Linked Data: Now What?

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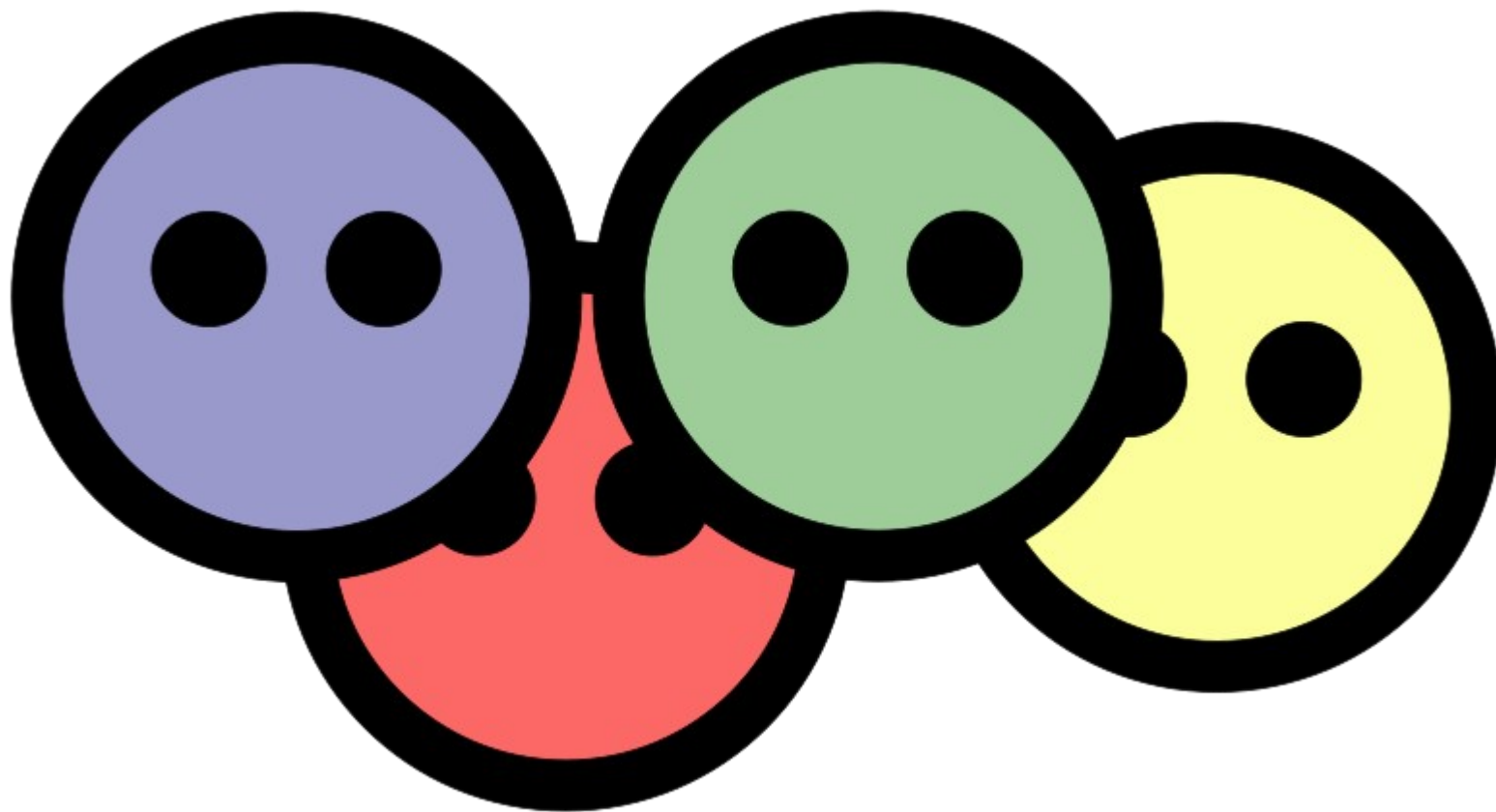
http://tomheath.com/id/me

twitter:tommyh

Without Linked Data, no Semantic Web!

Remember 2005?

Is there a Semantic Web beyond FOAF?

httpRange-14: What is the range of the HTTP dereference function? [**link to this issue**]

TBL's argument the HTTP URIs (without "#") should be understood as referring to documents, not cars.

