

Schloss Dagstuhl - Leibniz-Center for Informatics
Perspectives Workshop on the Semantic Web

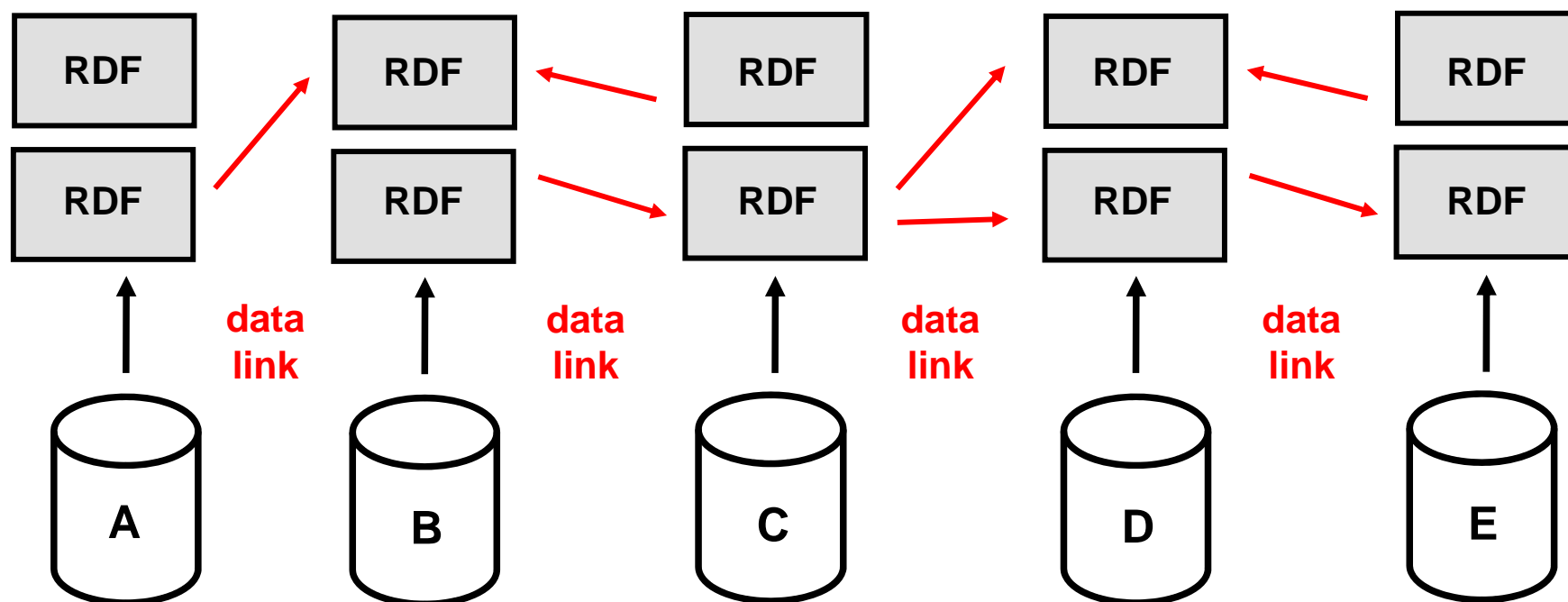
~~Semantics on the Web~~

Things that have not been said yet

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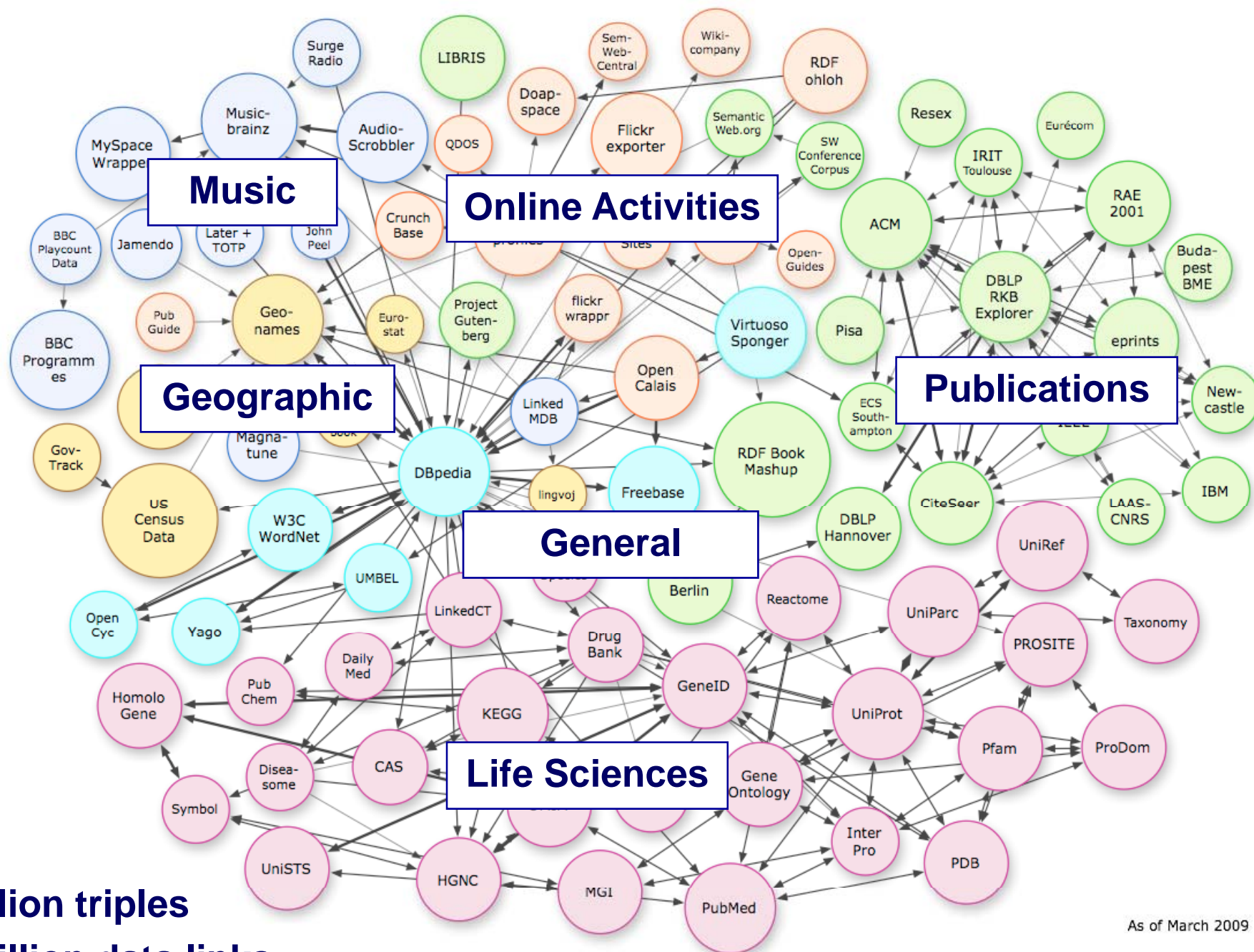
The Web of Data is a global data space
glued together by **links**.



