



WORLD WIDE WEB
c o n s o r t i u m[®]
Australian Office

Introduction and Applications of the Semantic Web

Slides by: Ivan Herman, W3C



<http://www.w3.org/2009/Talks/05-Oz-IntroSW-IH/>
<http://www.w3.org/2009/Talks/0615-SanJose-tutorial-IH/>

***Let's organize a trip to Budapest from
Amsterdam using the Web!***

You try to find a proper flight with ...

... a big, reputable airline, or ...

Book flights - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.klm.com/travel/nl_nl/apps/ebt/ebt_home.htm

Stel hier uw vraag (in me ?)

KLM Royal Dutch Airlines **nwa**

Book flights You are not logged in

1 Vlucht zoeken 2 Datum kiezen 3 Tijd kiezen 4 Uw gegevens 5 Bekijken & betalen

Contact KLM Service Center

E-mail een vriend(in) Print deze pagina

Kies uw heen- en terugvlucht.

Vertrek: Amsterdam (Schiphol) naar Boedapest (Ferihegy Airport)

☒ Alleen vluchten gebaseerd op Alleen de beste verbindingen (10 van 13)

☐ Alleen rechtstreekse vluchten tonen (5 van 13)

☐ Laagste tarieven (9 van 13)

☐ Alle vluchten (13)

Kies	Prijs	Vertrek	Aankomst	Vlucht
Rechtstreekse vluchten				
<input checked="" type="radio"/>		10:00 Vr 15 Aug 08 Amsterdam (Schiphol) Totale reistijd: 2 uren 0 minuten Uitgevoerd door MALEV Hungarian Airlines Vliegtuigtype :Boeing 737	12:00 Vr 15 Aug 08 Boedapest (Ferihegy Airport)	KL3201
<input type="radio"/>		12:20 Vr 15 Aug 08 Amsterdam (Schiphol) Totale reistijd: 2 uren 0 minuten Uitgevoerd door MALEV Hungarian Airlines Vliegtuigtype :Boeing 737	14:20 Vr 15 Aug 08 Boedapest (Ferihegy Airport)	KL3203

Kies tarief

Take Off

RETOUR tarieven per persoon incl. belasting en toeslagen (excl. reserveringskosten)

Take Off (25% FB Miles)

300

☒ Geselecteerd

Take Off

341

Selecteer

Take Off (Flexibel)

383
455
537

... the airline of the target country, or ...

Review - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://booking.malev.com/BookingSite/Review/Review.aspx

BOOK YOUR TRIP
FLIGHTS, SCHEDULES
PREPARE FOR FLIGHT
FLYING WITH MALEV
DUNA CLUB
CUSTOMER CARE
CORPORATE INFO






MALEV Hungarian Airlines
ONE MORE REASON TO TRAVEL

English


1 Search 2 Select 3 Review 4 Traveller data 5 Purchase 6 Confirmation

SELECT DELIVERY METHOD

Please select ticket delivery method below!

Delivery method	Service fee	Address
<input checked="" type="radio"/>  E-ticket View service fee breakdown	EUR 10	with e-invoice
<input type="radio"/>  Airport	EUR 30	KLM ticket office, departure hall 2.
<input type="radio"/>  Office	EUR 30	KLM ticket office, departure hall 2.
<input type="radio"/>  Courier		Courier or mail delivery is available only within the country of departure! You will be asked to provide a delivery address on the next page. Please note that in case of courier delivery we will be unable to deliver your ticket(s) to a PO box.
<input type="radio"/>  Mail	EUR 30	

BOOKING GUIDE
Book Cheap!
Card payment
About ticket pickup
If you are not among the travellers
Online Client Service


Check it!

FLIGHT SUMMARY

Outbound flight		Return flight	
From:	Amsterdam, Schiphol (AMS), Netherlands	From:	Budapest, Ferihegy 2A (BUD), Hungary
	Budapest, Ferihegy 2A (BUD).	To:	Amsterdam, Schiphol (AMS),

... or a low cost one

Online booking | Select Flights - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://wizzair.com/skylights/cgi-bin/skylights.cgi?step=1

W!ZZ wizzair.com

new destination from London Luton:
Timisoara (from 17 December)

online booking useful information destinations travel services partners

tant changes regarding checked-in baggages - Please click here for more details...

flights agency login my account search bookings log in

Book a Flight

Round Trip One Way

From: Eindhoven

To: Budapest-Terminal 1

Depart: 14 Aug


Return: 03 Sep

Passengers: 1 Adult Over 14 years 0 Child 2 to 14 years

search select contact passengers purchase confirmation

The flights available for the date(s) that you have selected are shown below. Review and select that you wish to purchase by ticking the dot next to the fare price or use the form to the left ha search for new flights. All times are local.

Fares shown below are for one way flights and per adult, child and infant. The total price includes the taxes and the charges. Payments made with debit and credit cards are subject to a payment [Click here](#) to find out the exact amount. The fee depends on the type of card that you wish to u payment.

going out 

Eindhoven » Budapest-Terminal 1

date	fareclass	flight	departs	arrives		price excluding tax	taxes and charges
Fri 15 Aug 08	Web	W6 228	13:25	15:20	<input type="radio"/>	Adult 94.99 EUR	26.00 EUR
Sun 17 Aug 08	Web	W6 228	13:25	15:20	<input type="radio"/>	Adult 73.99 EUR	26.00 EUR

Next Week >

You have to find a hotel, so you look for...

... a really cheap accommodation, or ...

Hostels - online booking at Youth Hostels and Backpackers Hostels - instant online reservations and reviews with HostelTraveler.co...

File Edit View History Bookmarks Tools Help

http://www.hosteltraveler.com/index.php

HostelTraveler.com

Hostel Traveler ... instant online booking for youth hostels, budget hotels and hostelling the globe

Welcome member travelers! [Sign in](#)

[Hostels](#) [Reviews](#) [Best deals](#) [Top Cities](#)

everything for travelers.

[Search Hotels/Cities](#)

[Check Reservations](#)

[Free Membership](#)

Find Hostels and Lodging at your destinations.

Look for **IWB** for instant online booking.

[How it Works](#)

[Step 1-Find Lodging](#)

[Step 2-Make Reservations](#)

Secure online hostel booking at worldwide youth hostels, backpackers, and budget hotels.

[Home](#)

[Start Over](#)

[Members](#)

[Lodging Operators](#)

[About this Site](#)

[Selection Status](#)

3 accommodations have been found matching your criteria.

Select your accommodations and click [Make Reservations](#) for rates, availability, and reservations.



Click on names to see photos, reviews, and more information.

Tip: Click [Instant](#) for rates and instant secure confirmations.

Sort by: [Price \(Lo-Hi\)](#) [Price \(Hi-Lo\)](#) [Traveler Rating](#) [Hostel Class](#) [Hostel Name](#)

[View Advanced Display Options](#)

Balaton, Hungary [Make Reservations](#)

<input type="checkbox"/>	Unity Hostel Balaton Rakoczi Ut 268 Hostel 8 Units Write a Review			From €12 2hours from Budapest,we are located right behind a free beach access to the lake, right opposite a large shopping and dinning court, only few minutes from the best clubs.lots of freebies!!!
--------------------------	---	--	---	--

... or a really luxurious one, or ...

Search Results - Mozilla Firefox

File Edit View History Bookmarks Tools Help


http://www.hilton.com/en/hj/hotels/search/newresults.jhtml?searchType=city&stat

Hilton
Travel should take you places®

Sign in Username or HHonors #: Password or PIN: Register Forgot password? ☐ Remember Me View Text Only Customer Support 1-800-HILTONS

Specials & Packages Reservations Meetings Social Gatherings Hilton HHonors Things to Do eBrochures My Favorites

Search Results



Change Your Search

Location
City: Budapest
Search Within: 40 mi km
State/Province: State / Province
Country: Hungary


Brand
☒ Hilton Hotels
☐ All Hilton Family Hotels


Search Results Print Help

The following locations matched your request.
Rates displayed may be non-refundable.
Please review rate rules and restrictions prior to booking your stay.

Sort by: Brand Show: All Hotels Go View Hotels on a Map >

Hilton Hotels

 **Hilton Budapest WestEnd** Compare Hotel

 Vaci ut 1-3
Budapest, Hungary, 1062
36-1-288-5500 Available

... an intermediate one ...

Szállás Utazás Magyarországon - Wellness-Szállás, Nyaralás, Utazás, Programok - Magyarországon - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.travelsinhungary.hu/view_kat.php?katid=1&megye=budapest

TRAVELS IN HUNGARY
www.travelsinhungary.hu

MAGYAR ENGLISH DEUTSCH

Keresés Az összes kategóriában OK

TÖRZSVENDÉG KEDVEZMÉNYEK

REGISZTRÁCIÓ

ELÉRHETŐSÉG

VENDÉGKÖNYV

Szállás (Wellness, Aktív pihenés, Gyógyturizmus)

Étterem

Programok, Látnivalók

Szórakozás (Élményfürdők, Kalandparkok)

Rendezényszervezés (konferenciák-tréningek)

AJÁNLATOK

Szálláshely \ Budapest

Válasszon megyét:
Válasszon!

Válasszon várost:
Válasszon!

Ajánlatok száma a kategóriában: 1.

Airport Hotel Budapest*****

SZÁLLÁSHELY
Budapest(Vecsés)
Ferihegyi repülőtéri szálloda és konferencia központ
részletesen...

oops, that is no good, the page is in Hungarian that almost nobody understands, but...

... this one could work

Bestwestern.com, the World's Largest Hotel Chain - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://book.bestwestern.com/bestwestern/selectHotel.do?ata=00158210

Customer Service Rewards Program Gift Card Groups & Meetings

Best Western

Welcome to bestwestern.com®

My Profile

Email or Member#:

Password:

SIGN-IN

Forgot Password
Create Password
Enroll Now

HOME FIND A HOTEL CHECK RESERVATIONS TRIP PLANNER PROMOTIONS & PROGRAMS PACKAGES

RESERVATIONS HOTEL LOCATIONS BEST WESTERN PREMIER HOTELS NEW HOTELS QUESTIONS & ANSWERS

→ **Hotel Search Results** ← Select Occupancy Select Room Review & Reserve Confirmation

Find a Hotel - Select Hotel

Page: 1

Modify Your Search:

City:

Select State or Province:

Select Country:

Check-In:

Check-Out:

Features & Amenities:

☐ High Speed Internet


☐ Complimentary Breakfast

☐ Breakfast Available


5 Hotels Found within of the **Budapest** Area

Show: By:

Display Currency In:


 [Show Hotels on a Map](#)

Best Western Hotel Hungaria



Stay at this 4-star Budapest hotel offering guests deluxe accommodations near some of Budapest's popular attractions and business locations. Visitors... [More >](#)

[Photo Gallery](#)

 [Pet Policy](#)

Rákóczi Ut 90,
Budapest, H-1074, Hungary
Distance from City Center: 0.86m / 1.38km

Hotel not available on selected dates.

[Check Alternate Dates](#)

Of course, you could decide to trust a specialized site...

... like this one, or...

Create your package from Amsterdam to Budapest (and vicinity) - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.expedia.com/pub/agent.dll?qscr=cmsh&subm=1&CMBTX_0_rgnm=Bud

Welcome - Already a member
My Itineraries | My Account | Customer Support

Search Expedia

Home Flights Hotels Cars **Vacation Packages** Cruises Activities DEALS & OFFERS Maps Business Travel Rewards

Start search over

Change your search

Departing: 8/18/2008

Returning: 9/3/2008

Star Rating: Show all

Lodging Type: Show All

Name contains:

Go

Change Travelers

2 Adults
1 Room
Change travelers

Create your package from Amsterdam to Budapest (and vicinity)

Maps: Area map view Hotel map view


Hotel amenities: Narrow your search

Show hotels in this area:
Budapest (and vicinity) (all areas) Go

Not what you're looking for? Choose a different destination

View packages: 1 - 25 26 - 50 51 - 75 76 - 97 Previous | Next

Sort by: ☒ Expedia Picks ☐ Price ☐ Hotel Name ☐ City ☐ Star Rating ☐ Traveler Opinion

Avg/person: \$2889	
 <p>Corinthia Grand Hotel Royal Impressive landmark building with imposing Neo-classical façade and soaring glass atrium, set on Pest's busy Erzsébet Avenue, and housing shops, a spa, ... More lodging info Hotel promotion - Stay 3 Nights and Save 20% on Your Stay! ★★★★★ Budapest, PEST Executive Double-Executive lounge usage Check in: 8/18/08 Includes: Free Wireless Internet, Spa Check out: 9/03/08 Credit, Breakfast Buffet</p>	<p>Total: Price details \$5778 Get ThankYou® Points</p> <p>Traveler Opinion 4.7 out of 5 15+ reviews</p>
<p>Amsterdam (AMS) to Budapest (BUD) Depart: 8/18/08 6:00 PM - 8:00 PM Malev Hungarian Airlines</p>	

1-800-55
Call now
for the same
great deals
plus expert
advice

... or this one

Budapest Hotels: Read Budapest Hotel Reviews and Compare Prices - TripAdvisor - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.tripadvisor.com/Hotels-g274887-Budapest-Hotels.html

est tourist

My TripAdvisor
Register Now!

22,582,888 Travelers from 190 Countries Planned Trips Here This Week!

Home Destinations Fun & Games Just For Members

Home → Europe → Hungary → Budapest

Budapest Hotels

ADD TO MY MAP WRITE A REVIEW EMA

Hotels (272) B&Bs / Inns (24) Specialty Lodging (83)

Find Hotels Travelers Trust

Check-in: Any date
mm/dd/yyyy

Check-out: Any date
mm/dd/yyyy

☒ My dates are flexible

Price: Any Price U.S. Dollars
Hotel class: Any Class Adults: 2

Recommended For: All

Best deals: Budapest hotels

- [Budapest. Boek en bespaar tot 75%.](#)
Booking.com Geen reserveringskosten!
- [Great Budapest Hotels](#)
www.Venere.com/Budapest_Hotels See maps & pics, read book online. Relax and enjoy your stay!
- [Budapest easyHotel Deals](#)
www.easyHotel.com City Centre from just €15 per night from founder of easyJet
- [Cheap Hotels Budapest](#)
www.otel.com/BudapestHotels Fantastic rates on Budapest Huge Savings, Instant Confirmation!

