



A quick survey of search interfaces for web based image and learning object collections

SIMILE Project
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OCLC Semantic Merge Demo



Semantic Merge Demonstration

This application demonstrates the cross-disciplinary semantic interoperability that can be achieved thru the use of Dublin Core as a base metadata element set, and RDF/RDFS as an encoding format. This interoperability is accomplished by linking XML, RSS and RDF metadata together at the schema level in a way that retains the individual "branding" of an organizations namespace.

[\[more...\]](#)

Participants include [Amico](#), [AGLS](#), [GEM](#), [W3C](#) and the [Electronic Thesis and Dissertations OAI-PMH repository](#).

Use this form to search for resources. Use the "Semantic Merge" button to demonstrate interoperability between objects and between object properties.

Search items of type:

For a property of:

With a value of:

Match: Exact phrase All terms Any term Match case? No Yes

Semantic merge? On Off

[Search](#)
[Admin](#)

Items Found: 0

Typical outputs of semantic merge demo (agriculture query)



<file:///home/wagnerh/work/java/interop/data/fao/TT2002-026836> [\[view\]](#)

[location](#) [\[view\]](#) Input is provided via CAGRIS (XG)Library Services Unit, Research Division, Central Experiment Station, Ministry of Agriculture, Land and Marine Resources, Via Arima P.O., Centeno

<file:///home/wagnerh/work/java/interop/data/fao/NP2002-026765> [\[view\]](#)

[classification](#) [\[view\]](#) Agriculture - General aspects

<file:///home/wagnerh/work/java/interop/data/fao/TT2002-026818> [\[view\]](#)

[corporateauthor](#) [\[view\]](#) Ministry of Agriculture, Land and Marine Resources, Port of Spain (Trinidad and Tobago). Agricultural Planning Division.

[location](#) [\[view\]](#) Input is provided via CAGRIS (XG)Library Services Unit, Research Division, Central Experiment Station, Ministry of Agriculture, Land and Marine Resources, Via Arima P.O., Centeno

<file:///home/wagnerh/work/java/interop/data/fao/PH2002-026775> [\[view\]](#)

[thesaurus](#) [\[view\]](#) AGRICULTURE

Typical outputs of the semantic merge demo (2000 query)



file:///home/wagnerh/work/java/interop/./data/amico/AIC_.1942.51.rdf#2002-09-03-0 [\[view\]](#)

[catalogedDate](#) 20000601
[\[view\]](#)

<http://purl.org/dc/terms/TemporalScheme> [\[view\]](#)

[issued](#) [\[view\]](#) 2000-07-11

<http://purl.org/dc/dcmitype/Image> [\[view\]](#)

[issued](#) [\[view\]](#) 2000-07-11

<http://purl.org/dc/terms/isVersionOf> [\[view\]](#)

[issued](#) [\[view\]](#) 2000-07-11

Some observations about OCLC demo



- It is difficult for the naive user to determine the scope of the collection, and hence create useful queries - try it yourself!
- It is difficult to generate results set that use more than one vocabulary
- The results sets include schemas as well as instance data – is this the behavior the user expects?
- Can we adapt the interface so it is more likely to produce meaningful results e.g. exclude searches that mix classes and properties from different vocabularies?
- Using URIs is confusing, should use labels
- Hierarchical browsers better than list boxes as can structure elements

An overview of the different UIs available for web based image and LOM collections



Site	Free text search	Classification browser	Field specific query	Other
SPIRO			Yes	Sample searches
IPL	Yes	Yes		
American Memory	Yes	Multiple	Yes	
National library of medicine	Boolean		Boolean	
Perseus	Yes	Mutliple		Sample searches
Smithsonian		Multiple		Unclassified browser
UNM		Yes	Yes	
Berger Foundation	Yes	Multiple		Tours, multi-image view, some hierarchical browsing, quick survey of collection
AMICO	Yes		Yes	
Web Gallery of Art		Yes	Yes	Tours, multi-image view, search bar
ADAM	Yes	Multiple	Yes	Proximity search, what's new search, multi-option browser, place name browser, option search
Google	Boolean			
Flamenco				Faceted search interface
OpenCourseWare	Yes	Yes	Yes	
Learning Commons	Yes	Yes	Yes	

Free text search (ADAM)



A simple search interface to the ADAM database

 [SEARCH](#)
[HELP](#)

- Search full text of resources
- Standard results display Concise results display

Classification browser (Internet Public Library)



The Internet Public Library

Home > Subject Collections > Arts & Humanities > **Fine Arts**

The nonutilitarian arts, arts concerned primarily with the creation of beauty.

