



OpenStreetMap

www.openstreetmap.org

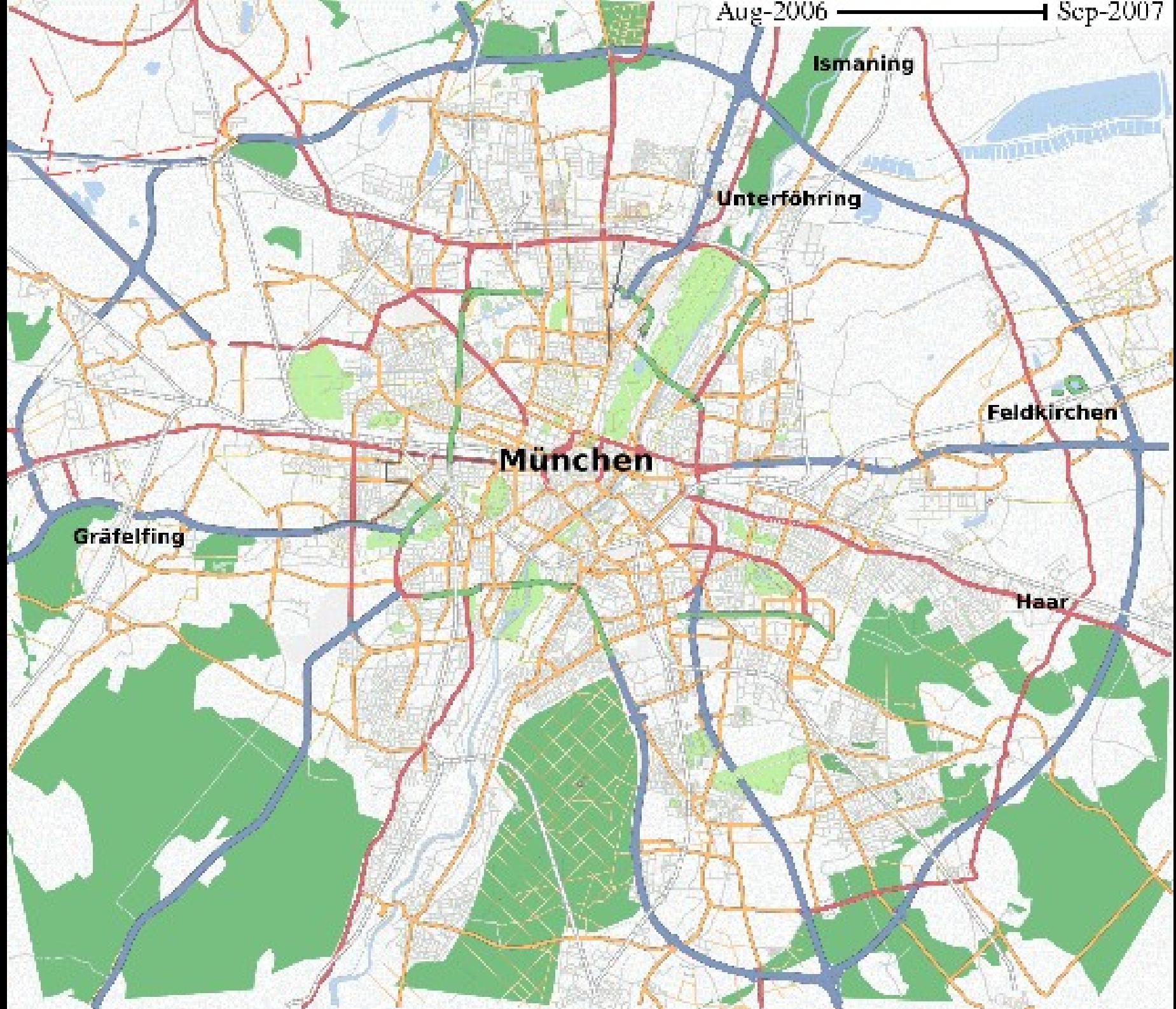
Jochen Topf

A community project
to map the world.

Worldwide project
Everybody can contribute
We are collecting **geodata**
Open tagging, no fixed schema
Free license (CC-BY-SA)

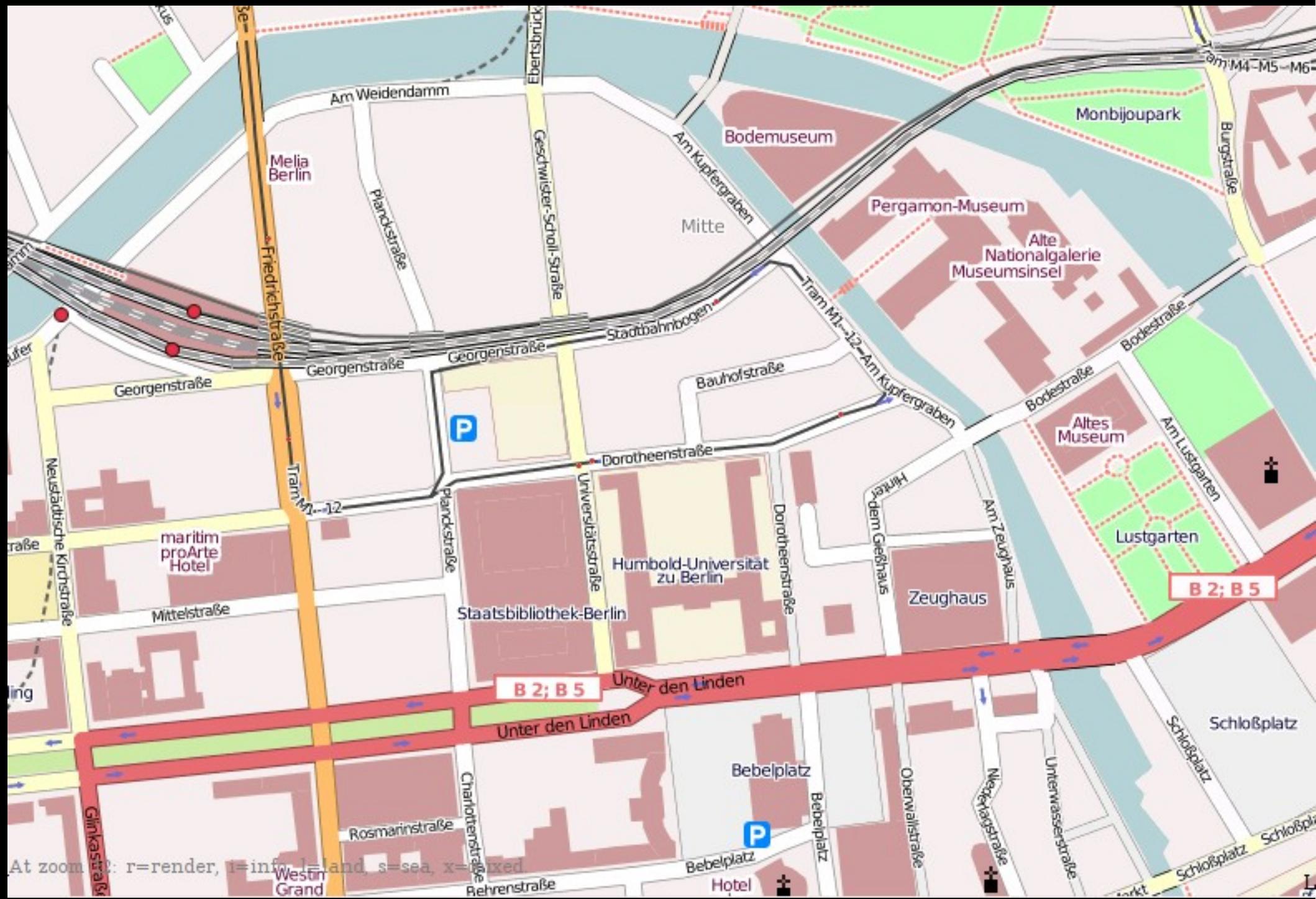






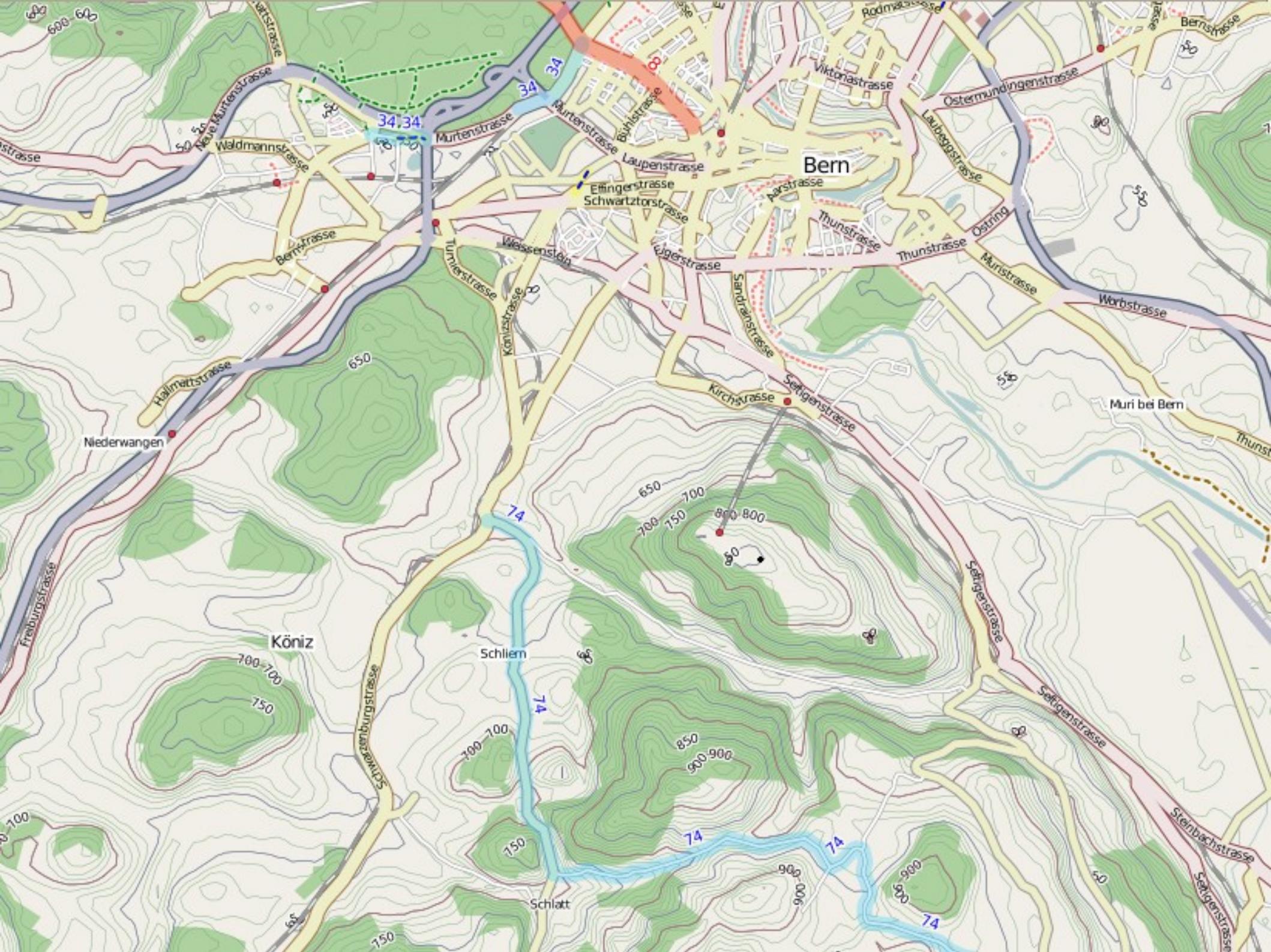


Berlin beginning of 2007



File View Tools Help









Routing / Navigation

OpenRouteService.org

MAP&ROUTING HELP INFO NEWS WIKI FREEOPENLS CONTACT

generated, collaboratively collected free geodata. This service is standards by the Open Geospatial Consortium (OGC). Thanks to please donate your geographic data to openstreetmap.org!

Interaction Get Information [Where am I?](#)

Bonn
Meckenheimer Allee' or Postcode '53111'

on 150 m Click on position in the map to search for Points of Interest, such as hotels, restaurants

Display Clear

Pos@: 7.079894 50.743985 Set

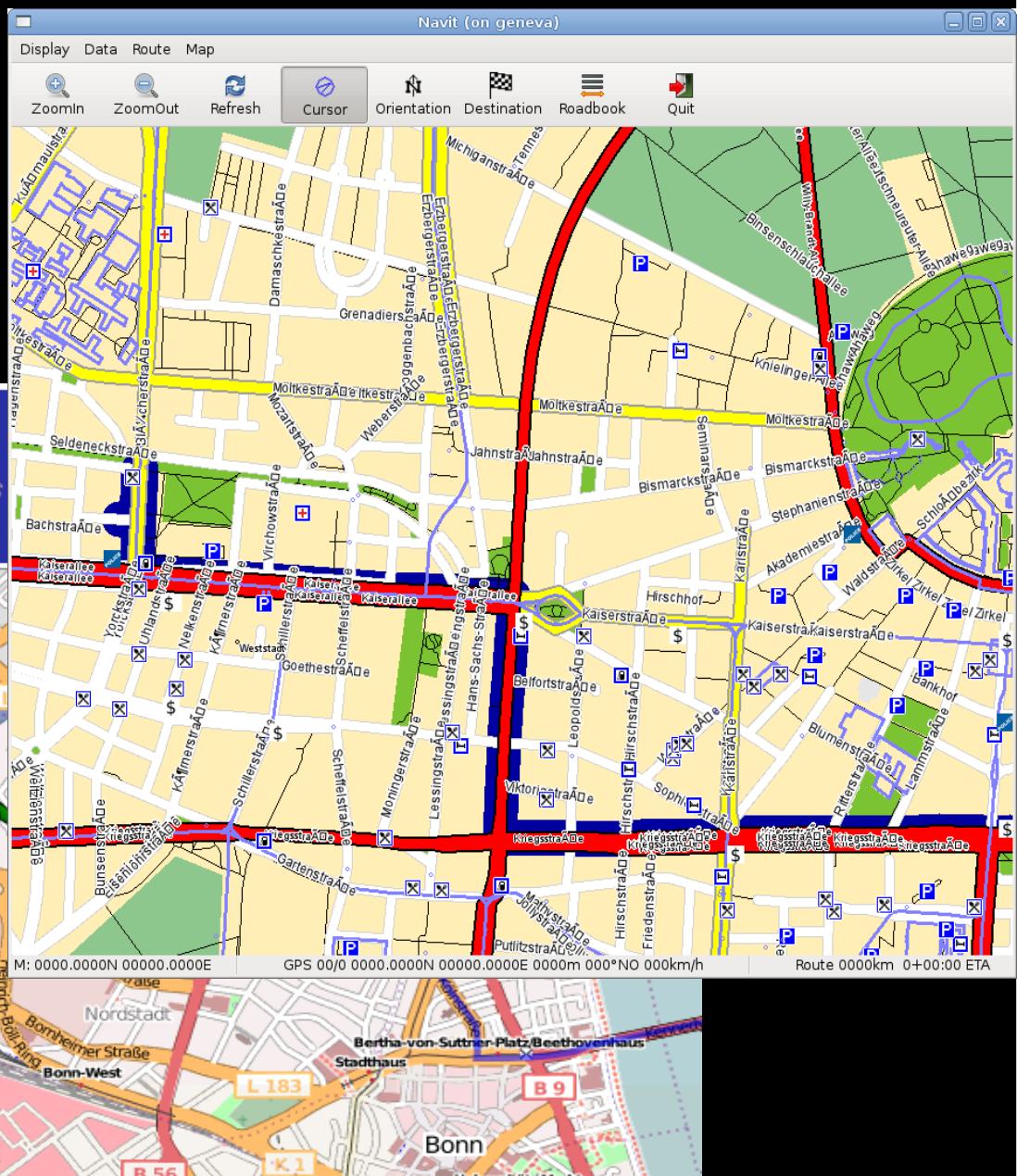
Pos@: 7.120664 50.740781 Set

km Fastest Calculate

Real Time Traffic* No Motorways

Avoided when routing: [Extended Routing Version](#)

Regions in given time: [Accessibility Analysis](#)





Collecting GPS data...

Collecting attributes

- On foot, by bike, car, train, ...
- Tracks and waypoints
- Notes on paper
- Audio notes
- Photos
- Out of copyright maps



Aerial Images

- Aerial/Satellite Images
- From Landsat
- From Yahoo
- ...

Layers

Data Layer

GPS Tracks from karlsruhe-suedstadt.gpx

Properties

Key	Value
created_by	JOSM
highway	residential
name	Luisenstraße
oneway	true

Add Edit Delete

Current Selection Luisenstraße

Select Reload Search

Command Stack

Lat/Lon 48.997208961434346 8.416045580981855

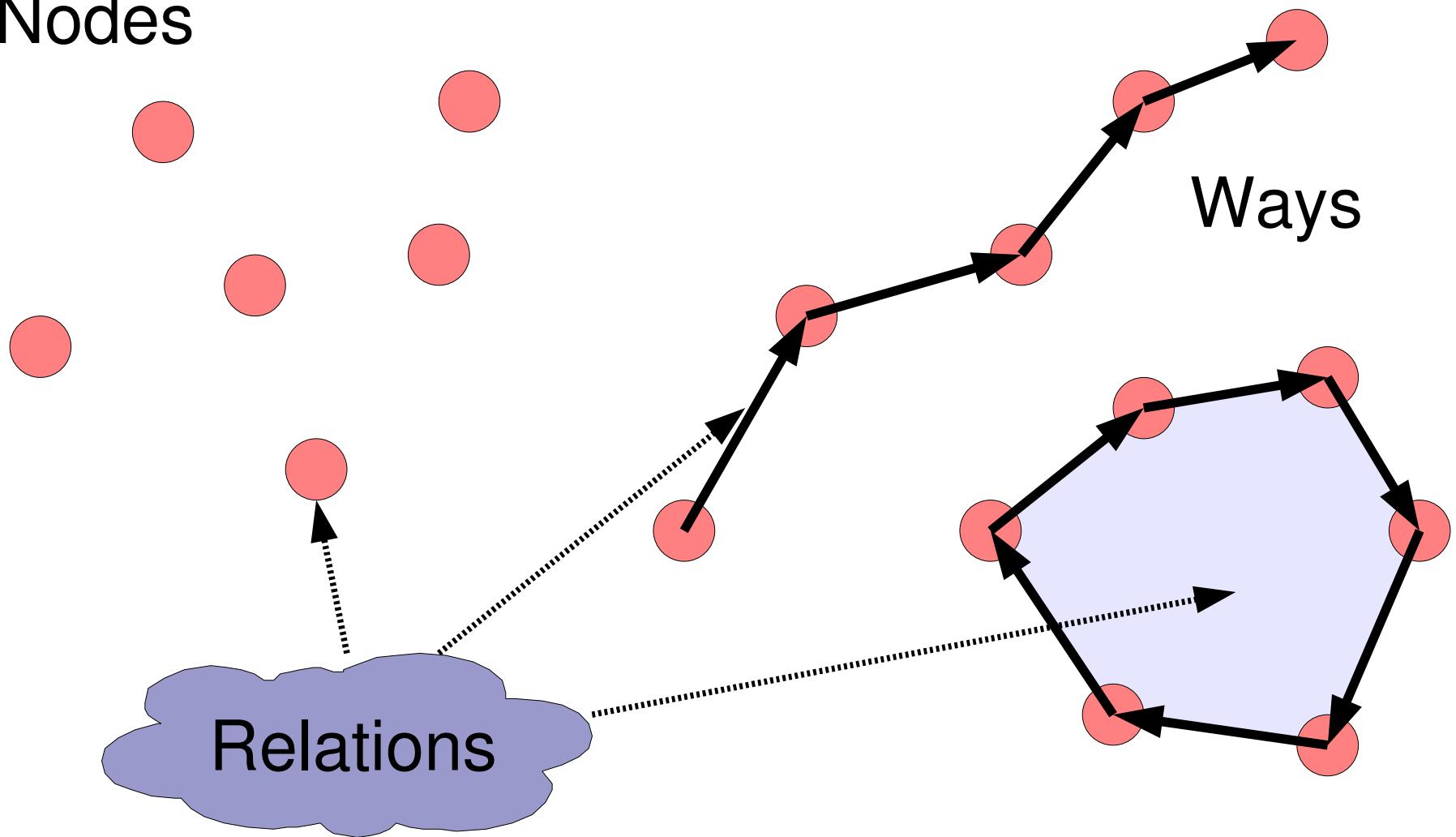
Object 5 nodes (incomplete)

Data model

- “The simplest thing that could possibly work.”
(Ward Cunningham)
- All data stored in central database
- Geometric objects
- With history

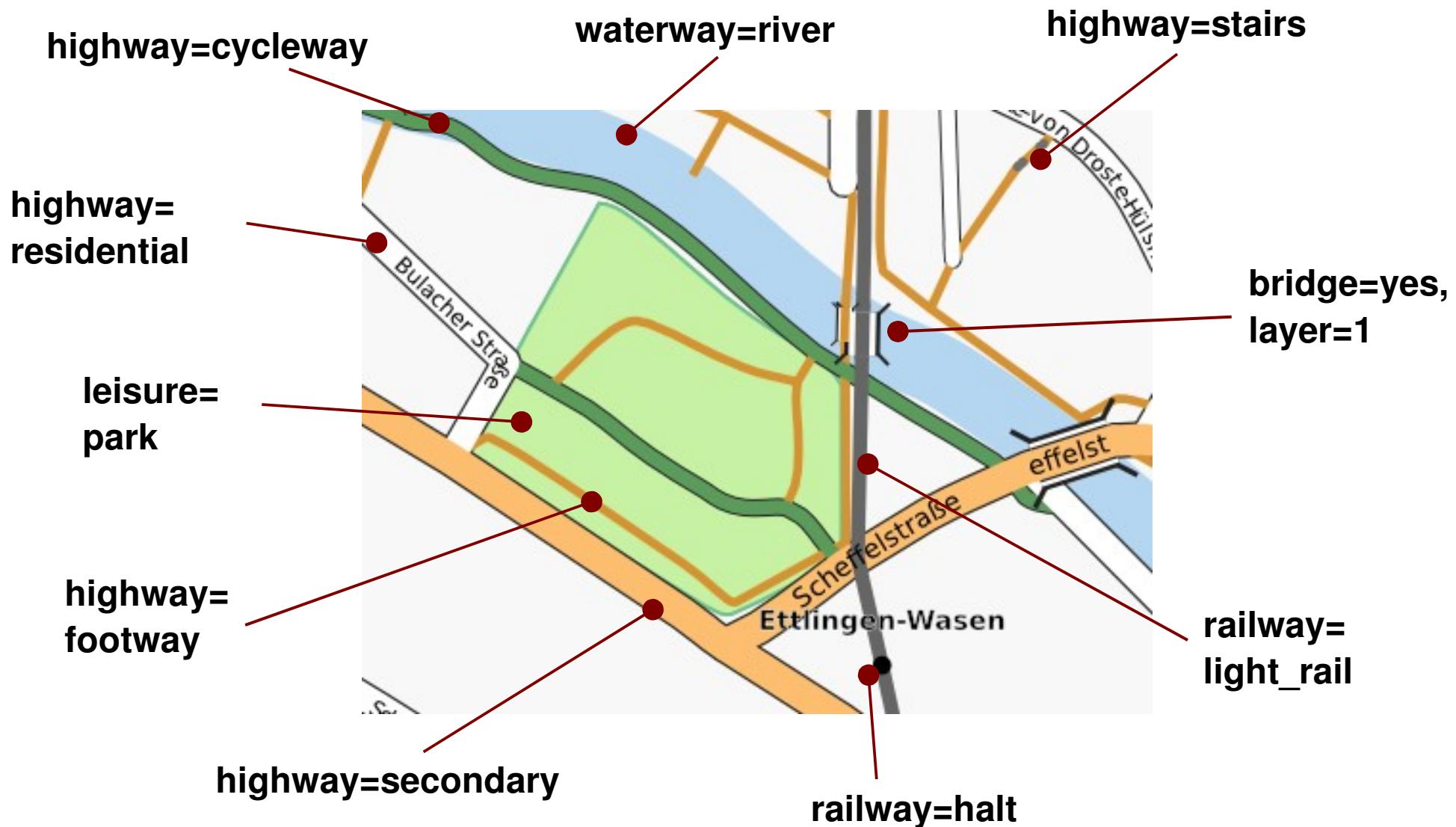
Data model

Nodes



Ways

Tags



Data model

- Objects with
 - A position/extent
 - A number of Tags (key=value)
- No
 - class/attributes
 - complete list of attributes
 - no ontology
 - no hierarchy

Where do tags come from?

- Invented as needed by people needing them
- Discussion on mailing lists and wiki
- Documentation in wiki
- Voting process (mostly ignored)
- Reorganization needed?
- Coexisting schemes?

Rough consensus

We reject: kings, presidents and voting.
We believe in: rough consensus and running code.

(David D. Clark)

Problems

- Tagging “for the renderers”
- Tagging only for current use of data
- Much of the available information is therefore not stored and will be lost
- Might need costly re-acquisition of data

We don't need no metadata....