[View all deals for Budapest](#)

Recommended Hotels

(1-20 of 272)

Sort by: Popularity [next >>](#)

Free Budapest Guide

Get the best picks for where to eat and play.

[Download pdf](#)

***You may want to know something
about Budapest; look for some photo-
graphs...***

... on flickr ...

Flickr: Budapest - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.flickr.com/groups/budapest/

Signed in as Ivan Herman Help Sign Out

Home You Organize Contacts Groups Explore

Search this group's pool Search

Budapest Share This

Group Pool Discussion 1,418 Members Map Invite Friends

Group Pool (19,017 items | Add photos or video)

NEW From apuc

NEW From André Fromont

NEW From carlogambino

NEW From carlogambino

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

NEW From Crashbandi

» More

Discussion (33 posts | Post a new topic)

... on Google ...

budapest - Google Image Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://images.google.nl/images?hl=en&q=budapest&btnG=Search+Images&gbv=2

Web Images Maps News Video Gmail more

Sign in

Google

budapest

Search Images Search the Web Advanced Image Search Preferences

Moderate SafeSearch is on

Images Showing: All image sizes

Results 1 - 18 of about 19,900,000 for [budapest](#) [definition]. (0.25 seconds)

E-mail this photo E-mail.
Budapest
550 x 412 - 40k - jpg
www.tripadvisor.com

Budapest, Hungary
450 x 338 - 43k - jpg
www.transitionsabroad.com

Budapest looks its most beautiful at ...
1024 x 768 - 161k - jpg
web.kvif.bgf.hu

Beautiful-Budapest
430 x 320 - 34k - jpg
www.budapesthotels.com
[More from
www.budapesthotels.com]

Hotel Victoria Budapest
575 x 473 - 92k - jpg
www.victoria.hu

Fly to Budapest and experience one ...
909 x 682 - 347k - jpg
www.sterling.dk

Danube Bridge Elisabeth in Budapest ...
1024 x 768 - 194k - jpg
budapest5.freeblog.hu

Budapest had 2421831 inhabitants in ...
422 x 425 - 29k - jpg
www.squidoo.com

budapest night
575 x 352 - 206k - jpg
www.wayfaring.info

Budapest - Things to Do with a Day ...
400 x 300 - 32k - jpg
cruises.about.com

Jewish Cultural Heritage in Budapest
452 x 360 - 67k
www.budapesthotels.com

Hungary, Budapest, Parliament
640 x 480 - 199k - jpg
www.hungary.travelphotoguide.co

... or you can look at mine 😊

Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.ivan-herman.net/Photos/JAlbum/Budapest/

distributed hash

View Theme Print Download (103 photos)

19 of 103

Táncsis Mihály utca, Budapest

(19 of 103 photos) delay=5

Published by Digital Photo Librarian

...or at a (social) travel site

Budapest Travel Guide | Budapest Tourism - RealTravel - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://realtravel.com/budapest-hungary-travel-guide-d13081-1.html

realtravel™ Real People. Real Advice. Real Experiences.™

Free Travel Blog | Free Trip Planner | Sign

Travel Guides | Hotels | Attractions | Things To Do | Editor's Picks | Deals

Search

You are here: Destinations > Europe > Hungary > Budapest > Travel Guide

BUDAPEST TRAVEL GUIDE AND TOURISM

Introduction | **Guides** | Trips | Photos | Flights | Hotels | Restaurants | Attractions | Deals




photo by Taisteal

[more Budapest photos >](#)
[Destinations near Budapest >](#)

Budapest Travel Guide

This capital city - made up of two parts, Buda and Pest - sits on one of the most beautiful areas of the Danube River and it shows. Often dubbed the "Paris of Eastern Europe", it is a combination of Old World grandeur and a thriving cultural scene. Budapest has a vibrancy and vitality that never slows and the numerous sights can occupy travelers for weeks. With so much history and culture to explore, no traveler leaves unsatisfied.

Price Compare Tool

Search multiple sites for the best rate in Budapest

[COMPARE FLIGHTS](#)

[COMPARE HOTELS](#)

Travel Guide Information From Our Partners

What happened here?

- You had to consult a large number of sites, all different in style, purpose, possibly language...
- You had to mentally *integrate* all those information to achieve your goals
- We all know that, sometimes, this is a long and tedious process!

- All those pages are only tips of respective icebergs:
 - the real *data* is hidden somewhere in databases, XML files, Excel sheets, ...
 - you have only access to what the Web page designers allow you to see

- Specialized sites (Expedia, TripAdvisor) do a bit more:
 - they gather and combine data from other sources (usually with the approval of the data owners)
 - but they still control how you see those sources
- But sometimes you want to personalize: access the original data and combine it yourself!
- The value is in the *combination* of the data

Here is another example...

CoCoDat - Collation of Cortical Data - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.cocomac.org

CoCoMac DATABASES ORT EXAMPLES

CoCoDat: Collation of Cortical [microcircuitry] Data

CoCoDat is a microcircuitry database that published experimental reports. The data and cellular compartment), as well as the

- Morphology
- Firing properties
- Ionic currents
- Ionic conductances
- Synaptic currents
- Connectivity

The database is available for download u data tables but also a Search Board with p manual or automatic relaxation of the sea

- Brain region
- Layer
- Neuron type

http://www.cocomac.org/cocodat/catalyzer/inc

Cell Centered Database - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://ccdb.ucsd.edu/sand/main?event=gallery&action=show&dpl=y

red database

Cell Centered Database™ Gallery

National Center for Microscopy and Imaging Research

Data | Search | Gallery | Dictionary | Publications | MyCCDB | Data Download | Contact us | Help

2D image Reconstruction Segmentation Animation

NeuronDB - Thalamic relay neuron - Overview (A) () - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://senselab.med.yale.edu

senselab

NeuronDB

Thalamic relay neuron

Back

Mode: **Overview** Data/Search plus Connectivity plus Classical References/Notes Models

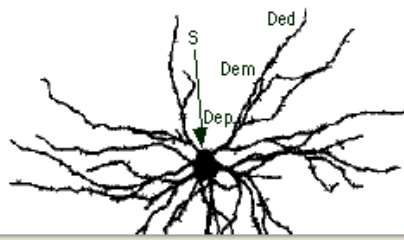
Region: Distal equivalent dendrite Middle equivalent dendrite Proximal equivalent dendrite Soma Axon hillock Axon fiber Axon terminal All Compartments

Properties: Receptors Channels Transmitters **All Properties**

Interoperation: Gene and Chromosome Experimental Data (neurodatabase.org) Microscopy Data (CCDB)

Neuron type: principal

Organism: Vertebrates



1. Equivalent dendrite
2. Distal equivalent dendrite
3. Middle equivalent dendrite
4. Proximal equivalent dendrite
5. Soma

Show other

Show other

Show other

Show other

Show other

Show other

Done

logged out

Another example: social sites. I have a list of “friends” by...

... Dopplr,

DOPPLR: Ivan Herman's fellow travellers - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.dopplr.com/traveller/IvanHerman/fellows

W easy jet

DOPPLR FOR IVAN

Find and Invite | Your connections | Your trips | Your account | Sign out


Visit our blog for updates

Where Next? { Gent, Boston, Vienna... }

+ Add a trip

Type the name of a city or a traveller

Find people and places



Welcome, Ivan

In the last 2 weeks,
one of your fellow travellers added a trip that coincides with you. [Find out more in your journal...](#)

You are at home in [Amsterdam](#).






You can [invite](#) people to Dopplr to see your trips, find them on [other networks](#) you use
or look for [travellers you already know](#) to encourage more coincidences.

You have a [public profile](#). [Edit it?](#)

You can now create a public profile to display to the whole internet if you want, not just Dopplr users — and take
any of the information to embed on your own website. [Give it a try!](#)

Your trips | Fellow travellers | Your journal | Your carbon

List or Map

-  Peter Brown is in [Montréal](#) until August 16th. [Boston](#) soon. [Montréal](#) later.
-  Daniel Appelquist is in [Washington](#) until August 23rd. [Aspen](#) soon. [Washington](#) later.
-  Eva Méndez is in [Maraña](#) until August 17th. [Santo Domingo](#) later.
-  Danny Weitzner is in [Bergen](#) until September 5th. [Los Angeles](#) later.
-  Charlton Barreto is in [Vienna](#) until August 18th. [Sacramento](#) soon. [Vienna](#) later.

... Twine,

My Connections | Twine - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.twine.com/user/ivanherman/connections

BETA INVITE-ONLY twine

ivanherman Logout Account

Home My Items My Twines My Connections Explore Start a Twine

Search Twine

My Connections


Search within My Connections...

View All Sort by Most Recent


Refine your view by...

You can also filter by selecting from the following categories.


related twines



Dean Allemang
at home
Oakland, CA
3 Twines | 4 Items
[Send Message](#) | [Disconnect](#)



David Provost
Breathing
Boston
20 Twines | 15 Items
[Send Message](#) | [Disconnect](#)




Attila Gardos
Hungary, Budapest
9 Twines | 8 Items
[Send Message](#) | [Disconnect](#)


[Connect with People](#)

[Invite People to Twine](#)


Recommended My Connections




jim
got my
san fra
83 Twi



Steve
Seattle
38 Twi



James
living in
95008
122 Twi



Chris
All rea
Mill Val
73 Twi

... LinkedIn,

LinkedIn: My Contacts: Connections - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.linkedin.com/connections?trk=hb_side_cnts

Account & Settings | Help | Sign Out | Language

Advanced Search People Search

Home Groups Profile **Contacts** Inbox (19)

Add Connections

Contacts

Connections Imported Contacts Network Statistics Add Connections

Connections

☐ Show contacts with new connections advanced options

Showing 311 of 311 connections. 15 outstanding sent invitations

A	Aasman, Jans Ja@franz.com View & edit details »	CEO at Franz Inc	252
B			
C			
D			
E	Abramatic, Jean-François jfa@ilooq.fr View & edit details »	Chief Product Officer at ILOG	163
F			
G			
H	Adida, Ben ben@adida.net View & edit details »	Software Security Researcher and Entrepreneur	148
I			
J			
K	Allemang, Dean dino-link@happydino.com View & edit details »	Chief Scientist at TopQuadrant Inc.	179
L			
M			
N	Allison, Kevin kevin.allison@ft.com View & edit details »	San Francisco Correspondent at The Financial Times	152
O			
P			
Q			
R	Alonso, Jose Manuel jalonso@w3.org View & edit details »	eGovernment Lead at W3C	106
S			
T			

Ivan Herman
Semantic Web Activity Lead, World Wide Web Consortium
What are you working on?
Your profile is 80% complete [Edit]

... and, of course, Facebook

The screenshot shows the Facebook 'All Friends' page in a Mozilla Firefox browser window. The address bar displays the URL: <http://www.new.facebook.com/friends/#/friends/?fclid=0&view=everyone&>. The page header includes the Facebook logo, the user's name 'Ivan Herman', and navigation links for 'Friends', 'Applications', and 'Inbox'. A search bar is located in the top right corner.

The main content area is titled 'All Friends' and features a 'Friend Lists' sidebar on the left. The sidebar includes links to 'All Friends', 'CWI', 'Family', 'IW3C2', and 'W3C Team', along with a 'Make a New List' button. Below the sidebar, there are sections for 'Find Friends' and 'Invite your friends to join Facebook'.

The main content area displays a list of friends. At the top, there are tabs for 'Showing: Status Updates', 'Recently Updated', 'Phonebook', and 'Everyone'. A search bar for friends is also present. Below the tabs, a dropdown menu for 'Show:' is set to 'Choose an option...'. The text 'You have 137 friends.' is displayed, followed by a pagination link '1 2 3 Next'. The list of friends includes:

- Shadi Abou-Zahra** (with profile picture)
- Ross Ackland** (with placeholder profile picture)
- Ben Adida** (with profile picture)
- Anupriya Ankolekar** (with placeholder profile picture)
- Daniel Appelquist** is hanging out in Aspen. (with profile picture and status update)
- Lora Aroyo** (with placeholder profile picture)

Each friend entry includes a small icon and a close button (X). The right sidebar contains advertisements, including 'Advertise', 'Make mo', 'Discover Ali world n°1 o marketplace', 'Do You T Photos?', 'Make your c book, from', and 'More Ads'.

- I had to type in and connect with friends again and again for each site independently 😞
- This is even worse then before: / feed the icebergs, but I still do not have an easy access to data...

What would we like to have?

- Use the data on the Web the same way as we do with documents:
 - be able to link to data (independently of their presentation)
 - use that data the way I want (present it, mine it, etc)
 - agents, programs, scripts, etc, should be able to *interpret* part of that data

Put it another way...

- We would like to *extend* the current Web to a “Web of data”:
 - allow for applications to exploit the data directly

But wait! Isn't what mashup sites are already doing?

A “mashup” example:

Triplt | Organize your travel - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.tripit.com/trip/show/id/858966

View Change Log

Trip Details

Summary View Expanded View

Thursday, July 24, 2008

Budapest, Hungary (Edit)
Avg: Sunny / Hi 28°C / Lo 14°C

Add Plans

Flight from Amsterdam (AMS) to Zurich (ZRH)

edit | delete | copy | move

FLIGHT 14:55 CEST	Swiss International Airlines 729	Depart: Amsterdam (AMS), 14:55 CEST	nonstop 1h 25min aircraft Airbus A320-100/200 374 miles	Conf. # JFFRAL
	Arrive: Zurich (ZRH), 16:20 CEST			

Connects to: LX 2258 at 17:20 CEST

Passengers Ivan Herman Eva Boka ep Herman	Booking Information Booked on 18/4/2008 http://www.swiss.com
--	--

Flight from Zurich (ZRH) to Budapest (BUD)

edit | delete | copy | move

FLIGHT 17:20 CEST	Swiss International Airlines 2258	Depart: Zurich (ZRH), 17:20 CEST	nonstop 1h 35min aircraft Fokker 100 500 miles	Conf. # JFFRAL
	Arrive: Budapest (BUD), 18:55 CEST			

Passenger(s): Ivan Herman, Eva Boka ep Herman.

