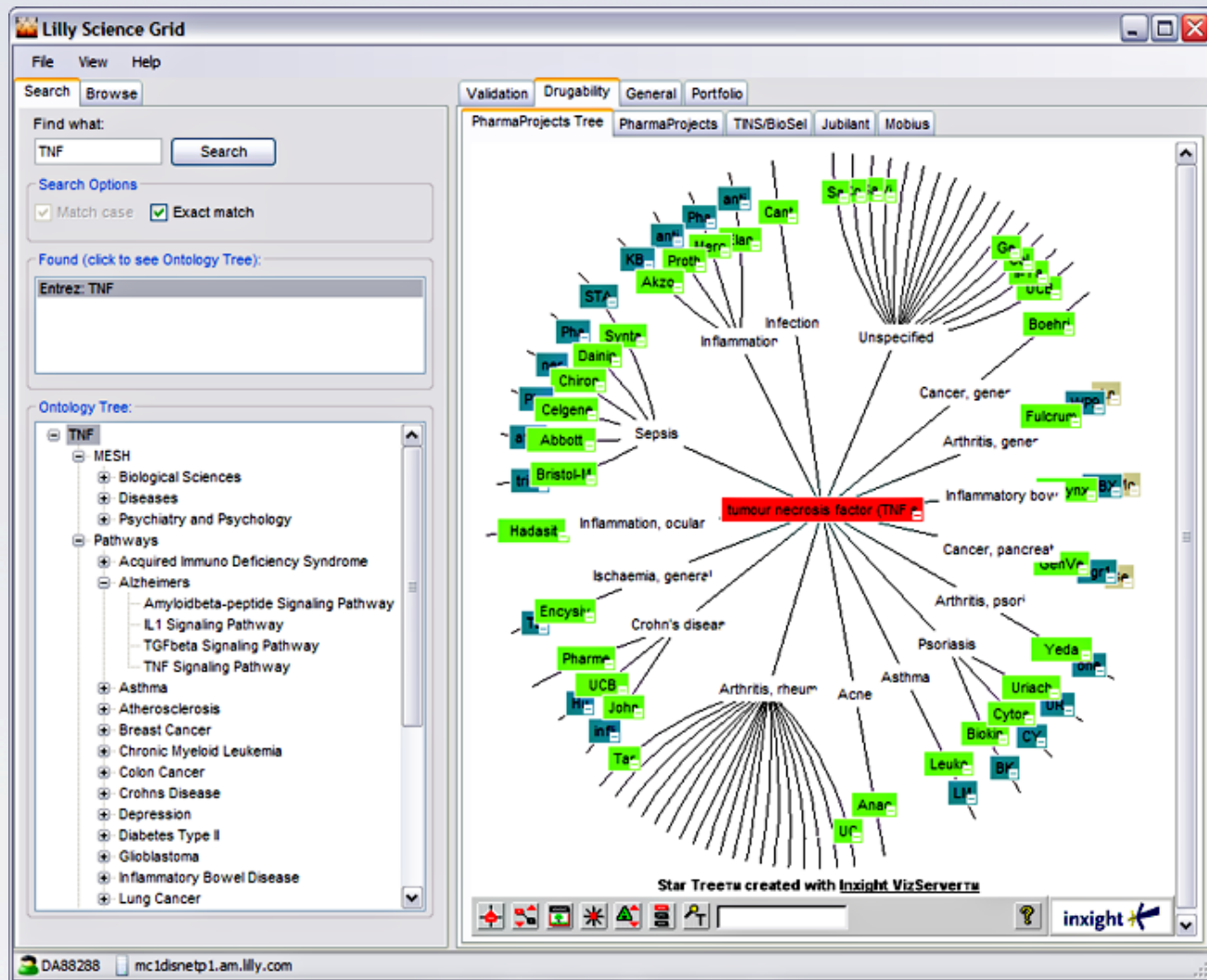
Microsoft Vista's Interactive Media Manager

- ▶ Uses an RDF/SPARQL/OWL based metadata framework
 - ▶ eg, for a better control over relationships among media assets and categories
- ▶ Custom OWL ontologies can be created and imported



Eli Lilly's Target Assessment Tool

- ▶ Prioritization of drug target, integrating data from different sources and formats
- ▶ Integration, search via ontologies (proprietary and public)



Novartis' UltraLink

- ▶ Semantic integration layer for knowledge resources
- ▶ uses of specialized ontologies (both local and public), SKOS taxonomies, etc

The screenshot displays the Novartis UltraLink web application. The main window shows a medical article titled "Imatinib for the treatment of rheumatic diseases" from Nature Clinical Practice Rheumatology. The article text includes: "There has been much speculation about the use of tyrosine kinase inhibitors for the treatment of rheumatic diseases. Investigations of small-molecule tyrosine kinase inhibitors (TKIs) have shown that they may be a promising therapeutic option for a range of rheumatic diseases, including scleroderma, pulmonary hypertension, and rheumatoid arthritis. Imatinib is approved by the FDA for the treatment of chronic myeloid leukemia (CML) and gastrointestinal stromal tumors (GIST). Imatinib potentially inhibits a submicromolar concentration of growth factor receptor (PDGFR) and also potentially inhibits the activity of other tyrosine kinases. Selective inhibition of one or more tyrosine kinases could provide a potent therapeutic option for a variety of autoimmune and inflammatory diseases, for which current therapies are insufficient. Scleroderma is a fibrotic disease that affects the skin, and can also affect visceral organs. Data published in 2006 suggest that anti-PDGFR autoantibodies might have a critical role in driving fibrosis in scleroderma. TGF-beta-stimulated signalling through Abl".

An "UltraLink" overlay window is open, showing a search for "spondyloarthritis". The overlay includes sections for "Competitor's Information", "Further Query" (with links to search in Ensembl, GeneCards, Harrison, HON, and OMIM), "Internal Information", "Literature", "News Information" (with links to NewsEdge and Scrip), "Patents and Drugs information (Compilation data for NTE)" (with links to display selected drugs and patents from IDDB), "Tools", and "GPS Navigator".

The interface also features a left sidebar with navigation links (Archive, Issues, Subjects, Authors, Collections, CME articles, About the journal, Help, Reprints and permissions) and a "RESOURCES" section (Nature Clinical Practice, Medical research, Immunology, Drug discovery, News@nature.com, Nature Conferences, Dissect Medicine, Anti-Pain Medicines). The APLAR logo is also visible.

Intelligent search for public services

- ▶ Semantic Web based search engine for public services at the municipality of Zaragoza (Spain)
- ▶ The search is based a local ontology, natural language processing and ontological reasoning



Vodafone live!

- ▶ Integrate various vendors' product descriptions via RDF
 - ▶ ring tones, games, wallpapers
 - ▶ manage complexity of handsets, binary formats
- ▶ A portal is created to offer appropriate content
- ▶ Significant increase in content download after the introduction



Improved Search via Ontology (GoPubMed)

- ▶ Search results are re-ranked using ontologies
- ▶ Related terms are highlighted, usable for further search

The screenshot displays the GoPubMed web interface within a Mozilla Firefox browser window. The left sidebar, titled 'what', shows a hierarchical ontology of categories. The 'Diseases' category is expanded, and a red circle highlights the following terms: 'Tinnitus [959]', 'Hearing Loss [424]', 'Vertigo [170]', and 'Hearing Loss, Sensorineural [165]'. The main content area shows search results for the query 'tinnitus', with 1,000 articles found. A blue arrow points to the first article, '5: Pros and cons of tinnitus retraining therapy.', which has a highlighted title and abstract. The abstract text includes 'A significant reduction in the Tinnitus Handicap Inventory (THI) was obtained as early as 1 month after implementation of tinnitus retraining therapy (TRT)'. Other articles listed include '1: Gabapentin effectiveness on the sensation of subjective idiopathic tinnitus: a pilot study.', '3: Algorithm for evaluation of pulsatile tinnitus.', and '4: Functional imaging of unilateral tinnitus using fMRI.'. The interface also includes a 'find it!' button, a 'goPubMed' logo, and a 'who' section on the left side for viewing other authors.

Improved Search via Ontology (Go3R)

- ▶ Same dataset, different ontology
- ▶ (ontology is on non-animal experimentation)

The screenshot displays the Go3R web application in a Mozilla Firefox browser. The interface is divided into a left sidebar and a main content area. The sidebar, titled 'what', contains a hierarchical ontology tree under '3R Relevance Filters (Beta)'. Two categories are circled in red: 'Body Systems & Structures' (with a sub-item 'Reduction' highlighted) and '3Rs Relevant' (with a sub-item 'In Vitro Experimental Design' highlighted). The main content area shows search results for the query 'tinnitus'. A search bar at the top right contains the text 'tinnitus' and a 'find it!' button. Below the search bar, it indicates '1,000 articles' and 'differences (P > 0.05)'. A list of article titles is displayed, including '2: Microvascular decompression of cochleovestibular nerve.', '3: Algorithm for evaluation of pulsatile tinnitus.', '4: Functional imaging of unilateral tinnitus using fMRI.', and '5: Pros and cons of tinnitus retraining therapy.'. A blue arrow points to the word 'tinnitus' in the title of article 4. The bottom of the page shows the start of article 6: 'Mass casualty incident management, triage, injury distribution of casualties and'.

Same problem, different solution...

How do I use Anatomy Lens? [BASIC](#) [ADVANCED](#) Best viewed in Firefox at 1280 x 1024

ANATOMY LENS: Semantic Search Over PubMed

PUBMED SEMANTIC QUERY

Search Stop Clear All

Specify Medical Subject Heading(s) (MeSH):

Specify Anatomical Part(s) (FMA):

Lung
[Lung \(FMA_7195\)](#)
[Remove](#)

Specify Genetic Process(es) (GO):

respiratory tube development
[respiratory tube development \(GO_0030323\)](#)
[Remove](#)

Published between and
Result Limit

Query Results

23 result(s) found between 2005 and 2008 in 1.612 seconds [Continue semantic search on additional related concepts?](#)

Compare results with standard PubMed search on [Lung respiratory tube development](#).