Request concerning
- HTTP
- URI

Discussion history
> 1 Jul 2002, 15 Jul 2002, 22 Jul 2002, 29 Jul 2002, 16 Sep 2002, 24 Sep 2002, 6 Jan 2003, 27 Jan 2003, 6 Feb 2003, 7 Jun 2003, 23 Jun 2003, 22 Jul 2003, 28 Jul 2003, 12 May 2004, 7 Feb 2005, 15 Mar 2005, 29 Mar 2005, 3 May 2005, 31 May 2005, 15 Jun 2005, 27 Feb 2006, 27 Feb 2006, 26 Feb 2007, 30 May 2007, 31 May 2007, 11 Jun 2007, 18 Jun 2007, 2 Jul 2007

Transition history

raised on 25 Mar 2002 by Tim Berners-Lee , on behalf of TAG
accepted on 6 Feb 2003

> **Background, proposals, threads, notes**
> - Axioms of Web Architecture , by Tim Berners-Lee
> - What do HTTP URIs Identify? by TimBL
> - History of Fragment Identifiers by Roy Fielding.
> - Moby Dick example and summary from TB.
> - Namespace v. Namespace Document is an example of this issue as evidenced by this thread .
> - See discussion of information resources
> - See discussion of phrase "on the Web" at 22 Jul 2003 teleconference and subsequent threads
> - Summary and proposal from NW
> - GoodURIs