Map of Budapest, Hungary

delete |

Budapest, Hungary

Map Satellite Hybrid

- In some ways, yes, and that shows the huge power of what such Web of data provides
- But mashup sites are forced to do very ad-hoc jobs
 - various data sources expose their data via Web Services
 - each with a different API, a different logic, different structure
 - these sites are forced to reinvent the wheel many times because there is no standard way of doing things

Put it another way (again)...

- We would like to extend the current Web to a standard way for a “Web of data”

But what does this mean?

- What makes the current (document) Web work?
 - people create different documents
 - they give an address to it (ie, a URI) and make it accessible to others on the Web

Steven's site on Amsterdam (done for some visiting friends)

The Internet Guide to Amsterdam - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://homepages.cwi.nl/~steven/amsterdam.html



The Internet Guide to Amsterdam

Contents

- [Introduction](#)
- [Time](#)
- [Weather](#)
- [Language](#)
- [Money](#)
- [Tipping](#)
- [Electricity](#)
- [Safety and Health](#)
- [Hotels](#)
- [Eating and Drinking](#)
- [Transport](#)
- [Shopping](#)
- [News](#)
- [Communications](#)
- [Places to See](#)
- [What's On](#)
- [The Amsterdam Year](#)
- [Maps](#)
- [Books](#)
- [Other Resources](#)

Designed to be printed out and taken with you.

Written by [Steven Pemberton](#), CWI, Amsterdam, and Astrid Kerssens, Amsterdam.

Linked to by more than 450 other sites; more than **3,500,000** grunted readers!

The top Amsterdam travel guide according to Google. If you know how Google works, you know that that says something about this site!

See also [London](#)

A Review of this Guide

The Internet Guide To Amsterdam:
WebUser Gold Award
Rating: ★★★★★
Reviewed By: Jane Hoskyn
Sometimes, it's the simple things in life that make your heart skip a beat.
This is especially true when you're abroad and you need a guide that loads really fast on your mobile phone or PDA (check), doesn't involve clicking from page to page to find what you want (check), isn't written in fluffy tourist-board-speak (check), has all the links you need and none of the ones you don't (check), and is put together by someone who loves your destination and knows it better than the insides of his own eyelids (check). Step forward Steven Pemberton, creator of this exemplary guide to having a damn good time in the 'Dam.

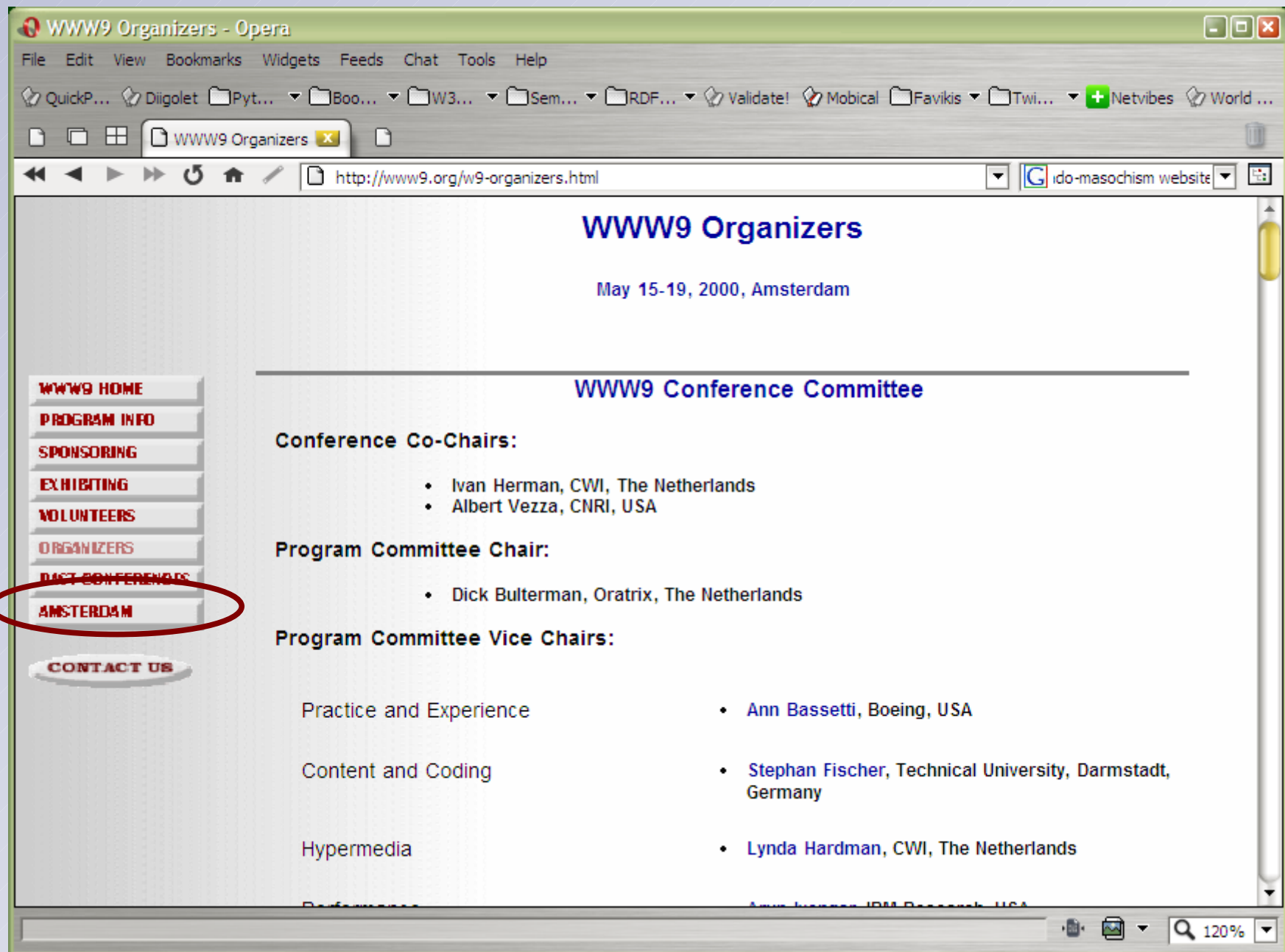
Introduction

Amsterdam is an unusual city in that it has all the advantages of a big city – culture, history, food, entertainment, good

Then some magic happens...

- Others discover the site and they link to it
- The more they link to it, the more important and well known the page becomes
 - remember, this is what, eg, Google exploits!
- This is the “Network effect”: some pages become important, and others begin to rely on it even if the author did not expect it...

This could be expected...



41

but this one, from the other side of the Globe, was not...

Netherlands - Spring Break Information - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://msass.case.edu/international/SPNetherlandsFAQ.html

CASE.EDU: HOME | DIRECTORIES | SEARCH

CASE WESTERN RESERVE UNIVERSITY
MANDEL SCHOOL OF APPLIED SOCIAL SCIENCES

INTERNATIONAL COURSES/PROGRAMS

MSASS | About | Admissions | Programs | Students | Faculty | Research | Library | Calendar | Departments

International Courses

- General Information
- Descriptions by Country
- Passport Application
- Dutch Visa Application
- Previous Trips
- Testimonials

Netherlands - Spring Break Information

Please also see the following links for information on the trip to the Netherlands

- General FAQ
- Applying for a Dutch Visa
- A Students Photo Journal of the Netherlands

What Forms do I need for this Program?

All of the forms you will need are linked from the Forms page.

More information? Check out these links:

Amsterdam Links

Spring Break Trip participants to Amsterdam may familiarize themselves with Amsterdam by visiting the following web sites. On website address nl refers to the Netherlands.

Information on travel outside the United States , including instructions on getting a passport:
<http://travel.state.gov>

A must see website <http://homepages.cwi.nl/~steven/amsterdam.html>

United States Consulate, Amsterdam: <http://www.usemb.nl>

Virtual Tour of Amsterdam: <http://www.channels.nl>

What would that mean for a Web of Data?

- Lessons learned: we should be able to:
 - “publish” the data to make it known on the Web
 - standard ways should be used instead of ad-hoc approaches
 - the analogous approach to documents: *give URI-s to the data*
 - make it possible to “link” to that URI from *other* sources of data (not only Web pages)
 - ie, applications should not be forced to make targeted developments to access the data
 - generic, standard approaches should suffice
 - and let the network effect work its way...

Example: combine data from experiments

- A drug company has huge amount of old experimental data on its Intranet
- Data in different formats (XML, databases, ...)
- To reuse them:
 - make the important facts available on the Web via standards
 - use *off-the-shelf* tool to integrate, display, search

Internal Compound Repurposing Example

Welcome, Allergy & Respiratory Team Member

This tool allows you to identify opportunities for additional uses of compounds from other teams within your project. It combines internal data, public data and the results of case mining experiments to provide testable hypotheses.

Control Panel & Item Filtering

Area	5/2 Approach	3/2 Term+Reason	1/2 Max_Stage_Reached	1/2 Literature Links
20 Pain	<input checked="" type="checkbox"/> 7 Antibody	<input type="checkbox"/> 37 ACTIVE	<input type="checkbox"/> 51 Candidate	<input checked="" type="checkbox"/> 0 - 50
10 Metabolic Disease	<input checked="" type="checkbox"/> 1 Recombinant	<input type="checkbox"/> 12 BIOMARKER	<input type="checkbox"/> 10 Discovery	<input type="checkbox"/>
8 Cancer	<input type="checkbox"/> 18 SM_Agonist	<input checked="" type="checkbox"/> 51 EFFICACY	<input checked="" type="checkbox"/> 41 Exploratory	<input type="checkbox"/>
3 Sexual Health	<input checked="" type="checkbox"/> 12 SM_Antagonist	<input checked="" type="checkbox"/> 11 MARKET	<input type="checkbox"/> 19 HTS	<input type="checkbox"/>
2 Infectives	<input checked="" type="checkbox"/> 21 SM_Inhibitor	<input checked="" type="checkbox"/> 11 REORG	<input type="checkbox"/> 11 Phase I	<input type="checkbox"/>
1 Urogenitals	<input checked="" type="checkbox"/>	<input type="checkbox"/> 10 TOXIC	<input type="checkbox"/> 13 Phase III	<input type="checkbox"/>
			<input type="checkbox"/> 41 Screening	<input type="checkbox"/>

51 items filtered from 710 originally (Reset All Filters)

Area	Original+Indication	Target_Name	Approach	Start	Term+Reason	Max_Stage_Reached	Owner	OMIM	Lit_All	Lit_Lit_2007	Lit_Mech	RNA	GED	Pathway	Compounds
Metabolic Disease	Diabetes	Liver glycogen phosphorylase	SM_Inhibitor	2007-Q2	EFFICACY	Candidate	P. Person								SW-030072
Sexual Health	Erectile Dysfunction	Integrin alpha-3 (Galactose 63)(VLA-3) (CD49C)	SM_Antagonist	2006-Q3	EFFICACY	Candidate	P. Person							1	SW-029782
Sexual Health	Erectile Dysfunction	Leukotriene C4 synthase	SM_Agonist	2006-Q3	EFFICACY	Candidate	M. Manager				1	1			SW-029638
Sexual Health	Erectile Dysfunction	transcription elongation factor A (SII)-like 4	SM_Inhibitor	2005-Q3	EFFICACY	Candidate	P. Person								SW-029626
Infectives	HEV	Putative four repeat ion channel (ix)	SM_Inhibitor	2006-Q2	EFFICACY	Candidate	L. Leader								SW-029994
Infectives	HEV	Voltage-gated potassium channel protein KV1.2 (ix)	SM_Agonist	2007-Q1	EFFICACY	Candidate	A. Scientist							1	SW-029653
Urogenitals	Incontinence	Human RNA binding motif (RBM) gene, partial cds.	SM_Agonist	2007-Q3	EFFICACY	Candidate	L. Leader							1	SW-029684
Pain	Migraine	Monocarboxylate transporter homologue 2 (SLC16A1) (ix)	SM_Inhibitor	2007-Q3	EFFICACY	Candidate	L. Leader	18							SW-030085

But it is a little bit more complicated 🤖

- On the traditional Web, humans are implicitly taken into account
- A Web link has a “context” that a person may use

Eg: address field on my page:

Ivan Herman - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.w3.org/People/Ivan/

W3C

Ivan Herman

[My Work at W3C](#) | [Contact information](#) | [Short CV](#) | [Upcoming trips](#) | [Public presentations](#)

My Work at W3C

I am Semantic Web Activity Lead; that is my main work at W3C. I am member of [IW3C2](#) (International World Wide Web Conference Committee) (the committee coordinating the yearly WWW conference series), serving as a liaison for W3C, and of [SWSA](#) (Semantic Web Science Association), the committee responsible for the International Semantic Web Conferences series.

As part of my work, I also participate in lots of outreach activities, and I regularly make presentations, tutorials, etc. You can consult my [list of presentations](#) for further details.

Contact information

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Phone numbers:
 phone: +31-20-5924163
 mobile phone: +31-641044153
 fax: +31-20-5924312

PGP/GPG:
 My GnuPGP key and signature is available on-line.

FOAF:
 You can either extract a short FOAF information from this page, or consult my more complete, public FOAF file.

Misc:



... leading to this page

Centrum Wiskunde & Informatica | CWI - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.cwi.nl/


home | contact | nl | intranet | Search...

CWI Centrum Wiskunde & Informatica


about cwi | events | library | news | research | scientists

Centrum Wiskunde & Informatica


Centrum Wiskunde & Informatica (CWI) performs fundamental scientific research in mathematics and computer science. CWI transfers the acquired knowledge to society and industry. The institute's strategy for the period up to 2012 is to concentrate research on four broad, societally relevant themes:




Earth & life sciences



The data explosion



Societal logistics




Software as service

News

13-10-08

PhD defence Jarek Byrka



22-09-08

Best Paper Award for SMIL State research

At the ACM DocEngineering Symposium in Sao Paulo, Brazil, from 16 till 19 September, CWI researchers Jack Jansen and Dick Bulterman received the Best Paper Award.

