

Linking Distributed Data across the Web

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- Background
- From a Web of Documents to a Web of Data
- The Linking Open Data Project
- Applications of Linked Data
- Ongoing Challenges



- Birmingham-based software company
- Past: established 40 years ago to deliver large collaborative metadata systems
- Present: Very stable with over 100 customers public authorities and universities
- Future: global data platform supporting ours and others' applications



Web of Documents to Web of Data

talis The Web of Linked Documents



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Challenges for the Web of Linked Documents

- Loosely Structured Content
 - Hard to process automatically



"Aston Business School is renowned for the quality of its teaching, research and its supportive environment. The School provides students with an inspirational educational experience that offers them rapid career progression in international business. We work closely with students to create a life changing experience that ensures our alumni go on to become leaders in their organisations and communities around the world"

Professor Michael West

Executive Dean, Aston Business School

Aston Business School is committed to creating and transferring knowledge that enables, innovates and inspires. The School is a welcoming community, focused on the core learning needs of our students, our alumni, businesses, organisations and their leaders.

ABS' successes are reflected in its current 5 RAE (research excellence) rating and its teaching excellence. The School has accreditations for its courses from all the leading professional bodies and Aston is among just 1% of business schools worldwide with triple accreditation from AMBA, AACSB and EQUIS. It is rated in the UK National Student Survey in the top 10 institutions teaching business for overall satisfaction with the quality of courses.

Located in the heart of Birmingham, England's second city, ABS attracts leading faculty from around the world (36% of its 100 academics are from a non UK background). As a consequence of the School's rapid financial growth (200% in nine years), Aston University has recently invested in a £22m extension to the Business School, which includes an outstanding residential (160 bedroom) conference centre.

The School offers an inspirational and life changing experience for its 3000 students, whether at undergraduate, postgraduate or doctoral level. It also offers transformational executive education programmes for leaders and businesses in excellent new facilities.

Challenges for the Web of Linked Documents

- Loosely Structured Content
 - Hard to process automatically
- Ambiguity

- "Find me a Business School in Birmingham"
- "Which Birmingham do you mean?"
- Integration and Querying across Data Sources
 - "Show me articles about Birmingham (US) from UK broadsheets"
 - "Which Business Schools have been rated highly for research in the last 5 years and are situated within 1 hours travelling distance of home and work?"



Don't just link the documents, link the things



Accordition

The Web of Linked Data

Don't just link the documents, link the things

	of MBAs									
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ation from AMBA,	Who we are The Association of MBAs is the international impartial authority on postgraduate business education and was established in 1967. Our accreditation service is the global standard for all MBA, DBA and MBM programmes. We are the only professional membership association for over 9,000 MBA students and graduates, accredited business schools, and MBA employers. Become a member today! Find out more about the Association of MBAs by clicking here.	Graduate Members Services and events (click here for a list) for MBA graduates in 88 countries	Student Members Support for a global network of MBA students							
xet consisting of	Liberating Talent For Competitive Advantage Bradford, UK Monday, 26 January 2009 Remember, everyone comes to work with talent Find out more about Liberating Talent For Competitive Advantage. See a full list of membership events.	Business Schools Conferences and services for top business schools	Accreditation Services 153 accredited business schools (click here for a list) in 69 countries							
UIS t EQUIS IS ination across	The Official Guide to Choosing an MBA Published in collaboration with The Independent, The Association of MBAs' Official Guide to Choosing an MBA is essential reading for the prospective MBA student. Purchase online today.	Considering an MBA? Impartial advice on MBA study in a crowded and complex market	Publications Free subscription to BLR, plus see our full list of products							
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Accreditation

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Triple Accredited

Aston is among just 1% of business schools worldwide with triple accreditation from AMBA, AACSB and EQUIS.

Accreditation is a stamp of quality for a school and its programmes. The Association of MBAs (AMBA) describes its own accreditation as giving international credibility to a school's MBA programmes as well as giving

students reassurance of the value of an accredited school's MBA in a market consisting of many hundreds of MBA programmes worldwide.