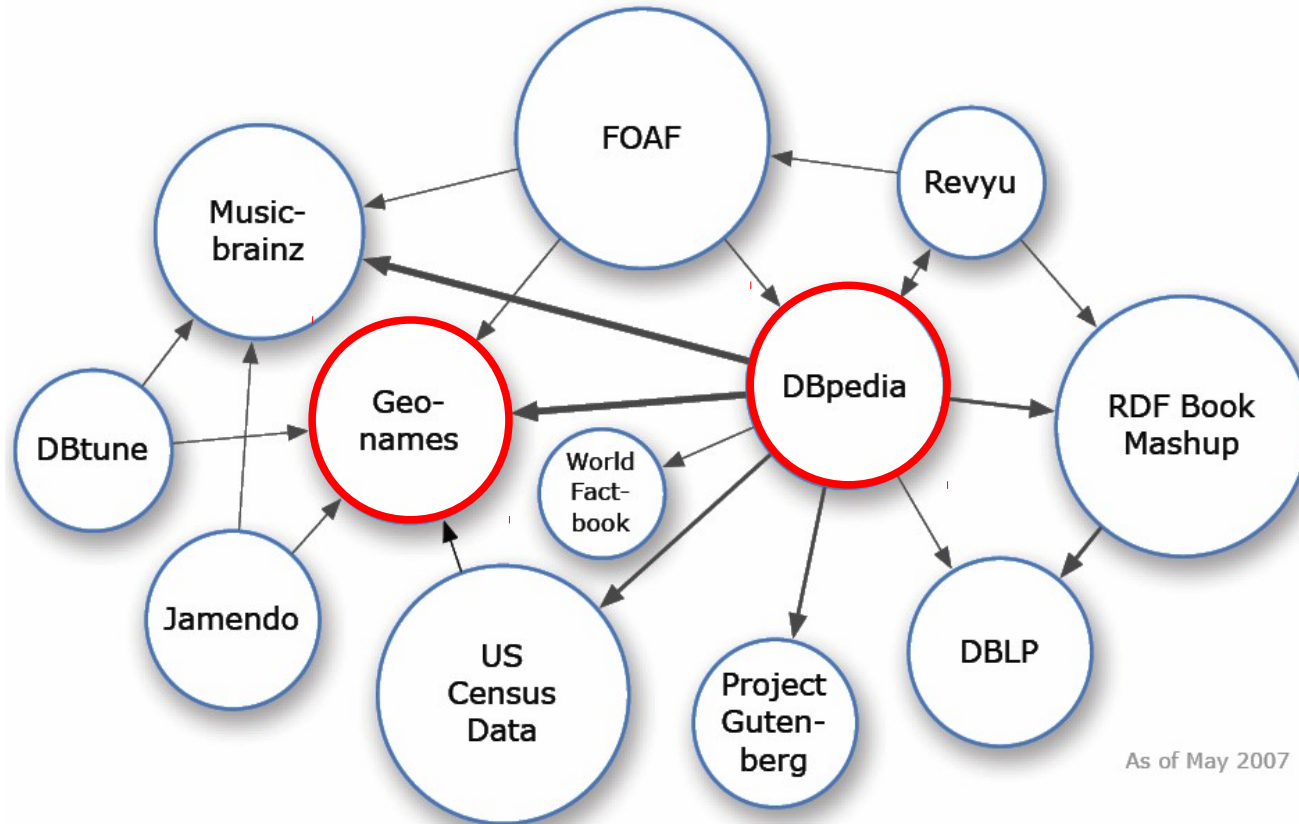*agreed* on 15 Jun 2005