[read more](#)

Agenda

18-10-08

Science Day at the Science Park Amsterdam

At Science Day the Science Park Amsterdam will be open for This year the theme of Science Day is 'Crack the code'. CWI workshops en demonstrations within this theme for every age

[read more](#)

21-10-08

MAS Seminar, speaker Svetlana Dubinkina

Two speaker session

Tea starting at 10.00

Room: M279

Speakers:

1. Svetlana Dubinkina, CWI MAS 1, tba
2. James Glazier, University of Indiana Bloomington, tba

[read more](#)

28-10-08

MAS Seminar, speaker Peter Sonneveld

- A human understands that this is an institution's home page
- He/she knows what it means (realizes that it is a research institute in the Netherlands)
- On a Web of Data, something is missing; machines can't make sense of the link alone

- New lesson learned:
 - extra information (“label”) must be added to a link: “this links to an institution, which is a research institute”
 - this information should be machine readable
- This is a *characterization* (or “classification”) of *both* the link *and* its target
 - in some cases, the classification should allow for some limited “reasoning”
 - eg, if an address refers to Amsterdam, then this means it is also in the Netherlands

Let us put it together

- What we need for a Web of Data:
 - use URI-s to publish data (not only full documents)
 - allow the data to link to other data
 - characterize/classify the data and the links (the “terms”) to convey some extra meaning
 - and use standards for all these!

So What is the Semantic Web?

It is a collection of standard technologies to realize a Web of Data

- It is that simple...
- Of course, the devil is in the details
 - a common model has to be provided for machines to describe, query, etc, the data and their connections
 - technologies should be around to “export” the data
 - the “classification” of the terms can become very complex for specific knowledge areas: this is where ontologies, thesauri, etc, enter the game...
 - but these details are fleshed out by experts as we speak!



Example: find the right experts at NASA

- NASA has nearly 70,000 civil servants over the whole of the US
- Their expertise is described in 6-7 databases, geographically distributed, with different data formats, access types...
- Task: find the right expert for a specific task within NASA!

Example: find the right experts at NASA

- Approach: integrate all the data with standard means, and describe the data and links using generic (and simple) vocabularies

POPS v.28.3 – Connected to 'POPS on FatDuck' – Using Model 'POPS on FatDuck Model' – Logged in as 'Michael Grove'

File Options Bookmarks Advanced Help

NASA Center (15) Source: x500

- ARC
- DFRC
- GRC
- GSFC**
- HQ
- IVV
- JPL
- JSC
- KSC
- LARC
- MAF
- MSFC

Project (176) Source: WIMS

- Mars Global Surveyor
- Mars Odyssey 2001
- Mars R&A
- Mars Reconnaissance Orbiter 2005 (...)
- Messenger
- Minor Revital
- Mission Operations
- Mission Science Guest Investigator
- Mission Success – Center Specific
- Multi-Mission Operations
- NMP Program Management and Futur...
- NPP/ESS Preparatory Project (NPP)

Competency (21) Source: CMS

- Astrobiology
- Astronomy and Astrophysics
- Climate Change and Variability
- Earth Atmosphere
- Earth Science Applications Research
- Earth System Modeling
- Fluid Physics
- Fundamental Physics
- Geophysical/Geologic Science
- Geospatial Science and Technologies**
- Icing Physics
- Laser Technology

People (1) Source: ...

- Jeanne M ...

Information Panel

View Different Social Network's Present in the Data

POPS

Jeanne M ...
Skill: Earth Sciences Competency Suite
Project: Center Investment Accounts

Facility: HQ

Michael H Grove

Jeffrey T ...

Michael Grove
Name: Michael Grove
Email: @nasa.gov
Phone: 301.
Employer: Clark and Parsia

Legend:

- Same Skill and Same Department
- Same Skill and Same Project
- Same Skill, Project, and Facility
- Am I Connected?

1 of 1

Social Net

Wait! Does it mean that I have to convert all my data in some way?

- Not necessarily; this would not always be feasible
- There are technologies to make your data *accessible* to standard means without converting it
 - run-time “bridges” (eg, rewriting queries on the fly)
 - annotate existing data (eg, XHTML pages)
 - extract data from XHTML/XML files
 - etc
- Some of these techniques are still being developed



Example: “Linking Open Data Project”

- Goal: “expose” open datasets for integration
- *Set links among the data items* from different datasets
- Set up query endpoints
- Altogether billions of relationships, millions of links...



Example data source: DBpedia

- DBpedia is a community effort to
 - extract structured (“infobox”) information from Wikipedia
 - provide a query endpoint to the dataset
 - interlink the DBpedia dataset with other datasets on the Web

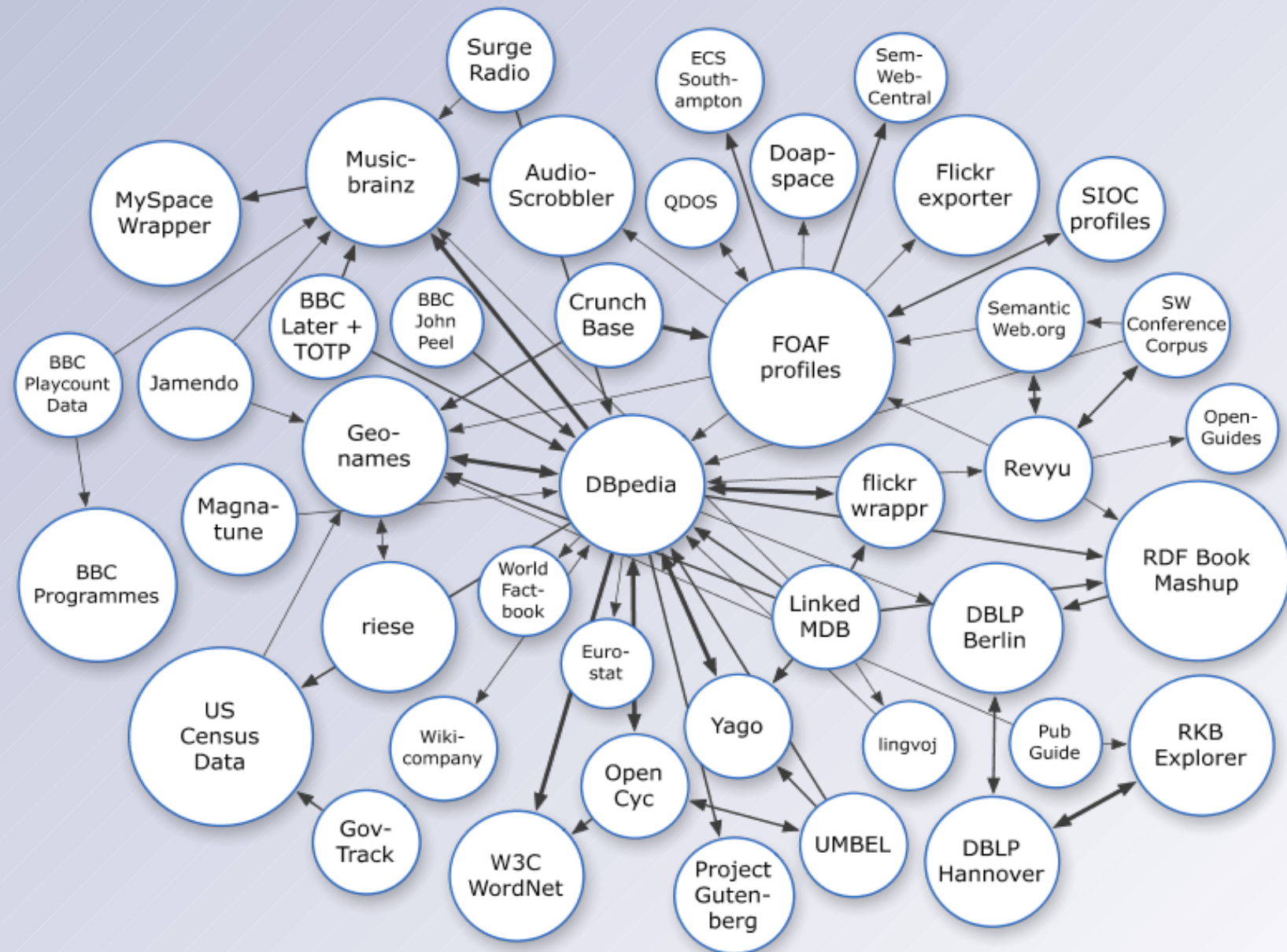


UNIVERSITÄT LEIPZIG





The LOD “cloud”, September 2008



As of September 2008

***All this sounds nice, but isn't that just
a dream?***

The 2007 Gartner predictions

During the next 10 years, Web-based technologies will improve the ability to embed semantic structures [... it] will occur in multiple evolutionary steps...

By 2017, we expect the vision of the Semantic Web [...] to coalesce [...] and the **majority of Web pages are decorated with some form of semantic hypertext.**

By **2012**, **80% of public Web sites will use some level of semantic hypertext to create SW documents [...]** **15% of public Web sites will use more extensive Semantic Web-based ontologies to create semantic databases**

(note: “semantic hypertext” refers to pages “prepared” for integration)

The “corporate” landscape is moving

- Major companies offer (or will offer) Semantic Web tools or systems using Semantic Web: Adobe, Oracle, IBM, HP, Software AG, GE, Northrop Gruman, Altova, Microsoft, Dow Jones, ...
- Others are using it (or consider using it) as part of their own operations: Novartis, Pfizer, Telefónica, ...
- Some of the names of active participants in W3C SW related groups: ILOG, HP, Agfa, SRI International, Fair Isaac Corp., Oracle, Boeing, IBM, Chevron, Siemens, Nokia, Pfizer, Sun, Eli Lilly, ...

Lots of Tools (not an exhaustive list!)

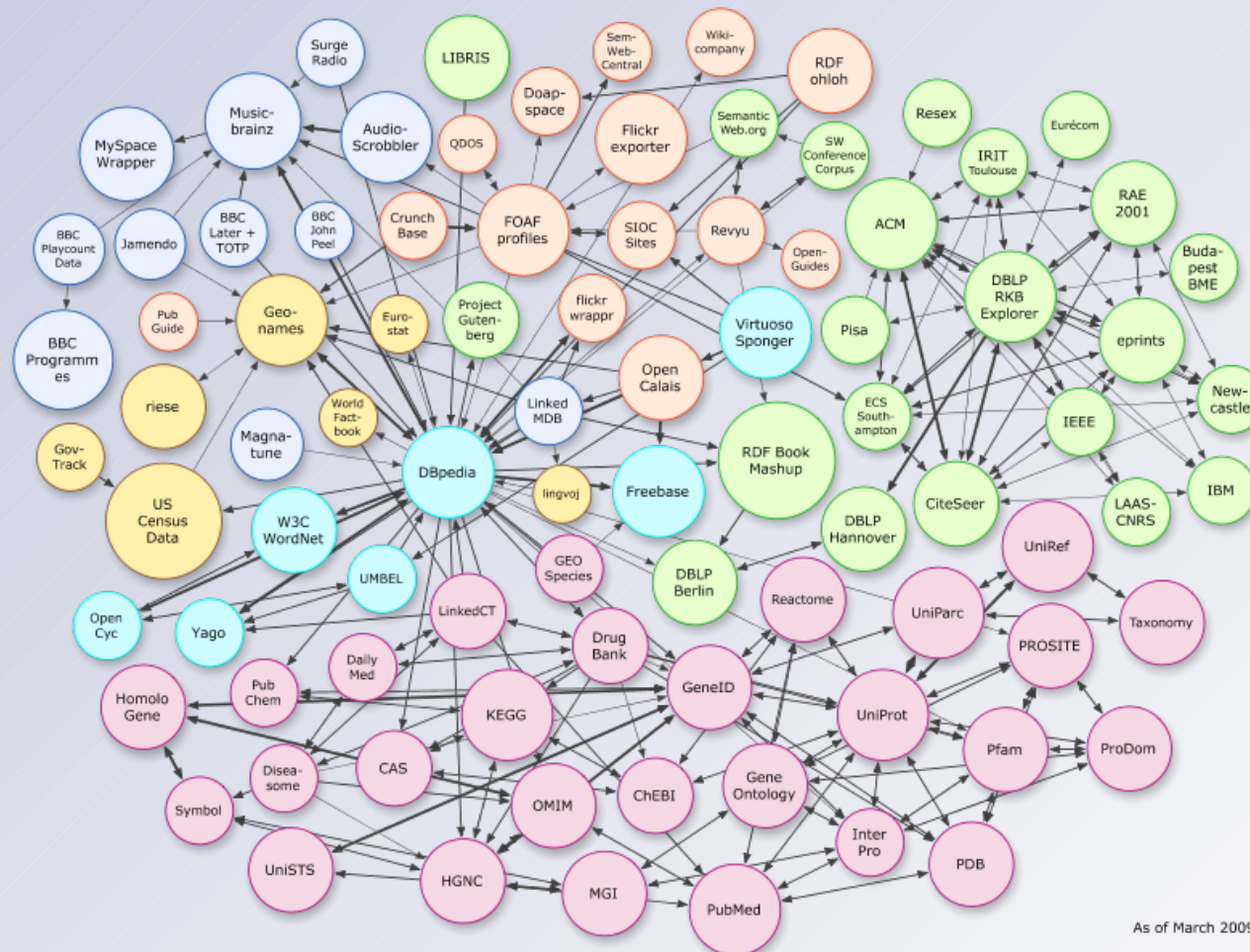
- Categories:
 - Triple Stores
 - Inference engines
 - Converters
 - Search engines
 - Middleware
 - CMS
 - Semantic Web browsers
 - Development environments
 - Semantic Wikis
 - ...
- Some names:
 - Jena, AllegroGraph, Mulgara, Sesame, flickurl, ...
 - TopBraid Suite, Virtuoso environment, Falcon, Drupal 7, Redland, Pellet, ...
 - Disco, Oracle 11g, RacerPro, IODT, Ontobroker, OWLIM, Tallis Platform, ...
 - RDF Gateway, RDFLib, Open Anzo, DartGrid, Zitgist, Ontotext, Protégé, ...
 - Thetus publisher, SemanticWorks, SWI-Prolog, RDFStore...
 - ...