There should be ...

- 1. links on instance level**
- 2. links on schema level**

We start doing a good job with instance level links



4.7 billion triples
142 million data links

As of March 2009

But setting links requires effort

- **Minimize this effort by providing link discovery tools**
 - generate links based on a matching description
 - examples: Silk and LinQL
- **Minimize the effort to maintain links**
 - experimentation with registries, update feeds, subscription models
- **Conclusion: We need a good story about incentives in order to make data publishers set links.**

Schema-level links

- **There is a pay-as-you-go data integration paradigm emerging on the Web of Data**
 - publish data first using different schemata
 - maybe use terms from common vocabularies
 - (Hopefully) publish schema mappings to the Web afterwards
- **There is no standard for publishing fine-grained term mappings**
 - owl:equivalentClass/Property, rdfs:subClass/PropertyOf are a good start
 - we also need value transformations (First name/Surname, Fahrenheit/Celsius, different geo-coordinates formats)
- **Conclusion: We should talk more to the database community, especially the dataspace people, as**
 - they might have the solutions that we need.
 - the Web of Data is a great playground for them.

Data Quality and Trust

- **The Web is a social thing and everything on the Web is a claim.**
- **We cannot ignore this fact any longer by putting trust somewhere in the higher layers of the Semantic Web cake.**
- **Conclusion: We should focus more on provenance tracking, quality assessment, data cleansing, and trust in order to enable data fusion.**
 - **Move the trust layer down in the Semantic Web layer cake (above RDF?).**
 - **Build “Oh, yeah?” buttons into our applications.**

Licensing and Privacy

- **More and more commercially relevant data is published**
 - data publishers want to attach licenses
- **the Web of Data is developing into a privacy nightmare**
 - this question is immediately asked by outsiders
- **Conclusion: We need better vocabularies to express licenses and usage restrictions.**
 - Creative Commons for data?
 - P3P 2?

Contributions of \$5,000 or more are disclosed within 10 days.

DOWNLOAD THESE RESULTS: [MICROSOFT EXCEL](#)

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ID NUMBER	EMPLOYER		OCCUPATION	
	N/A		HOMEMAKER	
AMOUNT	TYPE	TRANS. DATE	FILED DATE	TRANS #
\$43,900.00	INITIAL	11/26/2008	12/3/2008	1382793- INC135867

NAME OF CONTRIBUTOR			CITY	STATE / ZIP
STEVEN WHEELWRIGHT			LAIE	HI / 96762-1293
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NAME OF CONTRIBUTOR			CITY	STATE / ZIP
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PROP 8 MAPS

A mash-up of [Google Maps](#) and [Prop 8 Donors](#).

Proposition 8 changed the California state constitution to prohibit same-sex marriage. These are the people who donated in order

Location Search

Jump to [San Francisco](#), [Salt Lake City](#), or [Orange County](#).



Dynamics

Every minute...

- 100 edits in Wikipedia
- 120 new Blogs (not entries!)
- 300 tags in del.icio.us
- 800 question on Y! Answers
- 1.000 Tweets
- 4.000 images on flickr
- 13 hours of video on YouTube
- 100.000 objects on Facebook



SEMANTICS



TO THE PEOPLE

Semantics to the people!

- Who defines the semantics of a term?
- foaf:favouriteMovie
- owl:sameAs
- Specified semantics vs emergent semantics