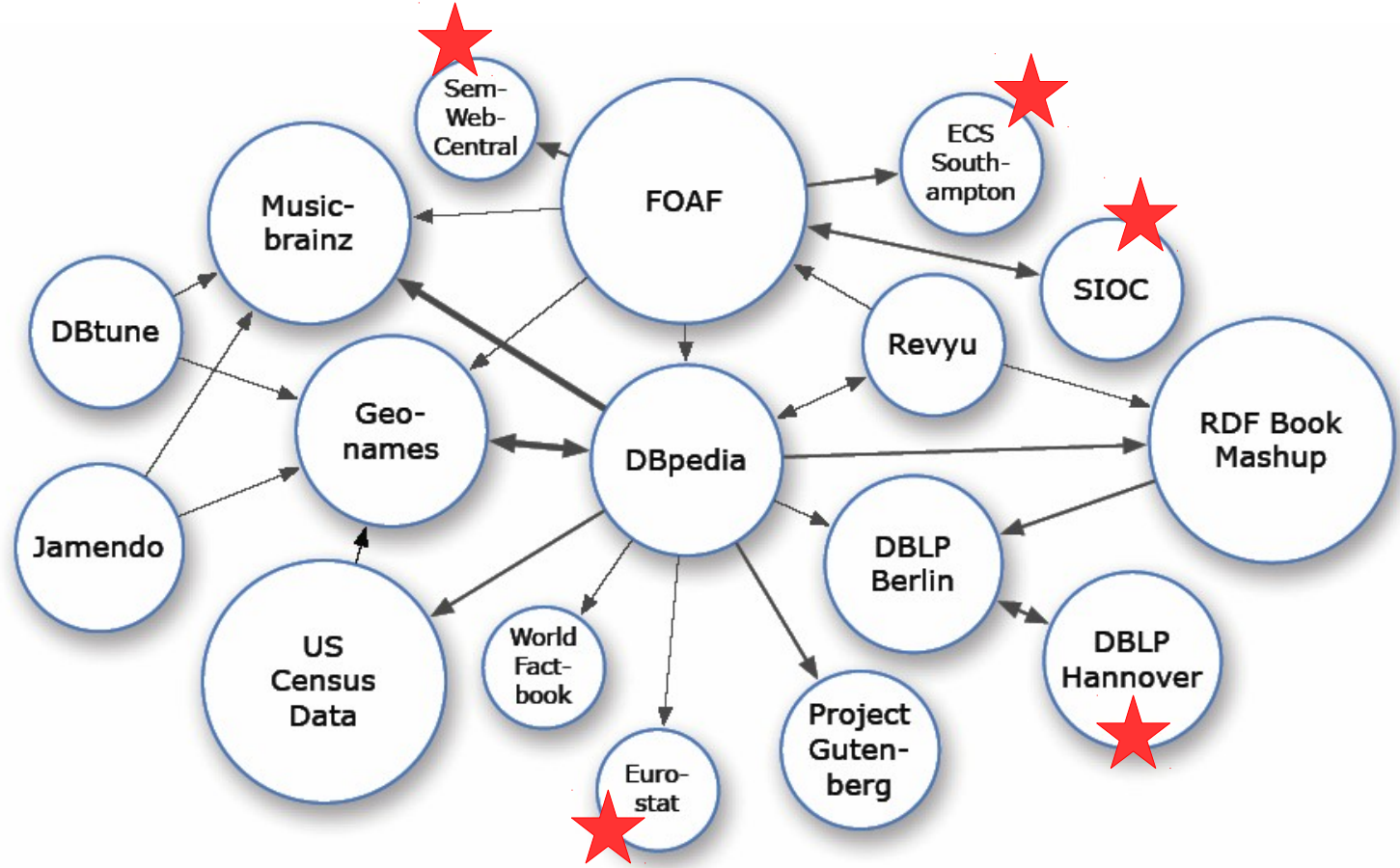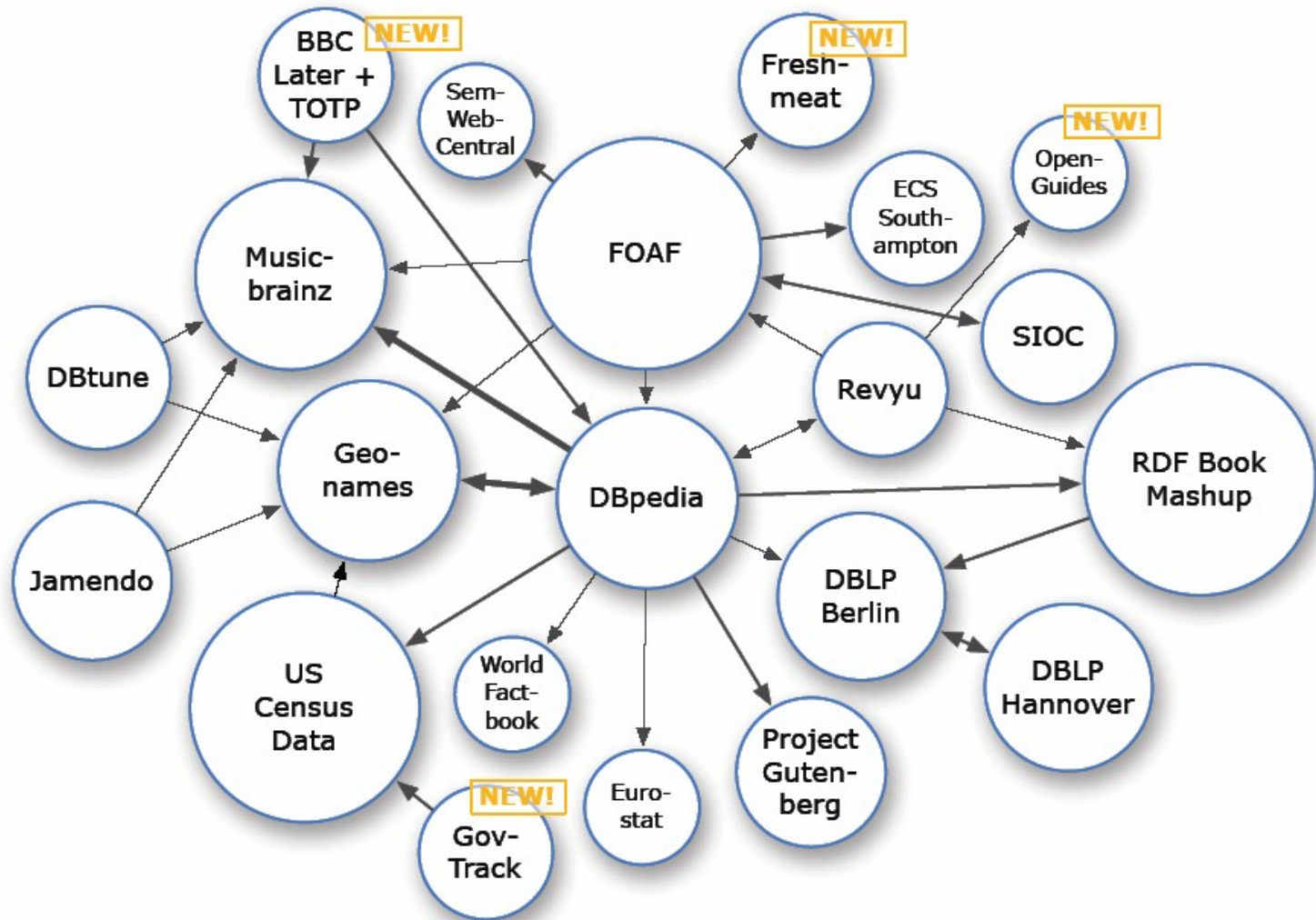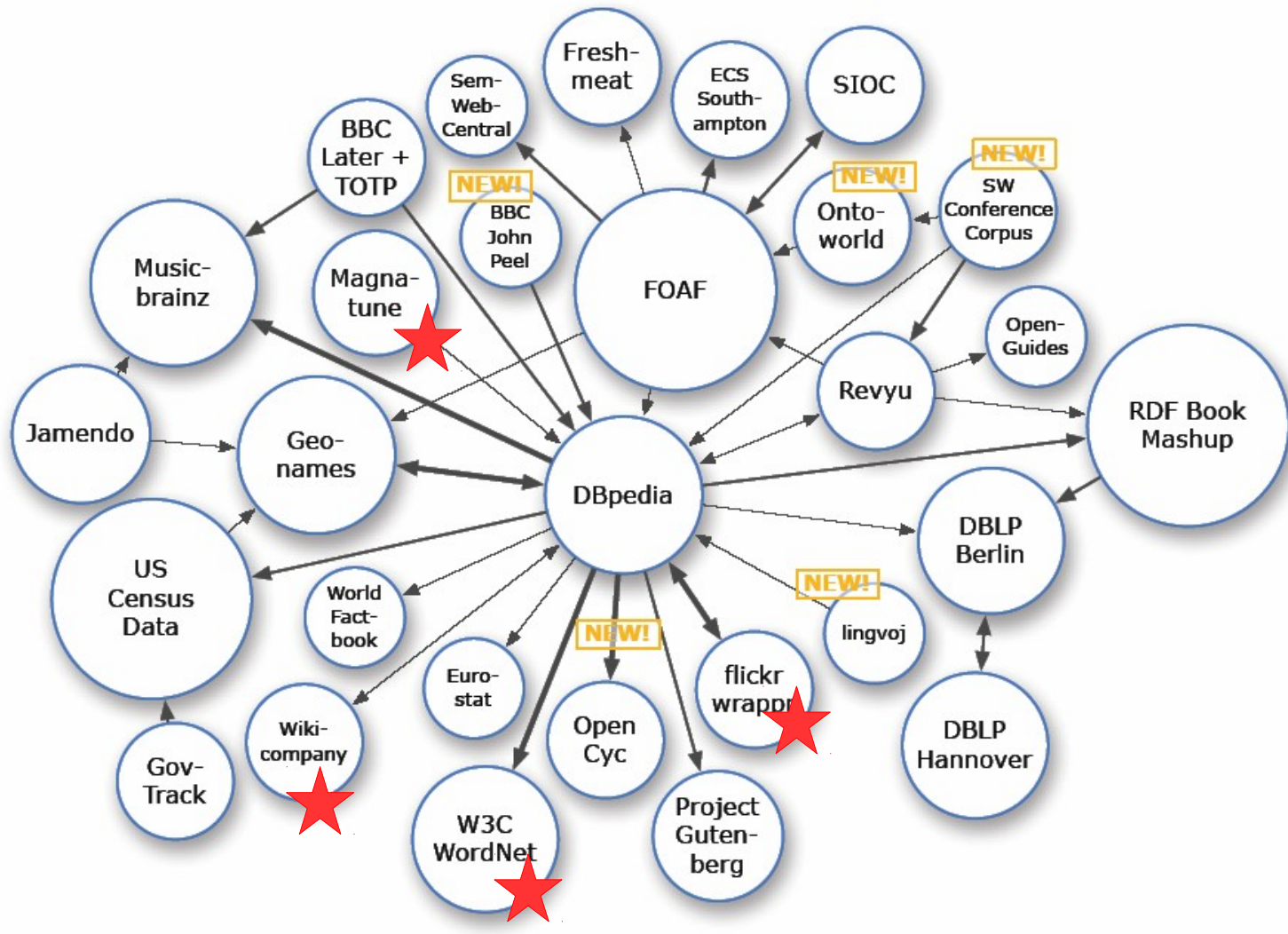