Some deployment communities

- Major communities pick the technology up: digital libraries, defence, eGovernment, energy sector, financial services, health care, oil and gas industry, life sciences ...
 - Health care and life science sector is now very active
 - also at W3C, in the form of an Interest Group

Application specific portions of the cloud

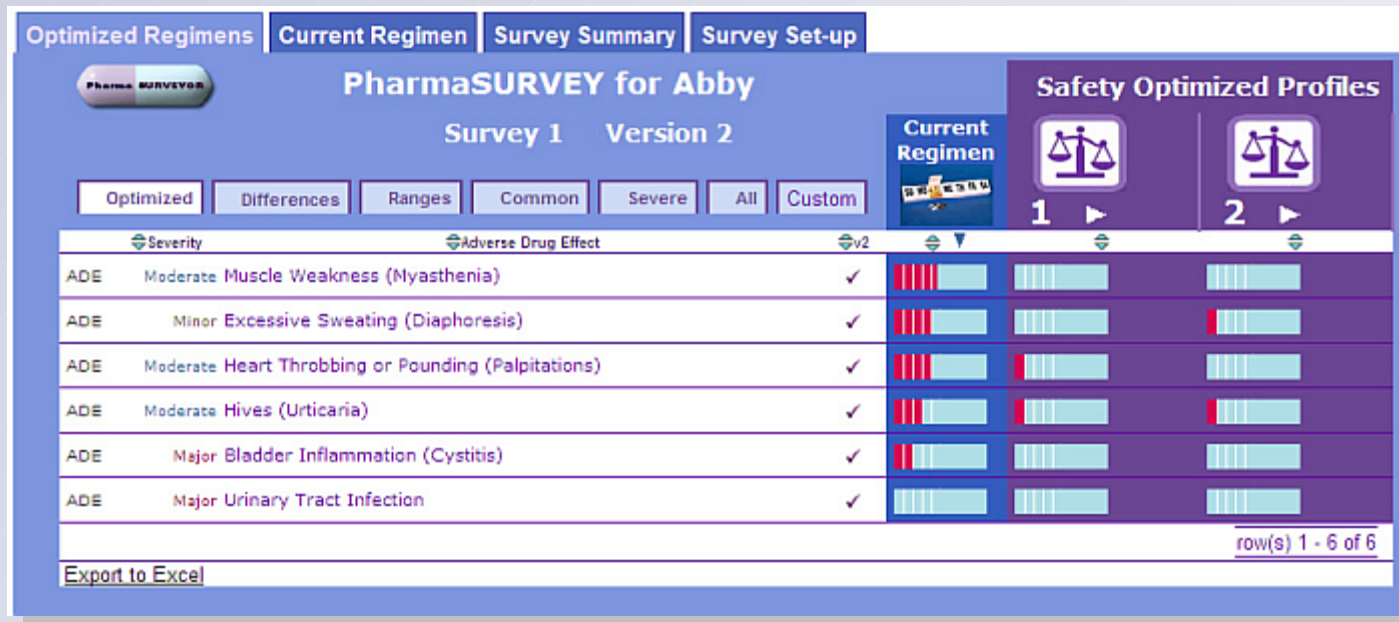
- Eg, “bio” related datasets
 - done, partially, by the “Linking Open Drug Data” task force of the HCLS IG at W3C



As of March 2009

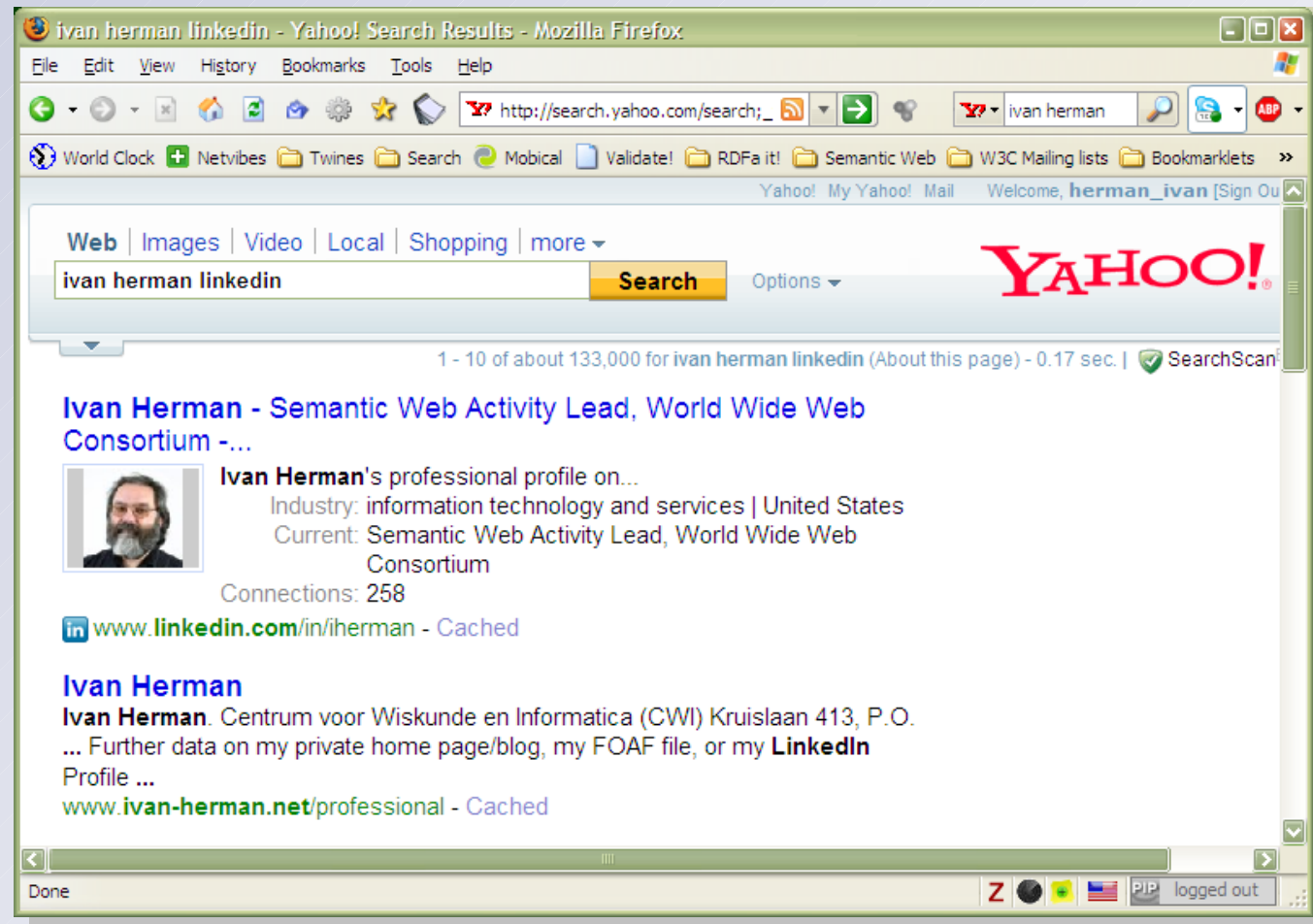
Help in choosing the right drug regimen

- Help in finding the best drug regimen for a specific case, per patient
- Integrate data from various sources (patients, physicians, Pharma, researchers, ontologies, etc)
- Data (eg, regulation, drugs) change often, but the tool is much more resistant against change



Yahoo's SearchMonkey

- Search based results may be customized via small applications
- Metadata embedded in pages are reused
- Publishers can export extra data via other formats



Information in Web Pages: SlideShare

What is the Semantic Web ... x

http://www.slideshare.net/ivan_herman/what-is-the-semantic-web-in-15-minutes-presentation

ivan_herman Logout All Languages

slideshare Present Yourself

Home Browse My Slidespace Upload Community Widgets

Search

Real World Semantic Apps
Calais offers semantic metadata extraction - free - to all
opencaais.com

NLP framework for .NET
The most complete .NET framework for Natural Language Processing
www.proxem.com

Ajax
Stop Object-Relational Mapping. Use InterSystems Caché DB. Download Now
InterSystems.com/Cache

Ads by Google
ADVERTISE ON SLIDESHARE

What is the Semantic Web (in 15 minutes...) Edit Presentation

Share Favorite Download + Group/Event

W3C WORLD WIDE WEB consortium
Benelux Kantoor

Internet Society

What is the Semantic Web? (In 15 minutes...)

ISOC Nieuwjaarsreceptie 2009

2009-01-15, Amsterdam, The Netherlands

Ivan Herman, W3C

ivan_herman, 2 months ago

Embed `<div style="width:428px;text-align:left" id="ss_919716">` custom

172 views, 1 favs, 0 embeds more stats

Very short introduction to what the Semantic Web is more

Get yourself in your presentation

Add mp3 audio to create a SlideCast

Insert YouTube videos

Related Presentations More by user

Scrum
In 15 minutes
505 views

Improve Your Self Confidence In 15 Min...
165 views

jQuery in 15 minutes
78638 views

Categories

Technology
Change Category

Tags

web semantic

Groups / Events

opensourcevhowto

Ads by Google

RDF Web

WPF Framework

Mapping Web

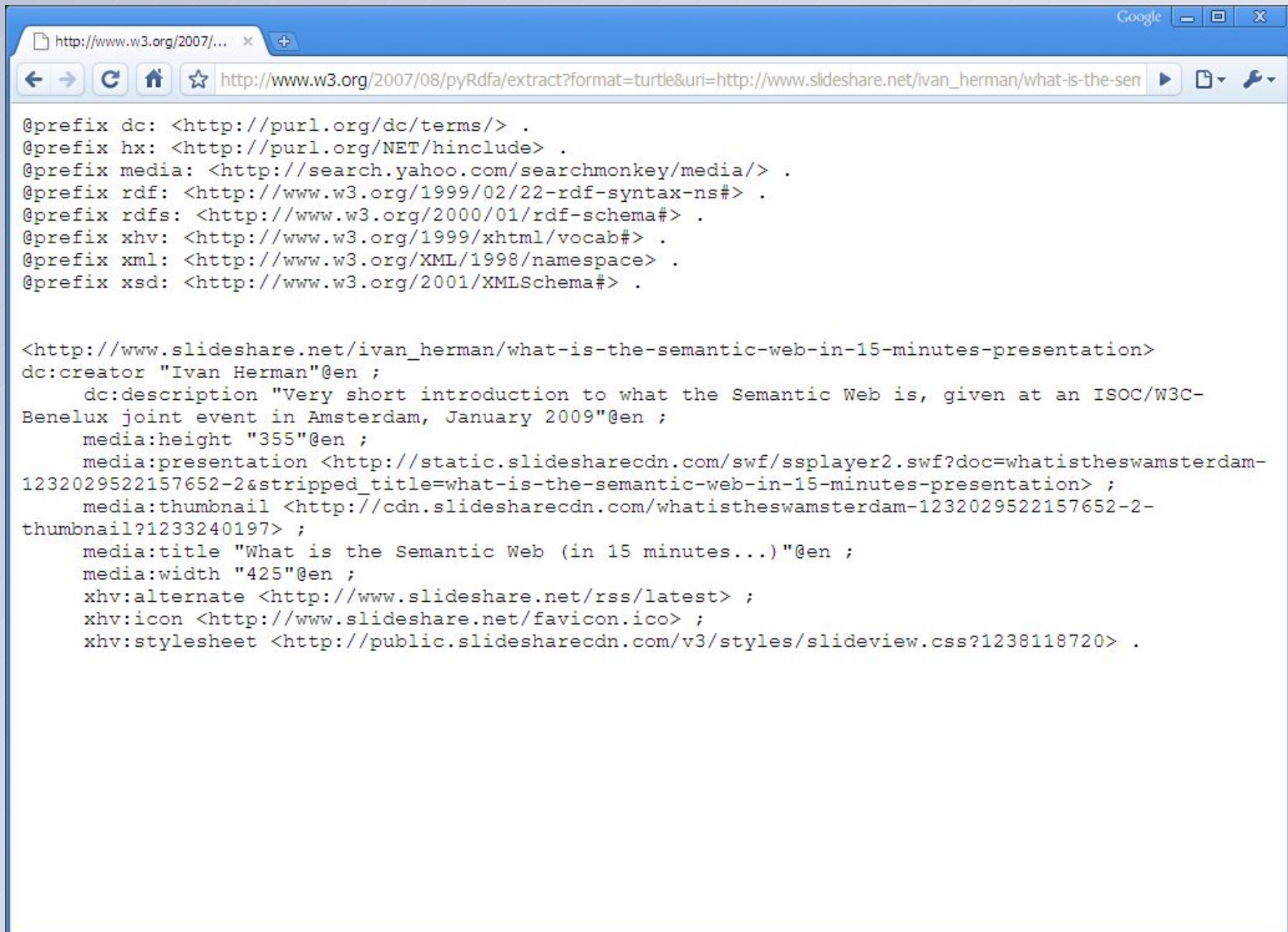
Semantics Web

share

1 / 54 full

PRESENTATION LOAD

Information in Web Pages: SlideShare



The screenshot shows a web browser window with the address bar displaying the URL: `http://www.w3.org/2007/08/pyRdfa/extract?format=turtle&uri=http://www.slideshare.net/ivan_herman/what-is-the-sem`. The main content area displays an RDF extract in Turtle format, starting with a series of prefix declarations and followed by a description of a presentation.

```

@prefix dc: <http://purl.org/dc/terms/> .
@prefix hx: <http://purl.org/NET/hinclud> .
@prefix media: <http://search.yahoo.com/searchmonkey/media/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix xhv: <http://www.w3.org/1999/xhtml/vocab#> .
@prefix xml: <http://www.w3.org/XML/1998/namespace> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

<http://www.slideshare.net/ivan_herman/what-is-the-semantic-web-in-15-minutes-presentation>
dc:creator "Ivan Herman"@en ;
  dc:description "Very short introduction to what the Semantic Web is, given at an ISOC/W3C-
Benelux joint event in Amsterdam, January 2009"@en ;
  media:height "355"@en ;
  media:presentation <http://static.slidesharecdn.com/swf/ssplayer2.swf?doc=whatistheswamsterdam-
1232029522157652-2&stripped_title=what-is-the-semantic-web-in-15-minutes-presentation> ;
  media:thumbnail <http://cdn.slidesharecdn.com/whatistheswamsterdam-1232029522157652-2-
thumbnail?1233240197> ;
  media:title "What is the Semantic Web (in 15 minutes...)"@en ;
  media:width "425"@en ;
  xhv:alternate <http://www.slideshare.net/rss/latest> ;
  xhv:icon <http://www.slideshare.net/favicon.ico> ;
  xhv:stylesheet <http://public.slidesharecdn.com/v3/styles/slideview.css?1238118720> .
  