2005 [Lysyl oxidase is essential for normal development and function of the respiratory system and for the integrity of elastic and collagen fibers in various tissues.](#) [A]

2005 [Nmyc plays an essential role during lung development as a dosage-sensitive regulator of progenitor cell proliferation and differentiation.](#) [A]

2005 [Pathophysiologic consequences following inhibition of a CFTR-dependent developmental cascade in the lung.](#) [A]

2005 [The transcription factor gene Nfib is essential for both lung maturation and brain development.](#) [A]

2005 [Vascular endothelial growth factor co-ordinates proper development of lung epithelium and vasculature.](#) [A]

6 articles found related to [Lung] and [alveolus development] [Why?](#) Rate:

Date PubMed Article

2007 [Fgf10 dosage is critical for the amplification of epithelial cell development.](#)

2007 [Foxp2 and Foxp1 cooperatively regulate lung and esophagus development.](#)

2007 [Respiratory distress and neonatal lethality in mice lacking Gata3.](#)

2006 [Alterations in gene expression in T1 alpha null lung: a model for congenital lung disease.](#)

2005 [Inactivation of tensin3 in mice results in growth retardation and increased susceptibility to lung cancer.](#)

2005 [Vascular endothelial growth factor gene therapy increases survival in a murine model of hyperoxia-induced lung injury: evidence that angiogenesis plays a role in lung injury.](#)

Annotations on Article

MeSH Terms: [abnormalities, Epithelial Cells, Male, embryology, Mice, Transgenic, Animals, Newborn, Gene Dosage, metabolism, Heterozygote, Myocytes, Smooth Muscle, Gene Expression Regulation, Developmental, Embryonic Stem Cells, Vascular Endothelial Growth Factor A, Mice, Knockout, Fibroblast Growth Factor 10, growth & development, Female, Lac Operon, Wnt Proteins, Mesoderm, cytology, Phenotype, Pregnancy, Animals, genetics, Lung, Platelet-Derived Growth Factor, Mice]

FMA Concepts: [Embryonic stem cell, Mesoderm, Lung]

Close

Result Explanation

These articles talk about **alveolus development** which is related to the queried term **respiratory tube development**

This is because...

[alveolus development](#) is a [part of lung development](#)

[lung development](#) is a [part of respiratory tube development](#)

[lung development](#) is [Transitive](#)

Health portal for laypersons

- ▶ The “ontology-based” search is combined with a layperson oriented portal...

The screenshot shows a web browser window titled "challenge.semanticweb.org - Mozilla Firefox". The address bar shows "http://challenge.semanticweb.org/". The website has a logo "tervesuomi.fi" and "prototyyppi" with a green tree icon. Below the logo is a "HOME" section with navigation links: "Topic areas > Epidemics and infectious diseases > infectious diseases", "Topic areas > Conditions and symptoms > conditions > infectious diseases", and "Topic areas > Conditions and symptoms > conditions > -synon infectious diseases > infectious diseases". There is a "Narrow your search" section with a table of categories and counts. To the right, there is a section titled "infectious diseases" with a list of diseases and their counts.

Narrow your search	
Life event	
course of life	
death	3
refugeedom	1
falling ill	1
family and relationships	
pregnancy	19
breastfeeding	1
puerperal period	1
leisure	
travel	22
seasons	
autumn	3
spring	1
summer	1
winter	4
Group of people	

infectious diseases	
hepatitis c (16)	tuberculosis (35) tuberculosis, pulmonary
hemorrhagic fever with renal syndrome (16)	dengue (8)
toxoplasmosis (2)	influenza in birds (36)
malaria (17) malaria, falciparum	bacterial diseases (33) dysentery, bacillary, syphilis, tetanus
anthrax (6)	hepatitis a (24)
aids (30)	polio (19)
parasitic diseases (3) cryptosporidiosis, toxoplasmosis	herpes (10) genital herpes
poxes (35) chickenpox, measles, rubella	legionellosis (13)

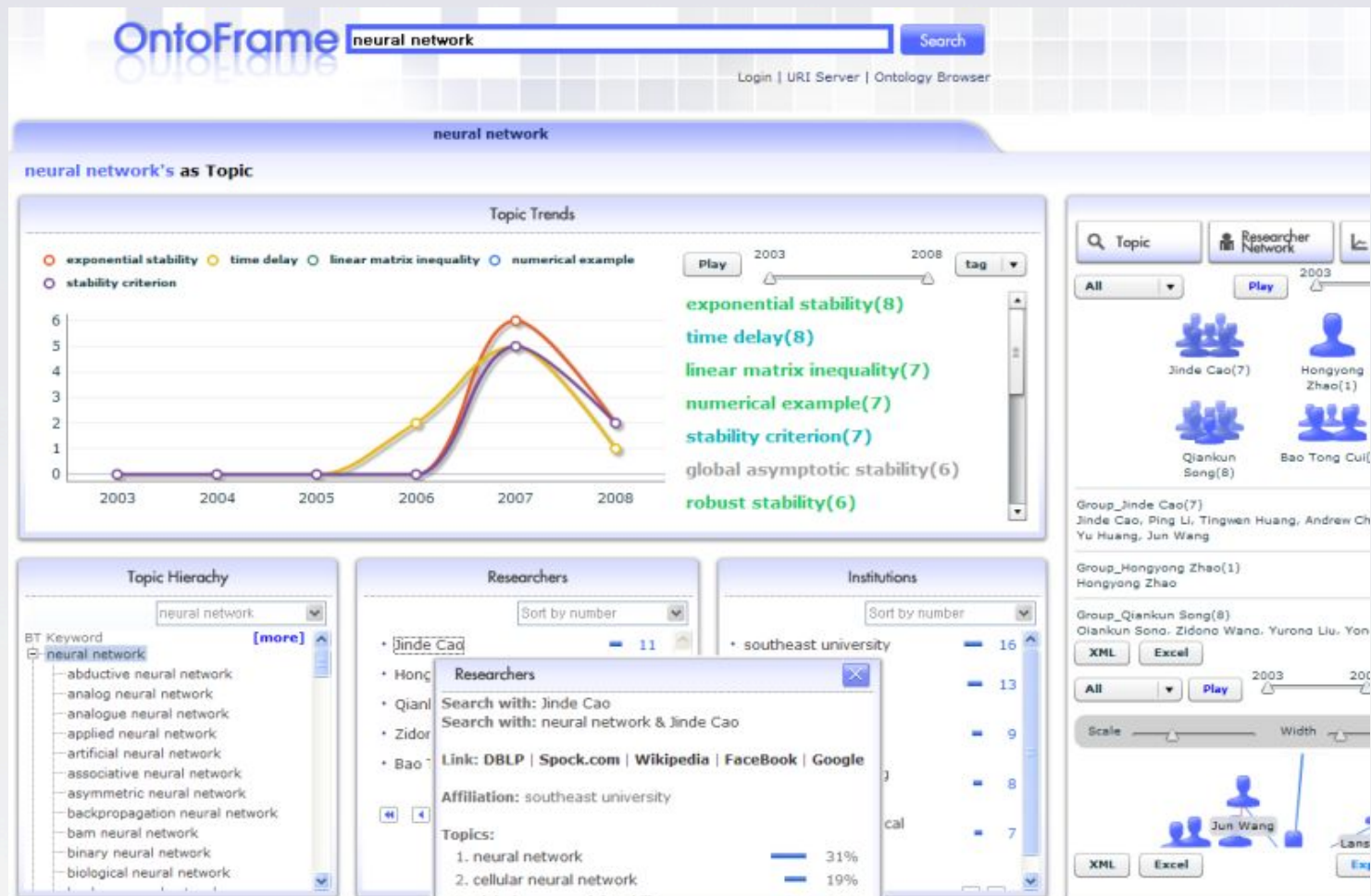
Health portal for laypersons

- ▶ The “ontology-based” search is combined with a layperson oriented portal...



Portal for researchers

- ▶ “Ontology-based” search is combined with keyword search to find information on scientific publications



Enriched view of cultural artifacts



the Cittie of London 31

Creator: [Cartographer : Ryther, Augustus](#) | ▶

Date: [1633] ; 1633

Geographic coverage: 531500 , 181500 ; [London, City of London](#)

Type: [StillImage](#) | ▶ [Map](#) | ▶

Subject: [River Thames](#), [London Bridge](#) | ▶ [London \(England\) — Maps](#) | ▶ 912 | ▶

Relation: [Crace Collection Of Maps Of London](#). [Collect Britain](#)

Description: This map has been attributed to Augustus Ryther, an engraver who prospered between 1572 and 1592, contributing to Saxton's Atlas of 1579. This plan was produced to satisfy a European market, and contains certain inaccuracies which a native Londoner would not have tolerated. The streets appear very much wider than they were in actuality. Houses are depicted as having large gardens, when these had, [See more](#) ▶

Data provider: [The British Library](#) | ▶

Provider: [The European Library](#) | ▶ [United Kingdom](#) | ▶

Explore further!