- No formal metadata
- Just freetext wiki explanations
- Work needed to extract usable data

Data mining

Full-text vs. meta-data

Google vs. Library

Data mining vs. lookup

Tagwatch

- Statistics about actual use
- Look at the data and infer metadata
- Needs large body of data
- Doesn't work for new tags



www.openstreetmap.org

www.geofabrik.de

Jochen Topf
jochen.topf@geofabrik.de

All maps in this talk are Copyright 2008 OpenStreetMap Contributors
The talk itself is Copyright 2008 Jochen Topf
Licence for maps and talk: Creative Commons CC-BY-SA



Semantics in Social Tagging Systems

Andreas Hotho

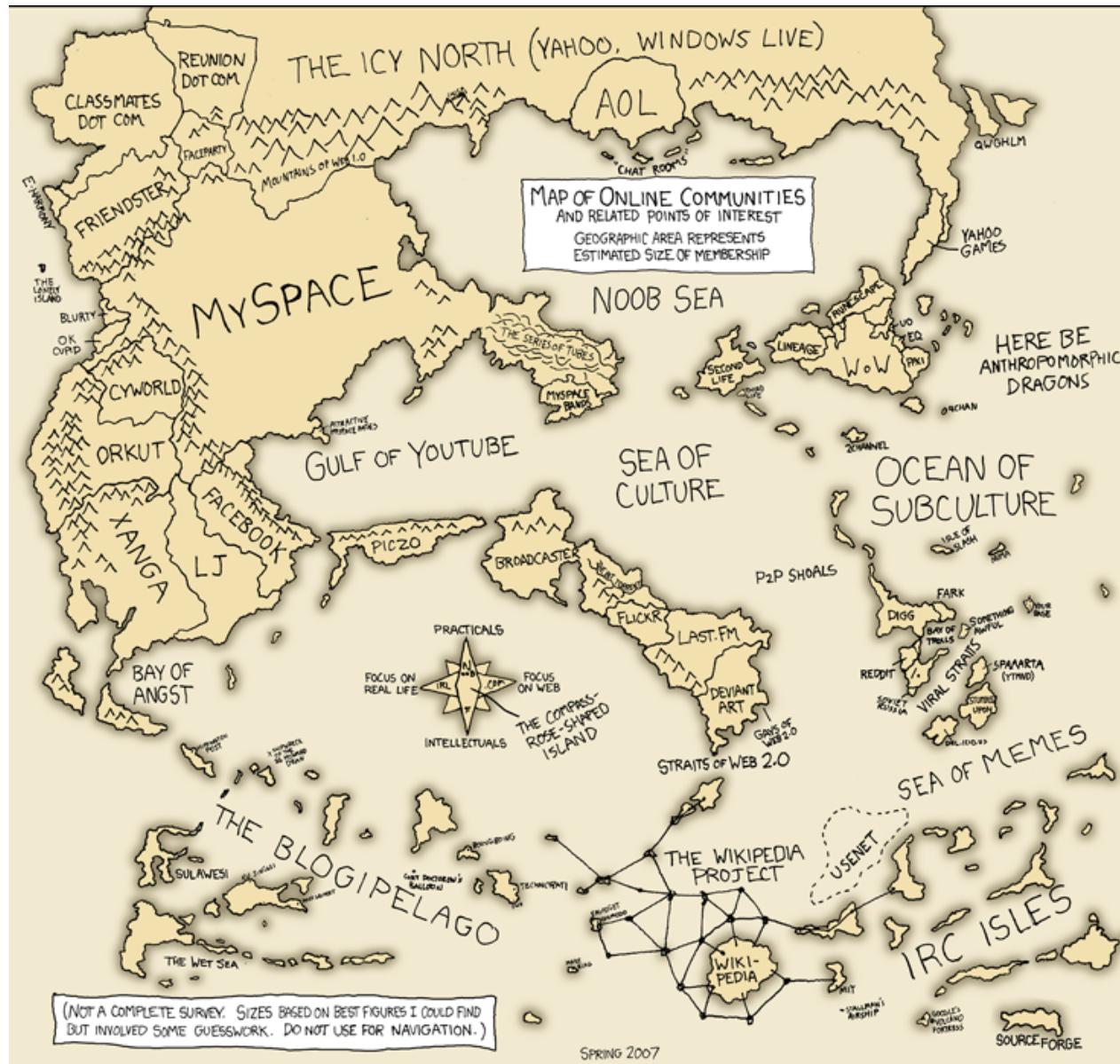
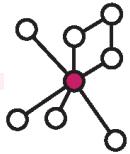
Dominik Benz, Robert Jäschke, Beate Krause, Christoph Schmitz, Gerd Stumme

*Hertie-Lehrstuhl für Wissensverarbeitung
Universität Kassel & Forschungszentrum L3S*

C. Cattuto, A. Baldassarri, V. Loreto, V. D. P. Servedio
Physics Department, University of Roma "La Sapienza", Italy



Map of Web 2.0



artwork by R. Munroe

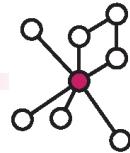
Andreas Hotho

<http://xkcd.com/>

26.09.2008

2

Everybody is tagging...

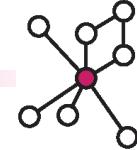


<http://xkcd.com/>

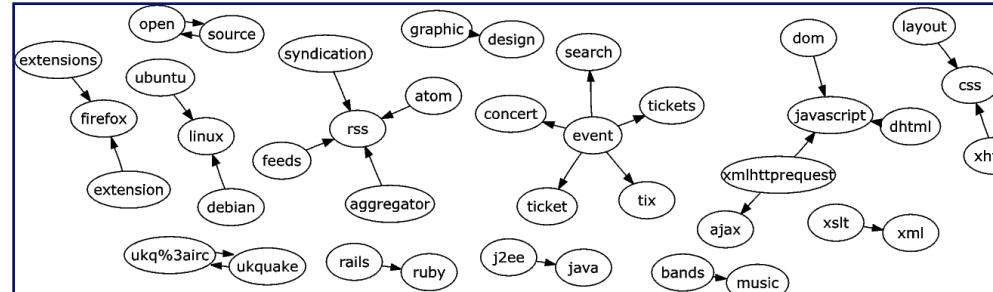
- simple and intuitive way to organize resources, immediately useful
 - uncontrolled vocabulary
 - however: evidence for converging vocabulary / emergent semantics due to
 - shared implicit knowledge
 - mutual influence of users
 - underlying social networks



Agenda



- BibSonomy - a social bookmark and publication sharing system

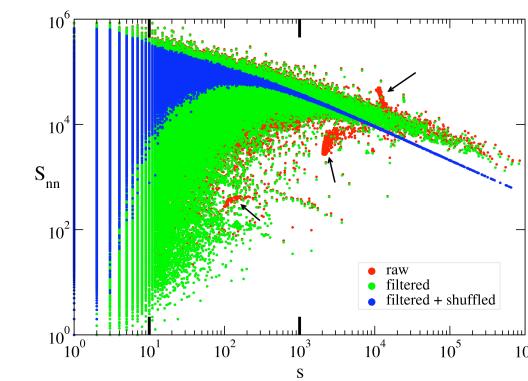
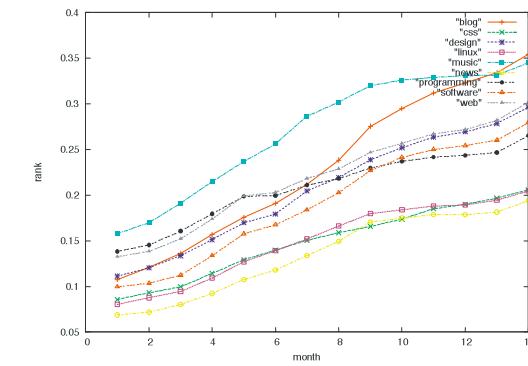


- ## ■ Overview Tagging Systems

- ## ■ Semantics between Tags

- ## ■ Summary and Outlook

Tag	FolkRank
semanticweb	0,0207820
semantic	0,0121305
web	0,0118002
semantic_web	0,0071933
rdf	0,0044461
semweb	0,0039308
resources	0,0034209
community	0,0033208
portal	0,0022745
xml	0,0022074
research	0,0020378
imported-bo...	0,0018920
en	0,0018536
.idate2005-04-11	0,0017555
newfurl	0,0017153
tosort	0,0014486
cs	0,0014002
academe	0,0013822
rfid	0,0013456
sem-web	0,0013316
w3c	0,0012994



BibSonomy – a cooperative publication management system



BibSonomy:: - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/

BibSonomy::home myBibSonomy BibSonomy::group:k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user:sta... KDE-Mediawiki DB bahn.corporate DBP Google Scholar CiteSeer Gerd's Wiki

BibSonomy :: search:all :: <fulltext search here>

A blue social bookmark and publication sharing system.

[tags](#) · [relations](#) · [groups](#) · [popular](#)
[myBibSonomy](#) · [post bookmark](#) · [post bibtex](#)

bookmarks [RSS](#) [XML](#)

previous | next [edit](#)

Musical Heaven: Broadway, Off-Broadway, West End, Movie Musicals
Celebrating the beauty of musicals, the great american theater tradition.
to [Movie Musical Opera West music](#) by [megggggg](#) on 2007-11-19 20:05:57
[copy](#)

Climbing Magazine - Since 1970
Climbing magazine is the number one climbing and bouldering magazine.
to [Climbing climbing magazine rockclimbing sports](#) by [megggggg](#) on 2007-11-19 20:04:12
[copy](#)

federal employee privacy act
federal employee privacy act
to [act employee federal privacy](#) by [joseph126](#) on 2007-11-19 20:04:06
[copy](#)

English Translation of the Catechism of the Catholic Church with Search Utility
A guide to Catholic Catechism
to [Liturgy Theology catechism catholicism religion](#) by [megggggg](#) on 2007-11-19 20:02:12
[copy](#)

publications [RSS](#) [BibTeX](#) [RDF](#) [more](#)

previous | next [edit](#) | [pick](#) | [unpick](#)

Antike Literatur im byzantinischen Ägypten im Lichte der Papyri
Kurt Treu *Byzantinoslavica* 47 1-7 (1986)
to [Antike Papyri Ägypten](#) by [avs](#) on 2007-11-19 19:41:55
[pick](#) | [copy](#) | [BibTeX](#)

Litteratulus Christianus. Beobachtungen und Bemerkungen zum Bildungsgrad antiker Christen
H. R. Seeliger *Theologische Quartalschrift* 183 297-312 (2003)
to [Antike Christentum Lesefähigkeit Schriftlichkeit](#) by [avs](#) on 2007-11-19 19:37:09
[pick](#) | [copy](#) | [BibTeX](#)

Ancient literacy
William V. Harris XV, 383 S.: II (1989)
to [Antike Lesefähigkeit Schriftlichkeit](#) by [avs](#) on 2007-11-19 19:33:20
[pick](#) | [copy](#) | [BibTeX](#)

Waterproof fire stations? Conceptual schemata and cognitive operations involved in compound constructions
Peer F. Bundgaard and Svend Ostergaard and Frederik Stjernfelt *Semiotica* 161 363--393 (2006)
to [2006 compounds frames by seandalai](#) on 2007-11-19 19:30:11
[pick](#) | [copy](#) | [URL](#) | [BibTeX](#)

filter:
- busy tags

-23PGlobalToLocal 2006 2007 ajax bibliometrie BioInf bioinformatics biology
blog books Cather checked cognition collaboration collaborative
community conference dblp description design E-Learning eclipse
eclipsepedia education Education erziehungswissenschaft event ezweb
fhhd07 filtering folksonomies folksonomy games gelesen
GeneralRelativity geodaten google history_of_medicine imported
internet java journal language LDSE learning Linux logic
mathematics modeling modelling multiagent myown network news online
ontology open OpenSource opensource people php postdocapplication
programming proj04p propr provenance Qualität QuantumGravity
recommender reference research SAUDESMED science search
Security semantic semanticweb social socialsoftware software
source sources Staat tagging technology toileting tools toread tutorial
ubuntu user vc video web Web2.0 Willa workflow Zeitschrift zukunft
überwachung

Large User Basis:

- 100.051 registered users
- 288.849 bookmarks
- 258.633 publications
- + 986.458 publications from DBLP.

2007-11-19 18:53:54

We use the system

- for our daily scientific work,
- in European and other projects
- and for evaluating our algorithms.

■ Integrated a.o. in Citavi and JabRef.

<http://www.bibsonomy.org>

Public BPMN Business Process Models
Volker Hoyer and Eva Bucherer and Florian Schnabel *Lecture Notes in Computer Science (LNCS)*, Springer (Berlin et al.) 12 (2008)

BibSonomy::tag::sna - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/tag/sna

BibSonomy::home myBibSonomy BibSonomy::group::k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki DBahn.corporate DBLP Google Scholar CiteSeer Gerd's Wiki

BibSonomy :: tag :: sna order by (date | folkrank)

A blue social bookmark and publication sharing system.

tags · relations · groups · popular
myBibSonomy · post bookmark · post bibtex
bookmarks [RSS](#) [XML](#)

previous | next edit

J. Kleinberg - Challenges in Social Network Data: Processes, Privacy and Paradoxes
to SNA TOWATCH lecture web-science by mstrohm and 1 other person on 2007-10-27 12:12:37
copy

Center for Models of Life - CMOL: Models / Interactive Java Applets
Network simulations
to SNA by mstrohm on 2007-10-26 16:02:53
copy

InfoVis CyberInfrastructure- Software
to analysis data sna software visualization by hotho and 1 other person on 2007-10-26 14:45:07
copy

NWB Community Wiki : Home Page browse
to analysis java network sna software by hotho on 2007-10-26 14:27:28
copy

visone - analysis and visualization of social networks
to analysis network sna social software visualization by hotho and 2 other people on 2007-10-26 13:43:19
copy

Social Network Analysis Research Case Studies
to casestudy communication enterprise2.0 sna socialnetworking by kochm on 2007-10-25 08:11:47
copy

Gesellschaftsklassen - Gesellschaft - Leben - ZEIT online
Man zieht in gute Viertel, schickt die Kinder auf Privatschulen, achtet auf Stil und Manieren: Das Bürgertum grenzt sich ab – und erschwert Menschen aus de...
to gesellschaft sna social society by jaeschke and 1 other person on 2007-10-22 14:32:20
copy

Andrew McAfee - The Impact of Information Technology (IT) on Businesses and their Leaders
The Impact of Information Technology (IT) on Businesses and their Leaders
to SNA knowledge_management knowledge_network social_network by bluedolphin on 2007-10-21 16:50:07
copy

International Sunbelt Social Network Conference
to SNA conference by mstrohm and 3 other people on 2007-10-12 17:56:29
copy

Topic-specific collection of references (here: Social Network Analysis)

to sna by odrorovic and 5 other people on 2007-10-31 13:24:55
pick | copy | BibTeX

logged in as ontoman · help · blog · about
0 picked in basket · edit tags · settings · logout

filter:
sna as concept from all users

- related tags

+ network + social + community + analysis + graphtheory + networks + virtual_community + graph + socialnetworks + social_network_analysis + socialnetworking + smallworld + workshop + visualization + myown + socialnetworkanalysis + infovis + socialnetworks + social + 2007 + software + seminar + uni + semantics + researcher + networks + software + research + analysis + influence + social_network + nepomuk + selforganization + ontology + leaders + buzz + evolution + literature + mining + tools + web-science + diplom2 + networking + KOLs + visualization + research + key + blogs + opinion + thought

Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/bib/tag/sna

Bibsonomy::home myBibsonomy BibSonomy::group::... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki DB bahn.corporate DBLP Google Scholar CiteSeer Gerd's Wiki

```
@inproceedings{falkowt:06,
    title = {Community Dynamics Mining},
    address = {Göteborg, Sweden},
    author = {Tanja Falkowski and Jörg Bartelheimer and Myra Spiliopoulou},
    booktitle = {Proc. of 14th European Conference on Information Systems (ECIS 2006)},
    url = {http://wwwiti.cs.uni-magdeburg.de/~tfalkows/publ/2006/ECIS_FalBarSpi06.pdf},
    year = {2006},
    biburl = {http://www.bibsonomy.org/bibtex/28978b9f8aab8ca951b80f97e6549f389/falkowski},
    priority = {2}, citeulike-article-id = {1438837},
    keywords = {community_dynamics myown sna}
}

@inproceedings{Mika_2005,
    title = {Ontologies Are Us: A Unified Model of Social Networks and Semantics.},
    address = {Heidelberg},
    author = {Peter Mika},
    booktitle = {The Semantic Web - ISWC 2005, Proceedings of the 4th International Semantic Web Conference, ISWC 2005, Galway, Ireland, November 6-10},
    editor = {Yolande Gil and Enrico Motta and V. Richard Benjamins and Mark A. Musen},
    pages = {522-536},
    publisher = {Springer},
    series = {Lecture Notes in Computer Science},
    url = {http://dx.doi.org/10.1007/11574620_38},
    volume = {3729},
    year = {2005},
    biburl = {http://www.bibsonomy.org/bibtex/2426c2fd559bb4e41c4f67d4eed0a39c7/wnpxrz},
    abstract = {In our work we extend the traditional bipartite model of ontologies with the social dimension, leading to a tripartite model of actors, concepts and instances. We demonstrate th
longnotes = {[http://citeseer.ist.psu.edu/739485.html citeseer]}}, lastdatemodified = {2006-09-26}, lastname = {Mika}, own = {notown}, pdf = {mika05-ontologies.pdf}, read = {notread},
keywords = {network ontology sna social }
}

@inproceedings{Mika_2005,
    title = {Ontologies Are Us: A Unified Model of Social Networks and Semantics.},
    address = {Heidelberg},
    author = {Peter Mika},
    booktitle = {The Semantic Web - ISWC 2005, Proceedings of the 4th International Semantic Web Conference, ISWC 2005, Galway, Ireland, November 6-10},
    editor = {Yolande Gil and Enrico Motta and V. Richard Benjamins and Mark A. Musen},
    pages = {522-536},
    publisher = {Springer},
    series = {Lecture Notes in Computer Science},
    url = {http://dx.doi.org/10.1007/11574620_38},
    volume = {3729},
    year = {2005},
    biburl = {http://www.bibsonomy.org/bibtex/2426c2fd559bb4e41c4f67d4eed0a39c7/tobold},
    abstract = {In our work we extend the traditional bipartite model of ontologies with the social dimension, leading to a tripartite model of actors, concepts and instances. We demonstrate th
longnotes = {[http://citeseer.ist.psu.edu/739485.html citeseer]}}, lastdatemodified = {2006-09-26}, lastname = {Mika}, pdf = {mika05-ontologies.pdf}, own = {notown}, read = {notread},
keywords = {SNA emergent_semantics knowledge_community knowledge_structures }
}

@article{omadadhain05prediction,
    title = {Prediction and ranking algorithms for event-based network data},
    address = {New York, NY, USA},
    author = {Joshua O'Madadhain and Jon Hutchins and Padhraic Smyth},
    journal = {SIGKDD Explor. Newsl.},
    number = {2},
    pages = {23-30},
    publisher = {ACM Press},
    volume = {7},
    year = {2005},
    biburl = {http://www.bibsonomy.org/bibtex/289a23b31a476c4f3f771b5e3e4e8432c/bsmwvh}
}



Export in over 30 formats, including BibTeX and Endnote



```
@inproceedings{schmitz2007network,
```


```

Publikationen - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.kde.cs.uni-kassel.de/pub

Bibsonomy::home myBibsonomy BibSonomy::group::k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki DBahn.corporate DBLP Google Scholar CiteSeer Gerd's Wiki

**UNIKASSEL
VERSITÄT**

**ENDOWED CHAIR OF THE HERTIE FOUNDATION
Knowledge and Data Engineering
DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE**



Informatik in Kassel

BibSonomy
[diese Seite taggen]

FG Wissensverarbeitung

- Wegbeschreibung

Mitarbeiter

- Gerd Stumme
- Monika Vopicka
- Dominik Benz
- Miranda Grahl
- Andreas Hotho
- Robert Jäschke
- Beate Krause
- Christoph Schmitz
- Sven Stefani

Lehrveranstaltungen

- Winter 2007/8
- Sommer 2007

Veranstaltungen

Presse

Jahresbericht

Projekte

Publikationen

Aktuelles/News

[KIK] Prof. Dr. Ralph Bergmann:
Ambient Intelligence zur Entscheidungsunterstützung bei Feuerwehreinsätzen [29.11.2007]

Publications of the Knowledge & Data Engineering Group

The list is generated automatically by [BibSonomy](#). For more details and BibTeX entries, please click on the titles.

- All publications in [BibTeX](#).
- All publications in one [list](#).
- All publications in the [SWRC ontology](#).
- All publications as [rss feed](#).
- All publications in [EndNote](#).

2007

[Workshop on Social and Collaborative Construction of Structured Knowledge \(CKC 2007\) at WWW 2007](#). In Harith Alani and Natasha Noy and Gerd Stumme and Peter Mika and York Sure and Denny Vrandecic, editor(s), Banff, Canada, 2007. [[BibSonomy: 2007 WWW challenge ckc2007 collaborative](#) | [myown social www2007](#)] URL

Dominik Benz and Karen H. L. Tso and Lars Schmidt-Thieme. [Supporting Collaborative Hierarchical Classification: Bookmarks as an Example](#). Special Issue of the Computer Networks journal on Innovations in Web Communications Infrastructure, 2007. [[BibSonomy: 2007 in press myown studienarbeit](#)]

[From Web to Social Web: Discovering and Deploying User and Content Profiles](#). In B. Berendt and A. Hotho and D. Mladenic and G. Semeraro, editor(s), (4736) Springer, 2007. [[BibSonomy: 2007 data dm mining myown social tm web](#)] URL

Ciro Cattuto and Christoph Schmitz and Andre Baldassari and Vito D. P. Servedio and Vittorio Loreto and Andreas Hotho and Miranda Grahl and Gerd Stumme. [Network Properties of Folksonomies](#). AI Communications Special Issue on "Network Analysis in Natural Sciences and Engineering" (to appear), 2007. [[BibSonomy: 2007 folksonomies myown network properties sosbuch](#)]

Ciro Catutto and Christoph Schmitz and Andrea Baldassari and Vito D. P. Servedio and Vittorio Loreto and Andreas Hotho and Miranda Grahl and Gerd Stumme. [Network Properties of Folksonomies](#). In Susanne Hoche and Andreas Nürnberger and Jürgen Flach, editor(s), AI Communications Journal, Special Issue on "Network Analysis in Natural Sciences and Engineering" (accepted for publication), IOS Press, 2007. [[BibSonomy: 2007 emergent fca folksonomies folksonomy](#) | [myown network semantics](#)] PDF

Miranda Grahl and Andreas Hotho and Gerd Stumme. [Conceptual Clustering of Social Bookmark Sites](#). In Alexander Hinneburg, editor(s), Workshop Proceedings of Lernen - Wissensentdeckung - Adaptivität (LWA 2007), 50-54, Martin-Luther-Universität Halle-Wittenberg, 2007. [[BibSonomy: 2007 bookmarking clustering collaborative folksonomy](#) | [myown social](#)] PDF

Miranda Grahl and Andreas Hotho and Gerd Stumme. [Conceptual Clustering of Social Bookmarking Sites](#). I-KNOW 07. 7th International Conference on Knowledge Management, Graz, Austria, 2007. [[BibSonomy: 2007 bookmarking clustering folkrank folksonomy](#) | [myown social tagging tagora tagorapub](#)]

Robert Jaeschke and Leandro Marinho and Andreas Hotho and Lars Schmidt-Thieme and Gerd Stumme. [Tag Recommendations in Folksonomies](#). In Alexander Hinneburg, editor(s), Workshop Proceedings of Lernen - Wissensentdeckung - Adaptivität (LWA 2007), 13-20, Martin-Luther-Universität Halle-Wittenberg, 2007. [[BibSonomy: 2007 bookmarking collaborative filtering folksonomy](#) | [myown recommender social](#)] PDF

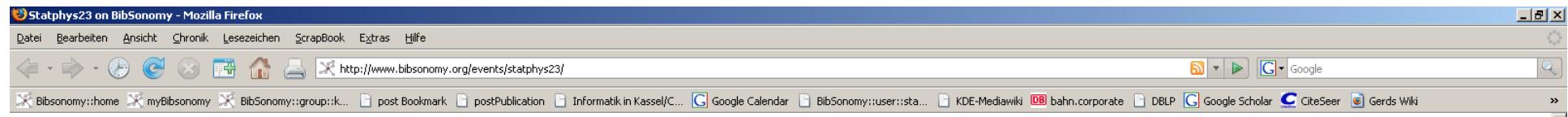
Robert Jäschke and Andreas Hotho and Christoph Schmitz and Gerd Stumme. [Analysis of the Publication Sharing Behaviour in BibSonomy](#). In U. Priss and S. Polovina and R. Hill, editor(s), Proceedings of the 15th International Conference on Conceptual Structures (ICCS 2007), (4604):283-295, Springer-Verlag, Berlin, Heidelberg, 2007. [[BibSonomy: 2007 BibSonomy bibsonomy bookmarking fca folksonomy iccs](#) | [myown publication sharing social trias](#)]

Robert Jäschke and Andreas Hotho and Christoph Schmitz and Bernhard Ganter and Gerd Stumme. [Discovering Shared Conceptualizations in Folksonomies](#). Journal of Web Semantics, 2007 (to appear). [[BibSonomy: 2007 analysis bibsonomy concept discovering fca folksonomies formal](#) | [myown shared triadic](#)]

Generates publication lists for individuals, research groups, and projects

Canada, 2007. [[BibSonomy: 2007 bibsonomy folksonomy myown](#)] PDF

Fertig Adblock



Statphys23. In Keywords.

This page is a front-end to [BibSonomy](#), a social bookmark and publication sharing system. All contributions submitted to the [Statphys23](#) conference have been loaded into the system, together with the keywords (tags) that authors have associated with their abstracts. Tags can be used to navigate through the conference abstracts.

[What is BibSonomy?](#) [Tutorials](#) [Get a BibSonomy account!](#)

Below, the tags (keywords) most frequently used by Statphys23 authors are shown. The size of each tag (keyword) is proportional to the logarithm of the number of abstracts that have been tagged with it. The number of abstracts associated with a tag (keyword) is displayed when hovering over it. Colors encode topics (tracks) of the Statphys23 conference, as shown at the bottom of this page. The color of each tag indicates the topic to which most abstracts annotated with that tag belong to. Clicking on a tag (keyword) will retrieve from BibSonomy a list of the abstracts that have been tagged with it. The full abstract of each contribution is available in BibTeX format.

adsorption analysis annealing anomalous approximation automata behavior biological boltzmann boundary brownian casimir cellular chain chaos chaotic cluster collapse collective colloidal colloids complex computer condensation confined confinement correlation correlations critical crystal crystals density diagram diffusion disorder disordered distribution dna driven dynamic dynamical dynamics effect effects energy entanglement entropy equation equations equilibrium evolution exact exclusion exponents field films finite-size first flow fluctuation fluctuations fluid fluids folding forces formation fractional fracture free function functional functions gas glass glasses granular group growth hard heat hydrodynamic information instability interaction interactions interface interfaces invited ising jamming kinetic kinetics langevin lattice law liquid liquids localization magnetic materials matrix matter mean mechanics media metastability method methods model models molecular montecarlo motion motors network networks noise non-equilibrium nonequilibrium nonlinear numerical optimization order particles passage pattern percolation phase phenomena physics point polymer polymers population potential potts problem process processes properties protein quantum random reaction reaction-diffusion relaxation renormalization replica resonance rheology scale-free scaling separation series shear simulation simulations size social spin state states statistical statistics **Statphys23** stochastic structure supercooled surface symmetry synchronization system systems temperature theorem theory thermal thermodynamics time **topic-1** **topic-10** **topic-11** **topic-2** **topic-3** **topic-4** **topic-5** **topic-6** **topic-7** **topic-8** **topic-9** traffic transition transitions transport turbulence universality walk walks water wetting

[topic-1] General aspects of statistical physics; thermodynamics; rigorous results and exact solutions.

[topic-2] Phase transitions and critical phenomena (equilibrium).

[topic-3] Nonequilibrium systems; driven systems, transport theory, relaxation phenomena, random processes.

[topic-4] Pattern formation in systems out of equilibrium: growth processes, fracture, hydrodynamic instabilities, chemical reactions etc.

[topic-5] Dynamical systems and turbulence.

[topic-6] Liquid matter and interfacial phenomena: atomic, molecular and ionic fluids, freezing, metastable liquids, wetting, surface effects, confined systems etc.

[topic-7] Soft condensed matter, polymers, liquid crystals, microemulsions, foams, membranes, colloids, granular material etc.

[topic-8] Quantum systems: quantum phase transitions, strongly correlated fermions, Bose-Einstein condensation, mesoscopic quantum phenomena, localization, etc.

[topic-9] Disordered and glassy systems: percolation systems, spin glasses, structural glasses, glass transition, etc.