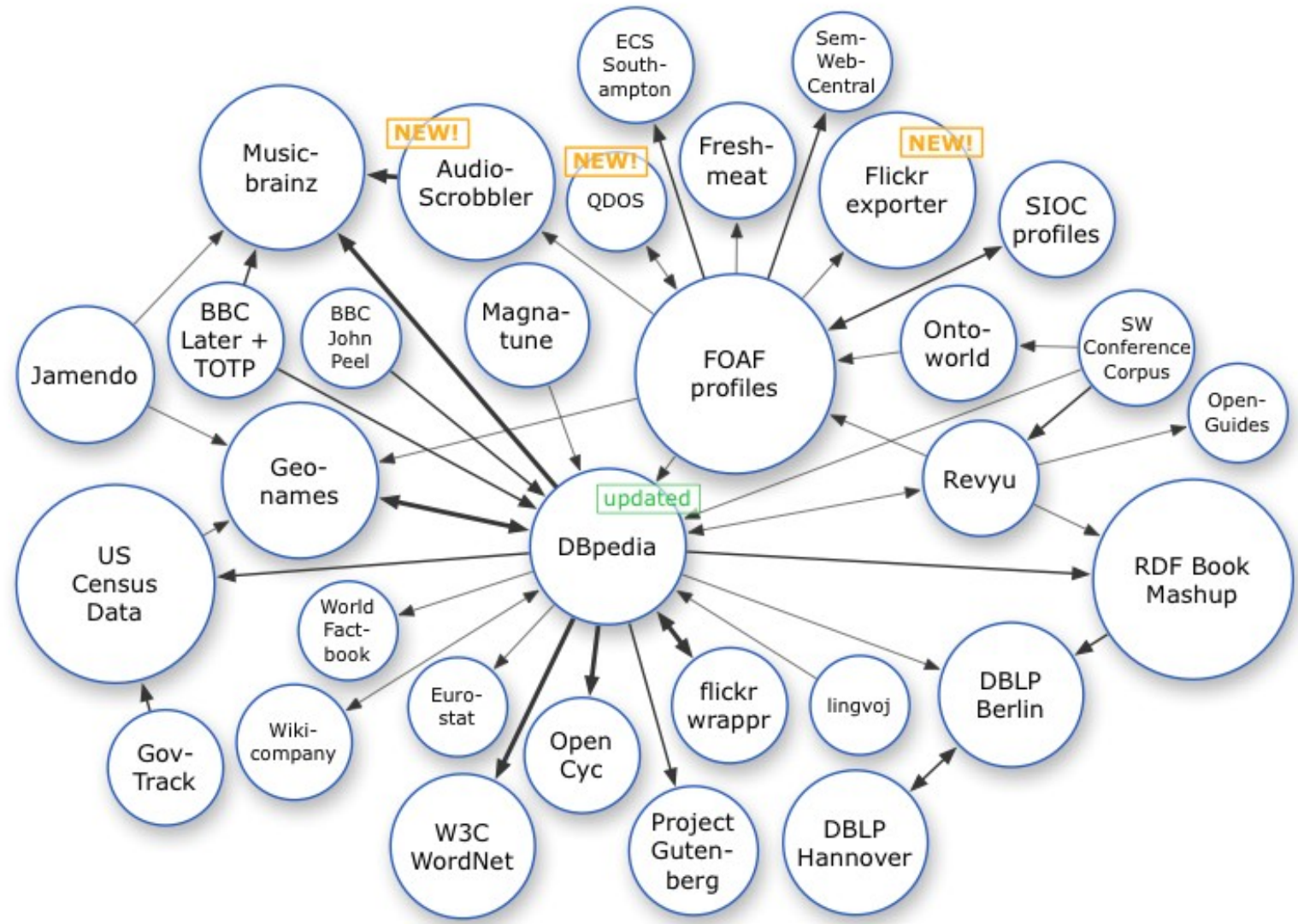# The LOD "Cloud" - May 2007