Similar content



Translate details ▼

Select language ▼

Powered by [Microsoft](#)® Translator

Cite on Wikipedia

Auto-generated tags ▼

What ▶

When ▶

Where ▼

Place Label: city of london

Place Term:

<http://sws.geonames.org/2643741/>

Geo Space: 51.51279 ; -0.09184 ;

[/record/92037](#)

[/25F9104787668C4B5148BE8E5AB8](#)

View item at

[The British Library](#)

Rights: Copyright © British Library Board

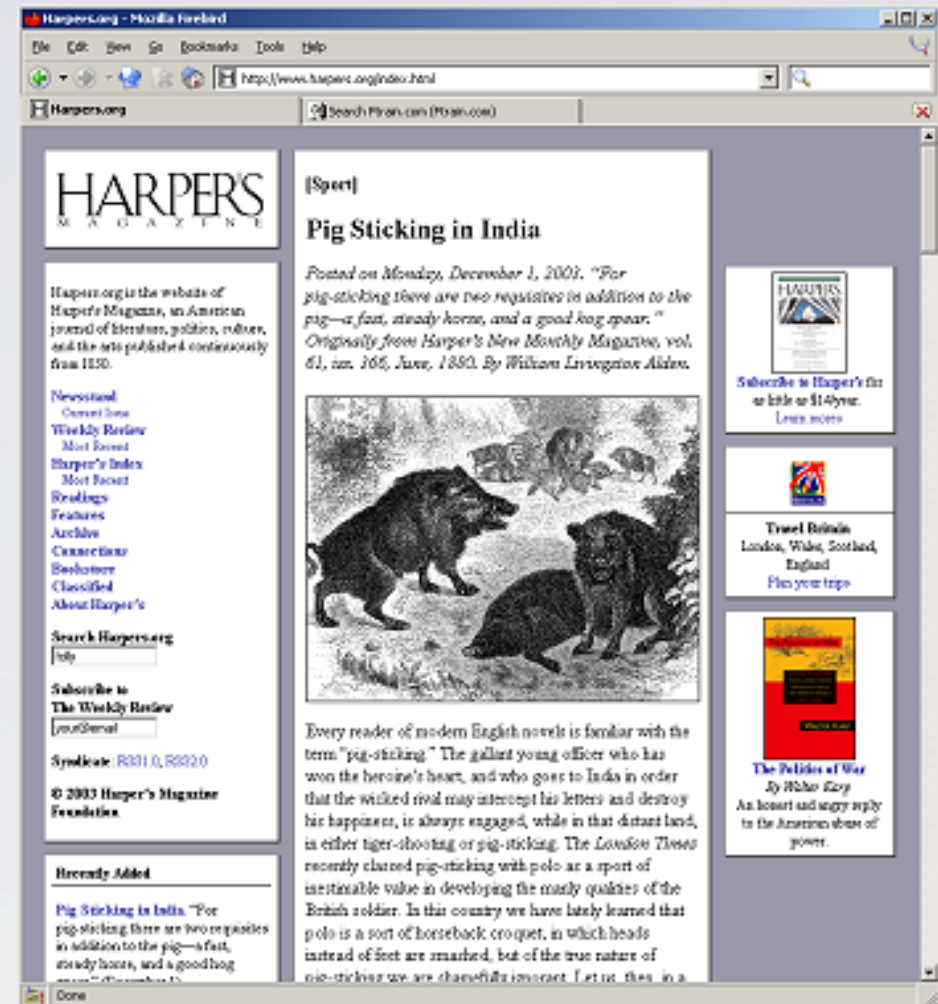
Identifier:

007000000000001U00031000 ;
Maps.Crace I

Format: 368 ; 464 ; Engraving ;
Millimetres ; jpeg

Other examples...

- ▶ Sun's White Paper and System Handbook collections
- ▶ Nokia's S60 support portal
- ▶ Harper's Online Magazine
- ▶ Oracle's virtual pressroom
- ▶ Dow Jones' Synaptica



Repair and Diagnostics Documentation

- ▶ Store repair and diagnostic operations in a repository with an OWL model
- ▶ A “diagnostic engine” generates the manuals on the fly, using RDF for information exchange (from engineering, repair shop, ...)

The screenshot displays a Renault diagnostic manual page. At the top, it says 'Effectuez le test suivant :'. Below this, the main heading is 'Connecteur du calculateur de clim régulée - Contrôle visuel (1 mn)'. Underneath, there are 'Opérations préliminaires' listed as a bulleted list: Autoradio 'Haut de gamme' - Dépose (4 mn), Radio Navigation - Dépose (3 mn), Console centrale - Dépose (7 mn), Garniture de bas de planche de bord - Dédclipper (1 mn), Garniture centrale - Dépose (3 mn), Tableau de commande de climatisation régulée - Dépose (7 mn), and Connecteur du calculateur de clim régulée - Accès (0 mn). A section titled 'Vérifier le branchement et l'état du connecteur' follows, with a bulleted list: Connecteur du calculateur de clim régulée - Rebrancher, Connecteur du calculateur de clim régulée - Remplacement, and Autre... To the right of the text is a Renault logo and a table titled 'Autoradio "Haut de gamme" - Dépose (4 mn)'. The table lists 'Ms. 1544' and 'Outil de dépose autoradio - Carminat Becker et Cabasse.' Below the table is a diagram of the car's dashboard with a callout '1' pointing to the radio unit. At the bottom, there are instructions: 'Déposer l'autoradio (1) à l'aide de l'outil (Ms. 1544)' and 'Débrancher les connecteurs.'

Effectuez le test suivant :

Connecteur du calculateur de clim régulée - Contrôle visuel (1 mn)

Opérations préliminaires

- ▶ Autoradio "Haut de gamme" - Dépose (4 mn)
- ▶ Radio Navigation - Dépose (3 mn)
- ▶ Console centrale - Dépose (7 mn)
- ▶ Garniture de bas de planche de bord - Dédclipper (1 mn)
- ▶ Garniture centrale - Dépose (3 mn)
- ▶ Tableau de commande de climatisation régulée - Dépose (7 mn)
- ▶ Connecteur du calculateur de clim régulée - Accès (0 mn)

Vérifier le branchement et l'état du connecteur

- Connecteur du calculateur de clim régulée - Rebrancher
- Connecteur du calculateur de clim régulée - Remplacement
- Autre...

Causes/Réparations possibles

- 13 %
Cablage moteur de recyclage - calculateur de clim régulée - Remise en état
- 13 %
Cablage moteur de recyclage - calculateur de clim régulée - Remplacement
- 13 %
Calculateur de clim régulée - Remplacement
- 12 %
Connecteur du calculateur de clim régulée - Rebrancher
- 13 %
Connecteur du calculateur de clim régulée - Remplacement

RENAULT

Autoradio "Haut de gamme" - Dépose (4 mn)

Outillage spécialisé indispensable	
Ms. 1544	Outil de dépose autoradio - Carminat Becker et Cabasse.

Autoradio chargeur CD

1

112232

112232

□ Déposer l'autoradio (1) à l'aide de l'outil (Ms. 1544).

□ Débrancher les connecteurs.

Car electronics' simulation

- ▶ Simulation of car electronics' physical conditions
- ▶ Integration of rules and different domain ontologies
- ▶ “Explanation” of query results

Ontologie Steuerzentrale - AVS

Module Extras Hilfe

Simulation Data Simulation Result

Index	Zeit	763	2	2	90	90	138.6	77.65625	1	1	0	0
1015	10.14174141	763	2	2	90	90	138.6	77.65625	1	1	0	0
1016	10.15161829	764	2	2	90	90	138.6	73.90625	1	1	0	0
1017	10.16152515	764	2	2	90	90	138.6	73.90625	1	1	0	0
1018	10.17168193	764	2	2	90	90	138.6	73.90625	1	1	0	0
1019	10.18152881	765	4	2	90	90	138.6	51.4375	1	1	0	0
1020	10.1916456	765	4	2	90	90	138.6	51.4375	1	1	0	0
1021	10.20216227	767	5	2	90	90	138.6	46	1	1	0	0
1022	10.21150931	767	5	2	90	90	138.6	46	1	1	0	0
1023	10.2216161	767	5	2	90	90	138.6	46	1	1	0	0
1024	10.2317229	769	5	2	90	90	138.7	39.59375	1	1	0	0
1025	10.24172973	769	5	2	90	90	138.7	39.59375	1	1	0	0
1026	10.25309612	768	5	2	90	90	138.7	31.5625	1	1	0	0
1027	10.26171339	768	5	2	90	90	138.7	31.5625	1	1	0	0
1028	10.27157026	768	5	2	90	90	138.7	31.5625	1	1	0	0
1029	10.28157709	768	5	2	90	90	138.7	25.28125	1	1	0	0
1030	10.29166389	768	5	2	90	90	138.7	25.28125	1	1	0	0
1031	10.30161073	768	5	2	90	90	138.7	25.28125	1	1	0	0
1032	10.3114876	773	5	2	90	90	138.7	23.25	1	1	0	0
1033	10.3215644	773	5	2	90	90	138.7	23.25	1	1	0	0
1034	10.33205107	775	5	2	90	90	138.8	30.625	1	1	0	0
1035	10.34173799	775	5	2	90	90	138.8	30.625	1	1	0	0
1036	10.35161486	775	5	2	90	90	138.8	30.625	1	1	0	0
1037	10.3615617	768	5	2	90	90	138.8	30.3125	1	1	0	0
1038	10.37155852	768	5	2	90	90	138.8	30.3125	1	1	0	0

Next Error... Explain Error... Configuration... Load Simulation Data... Start Simulation...

Explanation

ERROR: No triggers detected for the state transition at index 1020/1021.