Aston was also the first full range business school in the UK to receive EQUIS accreditation. This is awarded by The European Foundation for Management Development (EFMD). The EFMD describe the 'fundamental objective' of EQUIS as 'to raise the standard of management education worldwide. EQUIS facilitates standard setting, benchmarking, mutual learning, and the dissemination acros borders of good practice.'

Most recently in April 2003 Aston joined the elite group of international business schools that can boast accreditation from the North American based Association to Advance Collegiate Schools of Business (AACSB) alongside our AMBA and EQUIS awards. The AACSB comments that business schools that are granted their seal of approval represent 'the highest standard of

achievement for business schools, worldwide. Institutions that earn accreditation confirm their commitment to quality and continuous improvement through a rigorous and comprehensive peer review.'

The Web of Linked Data

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Don't just link the documents, link the things





- The data format for building the Web of Linked Data
- Resource Description Framework
- In essence a simple data model
- It's about writing down relations between things
- See http://www.w3.org/RDF/



- We need to be able to identify things globally and uniquely
- URIs (URLs) already provide those capabilities
- http:// URIs combine identification with retrieval



<http://dbpedia.org/resource/Talis_Group>

<http://xmlns.com/foaf/0.1/Person#based_near>

<http://sws.geonames.org/3333125/>

Linked Data Principles

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- 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 RDF information.
- 4. Include RDF statements that link to other URIs so that they can discover related things.

Tim Berners-Lee 2007 http://www.w3.org/DesignIssues/LinkedData.html



- Reduce redundancy
- Enable (relatively) seamless data integration
- Allow network effects to add value to your data



The Linking Open Data Project



The Linking Open Data Project

- Community project with W3C support
- Take existing open data sets
- Make them available on the Web in RDF
- Interlink them with other data sets

talis[®] Participants

- Massachusetts Institute of Technology (US)
- University of Southampton (UK)
- Freie Universität Berlin (DE)
- DERI (IE)
- KMi, Open University (UK)
- University of London (UK)
- Universität Hannover (DE)
- University of Pennsylvania (US)
- Universität Leipzig (DE)
- Universität Karlsruhe (DE)
- Joanneum (AT)
- University of Toronto (CA)

- BBC (UK)
- Talis (UK)
- Garlik (UK)
- OpenLink (UK)
- Zitgist (US)
- Mondeca (FR)
- Cyc Foundation (US)

The LOD "Cloud" - May 2007



talis[®] Geonames

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search



	Name	country	feature	km to center
1 🥊	City and Borough of Birmingham	United Kingdom	third-order administrative division	0.26 km
2 🖲	Comfort Inn Birmingham	United Kingdom	hotel	0.49 km
3 🖲	New Street Station	United Kingdom	railroad station	0.51 km
4 🖲	Snow Hill Station	United Kingdom	railroad station	0.51 km
5 🖲	Holiday Inn Birmingham City Centre	United Kingdom	hotel	0.58 km
6 🦻	Malmaison Birmingham	United Kingdom	hotel	0.7 km
7 🦻	Moor Street Station	United Kingdom	railroad station	0.84 km
8 🖲	Nitenite Birmingham Ltd	United Kingdom	hotel	0.87 km
9 🦻	The International Convention Centre	United Kingdom	community center	1.09 km
10	Brasshouse	United Kingdom	school	1.41 km
11	Worcester and Birmingham Canal	United Kingdom	canal	1.54 km

2





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languages

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- Avañe'é
 Aymar aru
- = Bosanski
- Български
- Català
- Чавашла
- Česky
 Cymraeg
- = Dansk
- Deutsch
- Eesti
 Ελληνικά
- Español
- = Esperanto

Birmingham

From Wikipedia, the free encyclopedia

This article is about the city in England. For the U.S. city named after it, see Birmingham, Alabama. For other uses, see Birmingham (disambiguation).

Birmingham () pronunciation (help-info), //b3:mIŋəm/ BIRR-ming-əm) is a city and metropolitan borough in the West Midlands county of England. Birmingham is the most populous of England's core cities, and is the second most populated British city after London, with a population of 1,010,200 (2005 estimate). Often considered to be the second city of the United Kingdom^[2], the City of Birmingham forms part of the larger West Midlands conurbation, which has a population of 2,284,093 (2001 census)^[3] and includes several neighbouring towns and cities, such as Solihull, Wolverhampton and the towns of the Black Country.