```


Improved Search (GoPubMed)

- Search results are re-ranked using ontologies
- Related terms are highlighted, usable for further search

The screenshot displays the GoPubMed web interface within a Mozilla Firefox browser window. The search term 'tinnitus' is entered in the search bar, and the results show 1,000 articles. The left sidebar, titled 'what', lists various categories with counts, and the 'Diseases' category is circled in red. The main content area lists several articles, with the first article highlighted by a blue arrow. The article titles and abstracts are displayed, with related terms highlighted in yellow.

what

- Top categories
 - Diseases [985]
 - Tinnitus [959]
 - Hearing Loss [424]
 - Vertigo [170]
 - Hearing Loss, Sensorineural [168]
 - Named Groups [762]
 - Patients [619]
 - Biological Sciences [885]
 - Noise [116]
 - Questionnaires [134]
 - Evaluation Studies [264]
 - Treatment Outcome [114]
 - Stress, Psychological [98]
 - Techniques and Equipment [908]
 - Anatomy [600]
 - Natural Sciences [792]
 - biological_process [461]
 - Chemicals and Drugs [445]
 - Organisms [500]
 - cellular_component [82]
 - molecular_function [67]
 - Technology, Industry, Agriculture [111]
 - Psychiatry and Psychology [661]
 - Unclassified [6]
- Hot topics in GO & MeSH
 - Tinnitus
 - Find categories ...
 - Find related categories ...
 - My last 5 queries
 - Clipboard [0]

Search Results:

1,000 articles

To see other authors, see the **who** section on the left side.

5: Pros and cons of tinnitus retraining therapy. (Highlighted with a blue arrow)

Hatanaka A et al., Acta Otolaryngol, 128 (4): 365-8, 2008
PMID: 18368566 Related Articles

A significant reduction in the **Tinnitus Handicap Inventory** (THI) was obtained as early as 1 month after implementation of **tinnitus** retraining therapy (TRT).

1: Gabapentin effectiveness on the sensation of subjective idiopathic tinnitus : a pilot study.

Bakhshaei M et al., Eur Arch Otorhinolaryngol, 2007
PMID: 17960408 Related Articles

Pure-tone audiograms, **laboratory** test and personal histories were used to exclude any particular etiology of **tinnitus**.

3: Algorithm for evaluation of pulsatile tinnitus.

Mattos DE et al., Acta Otolaryngol, 128 (4): 427-31, 2008
PMID: 18368578 Related Articles

Among patients with **venous tinnitus**, **sigmoid sinus diverticulum** was the most common finding.

4: Functional imaging of unilateral tinnitus using fMRI.

Lanting CP et al., Acta Otolaryngol, 128 (4): 415-21, 2008
PMID: 18368576 Related Articles

The response to sound in the **inferior colliculus** was elevated in **tinnitus** patients compared with controls without **tinnitus**.

Improved Search (Go3R)

- Same dataset, different ontology
 - (ontology is on non-animal experimentation)

The screenshot displays the Go3R web application interface within a Mozilla Firefox browser window. The left sidebar, titled 'what', contains a hierarchical ontology tree. The 'Top categories' section lists various categories, with 'Body Systems & Structures' and 'In Vitro Experimental Design' circled in red. The main content area shows search results for the query 'tinnitus', indicating 1,000 articles. The top result is '2: Microvascular decompression of cochleovestibular nerve.' followed by '3: Algorithm for evaluation of pulsatile tinnitus.', '4: Functional imaging of unilateral tinnitus using fMRI.', and '5: Pros and cons of tinnitus retraining therapy.' which is highlighted with a blue arrow. The interface includes a search bar, a 'find it!' button, and a 'Go3R' logo.

New type of Web 2.0 applications

- New Web 2.0 applications come every day
- Some begin to look at Semantic Web as possible technology to improve their operation
 - more structured tagging, making use of external services
 - providing extra information to users
 - etc.
- Some examples: Twine, Revyu, Faviki, ...

Integration of “social” software data

- Internal usage of wikis, blogs, RSS, etc, at EDF
 - goal is to manage the flow of information better
- Items are integrated via
 - Semantic Web based unifying format
 - simple, public vocabularies
 - internal data is combined with linked open data like Geonames
 - Semantic Web queries are used internally
- Details are hidden from end users (via plugins, extra layers, etc)

Integration of “social” software data

L'ensemble de ces lieux d'échange, de rencontre et de réflexion permettent de proposer des évolutions d'ordre réglementaire et législatif.

Personnalités :

[onto|members]

Domaines :

[onto|domaines]

Localisation:

Ville, Pays:

paris, fra

Paris, France

Répéter ce champ

Rattachement:

Affiliation principale:

Lien:

Répéter ce champ

Domaine et Métier:

Domaine:

Activités Associatives

Métier:

Associatif

Zone Géographique:

France

Inline macro

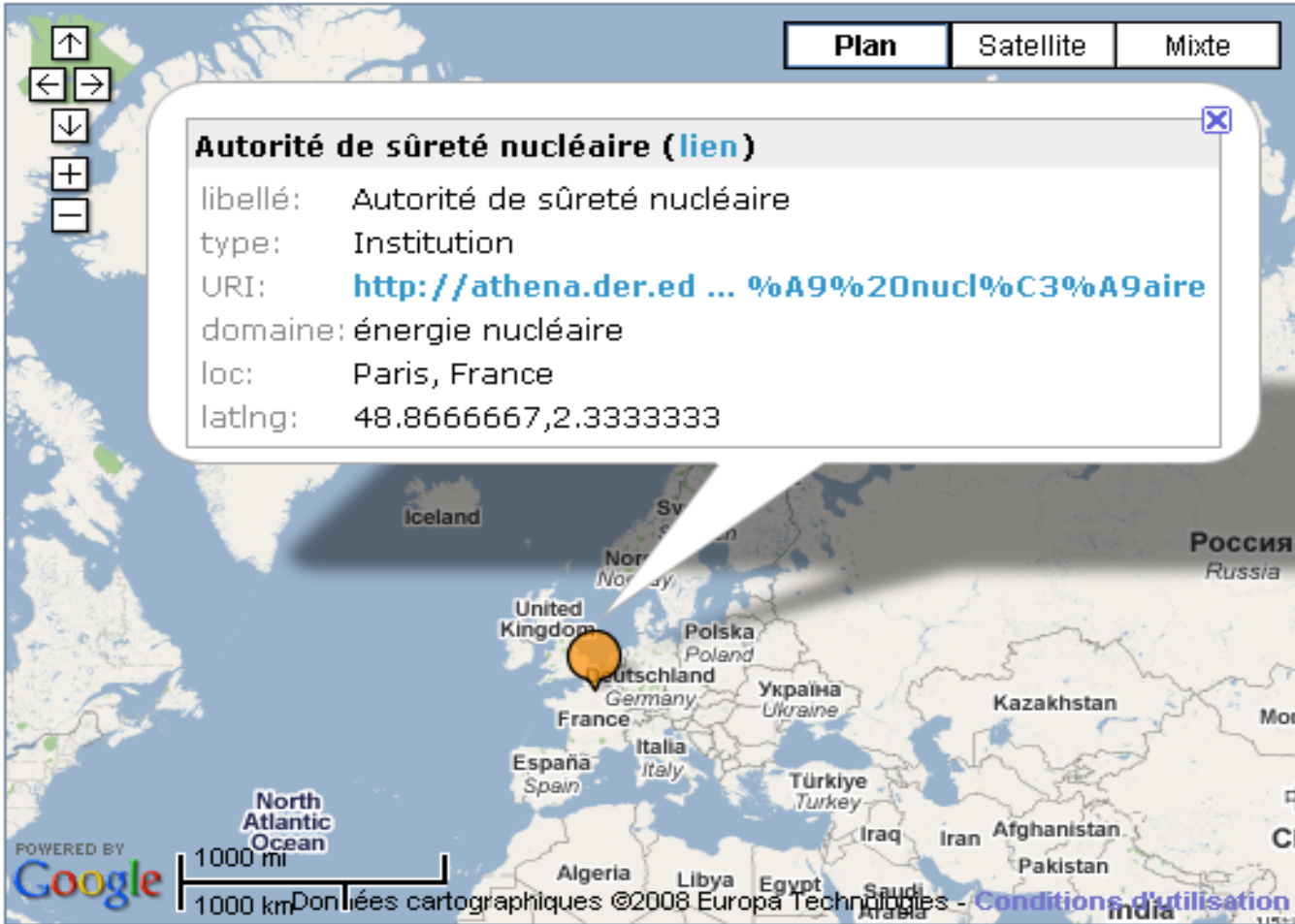
Simple autocomplete field

Complex instance field

Integration of “social” software data

BLOCS • **CARTE**

1 Institution filtrés sur un total de 173 items ([Réinitialiser tous les filtres](#))



Autorité de sûreté nucléaire (lien)

libellé: Autorité de sûreté nucléaire
 type: Institution
 URI: <http://athena.der.ed ... %A9%20nucl%C3%A9aire>
 domaine: énergie nucléaire
 loc: Paris, France
 latlng: 48.8666667,2.3333333

Plan Satellite Mixte

Type 1 ☒
 2 **Entreprise** ☐
 1 **Institution** ☒
 1 **Personne** ☐

Domain 1 ☒
financières
 1 **Energie** ☐
 1 **énergie nucléaire** ☒
 2 **Protection de l'environnement** ☐

Localisation
 1 **Paris, France**

POWERED BY Google
 1000 mi
 1000 km
 Données cartographiques ©2008 Europa Technologies - [Conditions d'utilisation](#)

Conclusions...

- More and more data should be “published” on the Web
 - this can lead to the “network effect” on data
- New breeds of applications come to the fore
 - “mashups on steroids”
 - better representation and usage of community knowledge
 - new customization possibilities
 - ...



The rough structure of data integration

1. Map the various data onto an abstract data representation
 - make the data independent of its internal representation...
2. Merge the resulting representations
3. Start making queries on the whole!
 - queries that could not have been done on the individual data sets

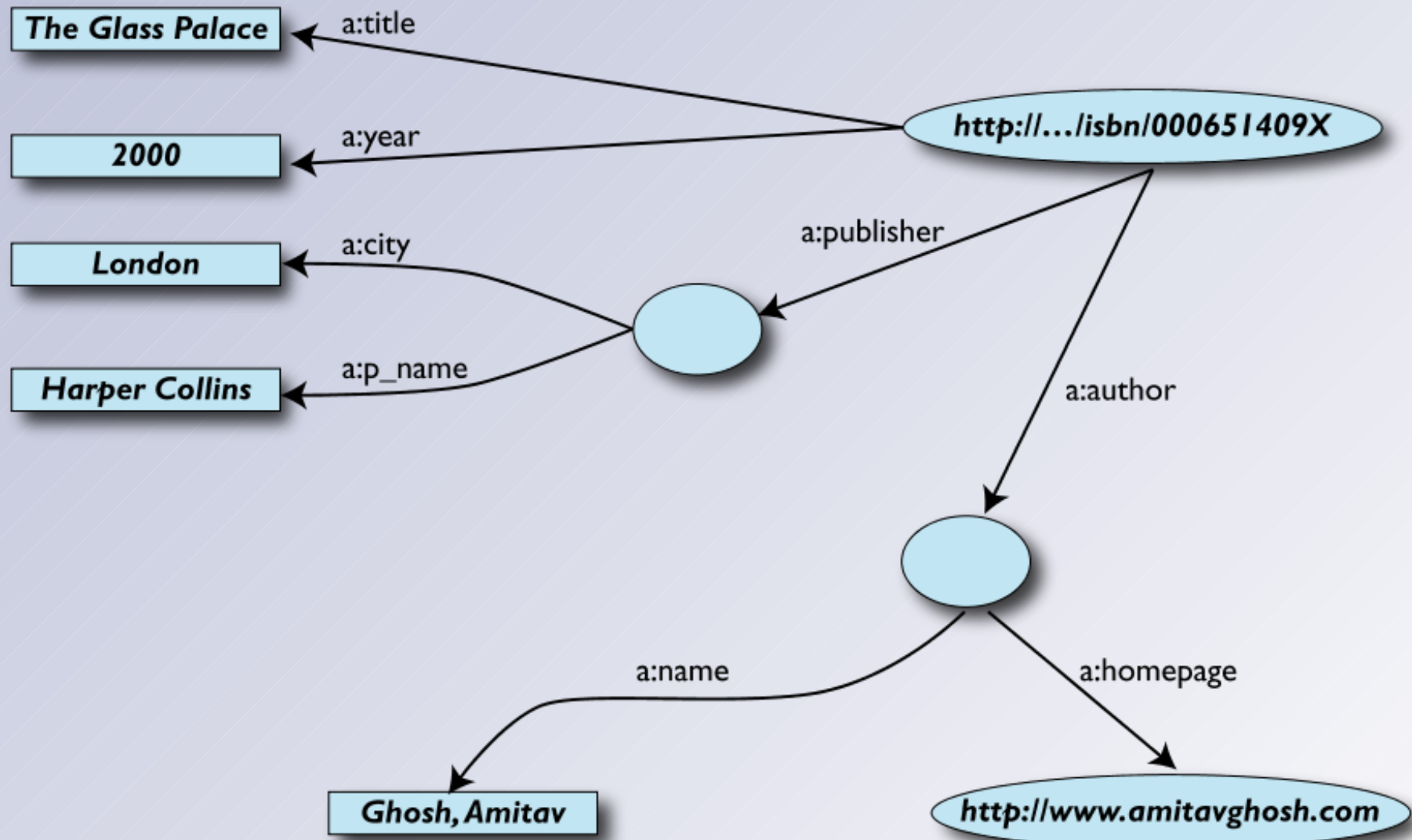
A simplified bookstore data (dataset “A”)⁸⁰

ID	Author	Title	Publisher	Year
ISBN0-00-651409-X	id_xyz	The Glass Palace	id_qpr	2000