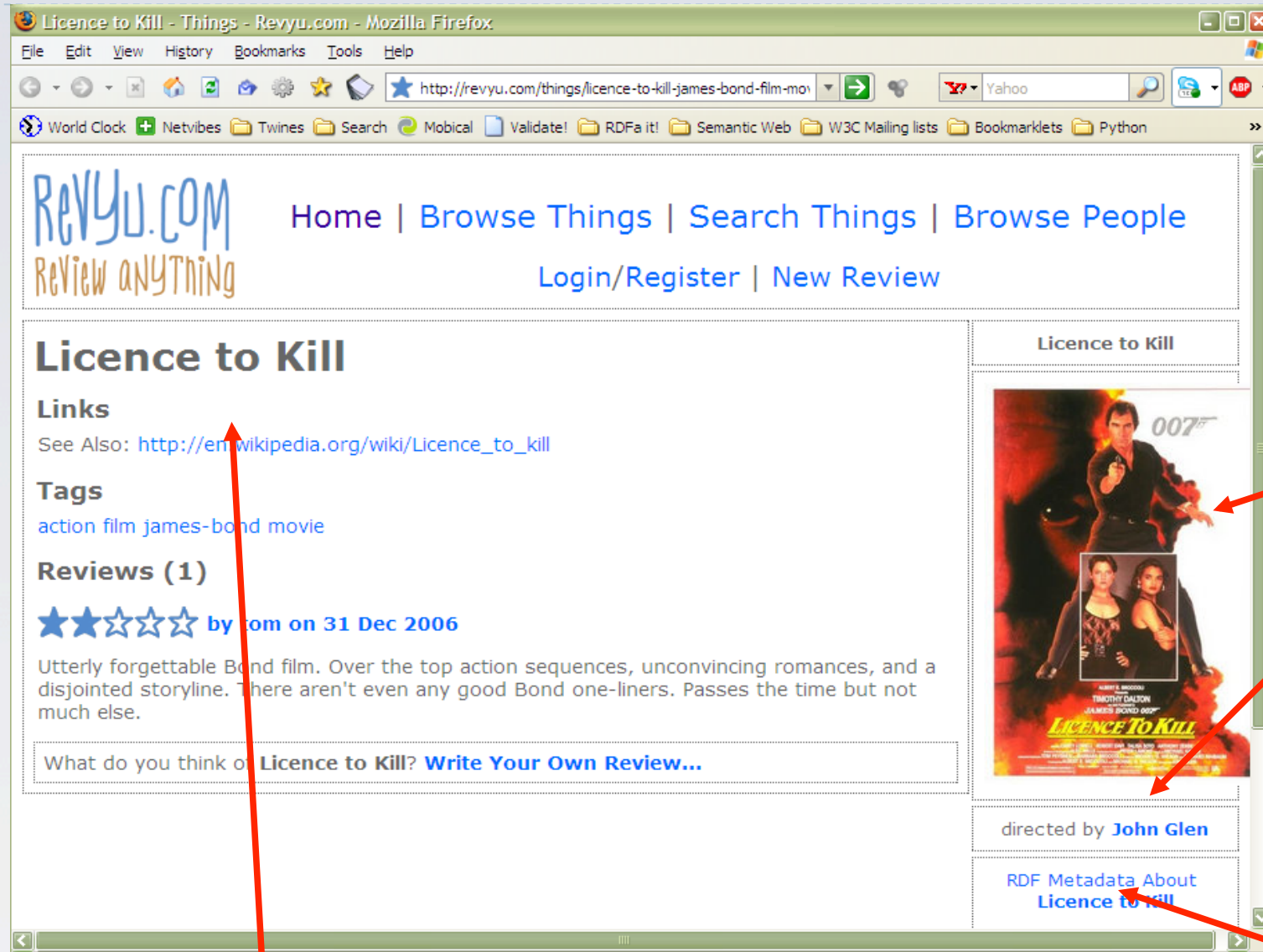
Proof tree

- Rule Instantiation: i2 ruleid->queryrule variables->[X=S1020]
- f4: isa_0053006900740075006100740069006f006e_(\$S1020, "http://schema.o
- f3: att_0069006e006400650078_(\$S1020, 1020.0, "http://schema.ontoprise.co
- Rule Instantiation: i5 ruleid->...
- f4: isa_0053006900740075006100740069006f006e_(\$S1021, "http://sche

New type of Web 2.0 applications

- ▶ New Web 2.0 applications come every day
- ▶ Some begin to look at Semantic Web as possible technology to improve their operation
 - ▶ more structured tagging, making use of external services
 - ▶ providing extra information to users
 - ▶ etc.
- ▶ Some examples: Revyu, Faviki, ...

“Review Anything”



enhance
output with
linked data

data in RDF

links to, eg, (DB/Wiki)Pedia

Faviki: social bookmarking, semantic tagging

- ▶ Social bookmarking system (a bit like del.icio.us) but with a controlled set of tags
 - ▶ tags are terms extracted from Wikipedia/DBpedia
 - ▶ tags are categorized using the relationships stored in DBpedia
 - ▶ tags can be multilingual, DBpedia providing the linguistic bridge
- ▶ The tagging process itself is done via a user interface hiding the complexities

Faviki Example

Sviatoslav Richter, legendary pianist - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.fanfaire.com/transitions/richter.html

TRANSITIONS
SVIATOSLAV RICHTER

SVIATOSLAV RICHTER
20 March
L

...the only

That was how one critic was compelled to describe Sviatoslav Richter when he how Clara Schumann spoke of the venerable Franz Liszt. The musical world m a great artist, indisputably one of the greatest pianists of the 20th century. Richt with his exquisite mastery of the keyboard ever since the 1960s when he first m bloc countries where he had been renowned for years. He consistently played t legend in the process. With his compatriots, cellist Mstislav Rostropovich and violinist David Oistrakh, he was responsible for the robust Soviet-American cultural exchange that began in the 1970s.

He was born in Zhitomir in the Ukraine to a family of German ancestry. His father was a respected pianist and piano teacher and his mother an amateur musician who was one of the early admirers of Debussy and Scriabin. He had his first music lessons with his father, becoming a master of the keyboard at the age of 8. The family later moved to Odessa where the young Sviatoslav enrolled at the Odessa Conservatory. In his teens, he was attracted to a career in conducting and at the astoundingly young age of 15 became a conductor for the Odessa Opera and the Ballet Theater, a post he held for four years. He gave his first piano recital at age 19 also in Odessa. Cognizant of his extraordinary talent, his superiors convinced him to study in Moscow with one of Russia's foremost piano teachers, Heinrich Neuhaus. He did so at the age of 22 and soon after completed his studies with the great piano teacher, who later wrote of his star student: "I must say in all honesty that there was nothing more I could teach Richter."

Start to type, then choose from the list or search by Google: [help >](#)

add new tag

Tags you added:

Classical music Sviatoslav Richter

Suggested tags

My recent tags

Anne-Sophie Mutter Jean-Pierre Rampal Ravi Shankar
ARIA Music Awards Fabio (DJ) Anoushka Shankar Mario (singer)
Joan Sutherland

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edit title, my note, privacy...

Save

Close

faviki

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*****.com

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EMAIL UPDATE
FREE CD!


fanfare
STORE
STORE

Faviki Example

SVIATOSLAV RICHTER

20 March

Le



...the only

That was how one critic was compelled to describe Sviatoslav Richter when he heard how Clara Schumann spoke of the venerable Franz Liszt. The musical world made him a great artist, indisputably one of the greatest pianists of the 20th century. Richter continued with his exquisite mastery of the keyboard ever since the 1960s when he first met the bloc countries where he had been renowned for years. He consistently played to the legend in the process. With his compatriots, cellist Mstislav Rostropovich and violinist David Oistrakh, he was responsible for the robust Soviet-American cultural exchange that began in the 1970s.

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Start to type, then choose from the list or search by Google: [help >](#)

Russian Museum

Russian music

Russian Music Competition

Russian Musical Society

Suggested tags

My recent tags

Anne-Sophie Mutter Jean-Pierre Rampal Ravi Shankar

ARIA Music Awards Fabio (DJ) Anoushka Shankar Mario (singer)


Joan Sutherland

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[edit title, my note, privacy...](#)

Save

Close



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fantasy STORE

Faviki Example

Classical music | Faviki. Tags that make sense. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.faviki.com/tag/Classical_music

faviki BETA TAGS THAT MAKE SENSE. edit profile sign out ivan friends

Classical music

PEOPLE: TAGS: Classical music; Search

OR AND

close all rss

This Month

- ivan Sviatoslav Richter, legendary pianist Dec 02
Classical music: Sviatoslav Richter: [1 person]
- ivan Sviatoslav Richter pages Dec 02
Page on Richter
Classical music: German: Jew: Keyboard instrument: Piano: Sviatoslav Richter: Ukrainian: [1 person]

November

- ivan YouTube entries with Gabriela Montero Nov 16
Classical music: Gabriela Montero: Improvisation: [1 person]
- Janos.Haits MUSOLIFE.COM: Classical Music News for Enthusiasts, Professionals and Students Nov 14
MUSOLIFE.COM
Classical music: Social web: Web 2.0: [1 person]

October

- ivan france musique Oct 12
Classical music: France Musique: Radio: Radio France: [1 person]

tag

Classical music

16 bookmarks

Classical music is a broad term that usually refers to mainstream music produced in, or rooted in the traditions of Western liturgical and secular music, encompassing a broad period from roughly the 9th century to present times.