[topic-10] Biologically motivated problems: biological networks, molecular motors, dynamics at the scale of the cell, evolution models, protein-folding models, statistical modelling of biological data etc.

[topic-11] Interdisciplinary topics in statistical physics: networks, econophysics, traffic flow, algorithmic problems, astrophysical applications, etc.

Entry point for conference proceedings

Brought to you by: TAGora project, Knowledge & Data Engineering Group, University of Kassel, PIL Group, Università di Roma "La Sapienza". Special thanks to: Giro Cattuto, Andrea Baldassarri, Valentina Beato, Marco Campani, Robert Jäschke, Andreas Hotho, Vittorio Loreto, Marco Perosa, Vito D.P. Servedio, Gerd Stumme.

KUG Recherche-Portal - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

KUG http://kug3.ub.uni-koeln.de/portal/opac?view=all

Bibsonomy::home myBibsonomy BibSonomy::group::k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki DBahn.corporate DBLP Google Scholar CiteSeer Gerd's Wiki

Universität zu Köln

Kölner UniversitätsGesamtkatalog

Katalogauswahl :: Recherche :: Trefferliste :: Merkliste [0]

RSS :: Mein KUG :: Hilfe :: Tutorien :: Sitzung beenden

USB Köln

[Vorheriger Titel] [Nächster Titel]

Top 20

An BibSonomy senden

Titelaufnahme

Kategorie	Inhalt
id	4916720
Verfasser	W G Postlep, Rolf-Dieter
Titel	Regionale Effekte höherwertiger Dienstleistungen
Zusatz	Einflüsse gesamtwirtschaftlicher Strukturveränderungen auf Wirtschaftskraft und kommunale Versorgungsbedarfe in verschiedenen Ballungsräumen
Vorlageform Verfasser	von Rolf-Dieter Postlep
Verlagsort	Bonn
Verlag	Ges. für Regionale Strukturentwicklung
Ersch. Jahr	1982
Umfang	X, 219 S. : graph. Darst.
Gesamttitel	Schriftenreihe / Gesellschaft für Regionale Strukturentwicklung ; 10
Medienart	a
Schlagwort RSWK	G Deutschland <Bundesrepublik> / Deutschland <Bundesrepublik>
Schlagwort RSWK	G Ballungsraum
Schlagwort RSWK	G Dienstleistungssektor
Schlagwort RSWK	G Dienstleistungssektor
Schlagwort RSWK	G Ballungsraum
Schlagwort RSWK	G Regionalentwicklung
ISBN	W 3-922754-08-2
Anzahl Gesamttitel	1

Besitzende Bibliothek	Standort	Inventarnummer	Signatur	Bestandsverlauf
USB Köln	USB-Magazin	-	5G6450	-

Ausleihe/Exemplare

Besitzende Bibliothek	Standort	Signatur	Ausleihstatus	Ausleihsystem
USB Köln	Hauptabteilung / Magazin	5G6450	bestellbar	Weiter

Basket functionality for libraries

[Schlagwortindex dieses Katalogs](#) [suchen](#)

http://sazerac.ub.uni-koeln.de/portal/weiterleitung/7fa19a0cb8dc1b0210947e7812e2d330/510/http://www.bibsonomy.org/BibtexHandler?reqTask=upload&url=http://kug.ub.uni-koeln.de/&description=KUG Recherche-Portal&encoding=ISO-8859-1&selection=@book {PostReg1982,%0Aauthor = "Postl... Adblock

BibSonomy::user::stumme - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/user/stumme

BibSonomy::home myBibSonomy BibSonomy::group::k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki

KUG Recherche-Portal BibSonomy::user::stumme HeBIS-Verbundkatalog (ohne Aufsätze...)

BibSonomy :: user :: stumme :: [enter tag(s) here]

A blue social bookmark and publication sharing system.

tags · **relations** · **groups** · **popular**
myBibSonomy · **post bookmark** · **post bibtex**

bookmarks (181) [RSS](#) [XML](#)

previous | 1 2 | next edit

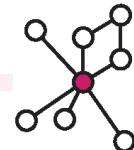
Alexa the Web Information Company
to statistics traffic web and 2 other people on 2007-11-09 14:51:18
[edit](#) | [delete](#)

Compete - SnapShot of bibsonomy.org, connotea.org, citeulike.org
to bibsonomy citeulike connotea statistics traffic on 2007-11-09 14:50:56
[edit](#) | [delete](#)

publications (667) [RSS](#) [BibTeX](#) [RDF](#) [more](#)

previous | 1 2 3 | next edit | pick | unpick

Regionale Effekte höherwertiger Dienstleistungen : Einflüsse gesamtwirtschaftlicher Strukturveränderungen auf Wirtschaftskraft und kommunale Versorgungsbedarfe in verschiedenen Ballungsräumen
Rolf-Dieter Postlep (1982)
to /Bundesrepublik Ballungsraum Deutschland Dienstleistungssektor Regionalentwicklung on 2007-11-19 20:26:13
[pick](#) | [edit](#) | [delete](#) | [BibTeX](#) [OpenURL](#)



HeBIS-Verbundkatalog (ohne Aufsätze) - results/titledata - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://hebis.rz.uni-frankfurt.de/HEBCGI/direktsuche.pl?ACT=SRCHA&IKT=8520&TRM=3-922754-08-2

BibSonomy::home myBibSonomy BibSonomy::group::k... post Bookmark postPublication Informatik in Kassel/C... Google Calendar BibSonomy::user::sta... KDE-Mediawiki DBahn.corporate DBLP Google Scholar CiteSeer Gerd's Wiki

KUG Recherche-Portal Ovid LinkSolver Links HeBIS-Verbundkatalog (ohne Au...)

Suchen Suchergebnis Erweiterte Suche Zwischenablage Benutzerdaten Mail-Auskunft Hilfe ©1998-2007 OCLC PICA

HeBIS
Verbundkatalog

suchen [und] Nummern (z.B. ISBN, ISSN) (NUM) sortiert nach Erscheinungsjahr
3-922754-08-2 suchen

Katalogauswahl
Online-Zeitschriften nach Fachgebieten
Bestellung
Download
Nichts gefunden?
Abmelden

Ihre Aktion suchen [und] (Nummern (z.B. ISBN, ISSN) (NUM)) 3-922754-08-2

Titel: Regionale Effekte höherwertiger Dienstleistungen : Einflüsse gesamtwirtschaftlicher Strukturveränderungen auf Wirtschaftskraft und kommunale Versorgungsbedarfe in verschiedenen Ballungsräumen / von Rolf-Dieter Postlep
Autor: Postlep, Rolf-Dieter
Erschienen: Bonn : Gesellschaft, 1982
Umfang: X, 219 S.
Serie: Schriftenreihe / Gesellschaft für Regionale Strukturerentwicklung ; 10
ISBN: 3-922754-08-2
Schlagwörter: Ballungsgebiet ; Regionalpolitik ; Regionalplanung ; Dienstleistungssektor ; Wirtschaftsstruktur

[zugehörige Veröffentlichungen](#)

Back reference to the library

 Uta Priss - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

Google Scholar DBLP CiteSeer bahn.corporate Informatik in Kassel/... BibSonomy::group::k... post BibTeX KDE-Mediawiki Google Calendar



Posting a new publication is easy:

- **Highlight reference**
- **Click on “Post Publication” button**

Uta Priss

Lecturer
[School of Computing](#)
[Napier University](#)



[Home](#)
[Publications](#)
[Research](#)
[Teaching](#)
[CV](#)
[FCA](#)

Email:
u. priss @ napier.ac.uk

Research Interests

Research interests include

- * semiotic and conceptual structures in information systems and knowledge systems;
- * information architecture and knowledge management;
- * ontologies, thesauri and classification systems.
- * logical/mathematical formalizations of signs, concepts and contexts

a) Journal Articles and Book Chapters

"Formal Concept Analysis in Information Science." In: Cronin, Blaise (ed.), Annual Review of Information Science and Technology. Vol 40, 2006, p. 521-543. (Preprint: [Pdf](#))

"Linguistic Applications of Formal Concept Analysis." In: Ganter; Stumme; Wille (eds.), Formal Concept Analysis, Foundations and Applications. Springer Verlag. [LNRAI 3626](#), 2005, p. 149-160. ([Pdf](#) © Springer-Verlag)

(with L. John Old) "Modelling Lexical Databases with Formal Concept Analysis." [Journal of Universal Computer Science](#), Vol 10, 8, 2004, p. 967-984. (Preprint: [Pdf](#))

"Faceted Knowledge Representation." [Electronic Transactions on Artificial Intelligence](#), Vol. 4, Section C, 2000, p. 21-33. Available at <http://www.ep.liu.se/ej/etai/2000/002/>

"Lattice-based Information Retrieval."

"Knowledge Discovery in Databases." [HTML version \(but without figures\)](#)

"Efficient Implementation of Semantic Relations in Lexical Databases." [Computational Intelligence](#), Vol. 15, 1, 1999, p. 79-87. (Preprint: [Pdf](#))

BibSonomy::edit bibtex - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/BibtexHandler?requTask=upload&url=http%3A%2F%2Fwww...

Google Scholar DBLP CiteSeer bahn.corporate Informatik in Kassel/... BibSonomy::group::k... post BibTeX KDE-Mediawiki Google Calendar

tags* fca information scienc space separated alpenverein atlanten analys analysis analytical
description, comment Uta Priss Analyze And andreas anmeldung annotation application arbeiten ardennen art association attachment attribute auf auskunft author Authoring award background bahn based bases battert bauernhof begriffliche begriffsanalyse belgien bibliothek
viewable for public
suggested science scientific
posting a new bookmark/publication:
■ Information Extraction (Mallet) fills form for you.
■ Just add your favorite tags.

post_bibtex
type* misc climbing closed clustering collaborative
BibTeX key* ieKey collaborative_tagging communities community complete completions computation computer concept Conceptual conceptual condensed conference contact contacts content context cordis course courseware cow crawler crawling CREAM cutter darmstadt Data data databases datalog DAV dav dbfusion de decompositions delicious dem demo der description Desktop desktop detection deutsch deutscher dfg diplomarbeit discovery distributive distributivity dl document Doktorandenstellen download drawing dresden e-learning ec ecai ecml edutella eecs eigenvalues eLearning elena email emergence emergent Encyclopedia endnote engine engineering engines errors Erwachsene ESWC EU eu EUREKA european european europäisch evaluation everest evolution ewmf

title* "Formal Concept Analysis in Information Science a memorable key without spaces
authors* each author on a separate line, format "Firstname Lastname"
editors* "In: Cronin Blaise(ed.) each editor on a separate line, format "Firstname Lastname"
booktitle Annual Review of Information Science and Technology. Vol 40 title of a book when only part is cited

Start | C:\... Wi... Mul... Mic... IB... Bib... DE 67% 16:44

BibSonomy::bibtex - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen ScrapBook Extras Hilfe

http://www.bibsonomy.org/bibtex/21f2b13a1fdf087676613b8263eb29262/stumme Google

Google Scholar DBLP CiteSeer bahn.corporate Informatik in Kassel/... BibSonomy::group::k... post BibTeX KDE-Mediawiki Google Calendar

BibSonomy :: bibtex :: "Formal Concept Analysis in Inf

A blue social bookmark and publication sharing system.

tags · groups · relations · popular
myBibSonomy · post bookmark · post bibtex · myRelations

logged in as stumme · help · faq · blog · about
3 picked in basket · edit tags · friends · settings · logout

stumme's BibTeX entry: pick edit delete BibTeX OpenURL

"Formal Concept Analysis in Information Science

Annual Review of Information Science and Technology, 40 : 521-543, 2006.

Editors: Cronin and Blaise

extra URLs: addURL

Description: Uta Priss

Tags: science information fca

science information fca update tags

pick edit delete BibTeX OpenURL

```
@misc{ieKey,
    title = {"Formal Concept Analysis in Information Science and Technology, 40 : 521-543, 2006."},
    booktitle = {Annual Review of Information Science and Technology},
    editor = {Cronin and Blaise},
    pages = {521-543},
    volume = {40},
    year = {2006},
    description = {Uta Priss},
    date = {2006},
    keywords = {science information fca}
}
```

PDF / PS

Your private copy of the document

http://www.bibsonomy.org/user/stumme/1999

tags
list | cloud
1994 1995 1996 1997 1998 1999 2000 2001
2002 2003 2004 2005 2006 2007 abis
accoona acquisition advanced digi aggregation
aifb akkd alc algorithm algorithms alignment alpen
alpenverein atlanten analys analysis analytical
Analyze and andreas anmeldung annotation
application arbeiten ardennen art association
attachment attribute auf auskunft author
Authoring award background bahn based bases
battert hausenhof herzliche

Posting a new bookmark/publication:

- That's it!
- Other options:
 - Scrapers (> 60), eg for Citeseer, ACM
 - Upload BibTeX
 - Enter information manually
 - JabRef interface

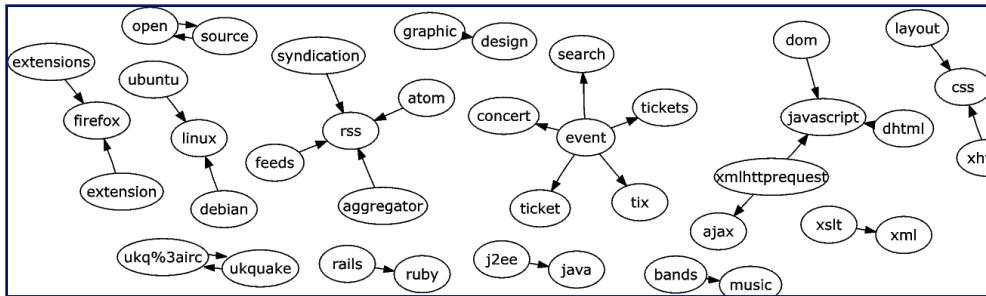
crawler crawling CREAM cutter Quammstaat .

Adblock

Agenda

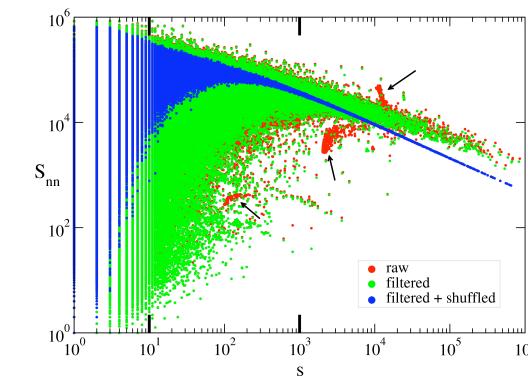
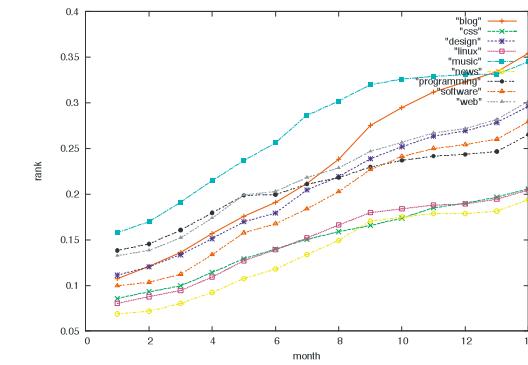


- BibSonomy - a social bookmark and publication sharing system



- Overview Tagging Systems

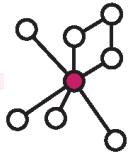
Tag	FolkRank
semanticweb	0,0207820
semantic	0,0121305
web	0,0118002
semantic_web	0,0071933
rdf	0,0044461
semweb	0,0039308
resources	0,0034209
community	0,0033208
portal	0,0022745
xml	0,0022074
research	0,0020378
imported-bo...	0,0018920
en	0,0018536
.idate2005-04-11	0,0017555
newfurl	0,0017153
tosort	0,0014486
cs	0,0014002
academe	0,0013822
rfid	0,0013456
sem-web	0,0013316
w3c	0,0012994



Social Tagging Systems / Delicious.com

The screenshot shows the Delicious.com homepage within an Opera browser window. The title bar reads "Delicious - Opera". The main content area features the Delicious logo and tagline "The tastiest bookmarks on the web. Save your own or see what's fresh now!". Below this is a search bar with the placeholder "Search the biggest collection of bookmarks in the universe...". A "Popular Bookmarks" section displays a list of top bookmarks, each with a thumbnail, title, and tags. To the right, a sidebar lists "Popular Tags" such as design, blog, video, software, tools, music, programming, webdesign, reference, tutorial, art, web, howto, javascript, tree, linux, web2.0, development, google, Inspiration, photography, news, food, flash, css, blogs, and education. The bottom right corner of the browser window shows a zoom level of 70%.





- **Simpy:**
 - free, “nicer” design
 - special function: groups, a bookmark history function
- **Mister Wong:**
 - Most popular system in Germany
 - special function: every post has links to „recommended“ web sites.
- **FURL** and **blinklist** has a special rating function.
- **Feed Me Links** has a function to add bookmarks by mail.
- **RawSugar** provides an automatically generated hierarchy.
- **backflip** and **AllMyFavorites.net** uses folders.
- **Chipmark**, **Spurl** and **Netvouz** has tags and folders.
- <http://www.simpy.com/>, <http://www.mister-wong.de/>, <http://www.furl.net/>,
<http://www.blinklist.com/>, <http://feedmelinks.com/portal>, <http://www.rawsugar.com/>,
<http://www.backflip.com/>, <http://www.allmyfavorites.net/>, <https://www.chipmark.com/Main>,
<http://www.spurl.net/>, <http://www.netvouz.com/>

Social Cataloging Systems



LibraryThing | Catalog your books online - Opera

File Edit View Bookmarks Widgets Feeds Tools Help

BibSo killSp... postB... postP... post... Ad hoth... BibLocal pBoo... pPubl... Web... post... post ... FRIT... FRIT...

X LibraryThing | Catalog y... +

← → ⌛ ⌂ ⌃ ⌄ http://www.librarything.com/ Google search

LibraryThing BETA

Home Search Zeitgeist Talk Groups Local Blog

What's on your bookshelf? Over thirty million books on members' bookshelves.

What is LibraryThing?

Enter what you're reading or your whole library—it's an easy, library-quality catalog. LibraryThing also connects you with people who read the same things.

Go ahead and [take the tour](#).

What's good?

- Meet the world's largest book club. Find people with *eerily* similar tastes.
- Catalog with Amazon, the Library of Congress or 690 other world libraries. Import from anywhere.
- Get recommendations. Tag your books and explore others' tags.
- Enter 200 books for free, as many as you like for \$10 (year) or \$25 (life).
- 1,000 free [Early Reviewer books](#) this month

Check it out

- Members have cataloged more than [thirty million books](#).
- Show your books: [on a shelf](#) or [as a list](#).
- Books: [Middlesex](#), [The Horse and his Boy](#), [Programming Ruby](#), [Stitch 'N Bitch](#), [The Structure of Scientific Revolutions](#), [Don't Waste Your Life](#)
- Interesting people: [avaland](#), [sylphette](#), [Busifer](#), [Irisheyzz77](#), [waffelhouse](#)

Sign in

user name
password

Sign in

Not a member? [Join now](#).

[lost password?](#) [organization?](#) [terms of service](#)

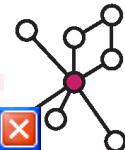
"Last week, one of these simple, brilliant ideas got built..."
The Guardian (UK) email digest
"The Wrap" by Andrew Brown

"LibraryThing appears poised to turn the cataloging of books into a form of communal recreation."
Christian Science Monitor

"It's six kinds of wonderful. It's all the wonderful."
alsafi
([much more](#))

100%

Social Cataloging Systems



LibraryThing | Catalog your books online - Opera

File Edit View Bookmarks Widgets Feeds Tools Help

BibSo killSp... postB... postP... post... ad hoth... BibLocal pBoo... pPubl... Web... post... post ... FRIT... FRIT...

L LibraryThing | Catalog y... X

http://www.librarything.com/zeitgeist Google search

Language: English [others]

LibraryThing BETA

Home Search Zeitgeist Talk Groups Local Blog

What's on your bookshelf?
Over thirty million books on members' bookshelves.

Zeitgeist Overview

Firehouse meet mouth.

Vital Statistics

Members 497,041
Books cataloged 31,700,527
Tags added 41,040,766
Unique works 3,695,532
Total reviews 507,069
Works reviewed 235,333
Ratings 4,953,288
User-contributed covers 1,093,106
Author photos 25,976
User groups 4,300
Forum messages 800,673
Forum touchstones 528,504

50 largest libraries (see more)

credo (16,229 books, private), CovenantNetwork (14,980 books), JeanLittleLibrary (13,822 books), kittylafong (13,217 books, private), AsYouKnow_Bob (13,138 books), pagerd (12,733 books), Patentnonsense (12,256 books), bookstopshere (12,056 books), antimuzak (11,594 books), shearrob (11,540 books), h34th3r (11,424 books), axarca (11,347 books), libvicki (10,753 books), devenish (10,745 books), ginaruiz (10,630 books), angelrose (10,587 books), gaspari (10,268 books, private), mitchellkay (10,064 books)

25 most reviewed books (see more)

Harry Potter and the Deathly Hallows (672 reviews), The Da Vinci Code (576 reviews), The Kite Runner (482 reviews), Twilight (478 reviews), The Time Traveler's Wife (443 reviews), The Curious Incident of the Dog in the Night-Time (391 reviews), (377 reviews), The Road (368 reviews), The Book Thief (338 reviews), Harry Potter and the Half-Blood Prince (332 reviews), Harry Potter and the Philosopher's Stone (328 reviews), Water for Elephants (325 reviews), Pride and Prejudice (319 reviews), Angels & Demons (309 reviews), A Thousand Splendid Suns (306 reviews), The Historian (302 reviews), (298 reviews), The Thirteenth Tale: A Novel (284 reviews), The Lovely Bones (282 reviews), Life of Pi (276 reviews), 1984 (273 reviews), Jonathan Strange & Mr Norrell (263 reviews), The Golden Compass (260 reviews), The Catcher in the Rye (250 reviews), To Kill a Mockingbird (249 reviews)

top books (see more)

Harry Potter and the Philosopher's Stone (35,414), Harry Potter and the Half-Blood Prince (32,974), Harry Potter and the Order of the Phoenix (31,619), Harry Potter and the Chamber of Secrets (30,899), Harry Potter and the Prisoner of Azkaban (30,621), Harry Potter and the Goblet of Fire (30,489), The Da Vinci Code (25,521) Harry Potter and the

Authors who LibraryThing (complete list)

Naomi Novik, Susan Wittig Albert, Sharon Lee, John Green, Janny Wurts, Randy Alcorn, Elizabeth Bear, Rosina Lippi, David Liss, Joe Hill, Richard Price, Brandon Sanderson, C.E. Murphy, Susie Bright, Martha Wells, David Weinberger, Sarah Monette, Sherryl Woods, Lynn Viehl, Sandra Gulland, Bryan Lee O'Malley, Robin D. Owens, Marisa de los Santos, Patrick Rothfuss, Lance Parkin, Carl Zimmer, E.E. Knight, Shanna Swendson, Lisa Unger, Christopher Locke — see the full list.

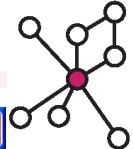
top 75 authors (author cloud)

By number of copies

J. K. Rowling (226,512), Stephen King (157,257), Terry Pratchett (141,167), J. R. R. Tolkien (113,398), Neil Gaiman (106,637), C. S. Lewis (103,878), William Shakespeare (86,580), Nora Roberts (72,050), Jane Austen (68,850), Isaac Asimov (67,782), Anne McCaffrey (63,466), Agatha Christie (62,867), Orson Scott Card (57,818), Charles Dickens (56,695), Douglas Adams (55,921), Anne Rice (55,622), Kurt Vonnegut (55,444), Robert A. Heinlein (53,542), John Grisham (52,571), Dan Brown (52,397), Mercedes Lackey (51,325), George Orwell (47,602), James Patterson (44,871), Dean Koontz (44,406), John

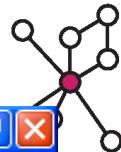
19

Social Cataloging Systems



The screenshot shows the Reliwa.de homepage. At the top, there's a blue header bar with the title "Reliwa.de - Der Treffpunkt für Bücher-, Musik- und Filmliebhaber - Opera". Below it is a menu bar with "File", "Edit", "View", "Bookmarks", "Widgets", "Feeds", "Tools", and "Help". The main content area features the Reliwa logo and the tagline "Der Treffpunkt für Bücher-, Musik- und Filmliebhaber". A search bar with a dropdown menu for "Schlüsselwort" and a "Suche" button is visible. Below the search bar is a navigation menu with tabs for "Startseite", "Bücher", "Musik", "Filme", and "Gruppen". To the right of the search bar, there's a login form with fields for "Benutzername" and "Passwort", and a "Einloggen" button. A message "Noch kein Account? [Kostenlos Anmelden!](#)" is displayed below the login form. The main content area is divided into several sections: "Bücher", "Musik", and "Filme" each with a grid of items; "Beliebte Autoren", "Beliebte Künstler", "Beliebte Regisseure", and "Beliebte Darsteller" each with a list of names; and "Mitglieder" and "Gruppen" sections with icons and names.

Social Cataloging Systems



Connotea: free online reference management for clinicians and scientists - Opera

File Edit View Bookmarks Widgets Feeds Tools Help

BibSo killSp... postB... postP... post... Ad hoth... BibLocal pBoo... pPubl... Web... post... post ... FRIT... FRIT...

Connotea: free online r...

http://www.connotea.org/ Google search

Search All Find results

Connotea Organise. Share. Discover.

Home Blog About Connotea Site Guide Community pages My Library

Free online reference management for all researchers, clinicians and scientists

Completely free, no download

→ sign up now

Already Registered?

Username Password Login

Forgotten your username or password? | Login with OpenID

Five reasons to use Connotea

1. Save and organize links to your references
2. Easily share references with colleagues
3. Access references from any computer
4. One click is all it takes
5. Easy to use. Start creating your library today

How it works

1 Find You find a reference

2 Save One click saves it on Connotea

3 Customize Add your own keywords for easy retrieval

Learn more

21

Social Cataloging Systems



CiteULike: Everyone's library - Opera

File Edit View Bookmarks Widgets Feeds Tools Help

BibSo killSp... postB... postP... post... ad hoth... BibLocal pBoo... pPubl... Web... post... post ... FRIT... FRIT...

CiteULike: Everyone's lib... http://www.citeulike.org/ Register Log in FAQ [?] Search

citeulike | sponsored by Springer

CiteULike Journals Groups

ANNUAL REVIEWS INSIGHTFUL RESEARCH STARTS HERE

Everyone's library

Some recent papers posted to CiteULike - all mixed together.