Sub-headings:

- Architecture**
- Graphic Arts**
Graphic Design and related arts.
- Dance**
- Design**
- Drama & Performance (Theater & Stagecraft)**
- Folk Art**
- Music**
- Visual Arts**

Field specific query (UNM)



Artist:

[For example: John Fullwood]

Nationality:

[For example: Japanese]

Title:

[For example: Palazzo Vecchio]

Object Type:

[For example: collage]

Medium:

[For example: chalk]

Subject:

[For example: mountains]

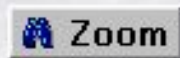
Date:
 B.C. A.D. to B.C. A.D. [For example: 201 B.C. to 800 A.D.]

Tours (Web Gallery of Art)

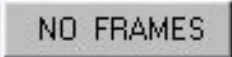


Overview of Italian Painters from 1200 to 1750

This tour provides you an overview of Italian painters active in the period 1200-1750. By selecting a local school from the list at left (or from the map, or the zoomed map), a list of artists grouped into time-frames of 50 years will appear. Short history and characterization of all local schools are also given.



- Northern Italy**
- [Venice](#)
- [Verona, Padua](#)
- [Ferrara](#)
- [Parma](#)
- [Bologna](#)
- [Milan](#)
- [Brescia, Cremona](#)
- [Genoa](#)
- Tuscany**
- [Florence](#)
- [Siena](#)
- Central Italy**
- [Umbria](#)
- [Roma](#)
- [Other](#)
- Southern Italy**
- [Naples](#)
- [Sicily](#)



Please send your [comments](#), sign our [guestbook](#) and send a [postcard](#).

© Web Gallery of Art, created by [Emil Kren](#) and [Daniel Marx](#).

Multi-Image view (Berger Foundation)



Multi-image view (WGA)

HALS, Frans (b. 1580, Antwerpen, d. 1666, Haarlem)

Biography



Stephanus Geraerds

1650-52
Oil on canvas, 115 x 87 cm
Koninklijk Museum voor Schone
Kunsten, Antwerp

Send Postcard!

HALS, Frans (b. 1580, Antwerpen, d. 1666, Haarlem)

Biography



Isabella Coymans

1650-52
Oil on canvas, 116 x 86 cm
Private collection

Send Postcard!

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

[« Search](#) [Music](#)
[« Copy to](#) [Reverse](#)
[Back to standard mode](#)

Links point to opposite side

[Search »](#)
[Copy to »](#)
[Hints](#)

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

Links point to opposite side

Hierarchical Browsing (Berger Foundation)



Johannes Vermeer

± Parcours de l'oeuvre de Vermeer

- Appendix

- ▶ Christ in the house of Martha and Mary: 1655
- ▶ Diana and her companions: 1655
- ▶ Saint Praxedis: 1655-56
- ▶ The little street: 1657-58
- ▶ Woman with a pearl necklace: 1664
- ▶ A woman writing: 1665
- ▶ The love letter: 1669-70
- ▶ A lady writing a letter and her servant
- ▶ The astronomer: 1668
- ▶ The geographer: 1668-69
- ▶ The guitar player: 1671-72

- World events: an overview of 17th century European art

- ▶ Rome
- ▶ Madrid
- ▶ Paris
- ▶ Delft



[Zoom \(full window\)](#) [Puzzle](#)

[World Art Treasures](#) [Admin](#)