Topics:

- Music genres
- Classical music
- European music

Read more on Wikipedia

related tags

- Takashi Yoshimatsu
- Sviatoslav Richter
- András Schiff
- Social web
- Frédéric Chopin
- Web 2.0
- Igor Stravinsky

Faviki Example

Russian classical pianists (topic) | Faviki. Tags that make sense. - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.faviki.com/topic/Russian_classical_pianists

faviki BETA TAGS THAT MAKE SENSE. edit profile sign out ivan friends

Russian classical pianists (topic)

PEOPLE: TAGS: Search

OR AND

close all rss

This Month

ivan Sviatoslav Richter, legendary pianist Dec 02
Classical music : Sviatoslav Richter : [1 person]

ivan Sviatoslav Richter pages Dec 02
Page on Richter
Classical music : German : Jew : Keyboard instrument : Piano : Sviatoslav Richter : Ukrainian : [1 person]

May

matejr YouTube - Korsakov-Rachmaninov: Hummelflug (Bumble Bee)Evgeny Kissin May 30
Evgeny Kissin : Flight of the Bumblebee : Piano : [1 person]

April

jerry YouTube - Rachmaninov plays Rachmaninov Apr 17
wow!
Piano : Prelude in C-sharp minor (Rachmaninoff) : Sergei Rachmaninoff : [1 person]

topic

Russian classical pianists

4 bookmarks

Tags:
Evgeny Kissin
Sergei Rachmaninoff
Sviatoslav Richter

this page topics:

- 1873 births
- 1892 works
- 1915 births
- 1943 deaths
- 1971 births
- 1997 deaths
- 20th century classical composers
- American classical pianists
- American composers
- Ancient peoples
- Chordophones
- Classical pianists

Integration of “social” software data

- ▶ Internal usage of wikis, blogs, RSS, etc, at EDF
 - ▶ goal is to manage the flow of information better
- ▶ Items are integrated via
 - ▶ RDF as a unifying format
 - ▶ simple vocabularies like SIOC, FOAF, MOAT (all public)
 - ▶ internal data is combined with linked open data like Geonames
 - ▶ SPARQL is used for internal queries
- ▶ Details are hidden from end users (via plugins, extra layers, etc)

Integration of “social” software data

L'ensemble de ces lieux d'échange, de rencontre et de réflexion permettent de proposer des évolutions d'ordre réglementaire et législatif.

Personnalités :

Inline macro → [onto|members]

Domaines :

[onto|domaines]

Localisation:

Simple autocomplete field → Ville, Pays:
paris, fra
Paris, France
Répéter ce champ

Rattachement:

Affiliation principale:
Lien:
Répéter ce champ

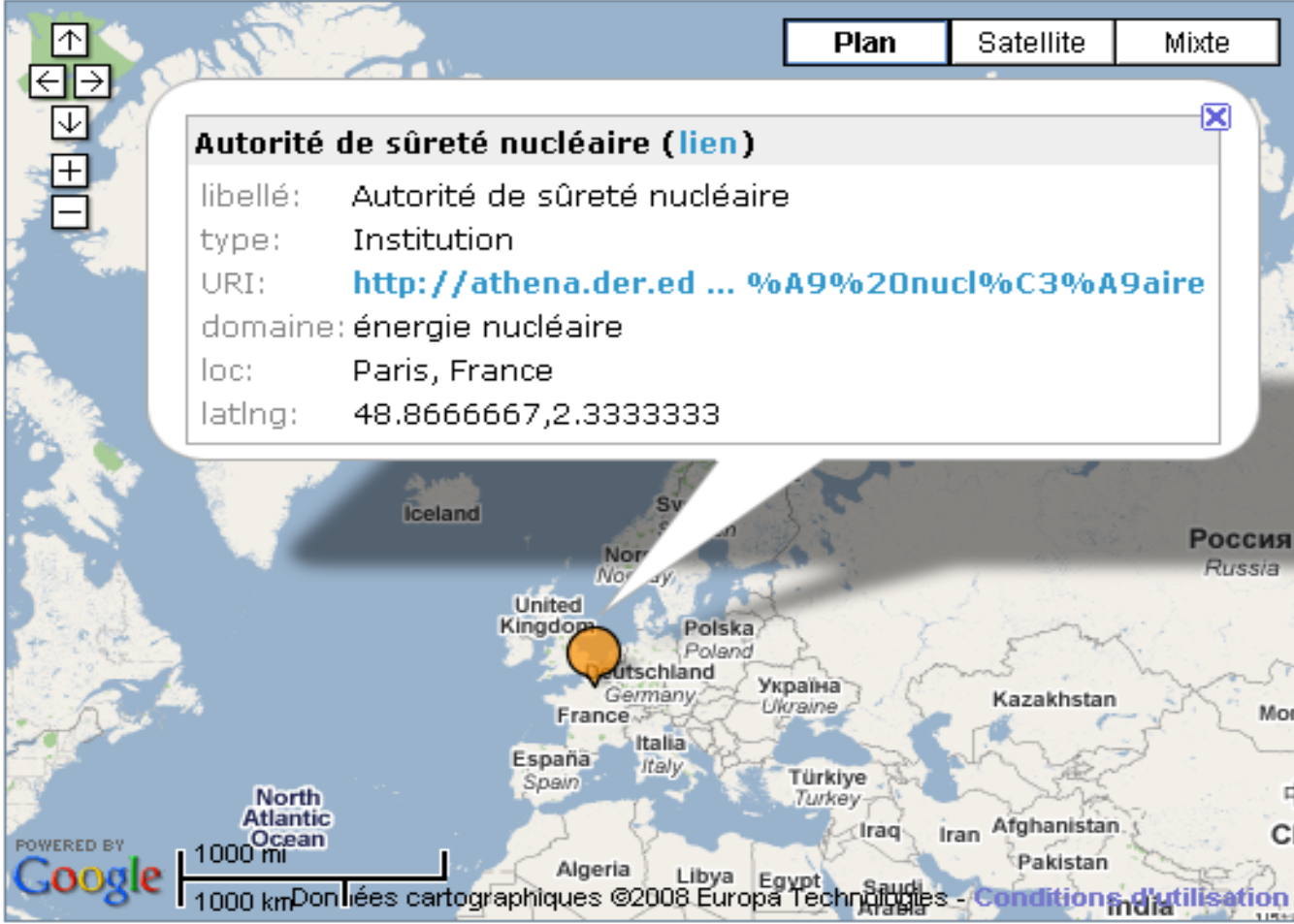
Domaine et Métier:

Complex instance field → Domaine:
Activités Associatives
Métier:
Associatif
Zone Géographique:
France

Integration of “social” software data

BLOCS • **CARTE**

1 Institution filtrés sur un total de 173 items ([Réinitialiser tous les filtres](#))



The screenshot displays a web application interface for a map-based data visualization. The main map shows Europe with a yellow pin over France. A pop-up window provides details for the selected entity: 'Autorité de sûreté nucléaire (lien)'. The sidebar on the right contains filter sections for 'Type', 'Domain', and 'Localisation'. The 'Type' section has 'Institution' selected. The 'Domain' section has 'énergie nucléaire' selected. The 'Localisation' section has 'Paris, France' selected. The map includes navigation controls and a scale bar.

Autorité de sûreté nucléaire (lien)

libellé: Autorité de sûreté nucléaire
type: Institution
URI: <http://athena.der.ed ... %A9%20nucl%C3%A9aire>
domaine: énergie nucléaire
loc: Paris, France
latlng: 48.8666667,2.3333333

Type

- 1 ☒ Type
- 2 ☐ Entreprise
- 1 ☒ Institution
- 1 ☐ Personne

Domain

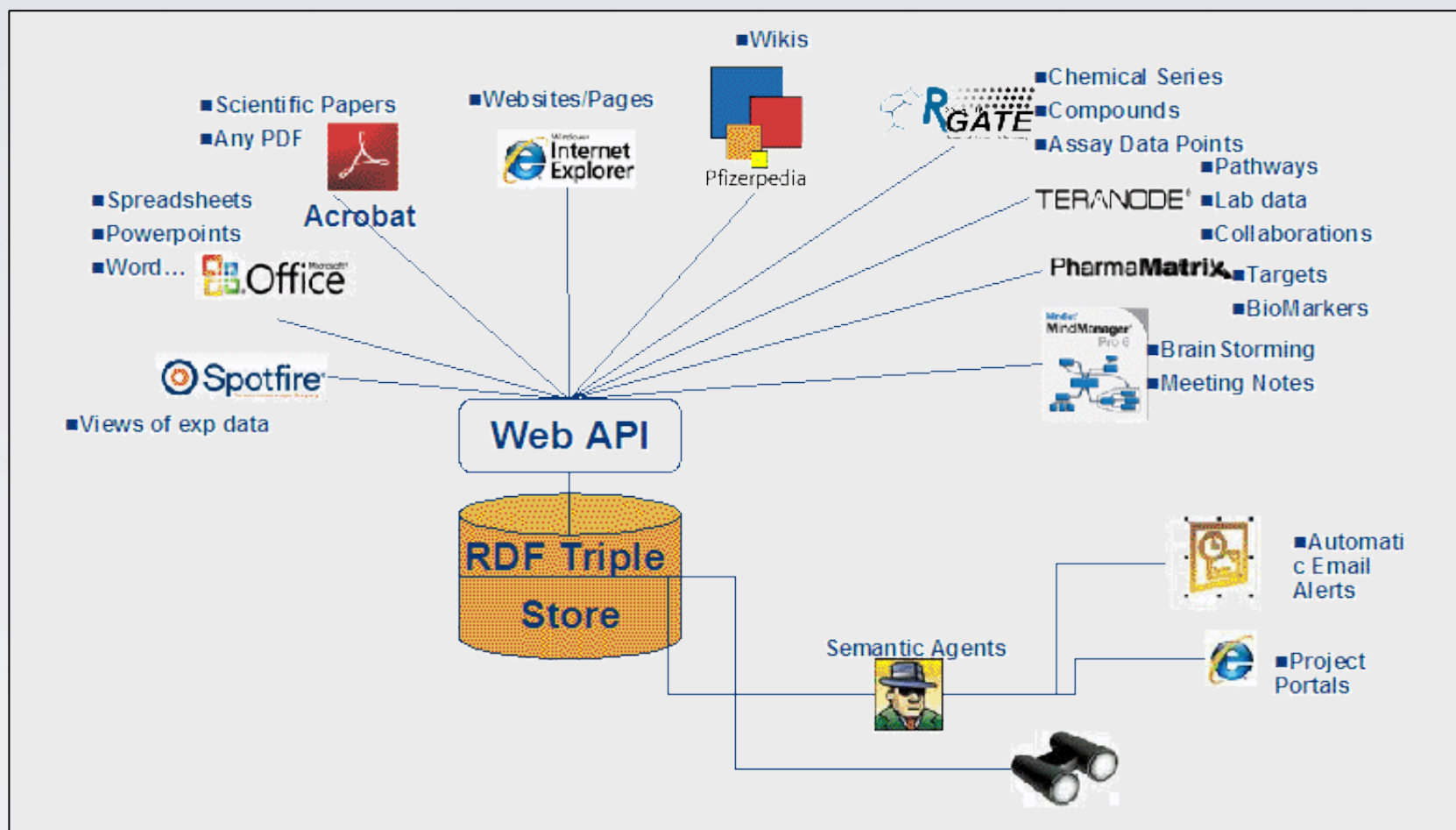
- 1 ☒ Domain
- financières
- 1 ☐ Energie
- 1 ☒ énergie nucléaire
- 2 ☐ Protection de l'environnement