The city's reputation was forged as a powerhouse of the Industrial Revolution in England, a fact which led to Birmingham being known as "the workshop of the world" or the "city of a thousand trades".^[4] Although Birmingham's industrial importance has declined, it has developed into a national commercial centre, being named as the third best place in the United Kingdom to locate a business, and the 21st best in Europe by Cushman & Wakefield in 2007.^[5] It is also the fourth most visited city by foreign visitors in the UK.^[6] In 1998, Birmingham hosted the G8 summit at the International Convention Centre, on the site of Bingley Hall, the world's first purpose-built exhibition hall, and remains a popular location for conventions today along with the National Exhibition Centre in nearby Solihull.^[7] In 2007, Birmingham was ranked as the 55th most livable city in the world, according to the Mercer Index of worldwide standards of living.^[8]

conventions today along with the National Exhibition Centre in nearby Solihull.^[7] In 2007, Birmingham was ranked as the 55th most livable city the world, according to the Mercer Index of worldwide standards of living.^[8] People from Birmingham are known as 'Brummies', a term derived from the city's nickname of *Brum*. This comes in turn from the city's dialect name, Brummagem,^[9] which is derived from one of the city's earlier names, 'Bromwicham'. There is a distinctive Brummie dialect and accent,

both of which differ from the adjacent Black Country.

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Contents (hide)



Coordinates: 🌍 52°29′1″N 1°54′23″W

Birmingham

City and Metropolitan borough

City of Birmingham

The LOD "Cloud" - July 2007



The LOD "Cloud" - August 2007



The LOD "Cloud" - November 2007



The LOD "Cloud" – Feb 2008



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The LOD "Cloud" – Sept 2008





Linked Data Applications





talis[®] DBpedia Mobile







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The Prestige

Links

Homepage: <u>http://theprestige.movies.go.com/</u> See Also: <u>http://imdb.com/title/tt0482571/</u>

Tags

christian-bale christopher-nolan drama entertainment film hugh-jackman illusion magic michael-caine movie murder period scarlett-johansson science-fiction whodunnit

Reviews (1)

This is a drama about intense rivalry between stage magicians in the late 19th Century. The evocation of the period, although first rate, is not the main attraction, however. The Prestige has an incredibly clever plot including the most ingenious murder I've ever come across. It also has a deeply moving and sad love story hidden in it, which gradually emerges over the course of the film.

The film requires a strong suspension of disbelief on some key points: there is a science-fiction premise which is introduced using the real historical character of Nikola Tesla (I'd rather they had used a fictional scientist). There are a couple more implausibilities required to hold it together (something odd that goes on that none of the characters pick up on and a dead-end that by a huge coincidence turns out not to be a dead-end: I can't be more specific without spoiling the plot).

However, rather than feeling cheated by these aspects of the film, I'm hugely impressed. The writers have taken an implausible (okay, impossible) premise but created an intricate, involving and visual story that would be impossible without that premise. Scenes join up with each other in many subtle ways, echoing the same writers' earlier film Memento. Even when you've seen the twist coming, the final scene which lays it all out are has a lot of impact and I suspect the final shot will haunt my dreams.

I expected the film to be about nice costumes or impressive magical trickery, but it is actually about deep emotions felt by the main characters as they deal with the situations life has dealt them, and it rather than serving up those emotions on a plate, it requires you to think and piece together what you've seen. That's got to be a good thing, in fact the best of what film a be.

What do you think of The Prestige? Write Your Own Review...

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# **Ongoing Challenges**



 When data can be easily integrated from multiple sources, what new forms of user interaction may be possible?



# Attribution and Licensing in the Web of Data

- When data can be easily integrated from multiple sources, how do we communicate the source and licensing conditions of each each fragment?
- How do we convey the credibility of each source that makes up the integrated view?

# Understanding New Business Models in the Web of Data

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• When data from multiple sources can be easily transported, reused and integrated, how do each of the individual data providers generate revenue from their data?



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  - http://linkeddata.org