- Conspecific and Interspecific Interactions Between the FEM-2 and the FEM-3 Sex-Determining Proteins Despite Rapid Sequence Divergence.**
J Mol Evol, Vol. 62 (2006), pp. 281-291.
by P Stothard, D Pilgrim
posted to wormbase t19c38 other nematode fem-2 elegans celegans caenorhabditis elegans c elegans by tharris to the group *C. elegans / WormBase* on 2008-09-23 19:55:51 as ★★★
- trt-1 Is the Caenorhabditis elegans Catalytic Subunit of Telomerase.**
PLoS Genet, Vol. 2 (2006)
by B Meier, I Clejan, Y Liu, M Lowden, A Gartner, J Hodgkin, S Ahmed
posted to y4104a14 wormbase trt-1 r12b24 other nematode mrt-2 him-10 elegans dy34 celegans caenorhabditis elegans c elegans by tharris to the group *C. elegans / WormBase* on 2008-09-23 19:55:29 as ★★★
- Automated cell lineage tracing in *Caenorhabditis elegans*.**
Proc Natl Acad Sci U S A, Vol. 103, No. 8, (21 February 2006), pp. 2707-2712.
by Z Bao, JI Murray, T Boyle, SL Ooi, MJ Sandel, RH Waterston
posted to wormbase other nematode elegans celegans caenorhabditis elegans c elegans by tharris to the group *C. elegans / WormBase* on 2008-09-23 19:54:58 as ★★★ along with 2 people and 1 group
- pat-4/ILK and unc-112/Miq-2 are required for gonad function in *Caenorhabditis elegans*.**
Exp Cell Res, Vol. 312 (2006), pp. 1475-1483.
by X Xu, SC Rongali, JP Miles, KD Lee, M Lee
posted to zk10582 wormbase unc-112 pat-4 pat-3 other nematode lfe-2 itr-1 ipp-5 f33d42 elegans celegans caenorhabditis elegans c elegans c47e87 c46h114 c29f97 c09b81 by tharris to the group *C. elegans / WormBase* on 2008-09-23 19:54:45 as ★★★

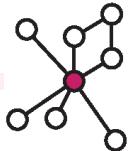
Everyone's Tags

Most active tags on CiteULike

Filter:

algorithm alignment analysis and article attention bayesian binding bioinformatics biology brain c_elegans caenorhabditis_elegans cancer celegans cell classification clustering cognition communication control culture data database design development diffusion dna dynamics ecology economics education elegans emotion evaluation evolution expression fmri gazette_abstract gene genetics genome genomics health history human imaging

Social Cataloging Systems



home - 2collab - Opera

File Edit View Bookmarks Widgets Feeds Tools Help

BibSo killSp... postB... postP... post... ad hoth... BibLocal pBoo... pPubl... Web... post... post ... FRIT... FRIT...

SPIEGEL ONLINE - Nach... home - 2collab

http://www.2collab.com/ Google search

register

2 collab bookmarks groups tools

Discover new research material

Browse and search through 2collab to find interesting new topics, research ideas, or new people who you can invite to become a member of your groups.

get started »

hide info

tags groups

view options ►

tags used in these bookmarks

affordable (1)
aires (1)
anesthetic (1)
argentina (1)
ATR-IR (1)
bautrager (1)
brazil (1)
brazilian (1)
buenos (1)
business (2)
cards (1)
causes (1)
channeling (1)
chilean (1)
codes (1)
Cofactor regeneration (1)
cordoba (1)
cream (1)
cusco (1)
Die design (1)
Dihydrogen (1)
disposable cameras (1)
effects (1)

How will you use **2collab**?

2collab.com / home most recent

State-of-the-art of simulation of sheet metal forming

0 votes 0 comments details

posted 1 hour ago by jmary options ►

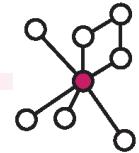
Journal of Materials Processing Technology 103, 1, 14-22, 1 June 2000.
tags: Forming, Sheet metal, Numerical simulation
18 Scopus citations

Constitutive equations for the simulation of sheet metal forming processes using the FEM

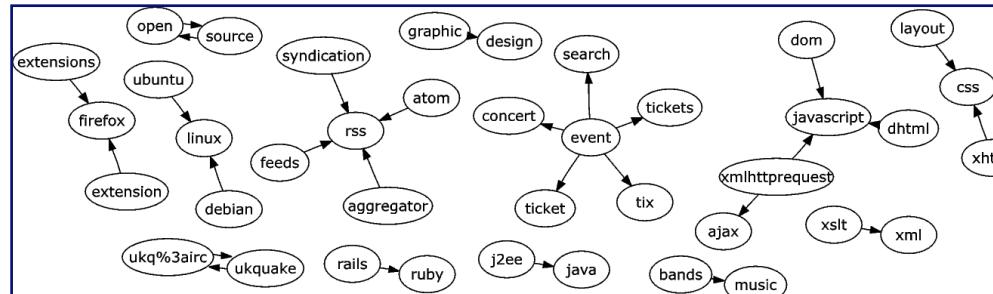
0 votes 0 comments details

posted 1 hour ago by jmary

Agenda



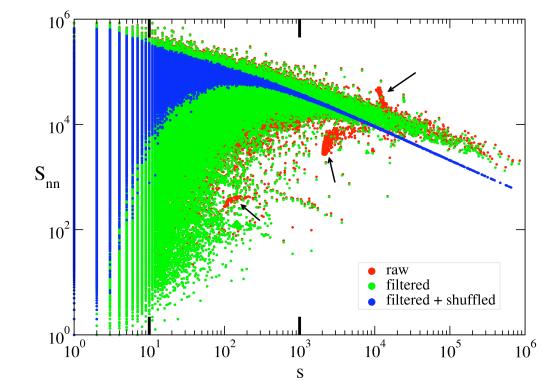
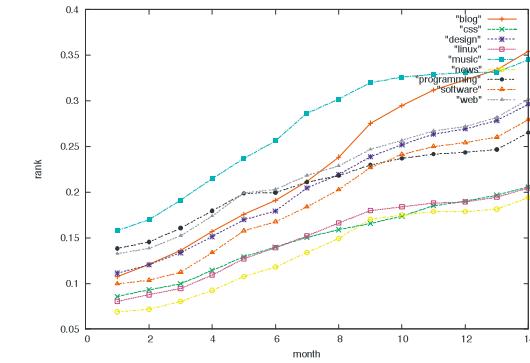
- BibSonomy - a social bookmark and publication sharing system

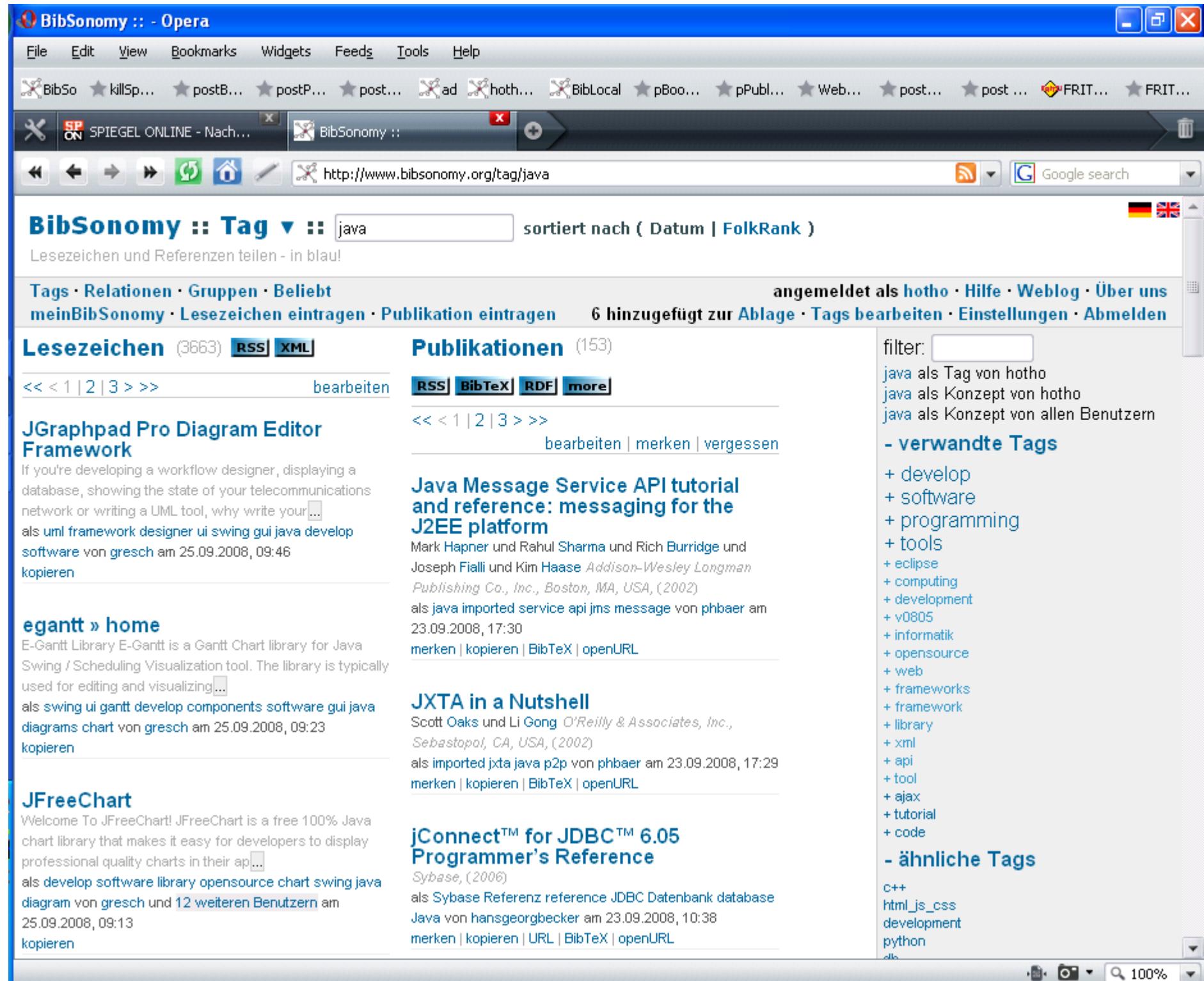


- Overview Tagging Systems

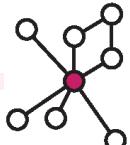
- Semantics between Tags

Tag	FolkRank
semanticweb	0,0207820
semantic	0,0121305
web	0,0118002
semantic_web	0,0071933
rdf	0,0044461
semweb	0,0039308
resources	0,0034209
community	0,0033208
portal	0,0022745
xml	0,0022074
research	0,0020378
imported-bo...	0,0018920
en	0,0018536
.idate2005-04-11	0,0017555
newfurl	0,0017153
tosort	0,0014486
CS	0,0014002
academe	0,0013822
rfid	0,0013456
sem-web	0,0013316
w3c	0,0012994





Most related tags by cooccurrence / cosine similarity



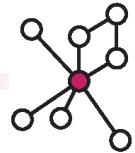
art	design photography illustration blog graphics
web2.0	ajax web tools blog webdesign
news	blog technology politics media daily
howto	tutorial reference tips linux programming
video	music funny tv software media
ajax	javascript web2.0 web programming webdesign
tutorial	howto programming reference design css
javascript	ajax programming css web webdesign

freq

art	graphic creative print portfolios nice
web2.0	web2 web-2.0 webapp "web web_2.0
news	blogs people weblog culture future
howto	how-to guide tutorials help how_to
video	entertainment awesome fun cool random
ajax	dhtml dom js ecmascript webdev
tutorial	tutorials tips coding code examples
javascript	webdevelopment webdev example examples webprogramming

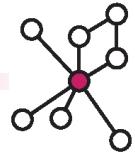
cosine

Semantic Grounding in WordNet



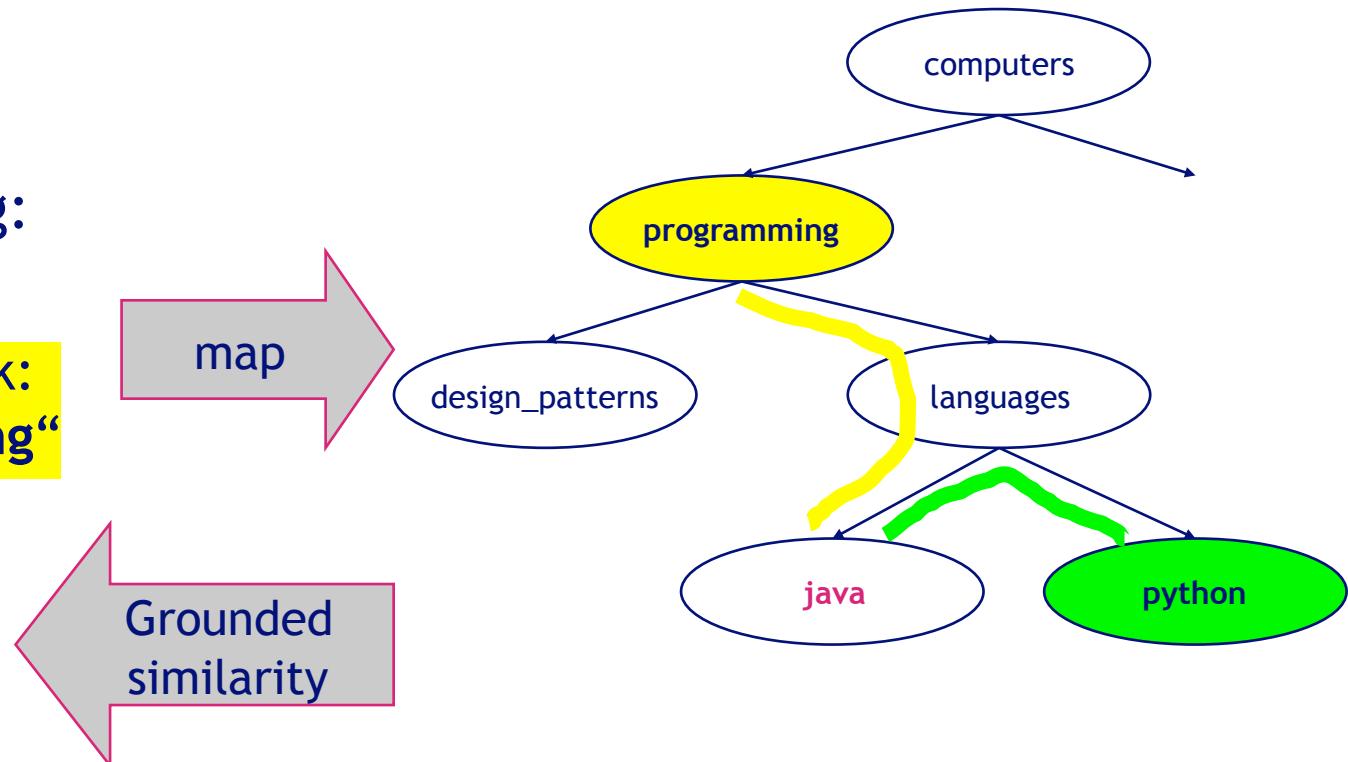
- WordNet is a large lexical database for English.
- Words with same meaning are grouped in *synsets*, which are ordered by an *is-a* hierarchy.
- Introduction of single **artificial root node** enables application of graph-based similarity metrics between pairs of nouns / pairs of verbs.
- Inclusion of top n del.icio.us tags in WordNet:
 - 100: 82%
 - 1,000: 79%
 - 5,000: 69%
 - 10,000: 61%

Example of Semantic Grounding

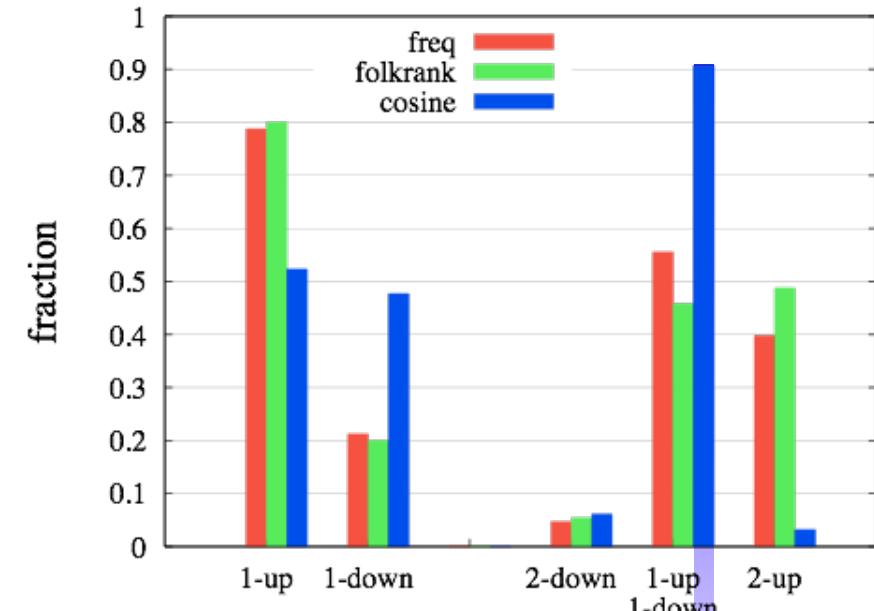
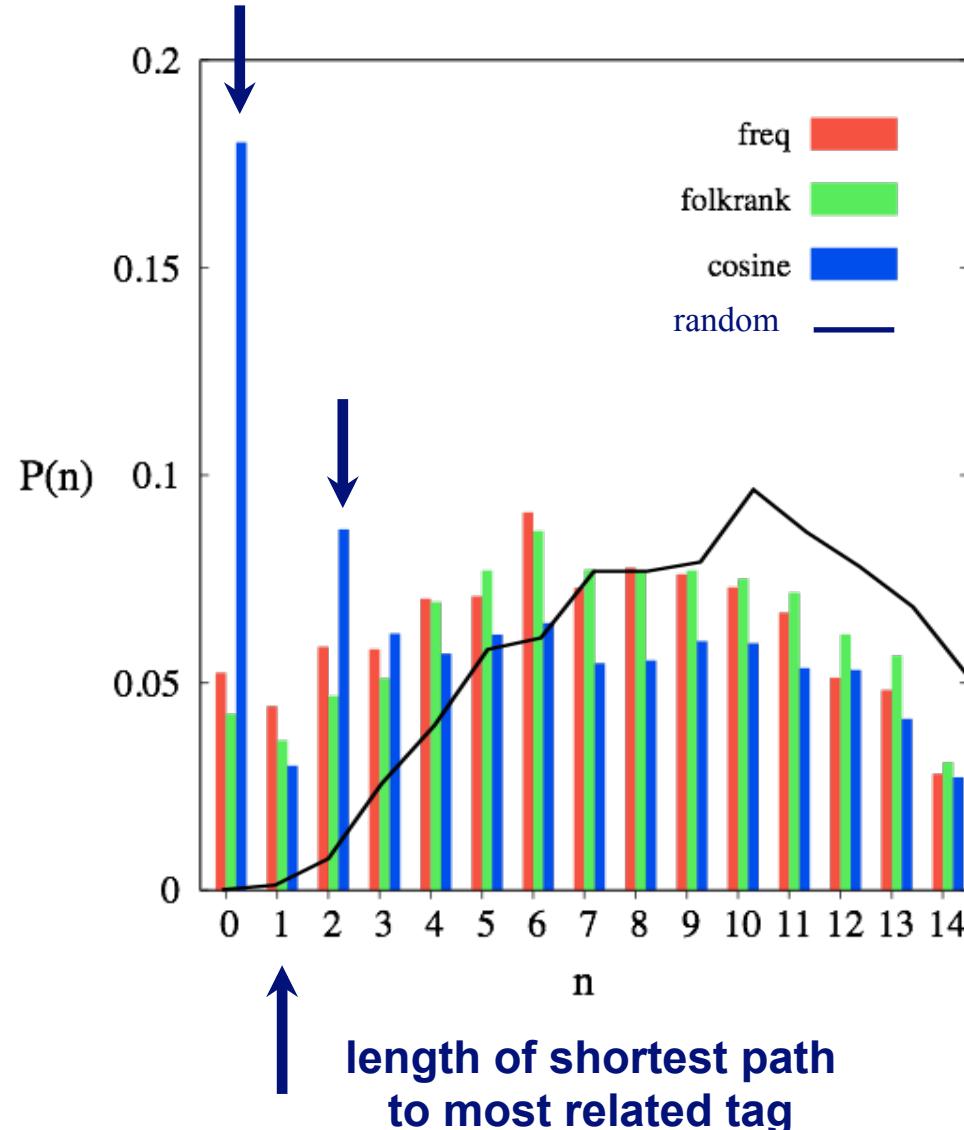


- Original tag:
 - „java“
- Most similar tag:
 - Freq, folkrank: „programming“
 - Cosine: „python“

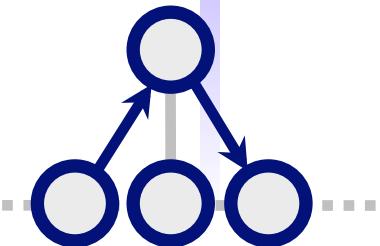
Wordnet Synset Hierarchy:



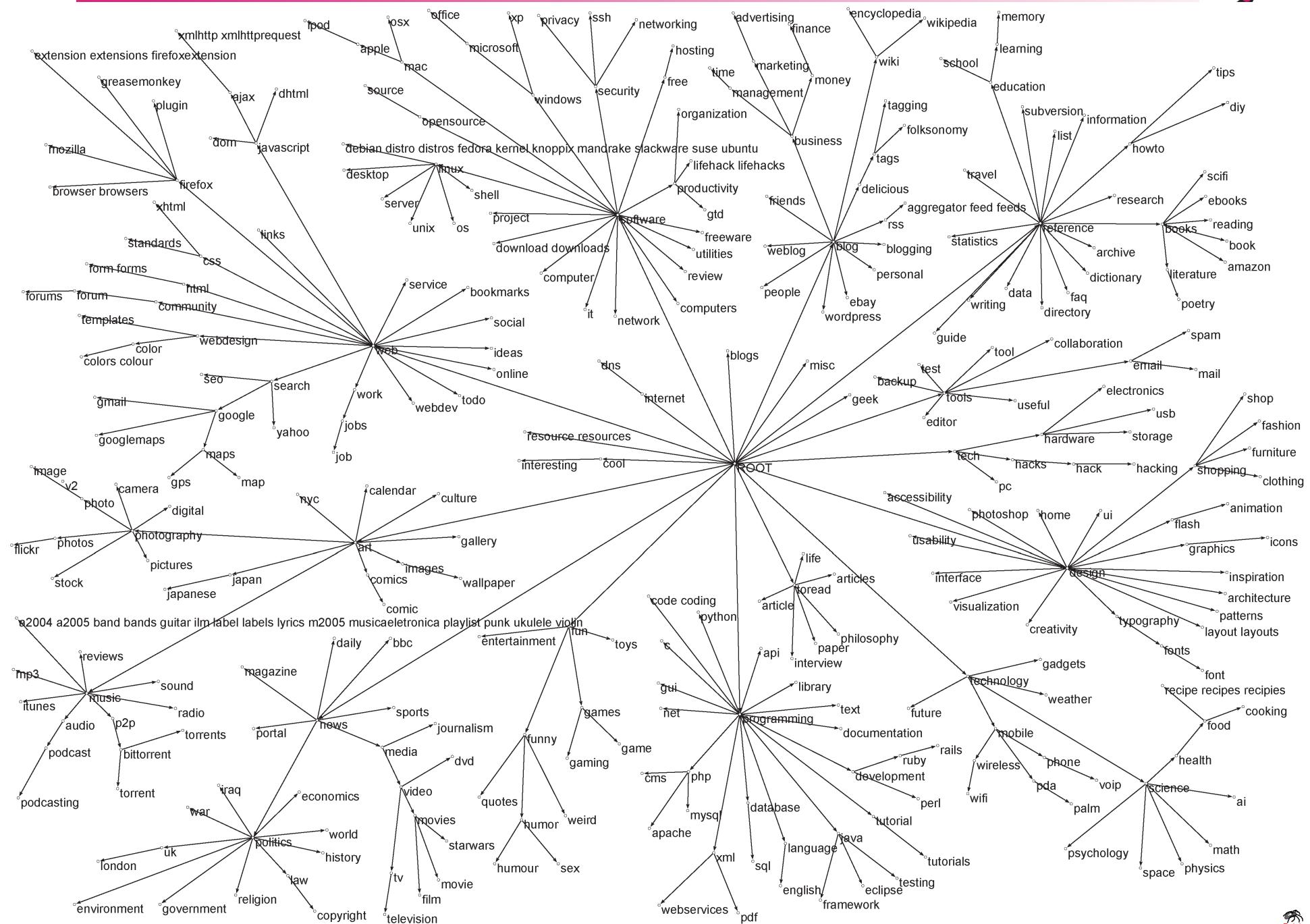
shortest paths in WordNet



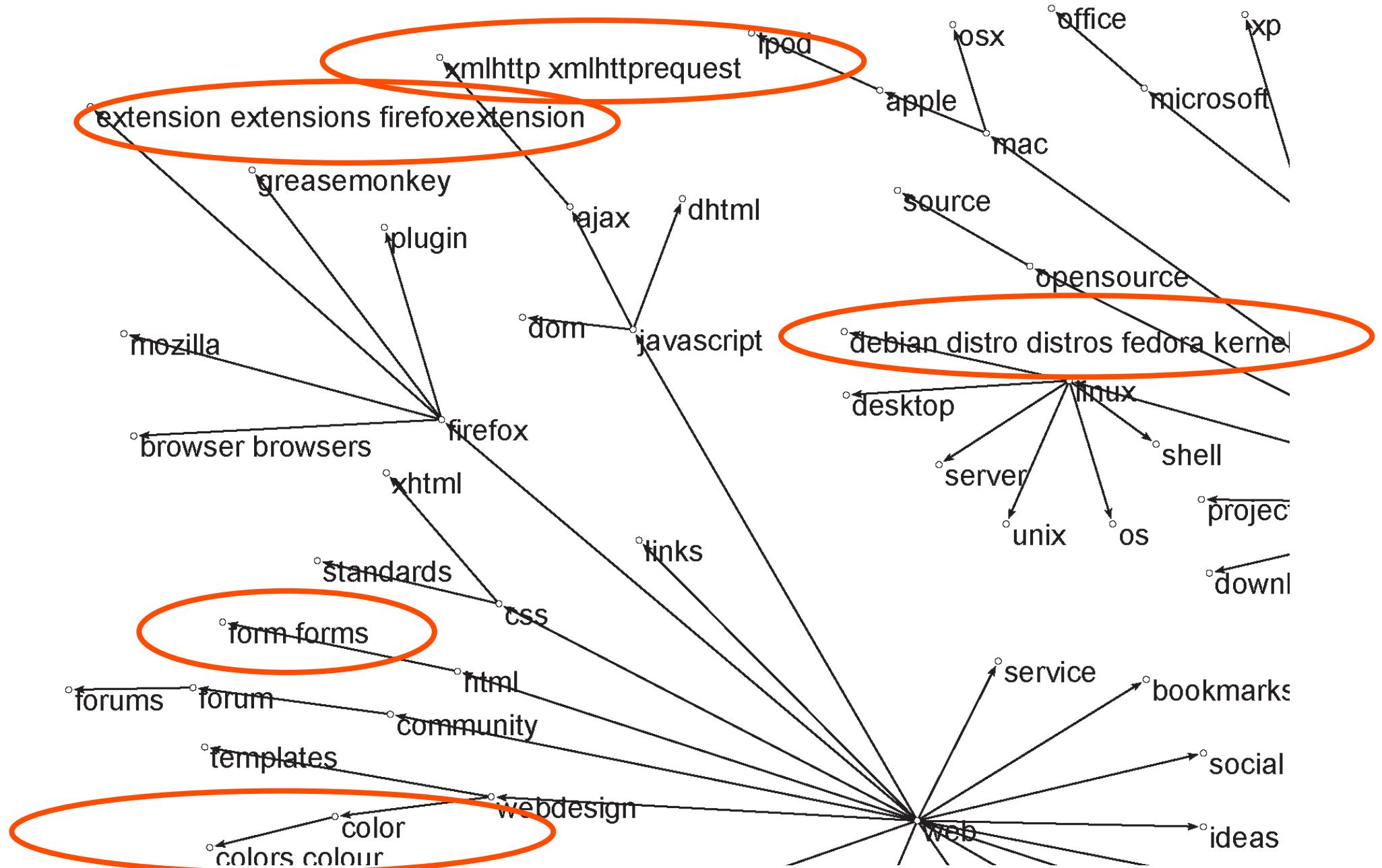
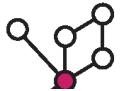
siblings