Localisation

- 1 ☒ Paris, France

Ontology controlled annotation

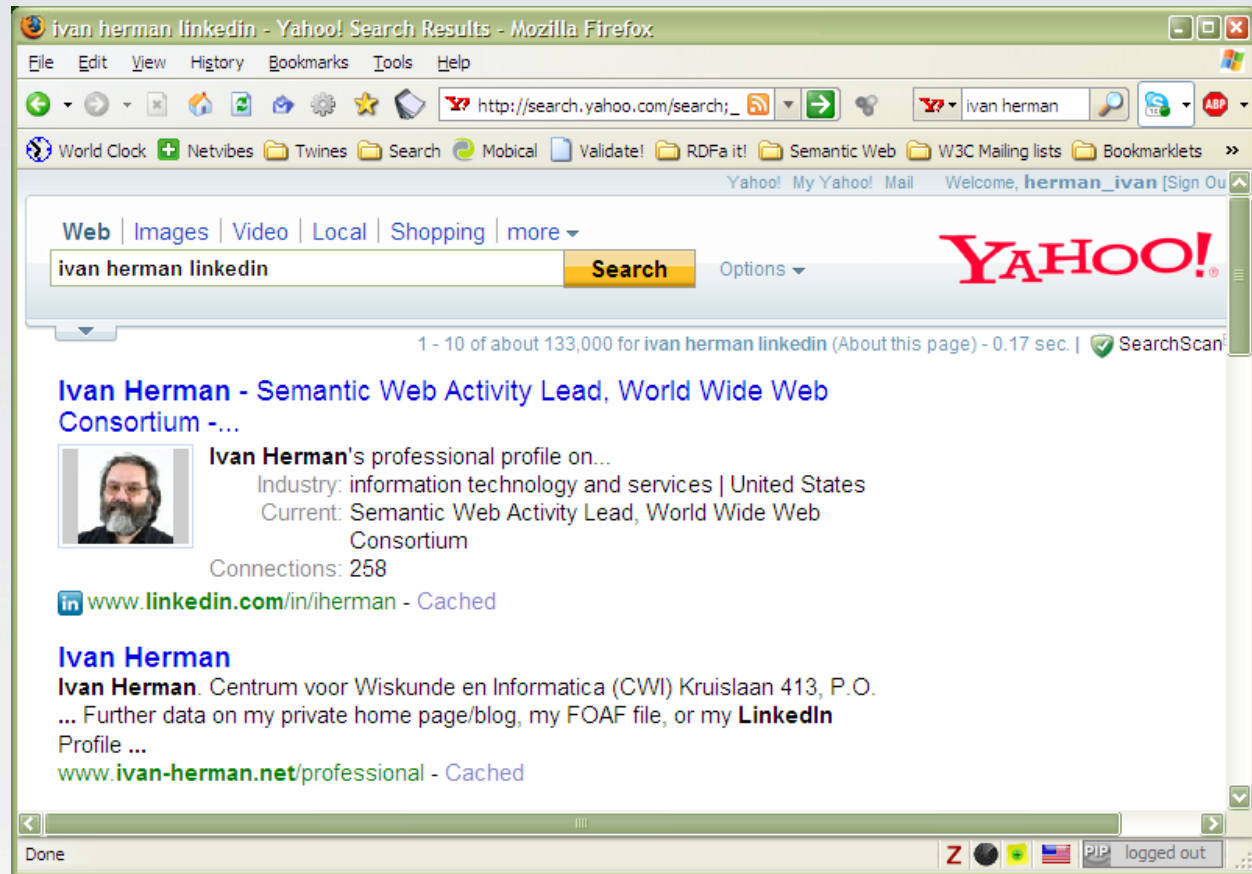
- Annotation of different data formats all along the full drug discovery process...



Worldwide Technology
R&D Informatics

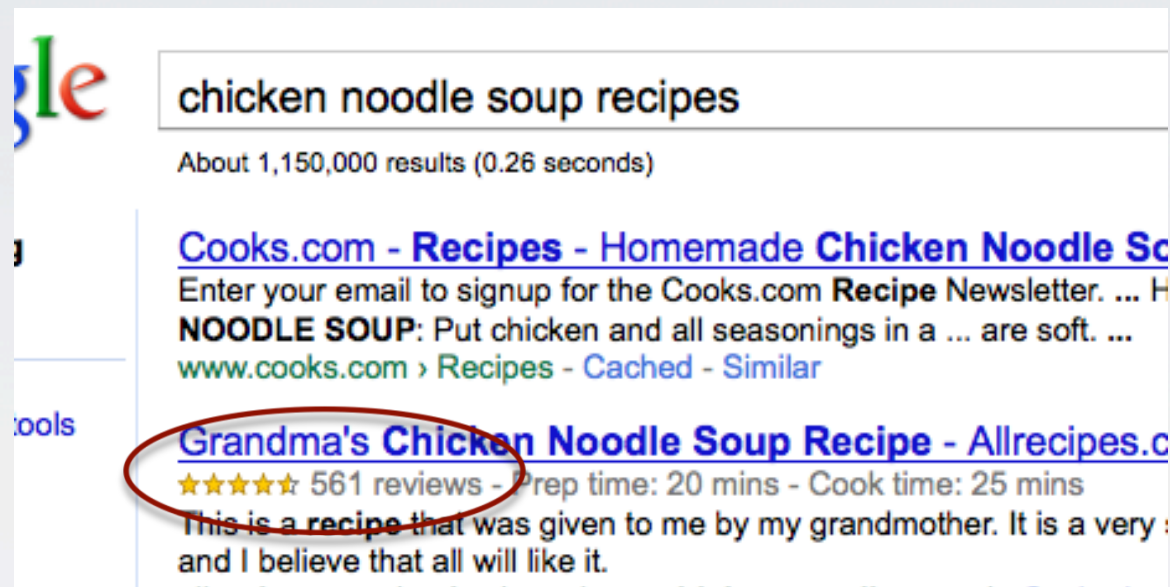
Yahoo's SearchMonkey

- ▶ Search based results may be customized via small applications
- ▶ Metadata embedded in pages (in RDFa, eRDF, etc) are reused
- ▶ Publishers can export extra (RDF) data via other formats



Google's rich snippet


- ▶ Embedded metadata (in microformat or RDFa) is used to improve search result page
 - ▶ at the moment only a few vocabularies are recognized, but that will evolve over the years



Univ. of Plymouth's resource management

- ▶ Managing “resource lists” (“course reserves”): ie, collections of resources (books, articles, a/v content, etc) as a companion for students
- ▶ Resources, relations, annotations, etc, are stored as RDF data
 - ▶ using public vocabularies to manage them
- ▶ Flexible user interface is provided to manage, manipulate, (individually) annotate
- ▶ Easy update against changing environments (eg, change in the library's subscriptions)

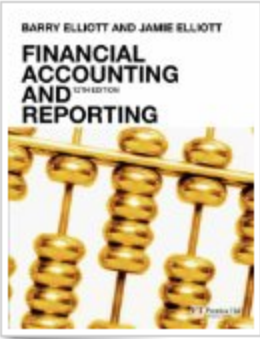
Univ. of Plymouth's resource management

**University of Plymouth**

Home My Resources Sign out

Financial accounting and reporting








The 12th edition of Elliott and Elliott is the recommended text to buy for this module.



[Get this item](#)

Item type	Book
Author(s)	Elliott, Barry., Elliott, Jamie.
Publisher	Financial Times/Prentice Hall
Edition	12th ed.
ISBN 10	0273712314
ISBN 13	9780273712312
Date	2008.

My Notes

B *I*       

Chapters 2 and 3 are useful for the 3rd seminar - more as an example of a poor argument than a good one!

This item appears on..

List: Financial Accounting and Reportin
Section: Recommended Text
Next item: Financial Accounting and Reportin
Pea...

Have you read this?

Have you read this?

☐ Decided not to Read
☒ Have Read
☐ Planning to Read
☐ Reading Now

[Set](#)

Library availability

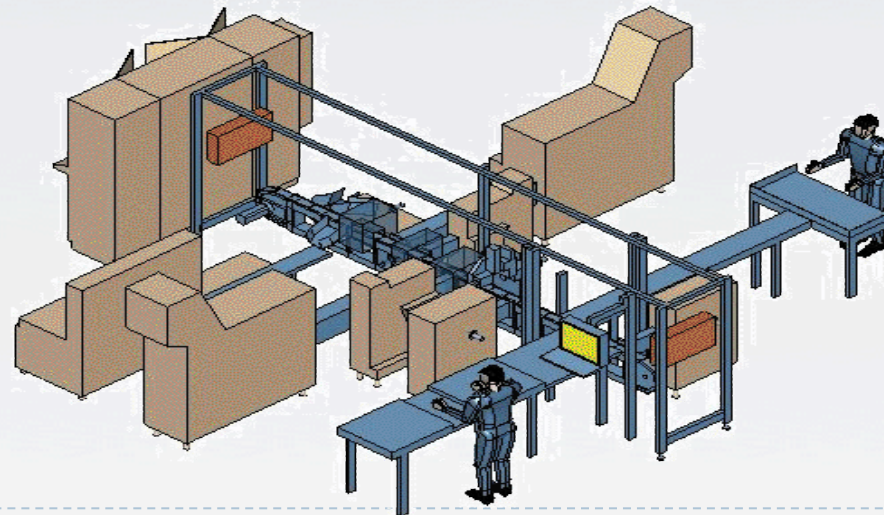
- ▶ used by over 20,000 students in Plymouth, other UK universities to come...