As of May 2007

The LOD "Cloud" - July 2007

The LOD "Cloud" - August 2007

The LOD "Cloud" - November 2007

The LOD "Cloud" – Feb 2008

The LOD "Cloud" – Sept 2008

As of September 2008

BBC Playcount Data

Surge Radio

LIBRIS

ECS Southampton

Sem-Web-Central

Wiki-company

RDF ohloh

Resex

ReSIST Project Wiki

Music-brainz

MySpace Wrapper

Audio-Scrobbler

QDOS

Doap-space

Flickr exporter

Semantic Web.org

SW Conference Corpus

Budapest BME

IRIT Toulouse

Eurécom

National Science Foundation

BBC Music

Jamendo

BBC Later + TOTP

BBC John Peel

Crunch Base

FOAF profiles

SIOC Sites

Revyu

Open-Guides

ACM

RAE 2001

CORDIS

Pub Guide

Geo-names

Euro-stat

Project Guten-berg

flickr wrappr

Virtuoso Sponger

Pisa

DBLP RKB Explorer

eprints

BBC Programmes

riese

Magna-tune

World Fact-book

Linked MDB

Open Calais

RKB ECS Southampton

IEEE

New-castle

Linked GeoData

US Census Data

W3C WordNet

DBpedia

lingvoj

Freebase

RDF Book Mashup

DBLP Hannover

CiteSeer

LAAS-CNRS

IBM

Gov-Track

Open Cyc

Yago

UMBEL

LinkedCT

GEO Species

DBLP Berlin

Reactome

UniParc

UniRef

PROSITE

Taxonomy

Homolo Gene

Pub Chem

Daily Med

Drug Bank

GeneID

UniProt

Pfam

ProDom

Symbol

Disea-some

CAS

KEGG

OMIM

ChEBI

Gene Ontology

Inter Pro

PDB

UniSTS

HGNC

MGI

PubMed

As of July 2009

What Worked?