ID	Name	Home Page
id_xyz	Ghosh, Amitav	http://www.amitavghosh.com

ID	Publ. Name	City
id_qpr	Harper Collins	London

1st: export your data as a set of relations



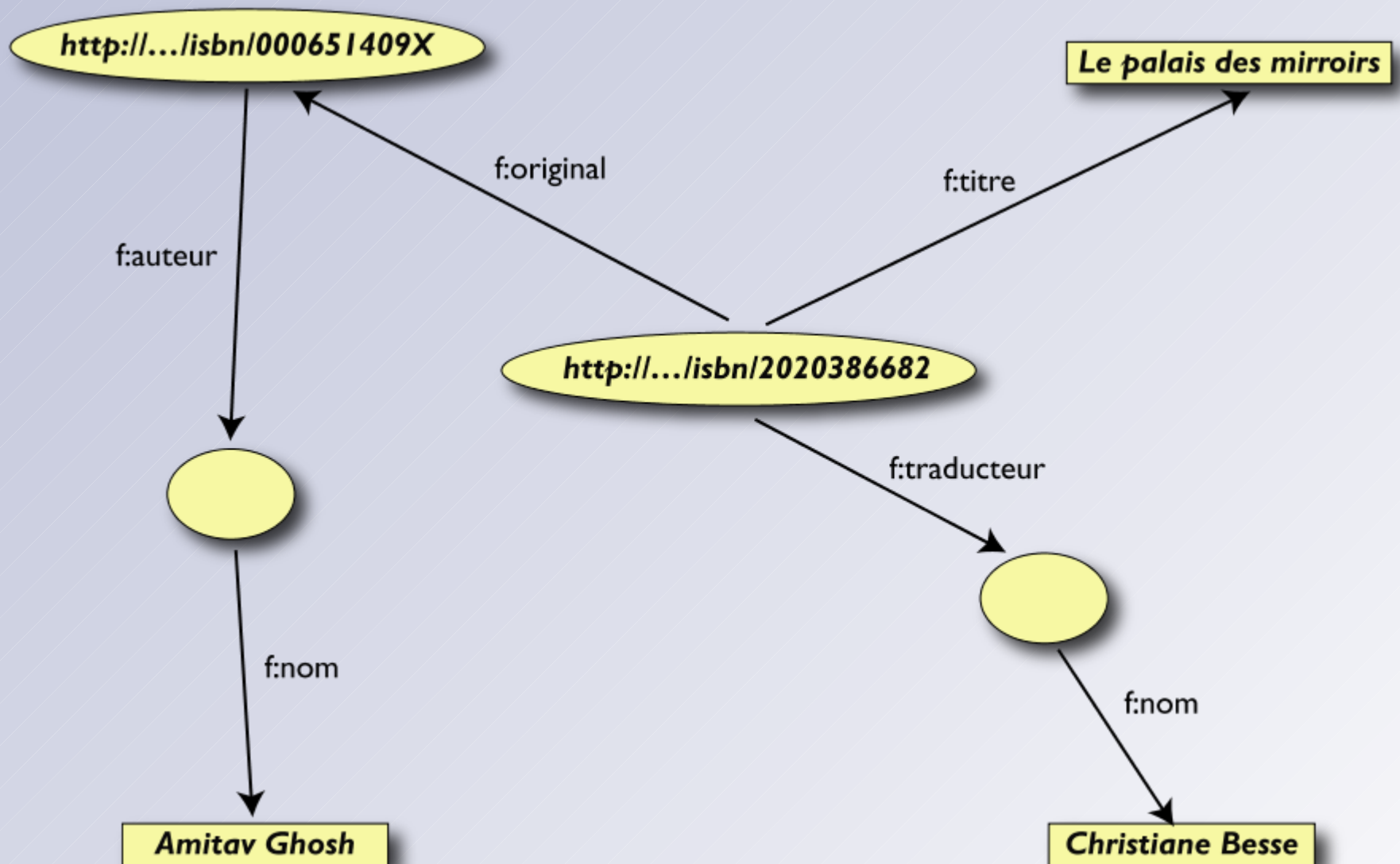
Some notes on the exporting the data

- Relations form a graph
 - the nodes refer to the “real” data or contain some literal
 - how the graph is represented in machine is immaterial for now
- Data export does not necessarily mean physical conversion of the data
 - relations can be generated on-the-fly at query time
 - via SQL “bridges”
 - scraping HTML pages
 - extracting data from Excel sheets
 - etc.
- One can export part of the data

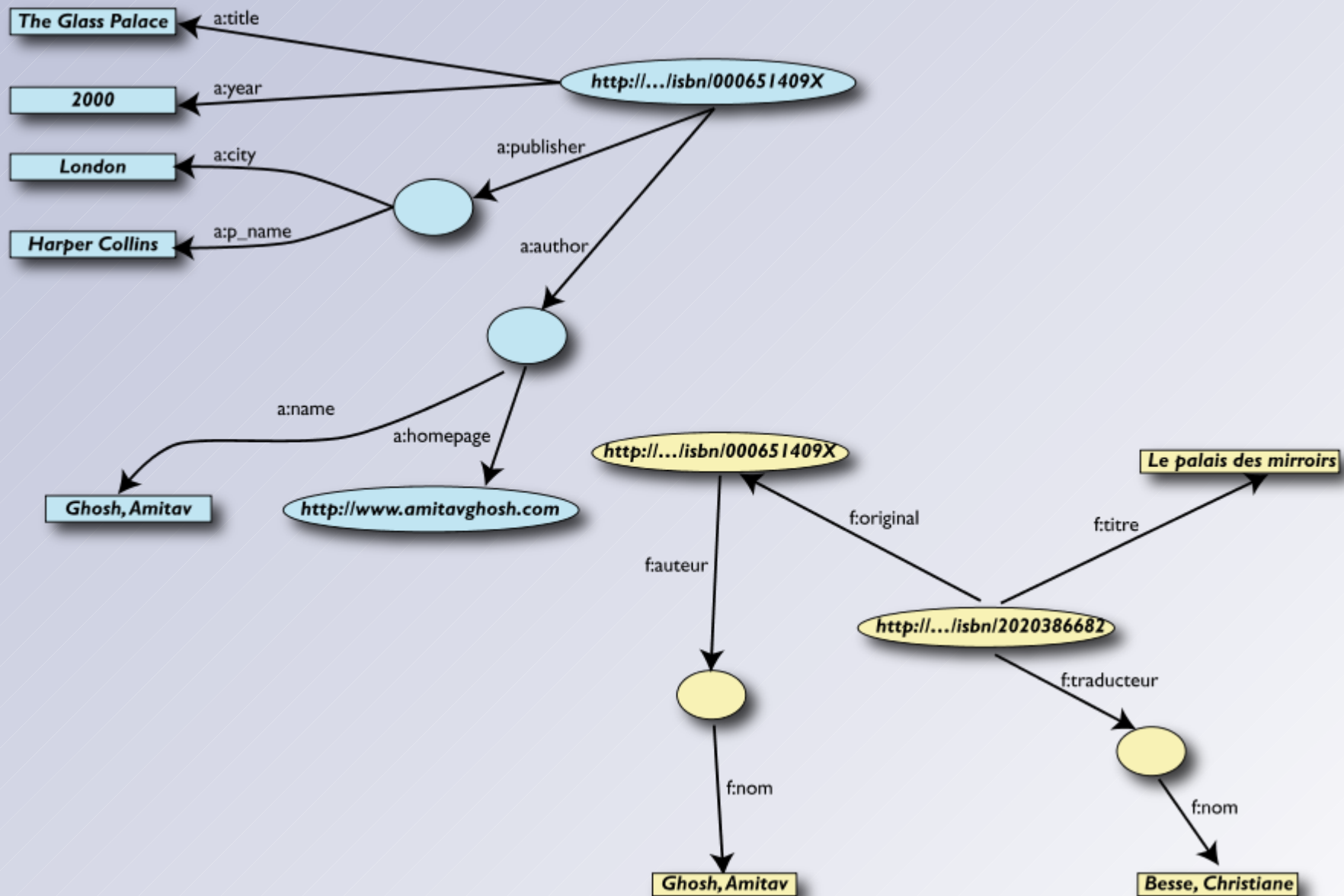
Another *bookstore data* (dataset “F”)

	A	B	D	E
1	ID	Titre	Traducteur	Original
2	ISBN0 2020386682	Le Palais des miroirs	A13	ISBN-0-00-651409-X
3				
6	ID	Auteur		
7	ISBN-0-00-651409-X	A12		
11	Nom			
12	Ghosh, Amitav			
13	Besse, Christianne			

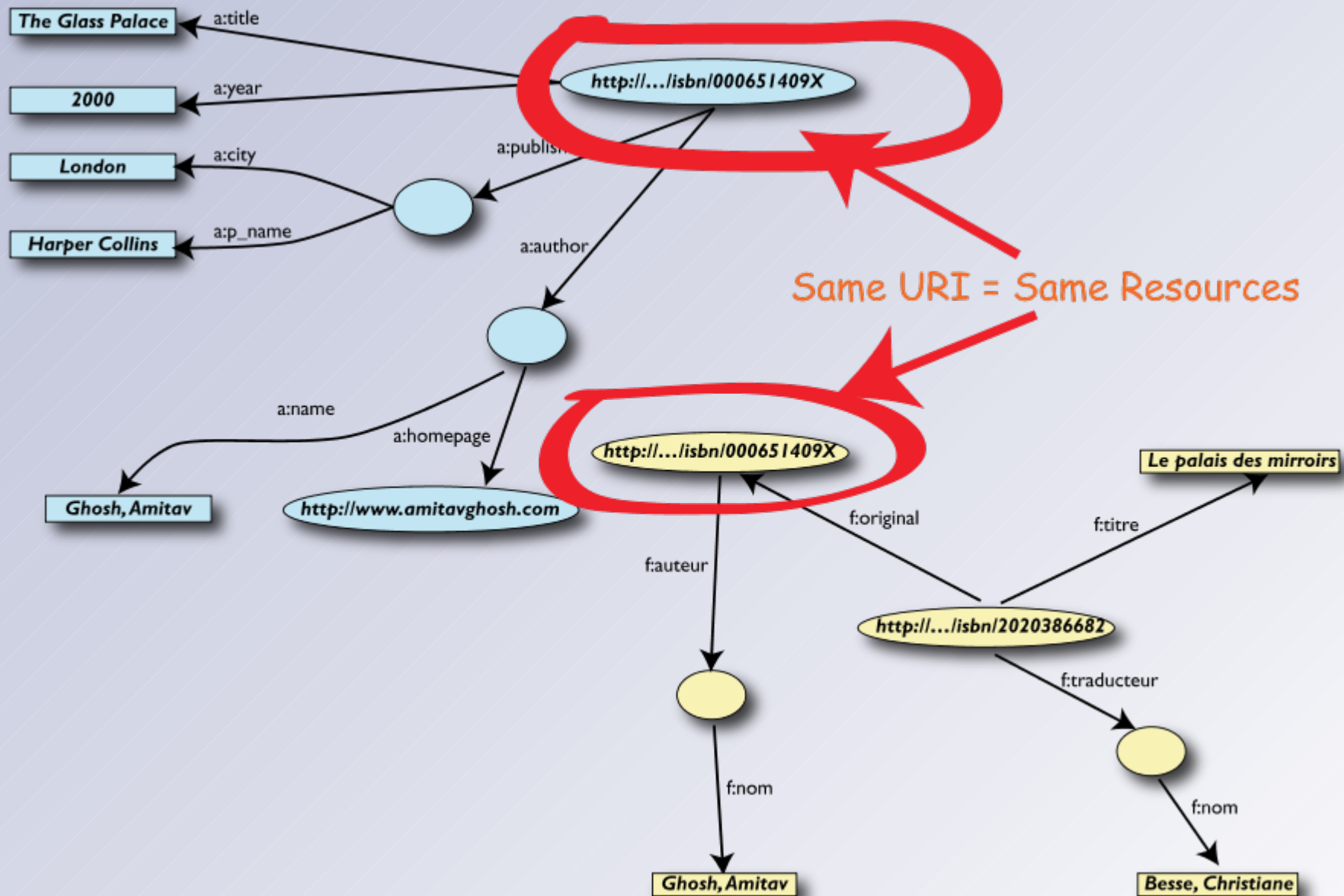
2nd: export your second set of data



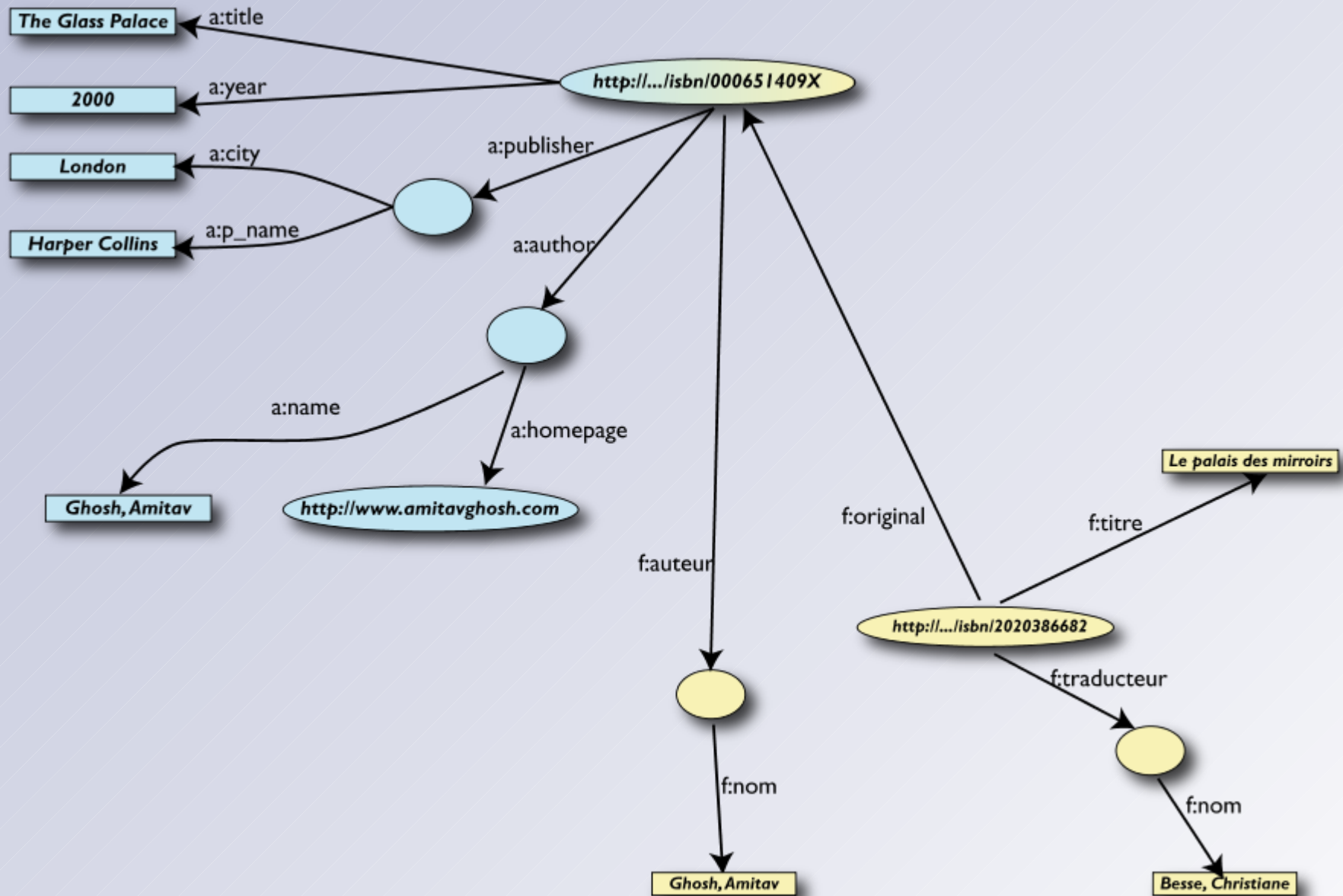
3rd: start merging your data



3rd: start merging your data (cont.)