Results for delicious together with similarity pruning



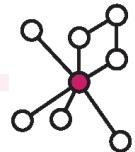
Results for delicious together with similarity pruning



Association Rules

$\cong \text{transactions}$

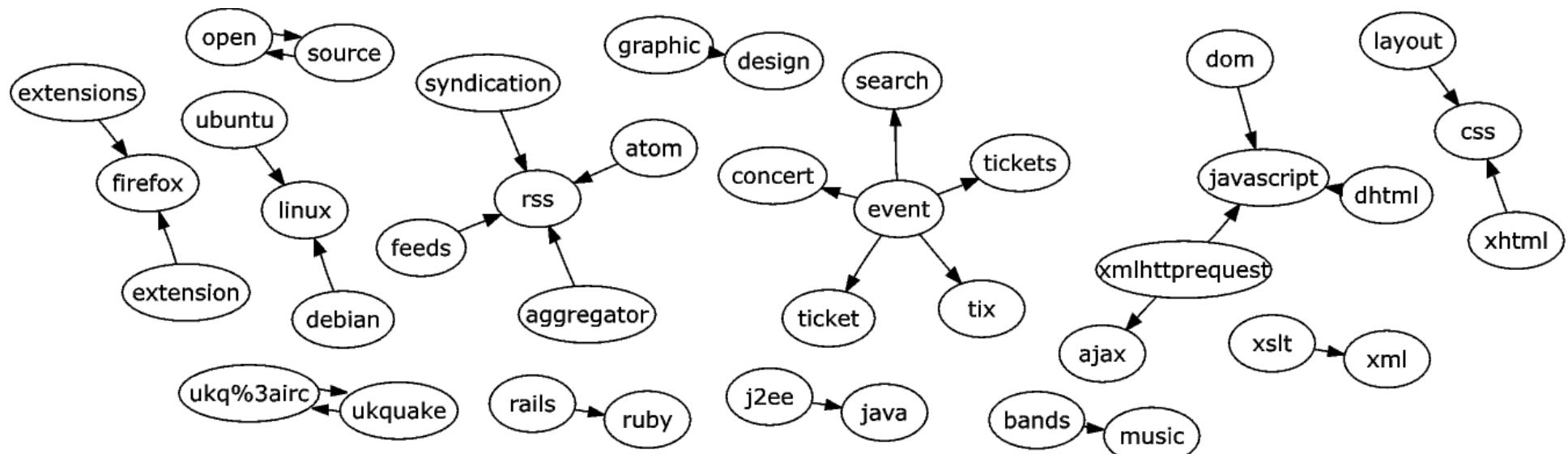
$\cong \text{items}$

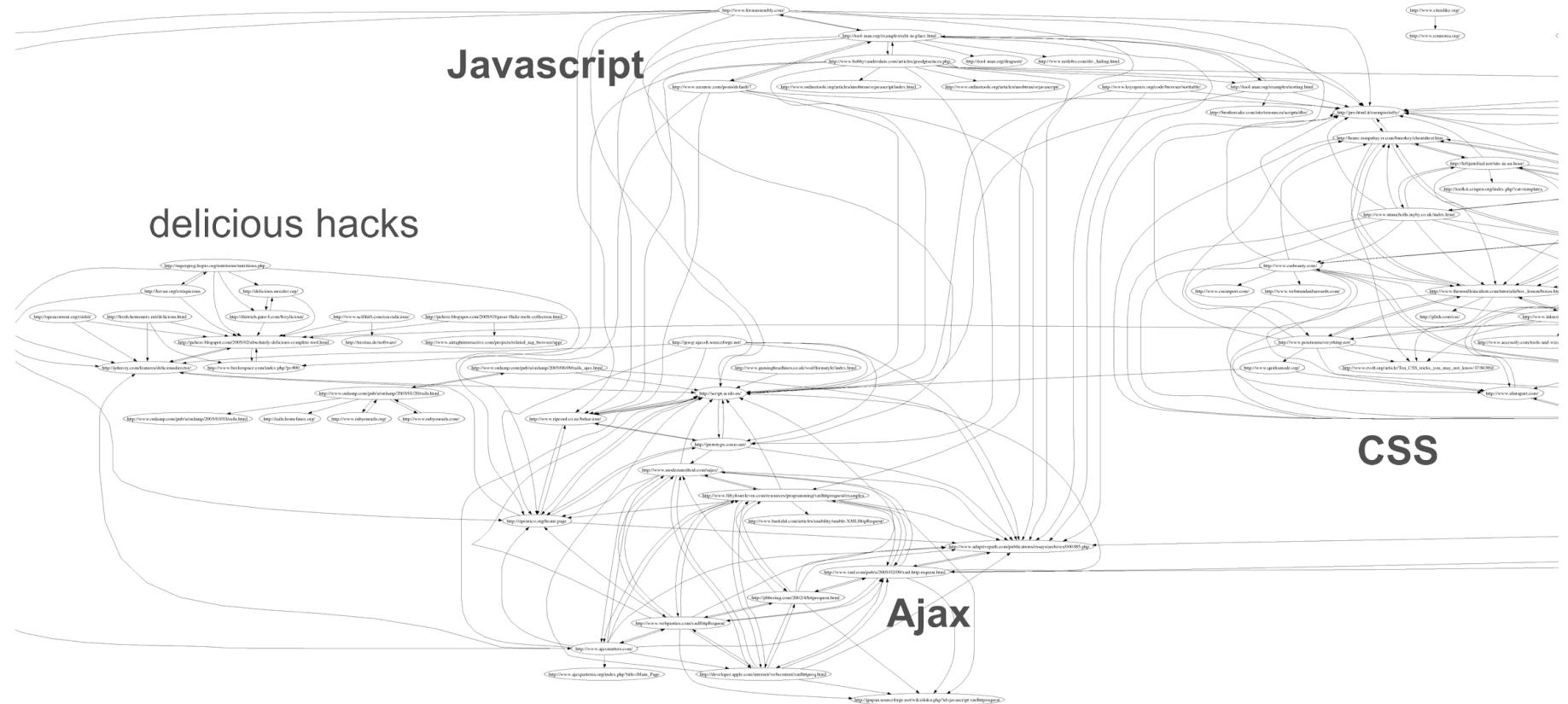


- $K_1 = (U \not\models R, T, I_1)$
- If users tag some resource with tag t_i , they frequently also use t_j for it.

- Usage:

- tag recommendations
- learning implications (tag hierarchy)

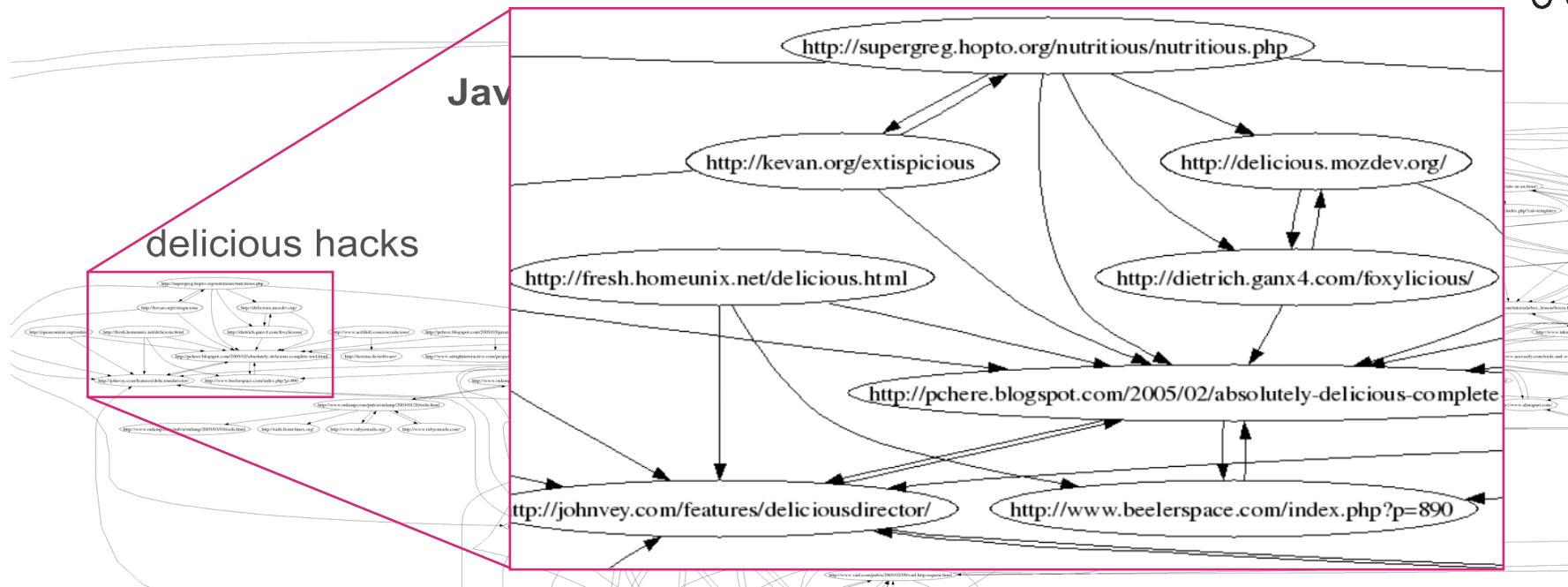
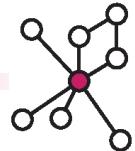




- $K_2 = (T \models U, R, I_2)$
- If users tag a resource r_i with a particular tag, they frequently also use this tag for r_j .

- Usage:
 - finding communities
 - resource recommendations

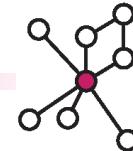
Association Rules



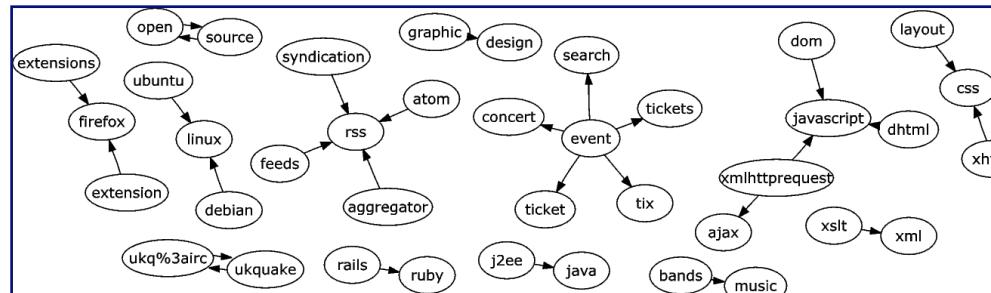
- $K_2 = (T \models U, R, I_2)$
- If users tag a resource r_i with a particular tag, they frequently also use this tag for r_j .

- Usage:
 - finding communities
 - resource recommendations

Agenda



- BibSonomy - a social bookmark and publication sharing system

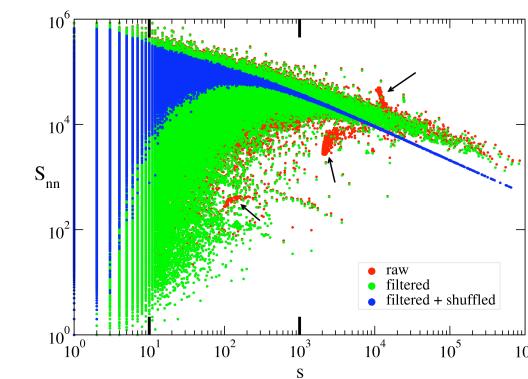
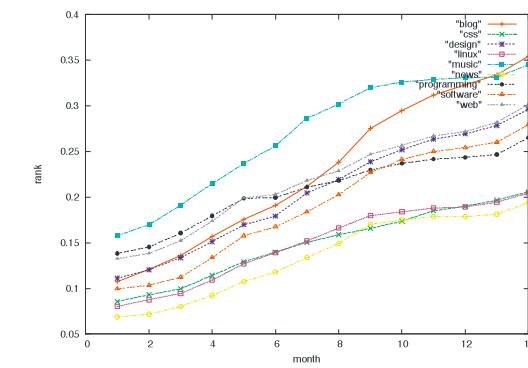


- ## ■ Overview Tagging Systems

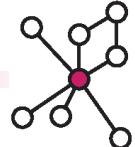
- ## ■ Semantics between Tags

- ## ■ Summary and Outlook

Tag	FolkRank
semanticweb	0,0207820
semantic	0,0121305
web	0,0118002
semantic_web	0,0071933
rdf	0,0044461
semweb	0,0039308
resources	0,0034209
community	0,0033208
portal	0,0022745
xml	0,0022074
research	0,0020378
imported-bo...	0,0018920
en	0,0018536
.idate2005-04-11	0,0017555
newfurl	0,0017153
tosort	0,0014486
cs	0,0014002
academe	0,0013822
rfid	0,0013456
sem-web	0,0013316
w3c	0,0012994

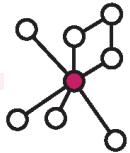


Summary and Outlook



- Our **FolkRank** algorithm supports search in folksonomies.
- **Relatedness measures** on tags in folksonomies are a good basis to extract semantic relations
- **Trend** detection in Social Bookmarking Systems
- Tag **Recommender** allows to recommend user specific tags for new post
- Detecting **Spam** is a major challenge
- **LogSonomies** - analysing the structure of search engine query log files
- **Learning** some kind of synsets, relations and hierarchy of tags

Similar tags live on www.bibsonomy.org



BibSonomy :: tag ▼ :: [java](#) order by (date | folkrank)

A blue social bookmark and publication sharing system.

logged in as dbenz · [help](#) · [blog](#) · [about](#)
1 picked in [basket](#) · [edit tags](#) · [settings](#) · [logout](#)

filter:

[java](#) as tag from dbenz
[java](#) as concept from dbenz
[java](#) as concept from all users

- related tags

- [+ develop](#)
- [+ programming](#)
- [+ software](#)
- [+ tools](#)
- [+ eclipse](#)
- [+ computing](#)
- [+ informatik](#)
- [+ opensource](#)
- [+ library](#)
- [+ development](#)
- [+ web](#)
- [+ frameworks](#)
- [+ xml](#)
- [+ framework](#)
- [+ api](#)
- [+ tutorial](#)
- [+ ajax](#)
- [+ plugins](#)
- [+ code](#)

- similar tags

- [c++](#)
- [python](#)
- [development](#)
- [html_js_css](#)
- [testing](#)
- [db](#)
- [code](#)
- [java_ee](#)
- [php](#)
- [oo](#)

Thanks for your attention!

contact:

hoto@cs.uni-kassel.de

Try it yourself:

www.bibsonomy.org

Daniel Kinzler

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Metadata in Wikipedia

data in, data out

Daniel Kinzler

Wikimedia Deutschland e.V.

September 26. 2008





Wikipedia is the free encyclopedia anyone can edit

- ▶ Founded in 2001
- ▶ Has become the standard online reference
- ▶ Number 8 website (Alexa), 50K requests per second
- ▶ Exists in 250 languages, has 10 million articles
- ▶ Run by Wikimedia, runs on MediaWiki
- ▶ Free content, free software

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Traditional (document) metadata is available throughout Wikipedia

- ▶ Document information
 - ▶ Title
 - ▶ URL
- ▶ Revision information
 - ▶ Author
 - ▶ Timestamp

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Metadata for media files is maintained on-page, as content:

- ▶ Source, License, Contributors, . . .

Description	<ul style="list-style-type: none">■ Deutsch: Reichstagsgebäude■ English: Reichstag building
Source	own work
Date	November 1, 2007
Author	Aconcagua
Permission (Reusing this image)	GFDL, Cc-by-sa-3.0
Camera location	See this image at its location on Google Maps
	This location on: Live Maps - MapQuest - Yahoo! Maps

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

Images Metadata

Metadata for image formats

- ▶ Resolution
- ▶ EXIF
 - ▶ Author, Copyright
 - ▶ Timestamp
 - ▶ Exposure, Aperture, Flash
 - ▶ Camera model
 - ▶ ...

Metadata for audio and video formats is not yet supported.

Camera manufacturer	Canon
Camera model	Canon DIGITAL IXUS 75
Exposure time	1/1 sec (1)
F Number	f/2.8
Date and time of data generation	18:12, 1 November 2007
Lens focal length	5.8 mm
Orientation	Normal
Horizontal resolution	180 dpi
Vertical resolution	180 dpi
File change date and time	18:12, 1 November 2007
Y and C positioning	1
ISO speed rating	200
Exif version	2.2
Date and time of digitizing	18:12, 1 November 2007
Image compression mode	5
Shutter speed	0
Aperture	2.96875
Exposure bias	0
Maximum lens aperture	2.96875
Metering mode	CenterWeightedAverage

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

MediaWiki's page export facility provides limited metadata

- ▶ Special:Export
- ▶ Pages and revisions
- ▶ XML wrapper around wikitext
- ▶ Some basic metadata

[Wikipedia](#)

[Traditional Metadata](#)
[Document and Revision](#)
[Media Metadata](#)
[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)
[Categories](#)
[Inter-Language Links](#)
[WikiWord](#)

[Structured Data](#)
[Records](#)

[Infoboxes](#)
[DBpedia](#)
[Semantic MediaWiki](#)
[WikiData](#)

[Conclusion](#)

[We Have](#)
[We Need](#)
[Thank You](#)

Online Export Interface XML

Metadata in Wikipedia

Daniel Kinzler

<http://en.wikipedia.org/wiki/Special:Export/Berlin>

```
<page>
  <title>Berlin</title>
  <id>3354</id>
  <revision>
    <id>240627831</id>
    <timestamp>2008-09-24T06:44:58Z</timestamp>
    <contributor>
      <username>Ling.Nut</username>
      <id>1929579</id>
    </contributor>
    <minor/>
    <comment>clean up, typos fixed</comment>
    <text xml:space="preserve">
{{pp-semi-protected|small=yes}}
{{otheruses1|the capital of Germany}}
{{Infobox German Bundesland}}
```

Wikipedia

Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
Inter-Language Links
WikiWord

Structured Data
Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

MediaWiki's web API for bots/scripts

- ▶ api.php
- ▶ supports complex queries
- ▶ lots of properties
- ▶ several output formats (JSON, YAML, WDDX, ...)
- ▶ but no RDF

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

```
http://en.wikipedia.org/w/api.php?action=query&titles=Berlin&prop=info|revisions&rvlimit=5&format=xml
```

```
<page pageid="3354"
      ns="0"
      title="Berlin"
      touched="2008-09-24T06:44:58Z"
      lastrevid="240627831"
      counter="2317"
      length="91446">
<revisions>
  <rev revid="240627831"
       minor=""
       user="Ling.Nut"
       timestamp="2008-09-24T06:44:58Z"
       comment="clean up, typos fixed" />
  <rev revid="239984512"
       user="Lear 21"
       timestamp="2008-09-21T12:03:45Z"
       comment="/* Transportation */ ref" />
```

Wikipedia

Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
Inter-Language Links
WikiWord

Structured Data
Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

The RDF Extension provides access to metadata

- ▶ Per-page RDF output
- ▶ Document info mainly in DC and CC vocab
- ▶ Also links, categories, images, etc
- ▶ Output in XML, Turtle or NTriples
- ▶ Supports custom RDF embedded in wiki pages
- ▶ Compare <http://www.communitywiki.org/en/DublinCoreForWiki>

Not on Wikipedia, used by WikiTravel

Wikipedia

Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
Inter-Language Links
WikiWord

Structured Data
Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

<http://wikitravel.org/en/Special:Rdf/Berlin>

```
<rdf:Description
    rdf:about="http://wikitravel.org/en/Berlin">
        <dc:date>
            rdf:datatype="http://purl.org/dc/elements/1.1/W3CDTF">
                2008-09-23T18:04:01Z
        </dc:date>
        <dc:rights>
            Creative Commons Attribution-ShareAlike 1.0
        </dc:rights>
        <dc:title xml:lang="en">
            Berlin
        </dc:title>
```

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

Page Links

Hyperlinks cross-reference pages

- ▶ Navigational, but also conceptual
- ▶ Mutually linked pages → related concepts
- ▶ Link label and link target → word and meaning
- ▶ Beware identity crisis when choosing URIs

[[Berlin Wall|The Wall]]

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

Pages are assigned to one or more categories.

- ▶ Categories form a poly-hierarchy (by convention)
- ▶ Categories of pages → Subsumption of concepts
- ▶ Structure often unclear or broken
- ▶ No intersection, no transitive inclusion

[[Category:Capitals in Europe]]

[[Category:States of Germany]]

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

Inter-language links refer to the same page in a different language (on another wiki)

- ▶ Granularity and coverage differ greatly
- ▶ Mutually linked pages probably describe the same concept
- ▶ Maintained manually, and per bot

Would a centralized system be better?

[[de:Berliner Mauer]]
[[fr:Mur de Berlin]]

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

WikiWord builds a thesaurus by mining the link structure

- ▶ Every page describes a concept
- ▶ Link labels are terms referring to those concepts
- ▶ Links and categories define relations
- ▶ Multilingual thesaurus by merging languages
- ▶ Export to SKOS
- ▶ No web interface yet
- ▶ <http://brightbyte.de/page/WikiWord>

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Wikipedia uses templates to present structured data records

- ▶ Maintained directly by users
- ▶ Template parameters can be extracted
- ▶ MediaWiki stores them as plain text
- ▶ External mining tools needed

```
 {{Infobox German Bundesland
|Name = Berlin
|image_photo = Cityscapeberlin2006.JPG
|area = 891.82
|population = 3416300
|elevation = 34 - 115
|GDP = 81.7
...
}
```

[Wikipedia](#)

[Traditional Metadata](#)
[Document and Revision](#)
[Media Metadata](#)
[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)
[Categories](#)
[Inter-Language Links](#)
[WikiWord](#)

[Structured Data Records](#)

[Infoboxes](#)
[DBpedia](#)
[Semantic MediaWiki](#)
[WikiData](#)

[Conclusion](#)

[We Have](#)
[We Need](#)
[Thank You](#)

Infoboxes

Daniel Kinzler

Infoboxes present a terse overview of properties

- ▶ Used for Cities, animals, bands, books, chemicals, ...
- ▶ Qualifiers are problematic: date of measurement, error margin, unit, source, etc

<u>Coordinates</u>	52°31'00"N 13°25'00"E CET/CEST (UTC+1/+2)
Administration	
<u>Country</u>	Germany
<u>NUTS Region</u>	DE3
<u>City subdivisions</u>	12 boroughs
<u>Governing Mayor</u>	Klaus Wowereit (SPD)
<u>Governing parties</u>	SPD / Left
<u>Votes in Bundesrat</u>	4 (of 69)
Basic statistics	
<u>Area</u>	892 km² (344 sq mi)
<u>Elevation</u>	34 - 115m
<u>Population</u>	3,416,300 (22/2007) ^[1]
- <u>Density</u>	3,831 /km² (9,921 /sq mi)
- <u>Urban</u>	3,700,000
- <u>Metro</u>	5,000,000
Other information	
<u>GDP/ Nominal</u>	€ 81.7 billion (2007)
<u>Postal codes</u>	10001-14199
<u>Area codes</u>	030
<u>Licence plate code</u>	B
<u>ISO region</u>	DE-BE
<u>Website</u>	berlin.de / 3dberlin.de

Wikipedia

Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
Inter-Language Links
WikiWord

Structured Data Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

Personendaten

“Personendaten” are biographic records on the German Wikipedia

- ▶ Works like a hidden infobox
- ▶ Contains date/place of birth/death, aliases, etc.
- ▶ Maintained by a WikiProject
- ▶ Automated extraction (every now and then)

```
 {{Personendaten
|NAME=Einstein, Albert
|ALTERNATIVNAMEN=
|KURZBESCHREIBUNG=Physiker
|GEBURTSDATUM=14. März 1879
|GEBURTSORT=[[Ulm]]
|STERBEDATUM=18. April 1955
|STERBEORT=[[Princeton (New Jersey)|Princeton]], [[USA]]
}}}
```

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)



DBpedia is a project that mines RDF triples from Infoboxes

- ▶ Allows SPARQL queries
- ▶ Multiple languages
- ▶ 100 million triples
- ▶ Web interface
- ▶ <http://dbpedia.org>

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

<http://dbpedia.org/data/Berlin>

```
<rdf:Description
    rdf:about="http://dbpedia.org/resource/Lothar_Bolz">
        <n0pred:deathPlace xmlns:n0pred="http://dbpedia.org/property/">
            rdf:resource="http://dbpedia.org/resource/Berlin"/>
    </rdf:Description>
    <rdf:Description
        rdf:about="http://dbpedia.org/resource/Alfred_Wegener">
            <n0pred:birthPlace xmlns:n0pred="http://dbpedia.org/property/">
                rdf:resource="http://dbpedia.org/resource/Berlin"/>
    </rdf:Description>
    <rdf:Description
        rdf:about="http://dbpedia.org/resource/Untoten">
            <n0pred:origin xmlns:n0pred="http://dbpedia.org/property/">
                rdf:resource="http://dbpedia.org/resource/Berlin"/>
    </rdf:Description>
```

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

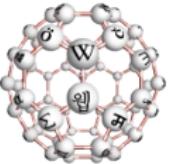
[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

Wikipedia



Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You

Semantic MediaWiki is a MediaWiki extension:

- ▶ Builds an RDF structure
- ▶ Allows SPARQL queries
- ▶ Users enter semantic relations in wiki syntax
- ▶ More complex syntax
- ▶ semantic-mediawiki.org

Not supported by Wikipedia

<http://semantic-mediawiki.org/wiki/Special:ExportRDF/Berlin>

```
<swivt:Subject rdf:about="#wiki;Berlin">
  <rdfs:label>Berlin</rdfs:label>
  <swivt:page rdf:resource="#wikiurl;Berlin"/>
  <rdfs:isDefinedBy rdf:resource="#wikiurl;Special:ExportRDF/Berlin" />
  <rdf:type rdf:resource="#wiki;Category-3ACity"/>
  <property:Capital_of rdf:resource="#wiki;Germany"/>
  <property:Coordinates
    rdf:datatype="http://www.w3.org/2001/XMLSchema#string">
    52°31'0"N, 13°24'0"E
  </property:Coordinates>
  <property:Located_in rdf:resource="#wiki;Germany"/>
  <property:Population
    rdf:datatype="http://www.w3.org/2001/XMLSchema#double">
    3391407
  </property:Population>
</swivt:Subject>
```

Wikipedia

Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
InterLanguage Links
WikiWord

Structured Data
Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

Wikipedia



Traditional Metadata
Document and Revision
Media Metadata
Accessing Metadata

Link Structure

Hyperlinks
Categories
Inter-Language Links
WikiWord

Structured Data
Records

Infoboxes
DBpedia
Semantic MediaWiki
WikiData

Conclusion

We Have
We Need
Thank You

WikiData is a MediaWiki extension:

- ▶ Stores structured data separate from wikitext
- ▶ Reusable across wikis
- ▶ Form-based structured data entry
- ▶ No export interface
- ▶ omegawiki.org

Not used by Wikipedia, active on OmegaWiki

We have...