Clarity

Clarity

The TAG provides advice to the community that they may mint "http" URIs for any resource provided that they follow this simple rule for the sake of removing ambiguity:

- If an "http" resource responds to a GET request with a 2xx response, then the resource identified by that URI is an information resource;

- If an "http" resource responds to a GET request with a 303 (See Other) response, then the resource identified by that URI could be any resource;

- If an "http" resource responds to a GET request with a 4xx (error) response, then the nature of the resource is unknown.

http://www.w3.org/2001/tag/issues.html#httpRange-14

Shared Principles/Norms

1. Use URIs as names for things

2. Use HTTP URIs so that people can look up those names.

3. When someone looks up a URI, provide useful information

4. Include links to other URIs. so that they can discover more things.

Berners-Lee (2006)
http://www.w3.org/DesignIssues/LinkedData.html

Action!

What Isn't Working?

Terminological Confusion

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- Let's not put openness on the critical path to Linked Data adoption

Now What?

Fundamental Requirements for uptake of Linked Data

- Data quality, availability, stability

- Clarity re. licensing (i.e. terms of reuse)
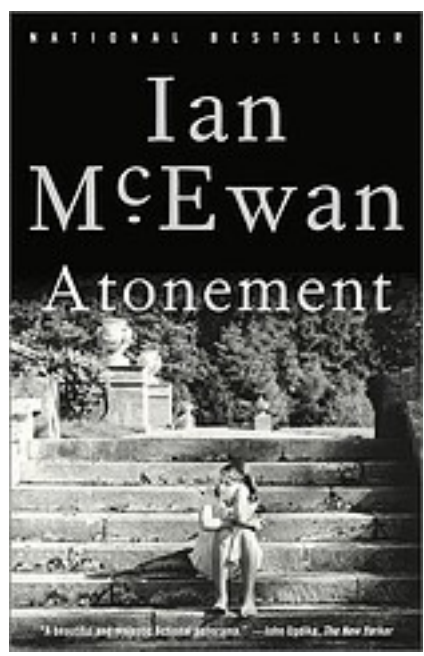
- Applications!

The 'Links' in 'Linked Data'

- Relax (for now) about the *owl:sameAs* issue

- It's only a problem when users tell us it's a problem

- Data quality is the issue

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Depictions of dbpedia:Atonement_(film)