Other application areas come to the fore

- ▶ Content management
- ▶ Business intelligence
- ▶ Collaborative user interfaces
- ▶ Sensor-based services
- ▶ Linking virtual communities
- ▶ Grid infrastructure
- ▶ Multimedia data management
- ▶ Etc

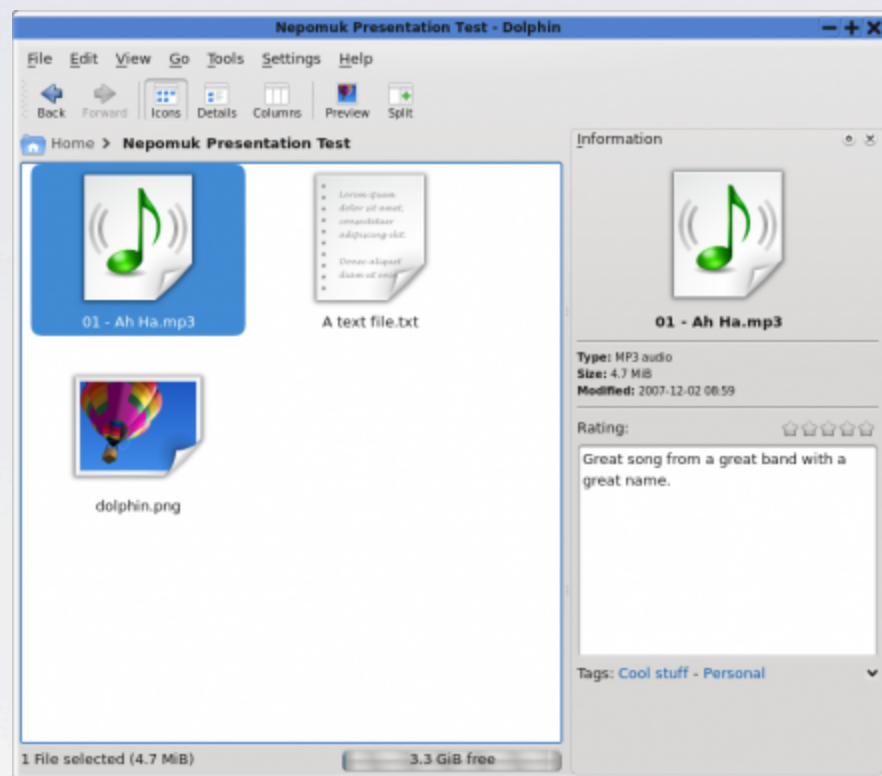
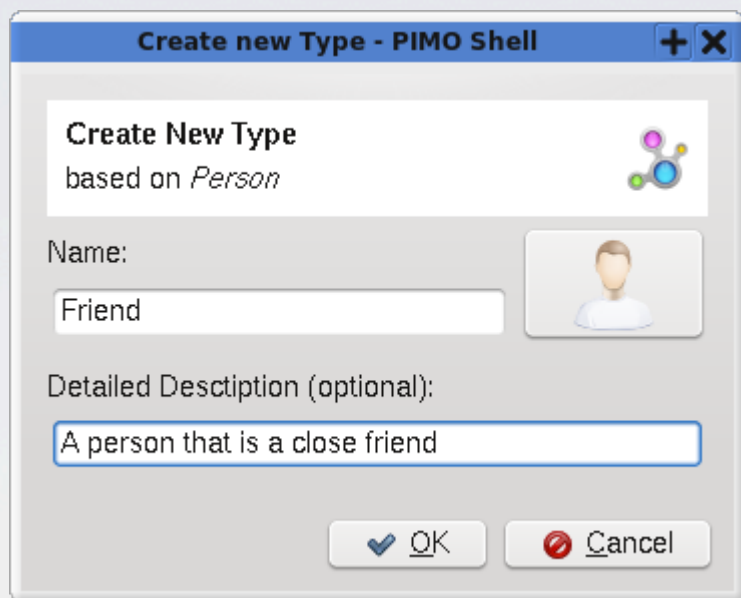
Open Engineering Platform

- ▶ EU project (SWOP) on end-user product configuration and optimisation
 - ▶ end user product ontologies based on semantic product modelling
 - ▶ reasoning combined with powerful user interfaces
- ▶ Applications in different business contexts (measurement equipments, electronic engineering, furniture fitting, building & public works)



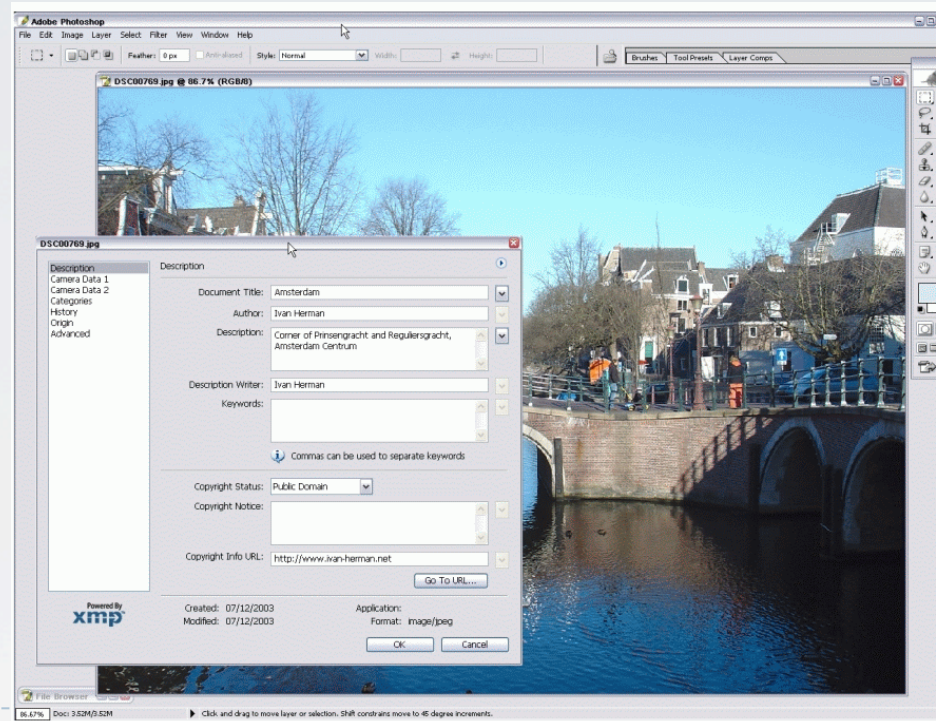
Semantic tagging and search in KDE

- ▶ Metadata backend fully based on RDF
- ▶ Each file can be tagged, rated, commented, and automatically indexed
- ▶ Queries are made via the combination of all those



Adobe's XMP

- ▶ Metadata added by, e.g., Photoshop into files in RDF
- ▶ XMP is a way of embedding + vocabulary + a set of (public) tools
- ▶ Used by a number of platform solutions



Content labelling for better search (Segala)