Faceted search interface (SeaMark)



seamarkTM
The Enterprise Navigator For Digital Information & Components

Search

1239 Medical Journal Articles

subject

[Antibiotics](#) 28
[Asthma](#) 28
[Blood Proteins](#) 27
[Cystic Fibrosis](#) 1017
[Lung](#) 28
[Meconium](#) 31
[Pseudomonas Infections](#) 34
[Pseudomonas aeruginosa](#) 36
[Sputum](#) 27
[Sweat](#) 37
[811 more](#)

date

[1974](#) 163
[1974-75](#) 1
[1975](#) 189
[1976](#) 229
[1977](#) 199
[1978](#) 199
[1979](#) 259

author

[C F Doershuk](#) 18
[H Shwachman](#) 32
[L M Taussig](#) 16
[L W Matthews](#) 17
[N Hoiby](#) 24
[R B Elliott](#) 15
[R C Stern](#) 20
[R E Wood](#) 15
[T F Boat](#) 25
[W J Warwick](#) 15
[2056 more](#)

publisher

[Acta-Paediatr-Scand](#) 22
[Am-J-Dis-Child](#) 23
[Am-Rev-Respir-Dis](#) 35
[Arch-Dis-Child](#) 52
[Clin-Chim-Acta](#) 33
[J-Pediatr](#) 73
[Lancet](#) 81
[Monogr-Paediatr](#) 34
[Pediatr-Res](#) 80
[Pediatrics](#) 45
[300 more](#)

Faceted search interface 2 (SeaMark)



seamarkTM
The Enterprise Navigator For Digital Information & Components

Search

28 Medical Journal Articles matching

subject 'Lung'

Refine by

subject

[Asthma](#) 3
[Bronchoscopy](#) 2
[Complement](#) 3 1
[Cystic Fibrosis](#) 26
[Irrigation](#) 3
[Mucus](#) 1
[Physical Therapy](#) 2
[Pneumonia, Staphylococcal](#) 1
[Reserpine](#) 2
[Staphylococcus aureus](#) 2
[11 more](#)

author

[C F Doershuk](#) 2
[D O Sordelli](#) 2
[E Lykkegaard](#) 3
[H Levison](#) 2
[J Houstek](#) 2
[J T Pedersen](#) 2
[L Jacobsen](#) 2

Sort by [title](#) [medlineNumber](#) [author](#) 1 to 10 of 28 Medical Journal Articles | [Next](#)

Animal model for cystic fibrosis: pulmonary clearance of Staphylococcus aureus in mice treated with reserpine.

medlineNumber: 79220419

subject: [Cystic Fibrosis](#), [Lung](#) , [Reserpine](#), [Staphylococcus aureus](#)

source: Life-Sci. 1979 May 21. 24(21). P 2003-10.

author: [O H Pivetta](#), [D O Sordelli](#), [R J Cassino](#)

publisher: [Life-Sci](#)

date: [1979](#)

Since it has been demonstrated that chronic administration of reserpine to rats produces CF-like alterations, we have studied the lung resistance to bacterial infections in animals treated with reserpine. Mice of the BALB/c inbred strain were injected subcutaneously with different doses of reserpine for 7 days; after, they were submitted to an infective aerosol containing Staphylococcus aureus in a nebulization chamber. With each pair of exposed animals, an individual value of the uncleared bacteria ratio (UBR) at 4 hours was obtained. Reserpinized animals showed a significant increase in UBR values when compared to control mice ($p < 0.05$ and $p < 0.01$ depending on the doses), suggesting an impairment of the lung antibacterial defenses. Although pharmacological doses of reserpine produce catecholamine depletion, we can not conclude that this action upon the nervous system is

Some conclusions



- There is huge variation in the type of interfaces available
- Some of the interfaces are not very well designed
- Classification / browse
 - is helpful so the user can understand the extend of the collection
 - multiple classification is much better than simple classification
 - in single classifications, collections with different vocabularies tend to be in different classification subtrees, so we don't need vocabulary mapping e.g. argricultural records vs visual images vs doctoral theses in OCLC demo
 - faceted search is better than multiple classification

Some conclusions (2)



- Search
 - Google is pretty much state of the art for search interfaces
 - all queries can be represented in free text, but a GUI helps users build advanced queries
 - Can do free text search and field specific search
 - We don't need vocabulary mapping for free text search because you search all the text fields, only for field specific search
- We've spoken a bit about "community annotation", but this does not just mean adding metadata fields, it means exploring data in different ways, representing relationships etc so different communities require different interfaces e.g. tours, quick overviews, image comparisons etc



i n v e n t