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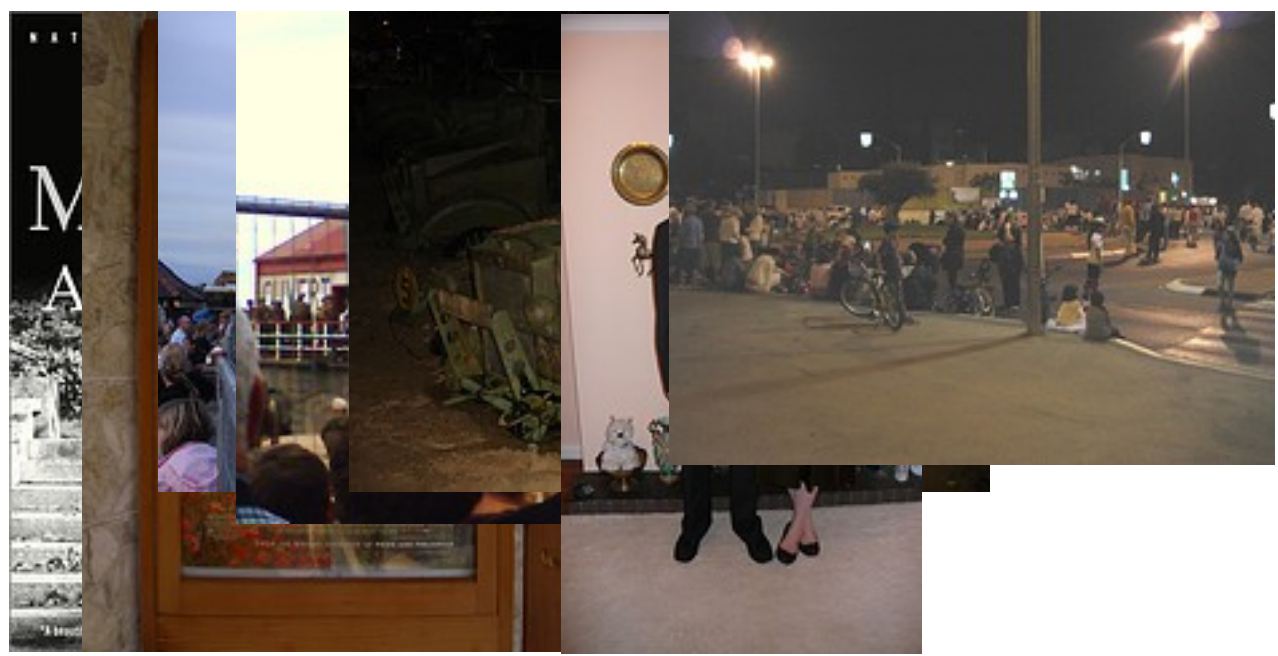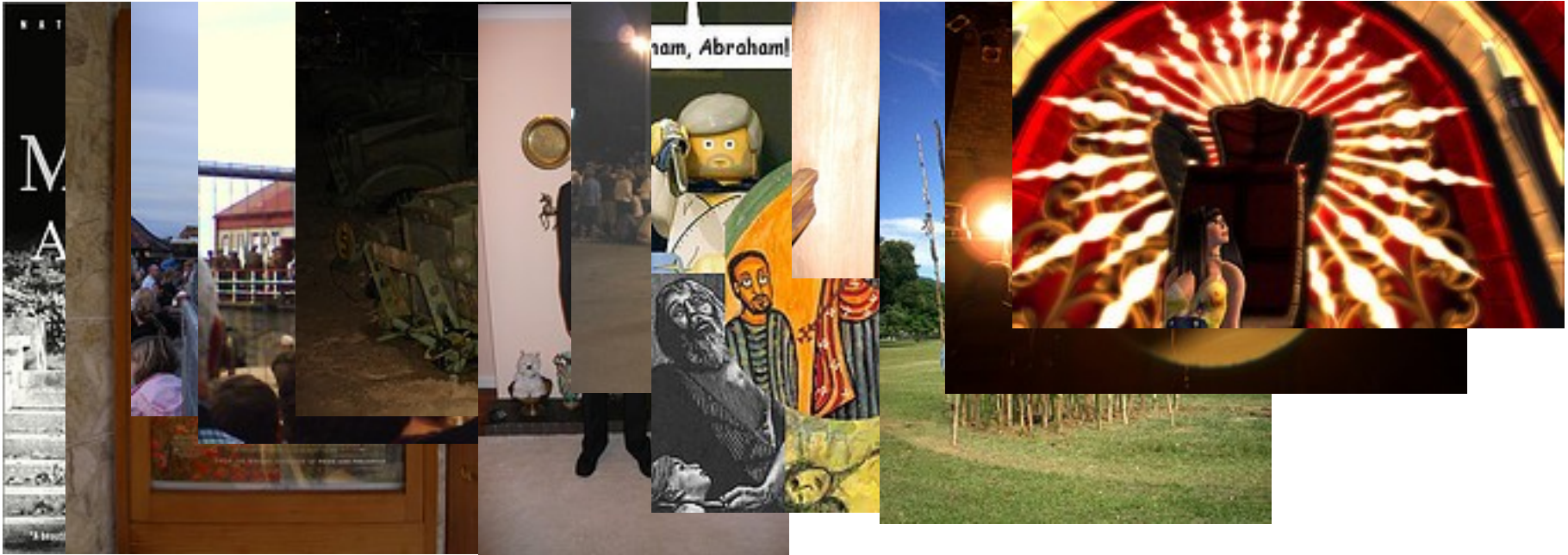
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- No more obsessing or speculation allowed, principled analysis only!

Discuss!

http://tomheath.com/slides/2010-06-crete-linked-data-now-what.pdf

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Where do we Focus our Efforts?

- Sustaining innovation

- Disruptive innovation
    - Low-end disruption
    - New-market disruption

(Christensen and Raynor, *The Innovator's Solution*, 2003)

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- Risky business ideas?
    - A new search engine that exploits structured data
    - A reviewing and rating site that publishes data in RDF
    - A new CMS with Linked Data support

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    - **What can we do less well with Linked Data, but at significantly less cost than with existing approaches?**

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  - **What can we enable with Linked Data that a large number of people aren't doing right now because it's too hard, expensive or inconvenient?**

Let's get to work!