- ▶ Document Metadata
- ▶ Structural Data
- ▶ Structured data records
- ▶ Lots of people maintaining this

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

We Need

Metadata in Wikipedia

Daniel Kinzler

[Wikipedia](#)

[Traditional Metadata](#)

[Document and Revision](#)

[Media Metadata](#)

[Accessing Metadata](#)

[Link Structure](#)

[Hyperlinks](#)

[Categories](#)

[Inter-Language Links](#)

[WikiWord](#)

[Structured Data](#)

[Records](#)

[Infoboxes](#)

[DBpedia](#)

[Semantic MediaWiki](#)

[WikiData](#)

[Conclusion](#)

[We Have](#)

[We Need](#)

[Thank You](#)

We need ways to...

- ▶ maintain the data easily.
- ▶ store structured data sensibly.
- ▶ query the data efficiently.
- ▶ access the data conveniently.

We need people to make it happen.

Thank You

Metadata in Wikipedia

Daniel Kinzler

The End

<http://brightbyte.de/repos/papers/2008/>

Wikipedia

Traditional Metadata

Document and Revision

Media Metadata

Accessing Metadata

Link Structure

Hyperlinks

Categories

Inter-Language Links

WikiWord

Structured Data

Records

Infoboxes

DBpedia

Semantic MediaWiki

WikiData

Conclusion

We Have

We Need

Thank You



An Interlinking-Hub in the Web of Data

Georgi Kobilarov, Chris Bizer, Sören Auer, Jens Lehmann

Freie Universität Berlin, Universität Leipzig

■ DBpedia.org is a community effort to

- extract structured information from Wikipedia
- make this information available on the Web under an open license
- interlink the DBpedia dataset with other open datasets on the Web

■ Contributors

- Freie Universität Berlin (Germany)
- Universität Leipzig (Germany)
- OpenLink Software (UK)
- Linking Open Data Community (W3C SWEO)



Extracting Structured Information from Wikipedia

■ Wikipedia consists of

- 11.2 million articles (2.5 million in English)
- in 264 languages
- monthly growth-rate: 4%

■ Wikipedia articles contain structured information

- infoboxes which use a template mechanism
- categorization of the article
- images depicting the article's topic
- links to external webpages
- intra-wiki links to other articles
- inter-language links to articles about the same topic in different languages

Bristol - Wikipedia, the free encyclopedia - Mozilla Firefox
 Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe
 W http://en.wikipedia.org/wiki/Bristol
 Erste Schritte Aktuelle Nachrichten Log in / create account

Title Bristol

Description This article is about the English city. For other uses, see [Bristol \(disambiguation\)](#).
 Bristol (UK pronunciation (help/info), IPA: /brɪstəl/) is a city, unitary authority and ceremonial county in South West England, 105 miles (169 km) west of London, and 44 miles (71 km) east of Cardiff.

Languages Български Català Česky Cymraeg Dansk Deutsch Eesti Español Esperanto Euskara Français മലയാളി Ido Bahasa Indonesia Íslenska Italiano עברית Latviešu Lëtzebuergesch Lietuvių Magyar Nederlands 日本語 Norsk (bokmål)

Web Links

Categorization

Domain specific Data

Images

Infoboxes

overseign state	United Kingdom
constituent country	England
region	South West England
ceremonial county	Bristol
historic counties	County corporate (Gloucestershire and Somerset) Avon
admin HQ	Bristol
royal Charter	1155
ounty status	1373
overnment	
Type	Unitary authority, City
Governing body	Bristol City Council
Leadership	Leader & Cabinet
Executive	Labour
MPs	Roger Berry (L) Kerry McCarthy (L) Doug Naysmith (L)/(Co-op) Dawn Primarolo (L) Stephen Williams (LD)

Multi-Lingual Abstracts

■ The dataset contains a short and a long abstract for each concept.

■ Short abstracts

- English: 2,490,000
- German: 391,000
- French: 383,000
- Dutch: 284,000
- Polish: 256,000
- Italian: 286,000
- Spanish: 226,000
- Japanese: 199,000
- Portuguese: 246,000
- Swedish: 144,000
- Chinese: 101,000

Property	Value
abstract	-{T}zh-tw:卡加利;zh-cn:卡尔加里;-{A}zh-tw:卡加利;zh-cn:卡尔加里;-(Calgary)是一座位于加拿大亚伯达省南部落基山脉的城市。面积789.9平方公里，海拔约1048米，人口约100万，是艾伯塔省经济、金融、文化和中心。卡尔加里一词的意思是“清澈流动的水”。十八世纪七十年代，开始有欧洲殖民者在此定居，后来成为西北皇家骑警(North West Mounted Police)的一所驿站。后加拿大太平洋铁路修建至此，卡尔加里逐渐发展成市。1941年这里发现了丰富的石油和天然气，从此城市得到了迅速的发展。世界上众多的包括中国的石油公司都在这里设有常驻机构，很多大的石油公司的总部就设在这里，因此卡尔加里也被称作加拿大的能源中心。1988年在这里举办过第十五届冬季奥林匹克运动会。当时作为赛场的室内滑冰场位于知名学府卡尔加里大学的校园内。这个城市的工程师密度是全加第一。多次被评为世界上最干净的城市。七月初，一年一度的牛仔节(Stampede)是这个城市最著名的节日，每年都能吸引来自世界各地但主要是美国的游客。城市以西的班夫国家公园(Banff National Park)是世界著名的自然风景区，也是加拿大第一所国家公园，各国游客亦慕名而来。卡尔加里火焰队是加拿大最好冰球队之一。卡尔加里与中国的大庆是姊妹城市。“
abstract	Calgary (gälisch für Klares Wasser) ist eine Stadt in Kanada in der Provinz Alberta. Sie ist die drittgrößte und am schnellsten wachsende Großstadt Kanadas und hat 956.078 Einwohner (Stand 2005)."
abstract	Calgary es la mayor ciudad de la provincia de Alberta, Canadá. Se ubica en una región de colinas y altiplanicies, a aproximadamente 80 km al este de las Montañas Rocosas. Tercera ciudad de Canadá en términos de población, contaba según el censo de abril de 2006 con 991.759 habitantes. La población estimada de su área metropolitana era de 1.060.300 habitantes en 2005 (véase Región de Calgary), lo que la convierte en la quinta mayor de Canadá. El "corredor Calgary-Edmonton" es la región urbana más poblada situada entre Toronto y Vancouver. Su nombre proviene del de una playa situada en la isla de Mull, en Escocia. Los habitantes de Calgary se llaman, en inglés, "Calgarians". La ciudad de Calgary es un destino muy conocido para los deportes de invierno y el ecoturismo: cerca de la ciudad se sitúa una gran cantidad de importantes lugares de vacaciones. La economía de Calgary se centra sobre todo en la industria petrolífera, aunque la agricultura, el turismo y la alta tecnología también contribuyen al rápido desarrollo económico de la ciudad. Calgary es la anfitriona de varios festivales anuales, como la Calgary Stampede, el Folk Music Festival, el Lilac Festival, el GlobalFest y el segundo festival de cultura caribeña en importancia del país, el Carifest. En 1988, Calgary se convirtió en la primera ciudad canadiense en acoger los Juegos Olímpicos de Invierno."
abstract	Calgary est la plus grande ville de la province de l'Alberta (Canada). Elle se situe dans le sud de la province, dans une région de collines et de plateaux à environ 80 km à l'est des montagnes Rocheuses. Troisième ville du Canada, en terme de population, elle comptait selon le recensement d'Avril 2006, 991 759 habitants (1 060 300 avec son agglomération en 2005, ce qui la met au cinquième rang des agglomérations canadiennes). Le « corridor Calgary-Edmonton » est la région urbaine la plus peuplée entre Toronto et Vancouver. Elle tire son nom d'une plage située sur l'île de Mull en Écosse. Les habitants de Calgary sont appelés « Calgariens ». La ville de Calgary est une destination bien connue pour les sports d'hiver et l'écotourisme ; un grand nombre de stations de vacances importantes se situent près de la ville. L'économie de Calgary est surtout centrée sur l'industrie pétrolière ; toutefois, l'agriculture, le tourisme et la haute technologie contribuent également au développement économique rapide de la ville. Calgary est également l'hôte de plusieurs festivals annuels majeurs, dont le Stampede de Calgary, le Folk Music Festival, le Lilac Festival, le GlobalFest, et le deuxième festival de culture des Caraïbes en importance au pays (Carifest). En 1988, Calgary devient la première ville canadienne à accueillir les Jeux olympiques d'hiver. Calgary est la ville la plus prospère dans la province la plus riche du Canada. Anciennement, les barons étaient appelés les Cheiks aux yeux bleus."
abstract	Calgary is de grootste stad van de Canadese provincie Alberta, en ligt op ongeveer 80 kilometer afstand van de Canadese Rocky Mountains. Calgary had in april 2006 een inwonertal van 991.759 en in de agglomeratie wonen 1.060.300 mensen. Het is de op drie na grootste stad van Canada, na Toronto, Montréal en Vancouver. De inwoners van Calgary staan bekend als Calgarians. De stad is een populaire bestemming voor wintersportvakanties door het groot aantal gelegen nabijgelegen vakantieparken in de bergen. De economie van de stad bestaat vooral uit de petroleumindustrie, ook al worden de landbouw, het toerisme en technologie steeds belangrijker. In 1988 organiseerde Calgary de Olympische Winterspelen. De burgemeester van de stad is Dave Bronconnier. Aan de "University of Calgary" studeren meer dan 28.000 studenten."
abstract	Calgary är en stad belägen i den södra delen av provinsen Alberta i Kanada. Calgary är Albertas folkrikaste stad med över 991.759 invånare, och Calgary är även den tredje största staden, invånarmässigt, i Kanada. En invånare i Calgary kallas för Calgarian. Calgary är en välvärt resmål för vintersport och ekoturism med ett flertal stora berg och världsbekanta berg i närheten av staden."
abstract	Calgary è una città che si trova nella provincia dell'Alberta, in Canada. È situata nel sud della regione, in una zona di colline e alte pianure, a est delle Montagne Rocciose (Rocky Mountains). Con i suoi 991.759 abitanti (stima del 2006) è la più grande città dell'Alberta e la quinta più grande in tutto il Canada."
abstract	Calgary é a cidade mais populosa da província canadense de Alberta, e a terceira mais populosa do país, sendo que sua região metropolitana é a quinta mais populosa do país. Localiza-se no sul da província, a cerca de 80 quilômetros leste das Montanhas Rochosas. Sua população é de 991 759 habitantes, possuindo aproximadamente 1,06 milhão de habitantes na sua região metropolitana. Fundada em 1875, Calgary é atualmente um centro financeiro e comercial, onde estão localizadas as sedes das principais empresas petrolíferas do Canadá."
abstract	Calgary – największe miasto kanadyjskiej prowincji Alberta, leżące na przedgórzu Górz Skalistych nad rzeką Bow."
abstract	カルガリー（英：）は、カナダ・アルバータ州の都市。アルバータ州最大の都市。1914年に付近でカナダで最初の石油が発見されてから急速に発展した。石油鉱業ではカナダの中心的役割を担い、大手石油会社のオフィスビルが建ち並ぶ。カナディアン・ロッキー観光の玄関口。1988年にはカルガリー冬季オリンピックの舞台となった。毎年7月のはじめには、カウボーイの祭典「カルガリー・スタンピード」が開催される。"

Infobox Extraction

```
 {{Infobox Network
| network_name      = British Broadcasting Corporation (BBC)
| network_logo       = [[Image:BBC.svg|200px|BBC logo]]
| country            = [[United Kingdom]]
| network_type       = [[Terrestrial television|Broadcast]] [[radio]], [[television]] and
[[Website|online]]
| available          = National<br/>International&nbsp;
| owner               =
| key_people         = {{nowrap|Sir [[Michael Lyons (UK politician)|Michael Lyons]] }}<br/>[[Mark Thompson]], [[Director-General of the BBC|Director of the Executive Board]].
| launch_date         = 1922 (radio)<br/>1927 (incorporation)<br/>1932 (television)
| founder             = [[John Reith, 1st Baron Reith|John Reith]]
| motto               = {{nowrap|"Nation Shall Speak Peace Unto Nation"}}
| past_names          = [[British Broadcasting Company|British Broadcasting Company Ltd. (1922-1927)]]
| website             = http://www.bbc.co.uk/
}}
```

dbpedia:BBC p:network_name
„British Broadcasting Corporation (BBC)“

dbpedia:BBC p:country dbpedia:United_Kingdom

dbpedia:BBC p:key_people dbpedia:Michael_Lyons
dbpedia:Mark_Thompson

British Broadcasting Corporation (BBC)



Type	Broadcast radio, television and online
Country	United Kingdom
Availability	National International
Founded	by John Reith
Motto	"Nation Shall Speak Peace Unto Nation"
Key people	Sir Michael Lyons, Chairman, BBC Trust Mark Thompson, Director-General (Chairman of the Executive Board).
Launch date	1922 (radio) 1927 (incorporation) 1932 (television)
Former names	British Broadcasting Company Ltd. (1922-1927)
Website	http://www.bbc.co.uk/

Accessing the DBpedia Dataset over the Web

1. DB Dumps for Download

2. SPARQL Endpoint

3. Linked Data

The DBpedia SPARQL Endpoint

- <http://dbpedia.org/sparql>
- hosted on a OpenLink Virtuoso server
- can answer SPARQL queries like
 - Give me all Sitcoms that are set in NYC?
 - All tennis players from Moscow?
 - All films by Quentin Tarantino?
 - All German musicians that were born in Berlin in the 19th century?
 - All soccer players with tricot number 11, playing for a club having a stadium with over 40,000 seats and is born in a country with over 10 million inhabitants?

Linked Data

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

Wikipedia Article URI:
<http://en.wikipedia.org/wiki/BBC>

DBpedia Resource URI
<http://dbpedia.org/resource/BBC>

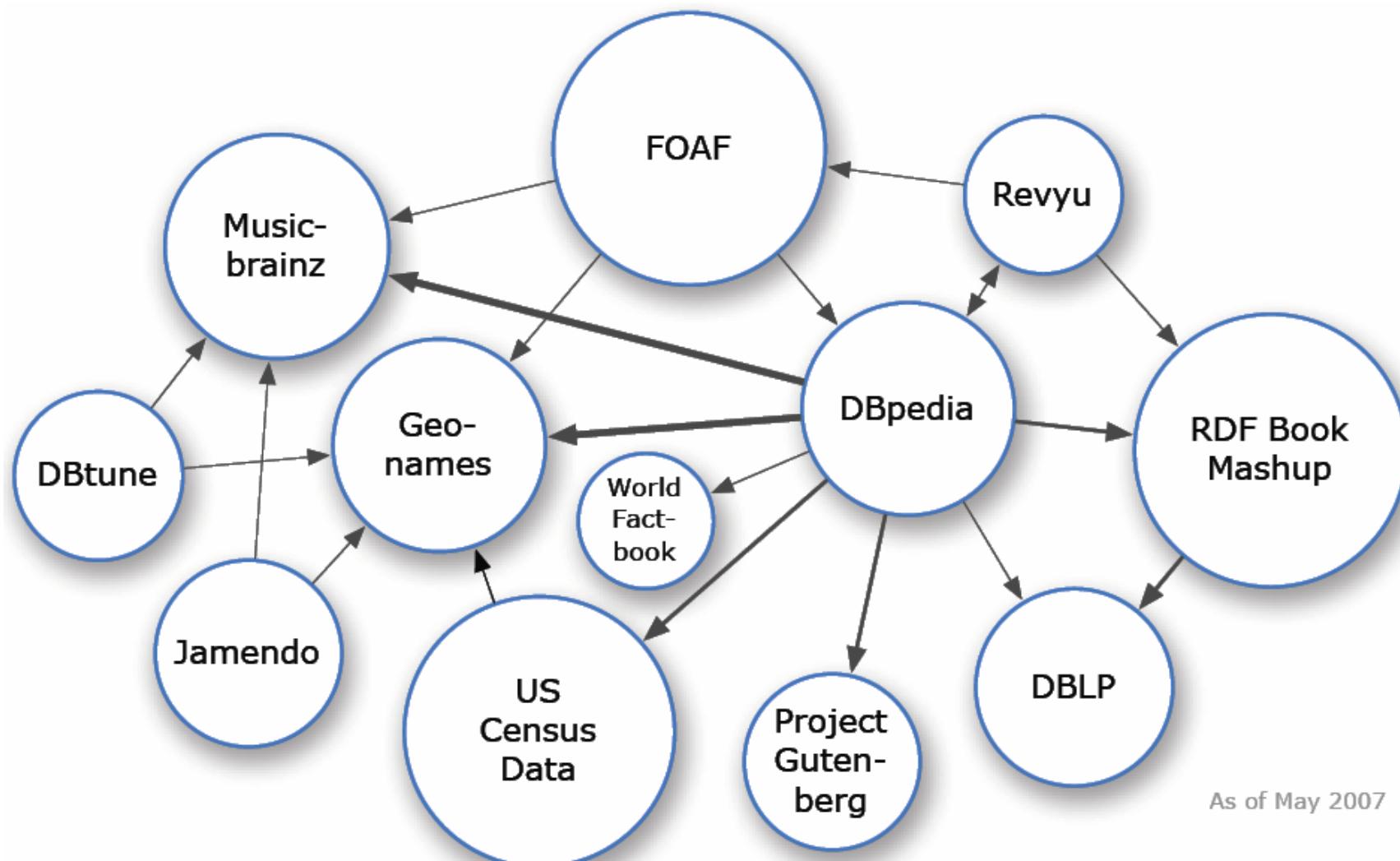
W3C Linking Open Data Project



■ Community effort to

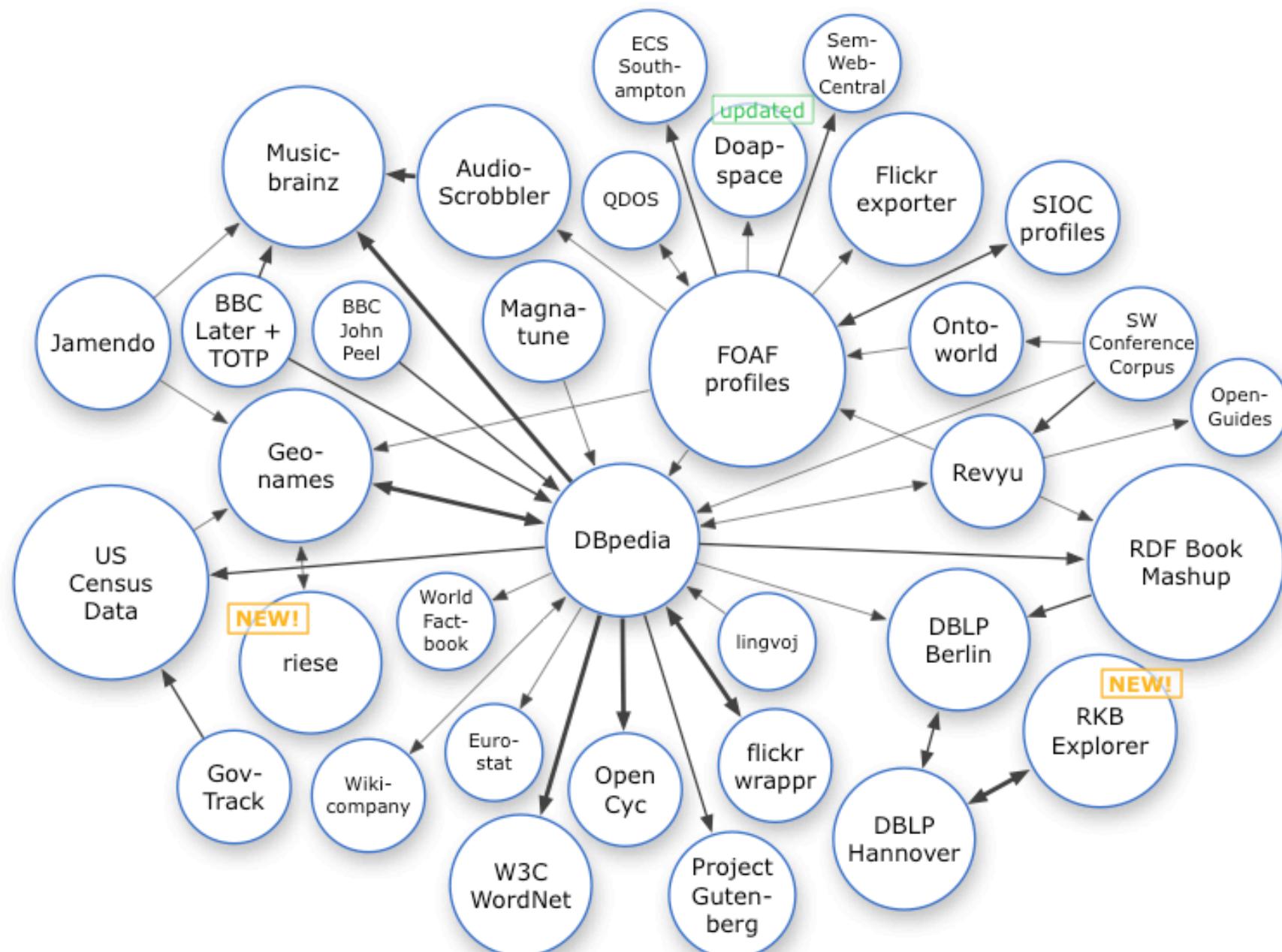
- publish existing open license datasets as **Linked Data on the Web**
- interlink things between different data sources

LOD Datasets on the Web: May 2007



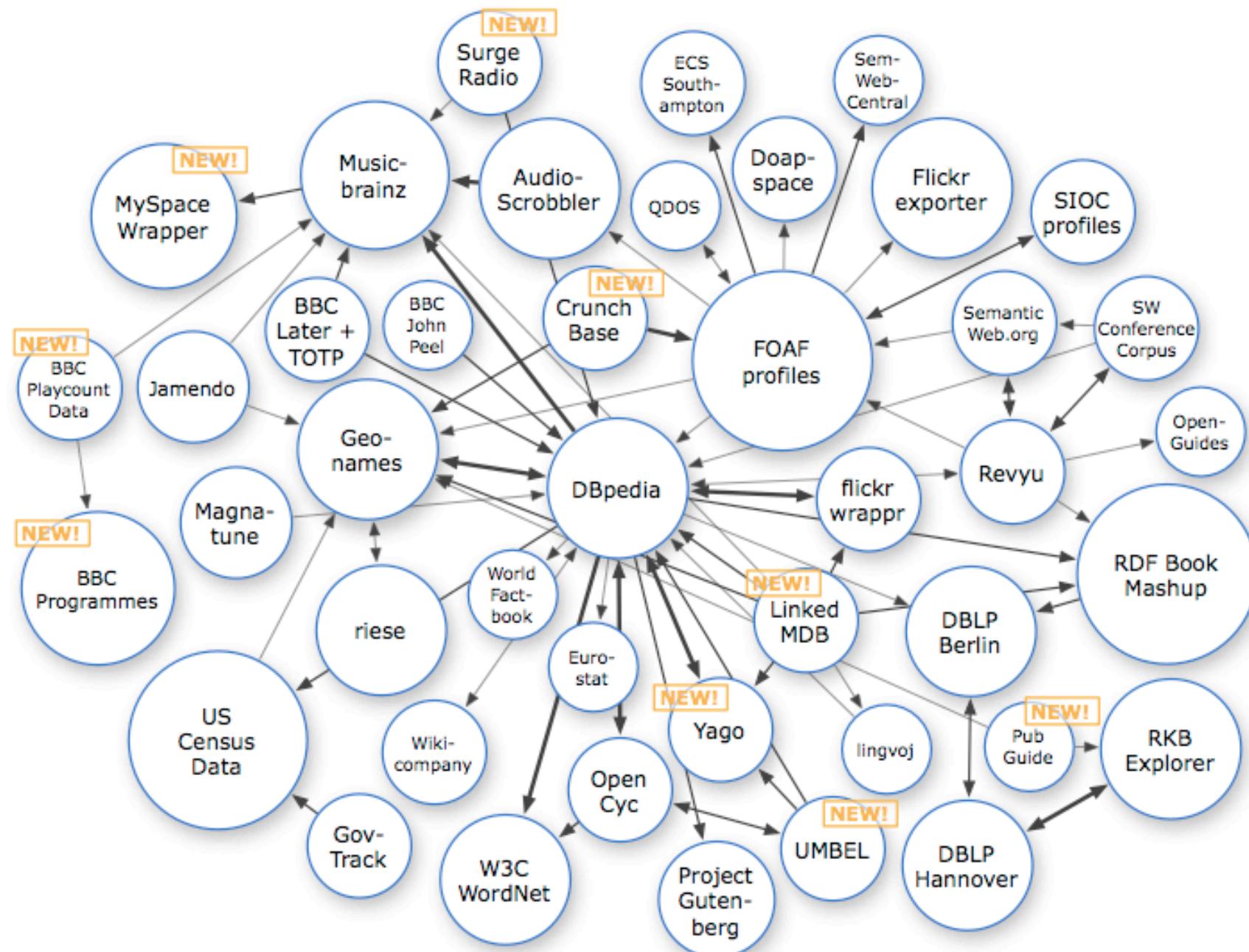
■ Over 500 million RDF triples.