- Use content labelling to qualify search results



Portal to Principality of Asturias' documents

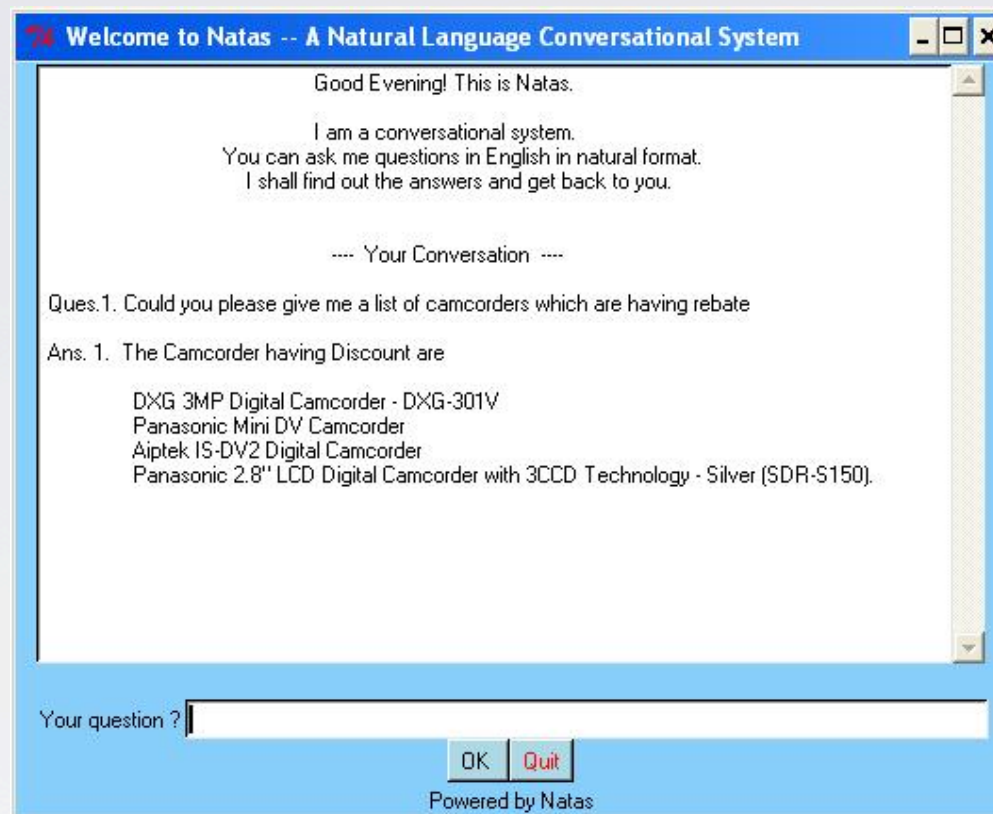
The screenshot shows the 'Buscador Experimental del BOPA' (Experimental Searcher of the BOPA) interface. At the top, there is a banner for the Principality of Asturias with the text 'asturias mucho más cerca...'. Below the banner, there is a navigation bar with 'Estás en' and links to 'Inicio', 'Buscador tradicional', and 'Buscador temático'. The main search area is divided into three steps: 'Paso 1-Buscador', 'Paso 2-Temas relacionados', and 'Paso 3-Información'. In 'Paso 1-Buscador', the search term 'dinero para iglesias' is entered in the search box, and a green 'Buscar' button is visible. In 'Paso 2-Temas relacionados', there is a link to 'Ayudas (cultura y ocio)'. In 'Paso 3-Información', there are dropdown menus for 'Encontró lo que esperaba:' (set to 'Sí') and 'Frecuencia de uso:' (set to 'Diaria'), and a text area for 'Mándenos sus comentarios:'. Below the search steps, there is a section titled 'Disposiciones encontradas con búsqueda temática en Ayudas (cultura y ocio)'. It shows 'Mostrando 100 primeros resultados (encontrados 132 artículos en 0,503 seg.)'. A table displays the search results with columns 'Relevancia', 'Titulo', and 'Fecha'.

Relevancia	Titulo	Fecha
1	RESOLUCION de 30 de diciembre de 2005, de la Consejería de Cultura, Comunicación Social y Turismo, por la que se convocan subvenciones para la restauración de Bienes de Interés Histórico para particulares e instituciones sin ánimo de lucro.	2006-02-02
2	RESOLUCION de 30 de diciembre de 2004, de la Consejería de Cultura, Comunicación Social y Turismo, por la que se convocan subvenciones para la restauración de bienes de Interés histórico para Corporaciones Locales.	2005-02-01

- ▶ Search through governmental documents
- ▶ A “bridge” is created between the users and the juridical jargon using SW vocabularies and tools

Natural interface to business applications

- Users interact with a business application (eg, via email) in natural language; OWL helps in the retrieval of relevant concepts



Mobile Content Recommendation System

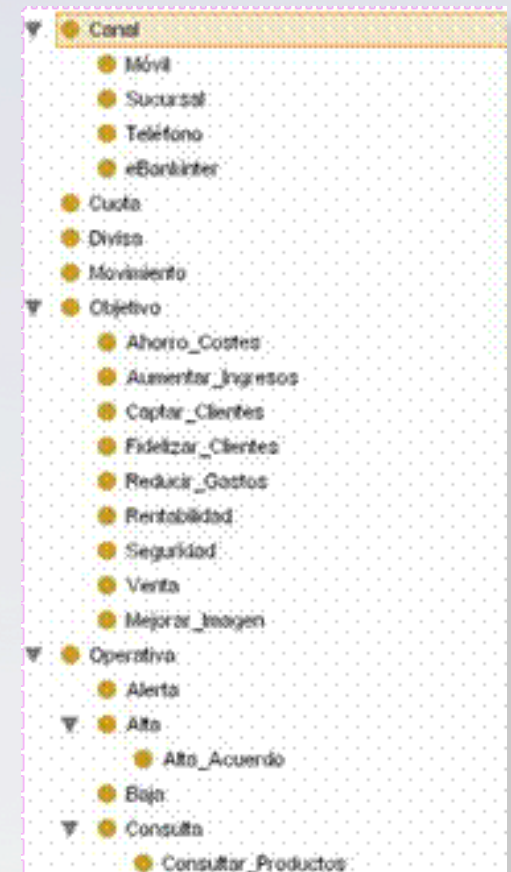
- ▶ Analyse the user behaviour of IP network users of Korea Telecom Freetel
 - ▶ build user characterization based on usage history
- ▶ Recommendations for content are provided based on user preference, time, place, weather, etc



Suggestions' database...

bankinter.

- ▶ Employees of the bank can submit new ideas for innovation, improving the business process, reduce costs, etc
- ▶ The entry system analyses the entry, shows similar ideas already in the system based on the concepts (not words)
- ▶ User gets immediate feedback, system gets better search, analysis, etc



iLaw—Intelligent Legislation support system

- ▶ Legal services are to government departments, enabling them:
 - ▶ compare to similar legislation home and abroad, eg:
 - ▶ compare terms with those around
 - ▶ trends, academic papers, civil complaints
- ▶ Based on:
 - ▶ integration of legal cases from US, Japan, and the EU countries, plus legal articles and academic papers in an RDF store
 - ▶ usage of own ontology, OWL and Rules reasoning

Courtesy of Hanming Jung, et al, KISTI and MOJ Korea, (SWEO Case Study)



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[다차원정보](#)
[동향정보](#)
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[이용자가이드](#)

통합검색음성

정보지도 INFORMATION MAP



다차원정보 MULTI-LAYERED INFORMATION



동향정보 TRENDS INFORMATION



법령 LAW

- > 국토해양부와 그 소속기관 직제 제49조 (운항기획관)
- > 국토해양부와 그 소속기관 직제 시행규칙 제44조 (운항기획관),
- > 국토해양부와 그 소속기관 직제 시행규칙 제50조 (서울지방항공..
- > 50 U.S.C. § 1512 : US Code - Section 1512:Transportation...
- > 49 U.S.C. § 44904 : US Code - Section 44904:Domestic air ..

"항공운송"와(과) 관련된 법령정보는 144건 이상입니다.

판례 CASE

- > 서울고등법원 76구388항공운송주선업면허취소처분취소청구사건..
- > 대법원 2003두10251 노선배분취소처분취소국제선정기항공운송..
- > 대법원 2003두3123 국제선정기항공운송사업노선면허처분취소

"항공운송"와(과) 관련된 판례정보는 36건 이상입니다.

논문 MATERIALS

- > 신홍균,김채형 (2000년) <특집> 21 세기를 대비한 항공산업제도 ..
- > 박오화, 함영훈, 홍순길, 허희영 (1993년) 논문 : 중국의 항..
- > 박석재 (2007년) 연구논문(연구논문) : 항공운송서류의 국제표준..
- > 崔竣瑋 (2004년) 국제항공운송에 관한 1999년 Montreal Convent..
- > 민기 (2003년) 시장실태와 제주도 지방정부의 항공운송산업 참여..

회원이동

클릭하시면 간편하게 이동합니다.

Baby CareLink

- ▶ Center of information for the treatment of premature babies
- ▶ Provides an OWL service as a Web Service
 - ▶ combines disparate vocabularies like medical, insurance, etc
 - ▶ users can add new entries to ontologies
 - ▶ complex questions can be asked through the service

The screenshot displays the CST Baby CareLink website. The header features the logo and a 'Product Map' section. A sidebar on the left lists navigation options like 'Product Map', 'Components', 'The Opportunity', 'About Us', 'In the News', 'Contact Us', and 'Home'. The main content area includes a 'Product Map' with a table of care components and a 'Did You Know?' box with a statistic about low birthweight. A 'Care Manager Tools' dropdown menu is also visible.

CST Baby CareLink

Product Map

CST Baby CareLink is a complete maternal/child health solution.

To view the contents of each component, mouse over the sections or click directly on them to view a complete product description.

Prenatal Care		Newborn Intensive Care	Infant Care	
Clinician Tools				
Healthy Beginnings	High-Risk Pregnancy	Neonatal Intensive Care	After the NICU	First Year of Life
Care Manager Tools				

Did You Know?

7.6% (300,000) of all births in the U.S. each year are low birthweight (< 2500 gms; 5 pounds, 8 ounces).

Care Manager Tools

- Prescribed Education
- Discharge Coordination
- Assessments
- Registration
- Census
- Reporting
- Message Center

Product Map || The Opportunity || About Us || Home

© 2004 Clinician Support Technology - One

459-3226 USA

CEO guide for SW: the “DO-s”

- ▶ **Start small:** Test the Semantic Web waters with a pilot project [...] before investing large sums of time and money.
- ▶ **Check credentials:** A lot of systems integrators don't really have the skills to deal with Semantic Web technologies. Get someone who's savy in semantics.
- ▶ **Expect training challenges:** It often takes people a while to understand the technology. [...]
- ▶ **Find an ally:** It can be hard to articulate the potential benefits, so find someone with a problem that can be solved with the Semantic Web and make that person a partner.

CEO guide for SW: the “DON’T-s”

- ▶ **Go it alone:** The Semantic Web is complex, and it's best to get help. [...]
- ▶ **Forget privacy:** Just because you can gather and correlate data about employees doesn't mean you should. Set usage guidelines to safeguard employee privacy.
- ▶ **Expect perfection:** While these technologies will help you find and correlate information more quickly, they're far from perfect. Nothing can help if data are unreliable in the first place.
- ▶ **Be impatient:** One early adopter at NASA says that the potential benefits can justify the investments in time, money, and resources, but there must be a multi-year commitment to have any hope of success

Thank you for your attention!

- ▶ These slides are publicly available on:

<http://www.w3.org/People/Ivan/CorePresentations/Applications/>