LOD Datasets on the Web: April 2008



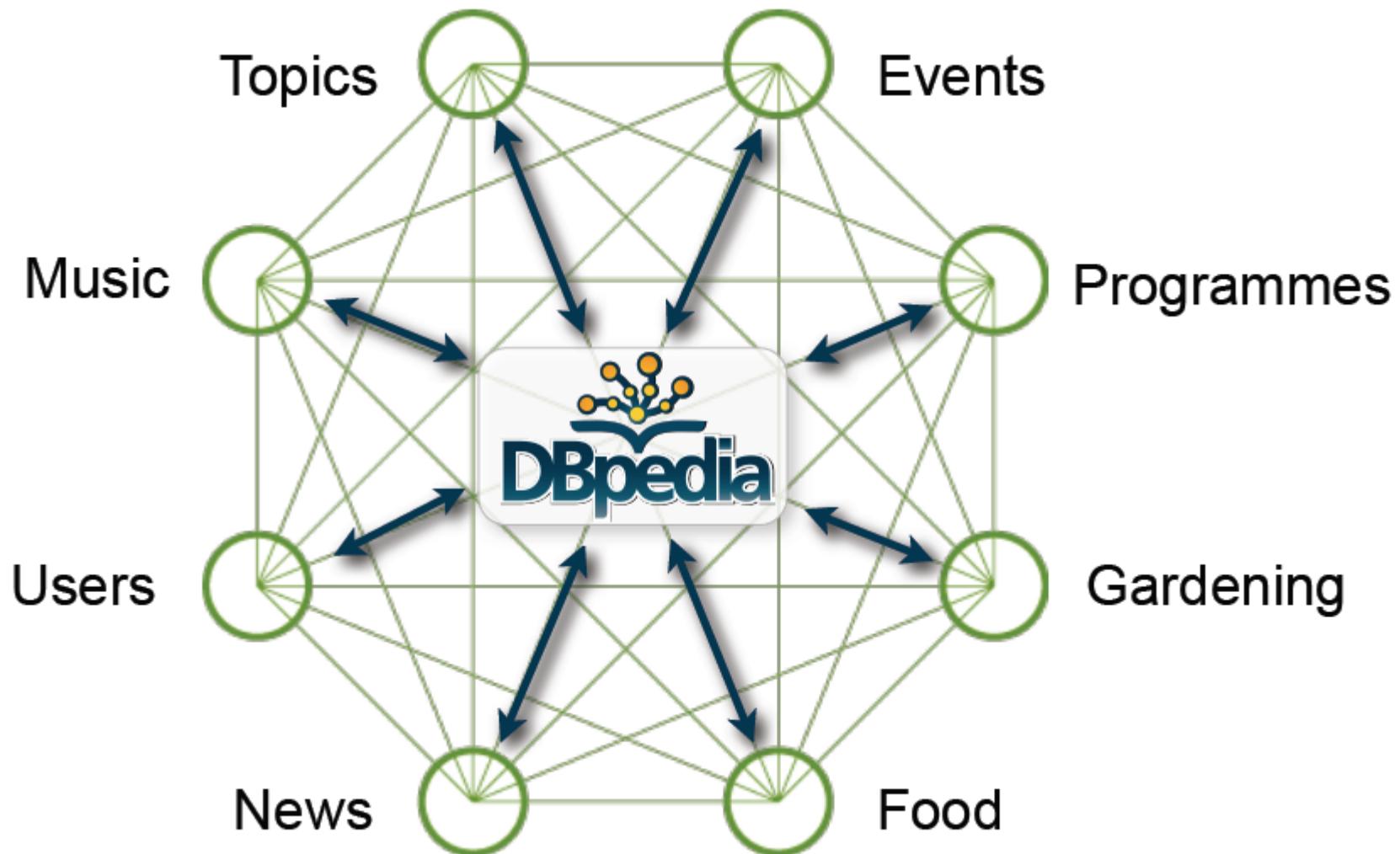
■ Over 2 billion RDF triples.

LOD Datasets on the Web: September 2008



As of September 2008

Linking Enterprise Data



Structuring Wikipedia's Knowledge

Currently under development

Building a class hierarchy / ontology

Mapping Wikipedia Templates to DBpedia classes

Class Hierarchy

- Build from scratch
- 170 classes
- 900 properties

- Structuring actual data, not modeling the world

- No AI terminology, no „living thing“ or „agent“

Template Mapping

Class TV Episode (Work)

Wikipedia Templates:

Television Episode

UK Office Episode

Simpsons Episode

DoctorWhoBox

Parsers

Handle Templates Values specifically

Example: Property splitting

Person born „1.1.1980, [[Berlin]]“

=> split to birthplace Berlin

 birthdate 1980-01-01

Parsers

Example: Class Rules

MusicalArtist

If property „currentMembers“ is set

=> Group

Otherwise

=> Person

Parsers

Example: Range Validation

Google keypeople

„[[Eric Schmidt]] ([[CEO]], [[Chairman]]), [[Sergey Brin]],
[[Larry Page]]

Company#keyperson range Person#Class

Google keyperson Eric Schmidt

Sergey Brin

Larry Page

Class Hierarchy

- **200k people (70k athletes, 65k artists, 18k office holders)**
- **193k places (100k areas, 40k cities, 10k rivers)**
- **187k works (71k music albums, 24k singles, 31k films, 15k books)**
- **87k species**
- **70k organisations (20k educational institutions, 18k companies, 12k radio stations)**
- **22k buildings (8k airports, 5k stations, 2k stadiums, 1k bridges)**
- **12k planets**

- **And more... (events, diseases, proteins, drugs, aircrafts, automobiles, ships, astronaut, architect, scientists)**

Thanks

<http://dbpedia.org>

georgi.kobilarov@fu-berlin.de

User data in the Open Library and other
systems...

Internet Archive

File Edit View History Delicious Bookmarks Tools Help

Internet Archive http://www.archive.org/index.php

ARCHIVE INTERNET

Universal access to human knowledge

Announcements (more)

NASA Images project launched

Milestone: 50,000 free live music concert

Books Scanning to be Publicly Funded

Web 85 billion pages

INTERNET ARCHIVE WayBackMachine http:// Take Me Back Advanced Search

Upload Anonymous User (login or join us)

Welcome to the Archive RSS

The Internet Archive is building a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, and the general public.

Moving Images 136,528 movies

Browse (by keyword) Curator's Choice (more)

Iraq

Live Music Archive 53,306 concerts

Browse (by band) Curator's Choice (more)

Poor Man's Whiskey Live at The Mystic Theater on... Darkside Set(46 minutes, 20

Audio 312,053 recordings

Browse (by keyword) Curator's Choice (more)

HIGHTECH EP

Texts 521,401 texts

Browse (by keyword) Curator's Choice (more)

Done

http://www.archive.org/index.php

Universal access to human knowledge

Web Moving Images Texts Audio Software Education Patron Info About
Forums | FAQs | Contributions | Jobs | Donate

Search: All Media Types

ments (more)

ges project

50,000 free live certificates

nning to be funded

85 billion pages

Web

SEARCH ARCHIVES

WayBack Machine

http://

[Advanced Search](#)

Upload

Anonymous User ([login](#) or [join us](#))

Welcome to the Archive [RSS](#)

The Internet Archive is building a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, and the general public.

Images

ies

se (by keyword)

r's Choice (more)

raq

Live Music Archive

53,306 concerts

[Browse \(by band\)](#)

[Curator's Choice \(more\)](#)

 **Live MUSIC Archive**

[Poor Man's Whiskey Live at The Mystic Theater on...](#)

Darkside Set (46 minutes, 20

Audio

312,053 recordings

[Browse \(by keyword\)](#)

[Curator's Choice \(more\)](#)



Texts

521,401 texts

[Browse \(by keyword\)](#)

[Curator's Choice \(more\)](#)



User-submitted data & metadata

File Edit View History Delicious Bookmarks Tools Help

Internet Archive

Moving Images 136,528 movies [Browse \(by keyword\)](#) Curator's Choice (more) 
[Bush Announces Hussein Capture](#)
President Bush announces Saddam Hussein's capture.

Live Music Archive 53,306 concerts [Browse \(by band\)](#) Curator's Choice (more)  [Poor Man's Whiskey Live at The Mystic Theater on...](#)
Darkside Set(46 minutes, 20 seconds) 1) Speak To Me 2) Breathe 3) On The Run 4) Time 5) Breathe ...

Audio 312,053 recordings [Browse \(by keyword\)](#) Curator's Choice (more) 
[digital_mode - Hightech EP Insho901](#)
A little uncompromising d'n'b to get you moving through the long winter nights. This Austrian duo...

Texts 521,401 texts [Browse \(by keyword\)](#) Curator's Choice (more) 
[Christmas comes but once a year : showing what...](#)
Gumuchian

Recent Reviews [The Great Trainrobbery - Resampled edition!](#)
Average rating: ★★★★★ [Ricky The Drummer](#)
Average rating: ★★★★★

Recent Reviews [String Cheese Incident Live at Trax on 1999-04-20](#)
Average rating: ★★★★★ [Tea Leaf Green Live at The Mill on 2006-06-07](#)
Average rating: ★★★★★

Recent Reviews [entre-deux](#)
Average rating: ★★★★★ [Elisa Luu : Floating Sounds \(PHCH002\)](#)
Average rating: ★★★★★

Recent Reviews [khyat](#)
Average rating: ★★★★★ [disabled veterans severance taxes](#)
Average rating: ★★★★★

http://www.archive.org/index.php

User interaction around resources

The screenshot shows a web browser window with the URL <http://www.archive.org/index.php>. The page displays a grid of resource cards and a forum feed.

Resource Cards:

- Ricky The Drummer**: Average rating: ★★★★★
- Tea Leaf Green Live at The Mill on 2006-06-07**: Average rating: ★★★★★
- (PHCH002)**: Average rating: ★★★★☆☆
- taxes**: Average rating: ★★★★★

Forum Feed (Most recent posts):

Subject	Poster	Forum	Replies	Date
"Do You Trust Your Wife" with Johnny Carson uploaded	Classic_TV_and_Radio_Fan	classic_tv	0	2 hours ago
Re: Good Aud from 1970? Yep. Read 'em and weep.	SkyDawg	GratefulDead	0	2 hours ago
Re: please delete...	jessedscott	etree	0	2 hours ago
Re: On th subject of acoustic Dead	lobster12	GratefulDead	0	3 hours ago
Top shelf deal from a top shelf Aud- 6/21/83	Liamfinnegan	GratefulDead	0	4 hours ago
Re: Asgaya Gigagae - The Decline Before The Dream (ritual ambient, drone)	brendas60	netlabels	0	4 hours ago
Thank You Rick!! I love silent films!!	Classic_TV_and_Radio_Fan	prelinger	0	4 hours ago
Asgaya Gigagae - The Decline Before The Dream (ritual ambient, drone)	plaguedreamer	netlabels	1	4 hours ago
Re: Good Aud from 1970? Yep. Read 'em and weep.	Speaking_in_Swords	GratefulDead	0	5 hours ago
Re: answer for kwave?	K-Wave	GratefulDead	0	5 hours ago

Institutional Support:

Alexa Internet	Prelinger Archives	LizardTech
HP Computer	National Science Foundation	Sloan Foundation
The Kahle/Austin Foundation	Library of Congress	Individual contributors

[Terms of Use \(10 Mar 2001\)](#)

Skin: [classic](#) | [columns](#) | [custom!](#)

Digitizing of texts

File Edit View History Delicious Bookmarks Tools Help

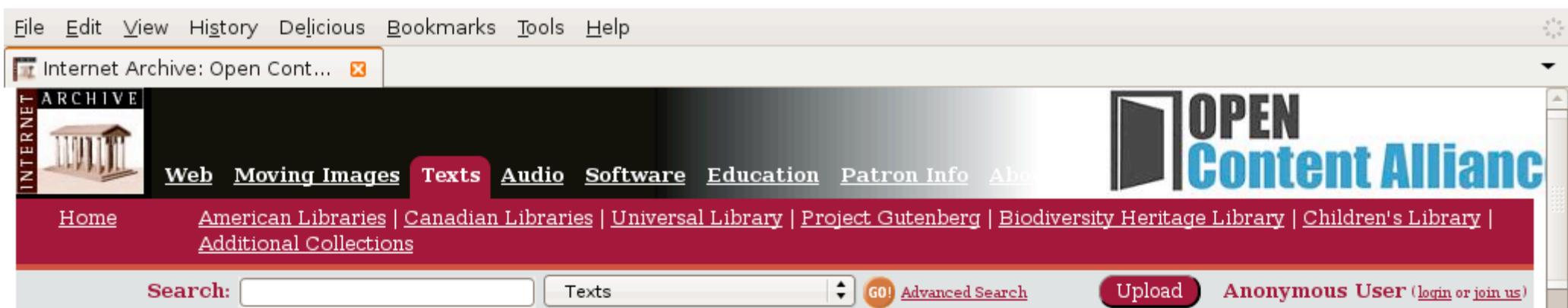
Internet Archive: Open Content Alliance

INTERNET ARCHIVE

Web Moving Images Texts Audio Software Education Patron Info About

Home American Libraries | Canadian Libraries | Universal Library | Project Gutenberg | Biodiversity Heritage Library | Children's Library | Additional Collections

Search: Texts GO! Advanced Search Upload Anonymous User (login or join us)



[Text Archive](#) > Open Content Alliance

Spotlight Item

No spotlight selected

About the Internet Archive

[Background](#)

[Frequently Asked Questions](#)

Welcome to Open Content Alliance

25,409 items

The Open Content Alliance (OCA) represents the collaborative efforts of a group of cultural, technology, nonprofit, and governmental organizations from around the world that will help build a permanent archive of multilingual digitized text and multimedia content. The books in this collection were sponsored by [Yahoo!](#) and the [Sloan Foundation](#). Please visit [opencontentalliance.org](#) for more information.

[See recent additions](#) - [RSS](#)

Recently Reviewed Items (more)

[Statuen und Statuetten von Königen und Privatleuten im Museum von Kairo. Nr. 1-1294 \(Volume 53\)](#)

Average rating: ★★★★★

[Purchas his pilgrimage : or Relations of the world and the religions observed in all ages and places discovered, from the creation unto this present. In foure parts. This first containeth a theologicall and geographical historie of Asia, Africa, and...](#)

Average rating: ★★★★★

[History of Penobscot County, Maine](#)

Average rating: ★★★★★

Most Downloaded Items

Last Week [more](#)

- [Caw caw: or, the chronicle of crows / by RM](#)
128 downloads

- [Diccionario nuevo de las lenguas Espanola y Francesa : el mas amplio y el mejor que ha salido a luz hasta aora, en que se contiene la explicacion del espanol en francas, y del Francas en Espanol; en dos partes: con las phrases y modos de](#)





Open Library (Open Library) [X](#)

What's New: 45 minutes ago - /b/OL1631228/M updated by ImportBot (initial import)



Open Library

One web page for every book. ([More...](#))

 [GO](#) 

[Scanned books only](#) ► [Advanced Search](#)

featuring **16,224,849** books

(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.

Find Books

- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)



Open Library (Open Library) [What's New: 45 minutes ago - /b/OL1631228/M](#) updated by ImportBot (initial import)



Open Library

One web page for every book. ([More...](#))

Scanned books only ▶ [Advanced Search](#)

featuring **16,224,849** books
(including **335,101** with full-text)



Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.



Find Books

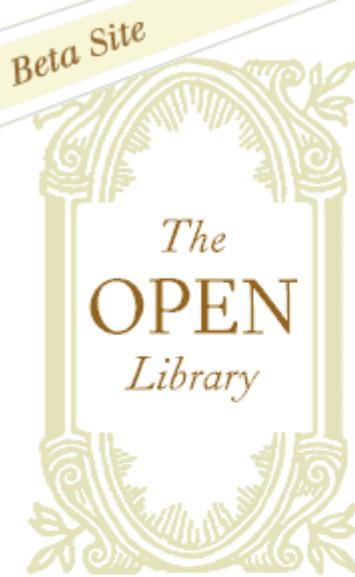
- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)



Open Library

One web page for every book. ([More...](#))

[Scanned books only](#) ▶ [Advanced Search](#)

featuring **16,224,849** books
(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.

Find Books

- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)

Library of Congress (books only)
Amazon (crawl)
~6 library systems
publishers



Open Library (Open Library) [X](#)

What's New: 45 minutes ago - /b/OL1631228/M updated by ImportBot (initial import)



Open Library

One web page for every book. ([More...](#))

adventures of tom sawyer [GO](#) ↵

[Scanned books only](#) ▶ [Advanced Search](#)

featuring **16,224,849** books

(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.

Find Books

- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)

Selected facets: (none)

Search results

adventures of tom sawyer

GO 

[Scanned books only](#) ▾ [Advanced search](#)

showing 1 - 20 of 448

The following records match the words **adventures of tom sawyer**:

[The Adventures of Tom Sawyer](#) by
(Scholastic Classics, 1999)

[Adventures of Tom Sawyer, The](#) by
(Cherish, 2000) Paperback

[The Complete Adventures of Tom Sawyer](#) by
(Borders Classics, 2004) Hardcover

Refine results

full text:

[Not available](#) (372)
[Available](#) (74)
[scannable](#) (2)

authors:

[Twain, Mark](#) (176)
[Mark Twain](#) (135)
[ICON Reference](#) (7)
[Rh Value Publishing](#) (6)
[Clemens, Samuel Langhorne](#) (5)

subjects:

[Missouri -- Fiction.](#) (85)
[Classics](#) (76)
[Mississippi River -- Fiction.](#) (62)
[Boys -- Fiction.](#) (61)
[Fiction](#) (51)

publication date:



Search results (Open Library) [X](#)

(Borders Classics, 2004) Hardcover

The Adventures of Tom Sawyer by

() Audio Cassette



The adventures of Tom Sawyer by Mark Twain

(Harper, 1904)

[READ ONLINE](#)



Adventures of Tom Sawyer (Classics) by Mark Twain

(Penguin Books, September 1986)

The Adventures of Tom Sawyer by

(Washington Square Press Pocket Books, 1972) Paperback

The adventures of Tom Sawyer by

(Beehive Books of Orbis Pub. Limited, 1986) Hardcover

The Adventures Of Tom Sawyer by Mark Twain

(Aerie Books LTD., 1000) Hardcover

publication date:

[1980-1999](#) (163)

[2000-now](#) (118)

[pre-1920](#) (50)

[1920-1939](#) (48)

[1960-1979](#) (48)

publishers:

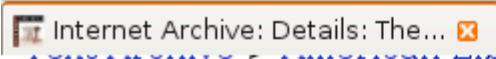
[Gabriel Wells](#) (36)

[Harper & brothers](#) (18)

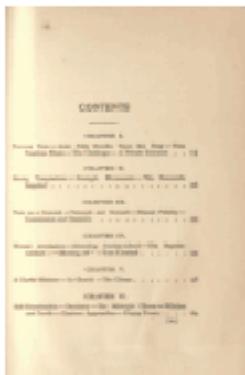
[Harper & Brothers](#) (16)

[Tandem Library](#) (15)

[Oxford University Press](#) (7)



View the book



DJVu	(6.8 MB)
PDF	(23 MB)
TXT	(407 KB)
Flip	(15 MB)
Book	

All Files: [HTTP](#)

[Help reading texts](#)

Resources

[Bookmark](#)
[Report errors](#)

The adventures of Tom Sawyer (1904)

Author: [Twain, Mark, 1835-1910](#)

Publisher: [New York : Harper](#)

Possible copyright status: NOT_IN_COPYRIGHT

Language: [English](#)

Call number: ucb:GLAD-50699597

Digitizing sponsor: [MSN](#)

Usage rights: [See terms](#)

Book contributor: [University of California Libraries](#)

Collection: [americana; cdl](#)

Reviews

Be the first to write a review

Downloaded 150 times

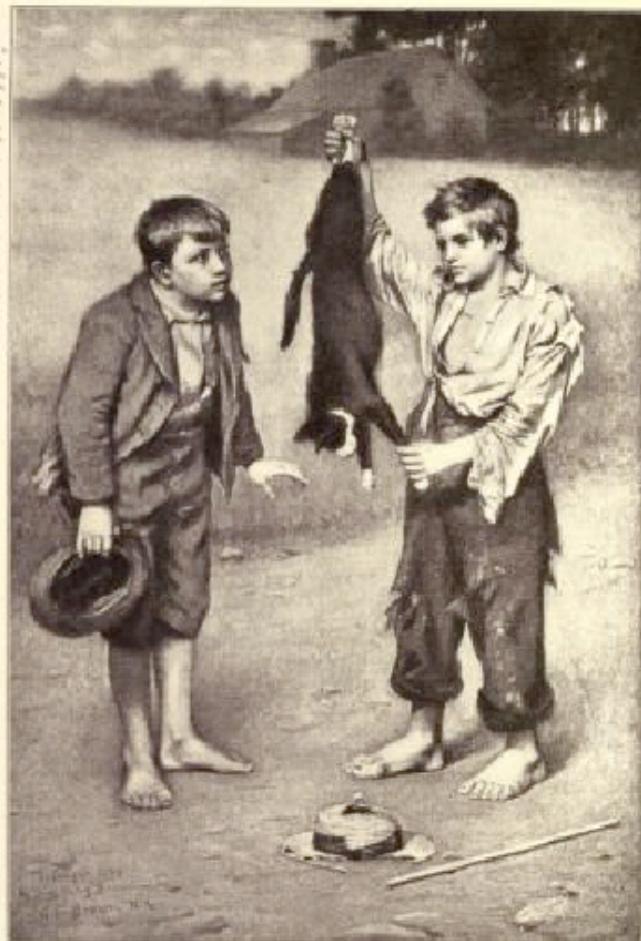
Selected metadata

Identifier: [advtomsawyer00twairich](#)

Copyright-evidence-operator: scanner-ian-white

Copyright-region: US

Copyright-evidence: Evidence reported by scanner-ian-white for item advtomsawyer00twairich on Sep 12, 2006; visible notice of copyright and date; stated date is 1903; not published by the US government; Have not checked



THE ADVENTURES OF TOM SAWYER

By MARK TWAIN

Illustrated, Colored, Large Edition.

ILLUSTRATED



NEW YORK AND LONDON

search bo



Print Details

Help

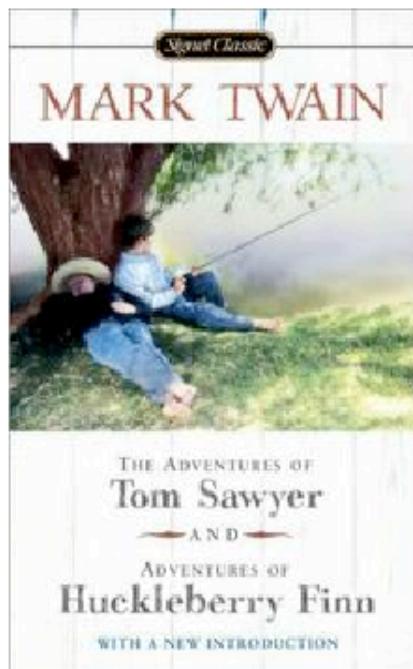


The adventures of Tom Sawyer

and, Adventures of Huckleberry Finn

by Mark Twain

Published in 2002, Signet Classic (New York)



[Change Cover](#)

Contributions: Twain, Mark, 1835-1910.

By Statements: Mark Twain ; with a new introduction by Shelley Fisher Fishkin.

Language: English

Pagination: xxiv, 298 p. ;

ISBN 10: 0451528646

LCCN: 2002030599

Dewey: 813/.4

LC: PS1306 .A1 2002

Genre: Fiction.

Subject: Sawyer, Tom (Fictitious character) — Fiction



BUY

[Amazon](#)
[Abebooks](#)
[Alibris](#)
[Barnes and Noble](#)
[Powells](#)

BORROW

[Your local library](#)
[BookMooch](#)
[Title Trader](#)

BROWSE

[Google Book Search](#) (partial)

Selected facets: (none)

Search results

adventures of tom sawyer

GO 

[Scanned books only](#)  [Advanced search](#)

showing 1 - 20 of 448

The following records match the words **adventures of tom sawyer**:

[The Adventures of Tom Sawyer](#) by
(Scholastic Classics, 1999)

[Adventures of Tom Sawyer, The](#) by
(Cherish, 2000) Paperback

[The Complete Adventures of Tom Sawyer](#) by
(Borders Classics, 2004) Hardcover

Refine results

full text:

- [Not available](#) (372)
- [Available](#) (74)
- [scannable](#) (2)

authors:

- [Twain, Mark](#) (176)
- [Mark Twain](#) (135)
- [ICON Reference](#) (7)
- [Rh Value Publishing](#) (6)
- [Clemens, Samuel Langhorne](#) (5)

subjects:

- [Missouri -- Fiction](#) (85)
- [Classics](#) (76)
- [Mississippi River -- Fiction](#) (62)
- [Boys -- Fiction](#) (61)
- [Fiction](#) (51)

publication date:

Selected facets: full text: scannable (x) >

Search results

adventures of tom sawyer

GO 

[Scanned books only](#)  [Advanced search](#)

showing 1 - 2 of 2

The following records match the words **adventures of tom sawyer**:

[The adventures of Tom Sawyer](#) by [Mark Twain](#)
(Books, Inc., 1900)

[The adventures of Huckleberry Finn \(Tom Sawyer's comrade\)](#)
by [Mark Twain](#)
(Grosset & Dunlap, 1918)

More results: 1 - 20

Refine results

full text:
[scannable](#) (2)

authors:
[Twain, Mark](#) (2)

publication date:
[pre-1920](#) (2)

publishers:
[Books, Inc.](#) (1)
[Grosset & Dunlap](#) (1)

The adventures of Tom Sawyer

by Mark Twain

Published in 1900, Books, Inc. (New York)



By Statements: by Samuel Clemens.

Series: The World's popular classics

Edition: Art type ed.

Pagination: 251 p. ;

Dewey: F

LC: PZ7.C584 Ad 1900zx

[Change Cover](#)

SCAN THIS BOOK



BUY

Not available for this book.

BORROW

Not available for this book.

BROWSE

Not available for this book.

Data comes from [Amazon](#),
[Library of Congress](#), and
users like you.



Applications Places System

Karen 66 °F Fri Sep 26, 1:18 PM

The adventures of Tom Sawyer (Open Library) - Mozilla Firefox

File Edit View History Delicious Bookmarks Tools Help

The adventures of Tom Saw...

The adventures of Tom Sawyer

by Mark Twain
Published in 1900, B

Change Cover

SCAN THIS BOOK

Open Library Scan On Demand close or Esc Key

This book has not been scanned.
Would you like to have it scanned and added to Open Library?

YES Please scan this book.

NO Please return to Open Library.

available for this book.
ROW available for this book.
WSE available for this book.
comes from Amazon, Library of Congress, and others like you.

http://openlibrary.org/b/OL13445668M?m=scan_confirm&keepThis=true&TB_iframe=true&height=300&width=500

talks - File Browser dc2008a - OpenOffice... The adventures of To...

View

Navigation pane with icons for Home, Back, Forward, Stop, Refresh, and Search.



One web page for every book. ([More...](#))

 GO ↶ ↷

Scanned books only ▶ [Advanced Search](#)

featuring **16,224,849** books

(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.



Find Books

- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

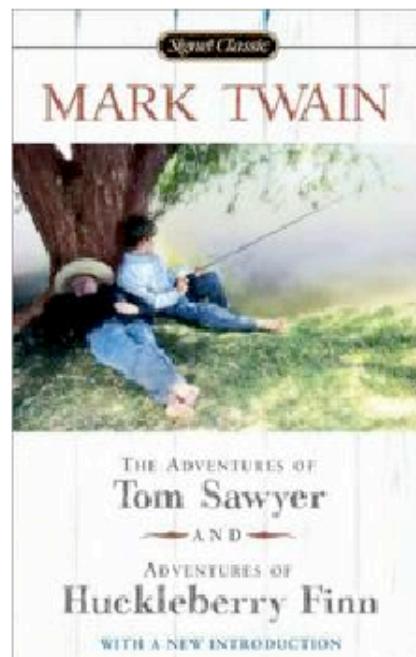
Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)

The adventures of Tom Sawyer and, Adventures of Huckleberry Finn

by Mark Twain

Published in 2002, Signet Classic (New York)



Change Cover

Contributions: Twain, Mark, 1835-1910.

By Statements: Mark Twain ; with a new introduction by Shelley Fisher Fishkin.

Language: English

Pagination: xxiv, 298 p. ;

ISBN 10: 0451528646

LCCN: 2002030599

Dewey: 813/.4

LC: PS1306 .A1 2002

Genre: Fiction.

Subject: Sawyer, Tom (Fictitious character) — Fiction.



BUY

[Amazon](#)
[Abebooks](#)
[Alibris](#)
[Barnes and Noble](#)
[Powells](#)

BORROW

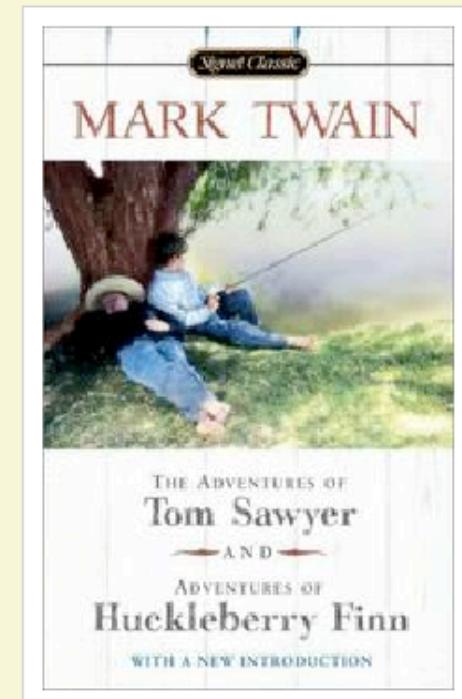
[Your local library](#)
[BookMooch](#)
[Title Trader](#)

BROWSE

[Google Book Search](#) (partial)

Currently Editing:
adventures of Tom Sawyer

Title prefix	The	<input type="button" value="+"/>
Title	adventures of Tom Sawyer	<input type="button" value="+"/>
Subtitle	and, Adventures of Huckleberry Finn	<input type="button" value="+"/>
By Statements	Mark Twain ; with a new introduction by Shelley Fisher Fishkin.	<input type="button" value="+"/>
Author	Mark Twain	<input type="button" value="+"/>
Contributions	Twain, Mark, 1835-1910.	<input type="button" value="+"/>
Published in	2002	<input type="button" value="+"/>
Published by	Signet Classic	<input type="button" value="+"/>
Published at	New York	<input type="button" value="+"/>
Series		<input type="button" value="+"/>
Edition		<input type="button" value="+"/>
Language	English	<input type="button" value="+"/>
Work		<input type="button" value="+"/>



Dewey 813/.4
LC PS1306 .A1 2002

 Editing adventures of Tom S...

DESCRIPTIVE

First sentence

Notes

Includes bibliographical references (p. xix-xxiv).

LAUREN MAZELLO

1

OCLC

Subject Sawyer, Tom (Fictitious)

Finn, Huckleberry (Fict)

Runaway children -- Fi

Child witnesses -- Fiction

Male friendship -- Fiction

Fugitive slaves -- Fiction

Race relations -- Fiction

Boys -- Fiction.

Mississippi River -- Fish

Missouri -- Fiction.

Genre

Fiction.

Table of contents

Edit Summary (briefly describe the changes you have made):

You irrevocably agree to place your contributions in the public domain.

Done

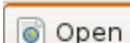


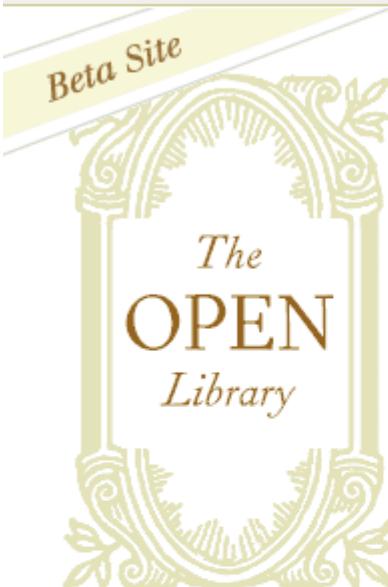
Currently viewing the history for:
/b/OL670887M

Number	Who	What	When
2	 	Edit Karen Coyle	August 1
1	 	Edit initial import (view MARC)	April 1

 **COMPARE** 



 Open Library (Open Library) x
What's New: 45 minutes ago - /b/OL1631228/M updated by ImportBot (initial import)



Open Library

One web page for every book. ([More...](#))

 GO

Scanned books only ▶ [Advanced Search](#)

featuring **16,224,849** books

(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.

Find Books

- ▶ [Recent changes](#)
- ▶ [Example search](#)
- ▶ [Add a book](#)
- ▶ [Index of books](#)

Build The Library

- ▶ [About the project](#)
- ▶ [About the technology](#)
- ▶ [About the librarianship](#)
- ▶ [A guided tour](#)

Develop The Site

- ▶ [Bug tracking](#)
- ▶ [Source code repository \(infogami\)](#)
- ▶ [Developer documentation](#)
- ▶ [Translate the site](#)

Open Library

Open Library

One web page for every book. ([More...](#))

Scanned books only ▶ [Advanced Search](#)

featuring **16,224,849** books

(including **335,101** with full-text)

Open Library has new functionality!

We have greatly improved our user interface to make editing our book catalog easier. In addition to this, we have added support for [internationalization](#) so that anyone can translate the Open Library site into any language.



books

[Build The Library](#)

[Develop The Site](#)

nt changes

▶ [About the project](#)

mple search

▶ [About the technology](#)

a book

▶ [About the librarianship](#)

ck of books

▶ [A guided tour](#)

▶ [Bug tracking](#)

▶ [Source code repository \(infogami\)](#)

▶ [Developer documentation](#)

▶ [Translate the site](#)

Open Library Internationalization (i18n) Support

The Open Library interface is comprised of a series of strings that can be translated by users through an innovative wiki interface. You can translate or add any string in any language! Help us build Open Library by improving our translations. **NOTE:** If a translation for a string is not available, the default is English. This results in a mixed translation until all of the strings for a language are completed (read [our tour](#) ([?](#)) for more info)

You can see how any translation looks by clicking on the "You are viewing the site in English" link and selecting the desired language from the "Change Language" pulldown menu. This link generally appears in the footer of every page on Open Library. Only translations that are in progress are made available in the pulldown menu.

► [You are viewing the site in English ...](#)

We have created a list of languages to help you get started ...

aa Afar
ab Abkhazian
af Afrikaans
am Amharic
ar Arabic

fa Persian
fi Finnish
fj Fiji
fo Faroese
fr French

ka Georgian
kk Kazakh
kl Greenlandic
km Cambodian
kn Kannada

oc Occitan
om (Afan) Oromo
or Oriya
pa Punjabi

ta Tamil
te Telugu
tg Tajik
th Thai
ti Tigrinya

Find: Highlight all Match case

Done



Editing /i18n/strings.sq

▶ / 27/27

/account/forgot_password 0/10
 /account/login 0/8
 /account/preferences 0/18
 /account/register 0/11
 /advanced_search 0/14
 /macros/ChangeLanguage 0/8
 /macros/HelpFormatting 0/2
 /macros/HelpWikilanguage 0/2
 /macros/OptionsEdition 0/10
 /macros/RecentChanges 0/11
 /mode/diff 0/12
 /mode/edit 0/23
 /mode/history 0/9
 /mode/view 0/8
 /search 0/19
 /strings/type/backreference 0/3
 /type/author 0/14
 /type/edition 0/42
 /type/home 0/17
 /type/i18n 0/7
 /type/macro 0/2
 /type/page 0/2
 /type/property 0/4
 /type/template 0/2
 /type/type 0/5
 /type/user 0/5

about_us	rreth nesh
back_to_top	kthehu tek "Rreth Bibliotekës së Hapur"
change_language	jeni duke shikuar faqen në Shqip
contact_us	na kontaktoni
create	krijo
create_it	krijojeni ate
deleted	kjo faqe nuk ekziston më / e fshier
facet_year	data e publikimit
guided_tour	udhë rrëfyesi
has_fulltext	me tekst të plotë
hello	tung
history	historia
internet_archive	IA
login	hyrje
logout	dalje

Language: sq

Use the pulldown menu to toggle between the default string set of English (en) and your desired language to begin working with translations.

Find:
 Highlight all Match case

Done





Biblioteca Aperta

Una pagina web per ogni libro. ([Più...](#))

Fulltext solo voci [► Ricerca avanzata](#)

contenente **13.862.448**
libri (ivi compresi **234857** con il testo completo)

La Biblioteca Aperta ha nuove funzionalità!

Abbiamo notevolmente migliorato la nostra interfaccia per rendere più facile tutte le vostre modifiche. Inoltre, abbiamo creato la capacità per [internazionalizzazione](#), perciò chiunque può preparare traduzioni delle pagine del sito in qualsiasi lingua.

Trova Libri

- [Le recenti modifiche](#)
- [Esempio di ricerca](#)

Costruire la biblioteca

- [Informazioni sul progetto](#)
- [Sulla tecnologia](#)

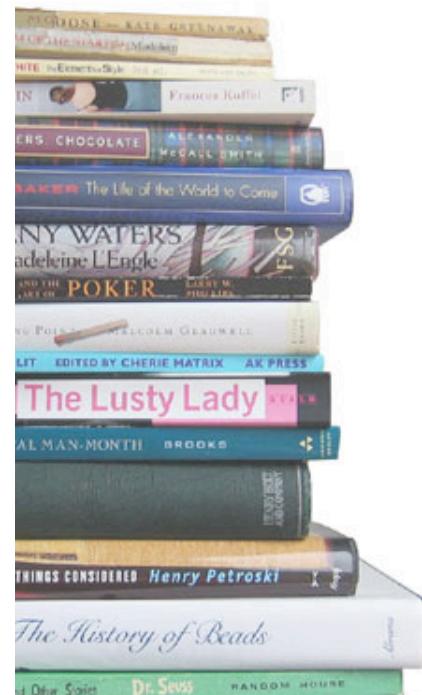
Sviluppare il sito

- [Bug tracking](#)
- [Repository di codice sorgente \(infogami\)](#)

LibraryThing

BETA

Home Search Zeitgeist Talk Groups Local Blog



LibraryThing in your language? You might be interested in www.librarything.de.

What is LibraryThing?

Enter what you're reading or your whole library—it's an easy, library-quality catalog. LibraryThing also connects you with people who read the same things.

Go ahead and [take the tour](#).

What's good?

- Meet the world's largest book club. Find people with *eerily* similar tastes.
- Catalog with Amazon, the Library of Congress or 690 other world libraries. Import from anywhere.
- Get recommendations. Tag your books and explore others' tags.
- Enter 200 books for free, as many as you like for \$10 (year) or \$25 (life).
- 1,000 free [Early Reviewer books](#) this month

Check it out

- Members have cataloged more than [thirty million books](#).
- Show your books: [on a shelf](#) or [as a list](#).
- Books: [Middlesex](#), [The Horse and his Boy](#), [Programming Ruby](#), [Stitch 'N Bitch](#), [The Structure of Scientific Revolutions](#), [Don't Waste Your Life](#)
- Interesting people: [avaland](#), [sylphette](#), [Busifer](#), [Irisheyz77](#), [wafflehouse](#)
- Tags: [wwii](#), [Victorian](#), [philosophy of science](#), [vampires](#), [theology](#), [dogs](#)
- Check out the [LibraryThing blog](#) to see how rapidly—and openly—it's developing.
- If the [buzz page](#) doesn't convince you, you cannot be convinced. Go away.

Sign in

user name

password

[Sign in](#)

Not a member? [Join now](#).

[lost password?](#) [organization?](#) [terms of service](#)

"Last week, one of these simple, brilliant ideas got built..."
The Guardian (UK) email digest
"The Wrap" by Andrew Brown

"LibraryThing appears poised to turn the cataloging of books into a form of communal recreation."
[Christian Science Monitor](#)

"It's six kinds of wonderful. It's all the wonderful."
[alsali](#)

([much more](#))

LibraryThing

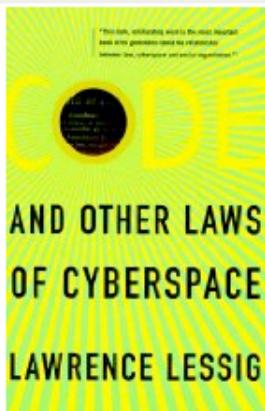
BETA
[Home](#) [Profile](#) [Your library](#) [Tags](#) [Add books](#) [Talk](#) [Groups](#) [Local](#)
[Search](#) [Zeitgeist](#) [Tools](#) [Blog](#)
[List](#) [Covers](#) [Tags](#)
[Styles](#) [A](#) [B](#) [C](#) [D](#) [E](#) [Pencil](#)
[Power edit](#)
[Print](#)
[All fields](#)
[Search](#) [?](#)

1 – 20 of 131

[next page](#)
[\[1\]](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#)

Author	Title	Date	Tags	Comments	Shared
	Stein, Dorothy	Ada, a life and a legacy	1985	ada lovelace women technology mathematics	    11
	Lovelace, Ada King, Countess of	Ada, the enchantress of numbers : a selection from the letters of Lord Byron's daughter and her description of the	1992	Ada Lovelace	    21/1
	Schudson, Michael	Advertising, the Uneasy Persuasion: Its Dubious Impact on American Society	1986	Advertising	    20
	Steiner, George	After Babel : aspects of language and translation	1998	language, translation	    198/2
	Fischer, Claude S.	America calling : a social history of the telephone to 1940	1992	technology, sociology, telephone	    39/1

L Code and other laws of cybe... X



Code and other laws of cyberspace

by [Lawrence Lessig](#)

Members	Reviews	Popularity	Average rating	Conversations
426	7	7,595	★★★★ (4.08)	1

Your library

[Code and other laws of cyberspace](#) by [Lawrence Lessig](#). New York: Basic Books, c1999. xii, 297 p. : ill. ; 25 cm.

Main page

- [Details](#)
- [Edit book](#)
- [Change cover](#)

- [Member reviews \(7\)](#)
- [Recommendations](#)
- [Descriptions \(3\)](#)
- [Conversations \(1\)](#)
- [Common Knowledge](#)
- [Members](#)
- [Editions](#)

Members

[all members](#)

Recently added by: [brianhrogers](#), [teca](#), [worrydream](#), [scottlenger](#), [mkriens](#), [dirigo](#), [upstairsgirl](#), [martijnaslander](#), [chbeery](#), [lampe](#)

Your top 50 similar libraries: [mollymolo](#), [swaltersky](#), [michaelzimmer](#), [cjkarr](#), [superpatron](#), [libklang](#), [EdwardBetts](#), [noteworthy](#), [tmccormick](#), [schoen](#) ([show all](#))

Member tags

[numbers](#) | [all tags](#)

borrowed Business **code** communications **computers** computing constitution **copyright** creative
commons culture **current events** cyberlaw **Cyberspace** information information technology
intellectual property **internet** ip k **law** Lawrence Lessig Laws of Cyberspace legal lessig
library library science non-fiction own philosophy politics privacy Read regulation school science society Sociology
software tech **technology** Textbook to read unfinished unread web webuse project wishlist

LibraryThing recommendations

<http://www.librarything.com/profile/dirigo>

Buy, borrow, swap or view P

[Abebooks](#)
[Alibris](#)
[Amazon.com](#)
[Barnes & Noble](#)
[BookFinder.com](#)
[BookSense](#)
[Worldcat](#)

[Swap this book \(0/9\)](#)

[Google Books: Book info](#)

Popular covers



Rating

Average: (4.08)



Member reviews

Showing 1-5 of 7 ([next](#) | [show all](#))

[date ▾](#) | [votes](#)

Code is a great book on the regulation of cyberspace. There is no dancing around the point that it is a tedious read. Keeping my focus till the end was difficult, but it was worth finishing. Lessig makes it clear that cyberspace can and will be governed by the nature of its architecture even if it is not governed directly by law. If the regulation of cyberspace is of any interest to you, this book is an essential read. ()

[tyroeternal](#) | Sep 19, 2008 | [link](#)

 | [flag](#)

You know those bumper stickers that say "Charlton Heston is my president?" Well, if I didn't think all bumper stickers are tacky, I would print one that says "Lawrence Lessig is my president."

Lessig's original [Code_and_Other_Laws_of_Cyberspace_](#) was written before Napster even had its heyday, let alone today's whole Web 2.0 cornucopia. So this new version contains much-needed updates to its examples and



Building Connections through the Collections

Bibliocommons is a complete social discovery system for libraries.

We're completely re-thinking the online library experience. We've had our heads down building and delivering groundbreaking new services, transforming online library catalogues from searchable inventory systems into engaging social discovery environments.

BiblioCommons' services are designed to enable rich connections around library collections — connections between our users and the content, conversations, and communities they're most interested in.

In the process we've neglected our own home — but with our first release now live in a closed beta with our Charter Subscribers (Public Library Services Branch of British Columbia and Knowledge Ontario), we'll have more to share with you soon.



Find books, music, movies, and more. [More search options](#)

Keyword

Search OPL Catalogue

Search



[My OPL](#) [Explore](#) [Research](#) [Programs/Events](#) [Services](#) [Interests](#) [About OPL](#)

My Borrowing

Checked Out
Holds
Fines
Recently Returned

My Collection

My Collection
Community Credits

My Lists

My Lists
For Later

My Networks

Trusted Sources
Ignored Users

1 2 3



Tuesday	9:30AM - 9PM
Wednesday	9:30AM - 9PM
Thursday	9:30AM - 9PM
Friday	9:30AM - 5PM
Saturday	9:30AM - 5PM
Sunday	1PM - 5PM

[More branch info ▶](#)

Workshop with Stuart Ross

Saturday Oct 25, '08 1:00-4:00pm

[Read more news ▶](#)

Ask a Question

Whether you're looking for general information, or something specific, we're here to help.

Chat with us

Email

<http://opl.bibliocommons.com/checkedout>

Recently Reviewed Items

Filter by: [Any Format](#)



New At The Library

Our suggested reads and new items. New DVDs are now updated daily!

[View all Lists](#)

[Take a tour of My OPL](#)

Quick Links

[How do I ...](#)



Small Business EVENTS



An Evening with
Alan Gross





Oakville Public Library

Find books, music, movies, and more. [More search options](#)

Keyword

Search OPL Catalogue

My OPL

Explore

Research

Programs/Events

Services

Interests

About OPL

My Borrowing

Checked Out

Holds

Fines

Recently Returned

My Collection

My Collection

Community Credits

My Lists

My Lists

For Later

My Networks

Trusted Sources

Ignored Users

1 2 3

Tuesday	9:30AM - 9PM
Wednesday	9:30AM - 9PM
Thursday	9:30AM - 9PM
Friday	9:30AM - 5PM
Saturday	9:30AM - 5PM
Sunday	1PM - 5PM

[More branch info ▶](#)

Workshop with Stuart Ross

Saturday Oct 25, '08

1:00-4:00pm



[Read more news ▶](#)

Ask a Question

Whether you're looking for general information, or something specific, we're here

Recently Reviewed Items

Filter by: Any Format

New

Our suggested items. New daily!

[View all L](#)

Take a

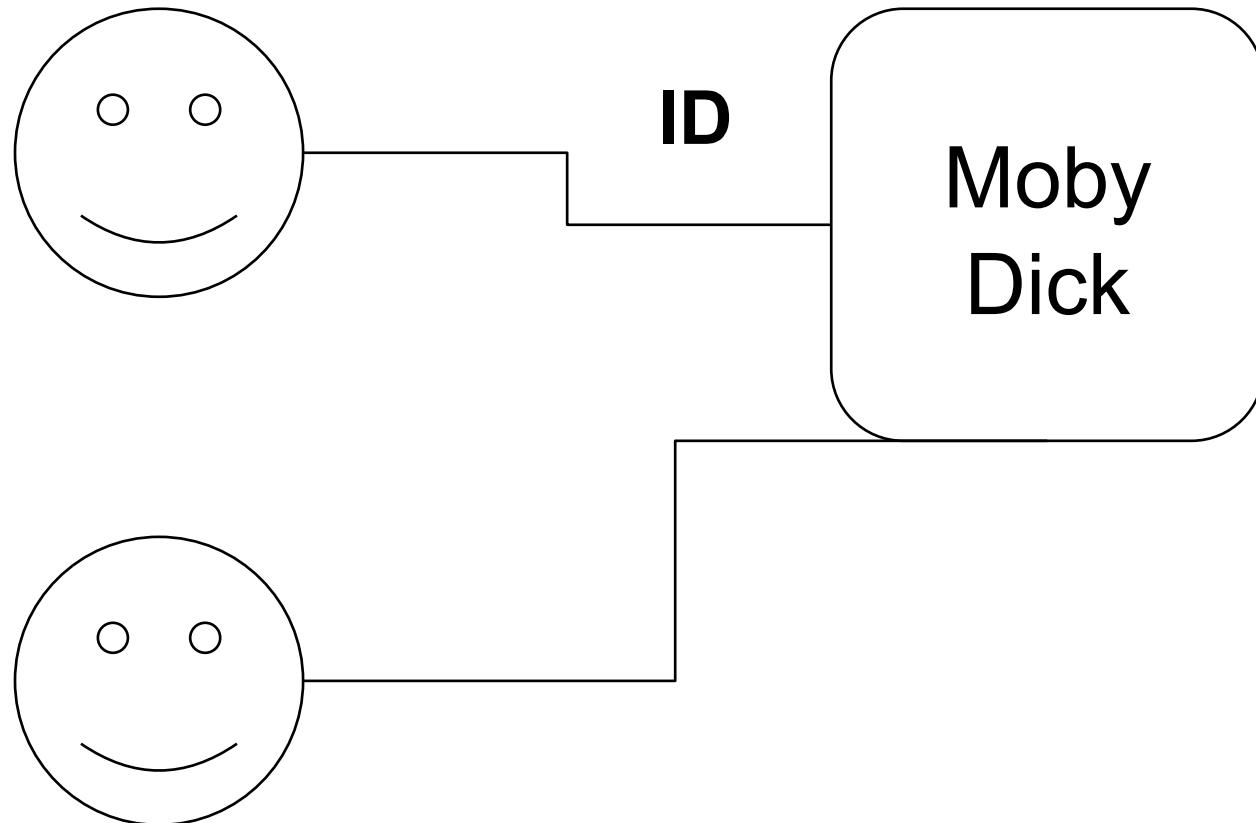
Quick

How do

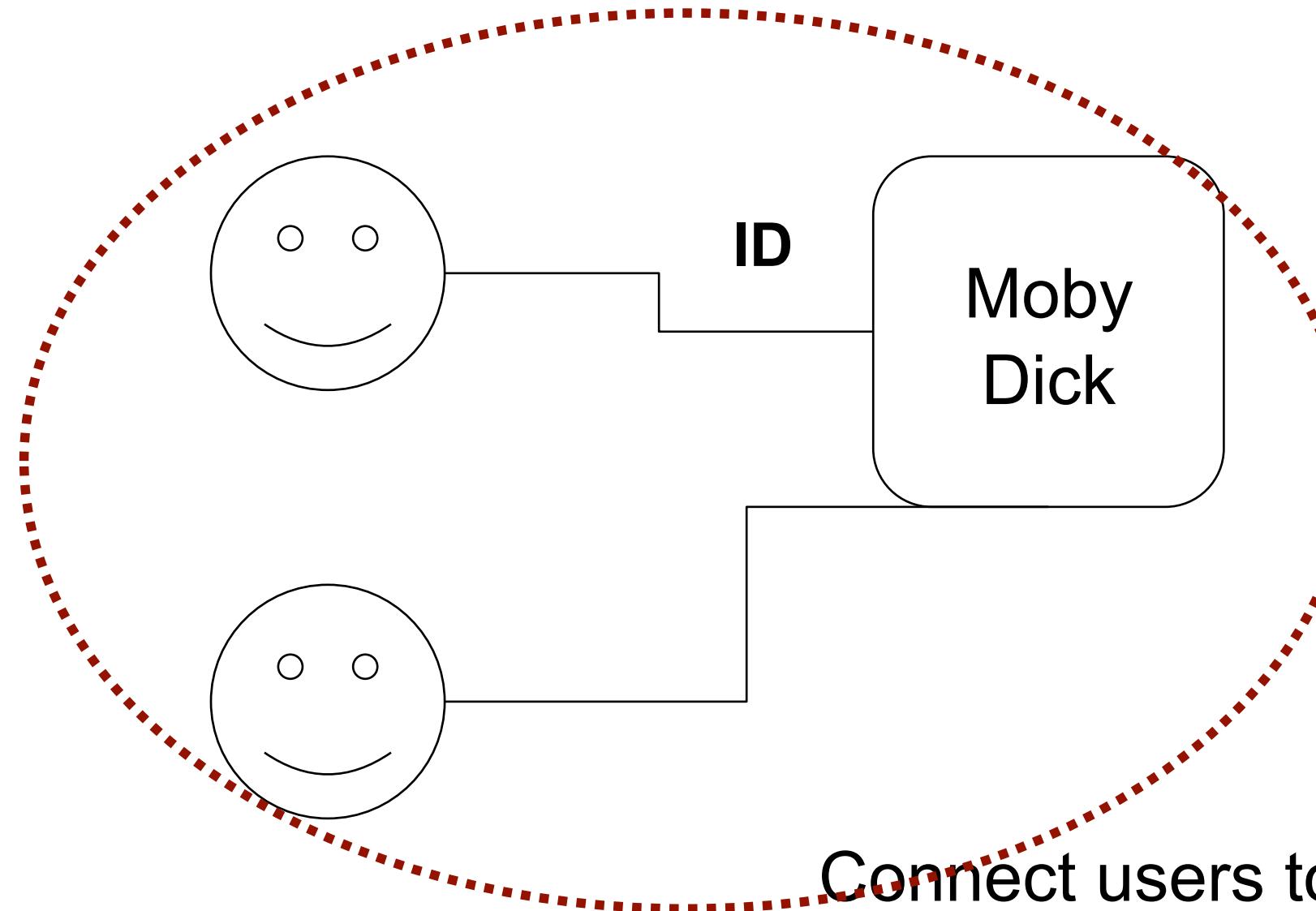
Small

Change models

- Open Library
 - Data from LC, libraries, publishers, Amazon, individuals
 - All change/add a single versioned record
- LibraryThing
 - Data from individuals (via libraries)
 - Every individual has their own record
- Bibliocommons
 - User data



Connect user data to a resource



Connect users to each other
through resource.
Basis of a conversation

Thank You

Karen Coyle
kcoyle@kcoyle.net