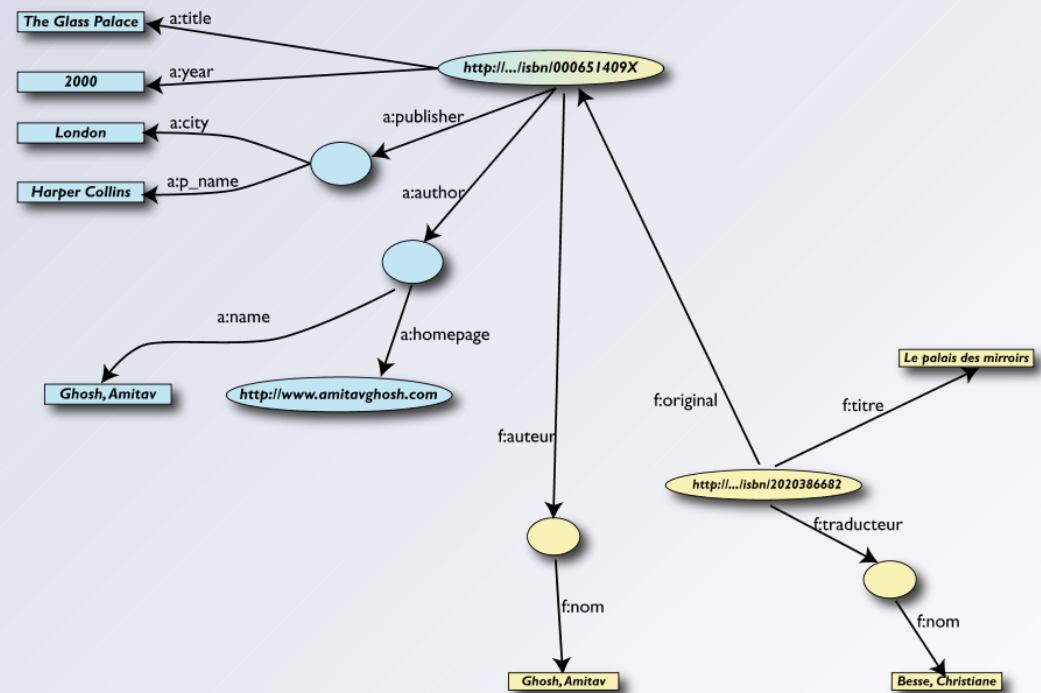


3rd: merge identical resources



Start making queries...

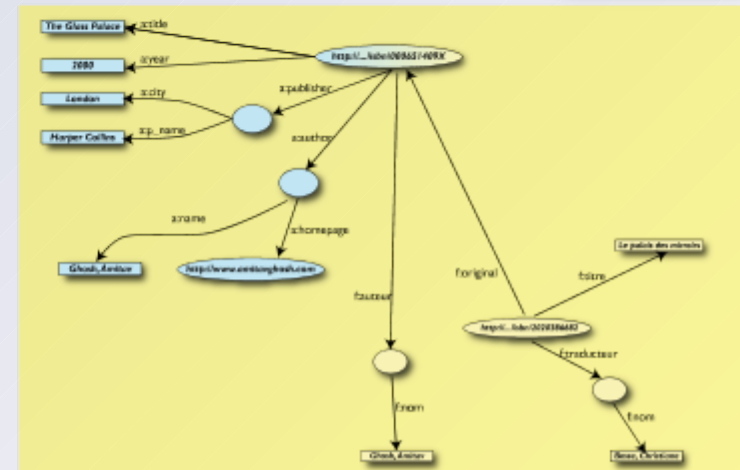
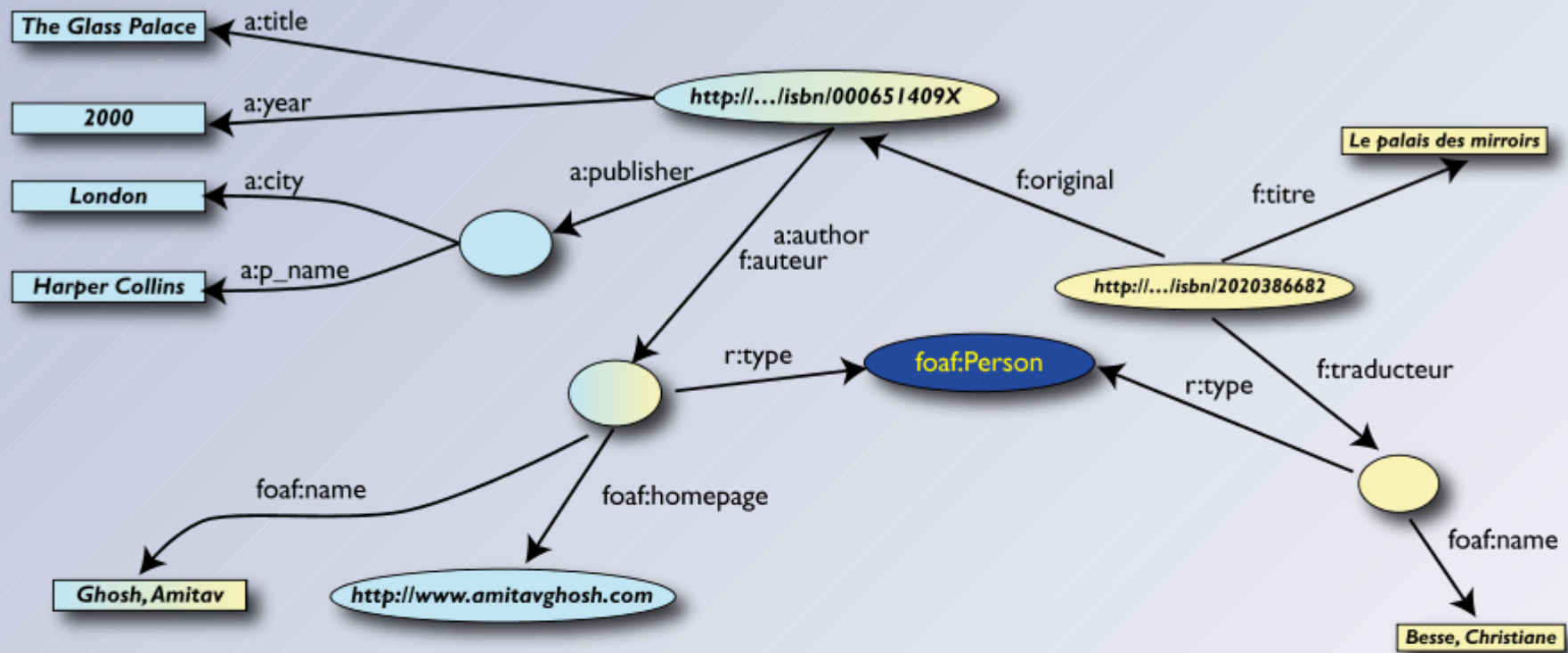
- User of data “F” can now ask queries like:
 - “give me the title of the original”
 - well, ... « donne-moi le titre de l’original »
- This information is not in the dataset “F”...
- ...but can be retrieved by merging with dataset “A”!



However, more can be achieved...

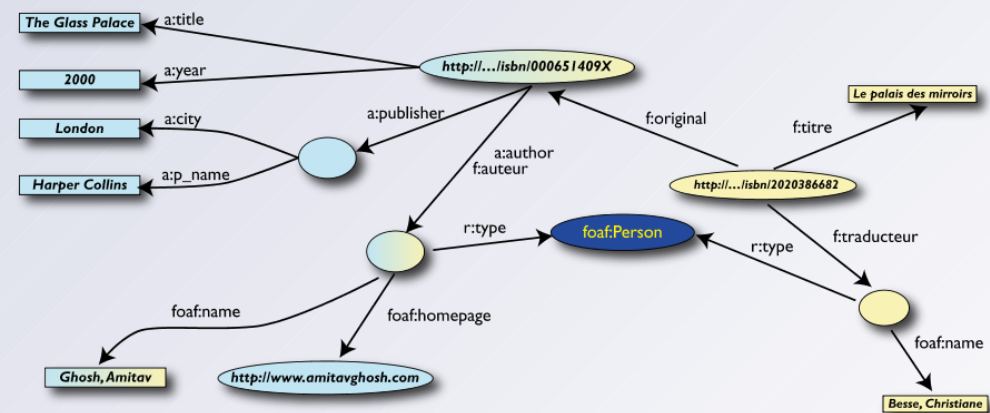
- We “feel” that **a:author** and **f:auteur** should be the same
- But an automatic merge does not know that!
- Let us add some extra information to the merged data:
 - **a:author** same as **f:auteur**
 - both identify a “Person”
 - a term that a community may have already defined:
 - a “Person” is uniquely identified by his/her name and, say, homepage
 - it can be used as a “category” for certain type of resources

3rd revisited: use the extra knowledge



Start making richer queries!

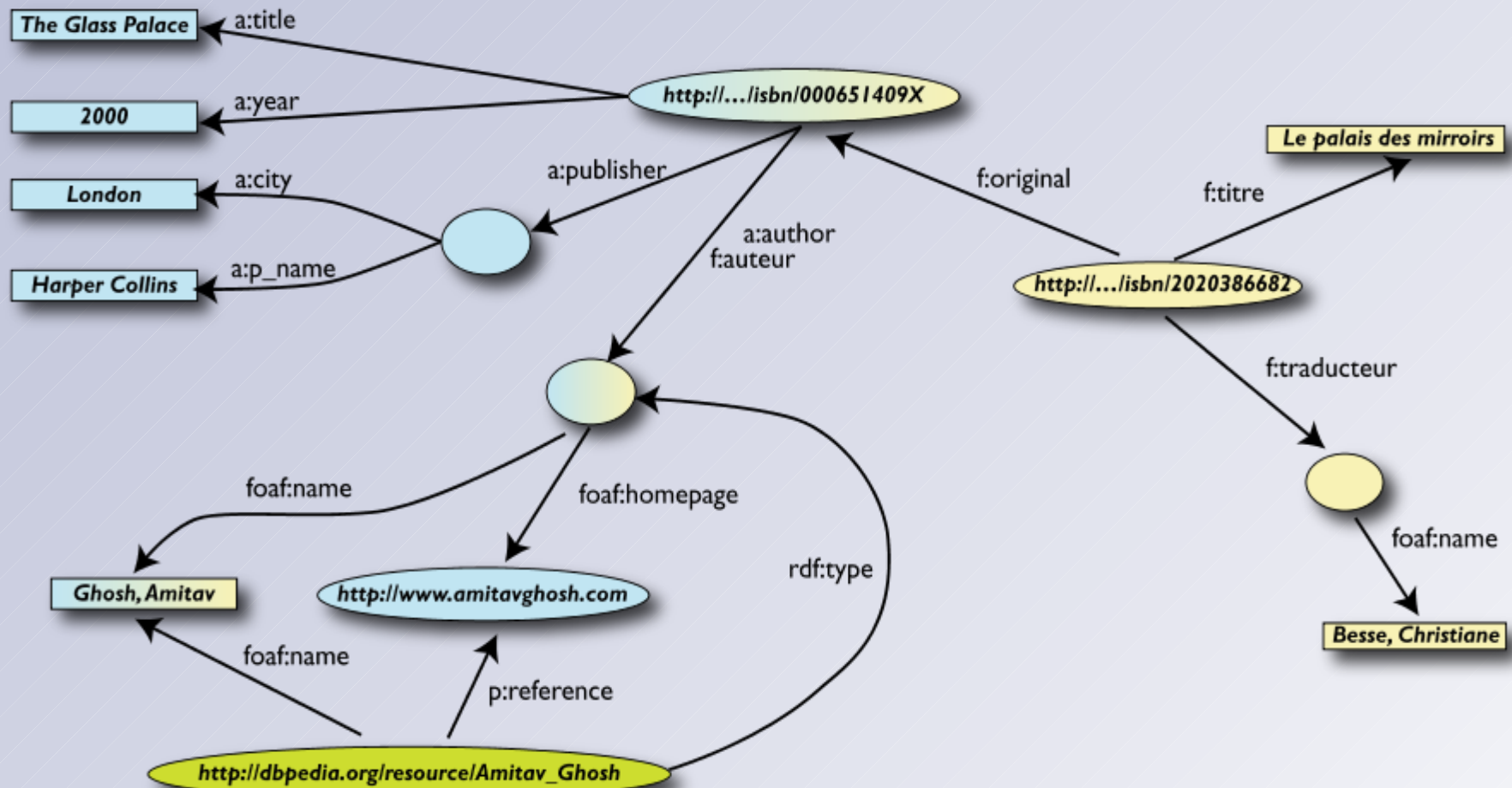
- User of dataset “F” can now query:
 - “donnes-moi la page d’accueil de l’auteur de l’originale”
 - well... “give me the home page of the original’s ‘auteur’”
- The information is not in datasets “F” or “A”...
- ...but was made available by:
 - merging datasets “A” and datasets “F”
 - adding three simple extra statements as an extra “glue”



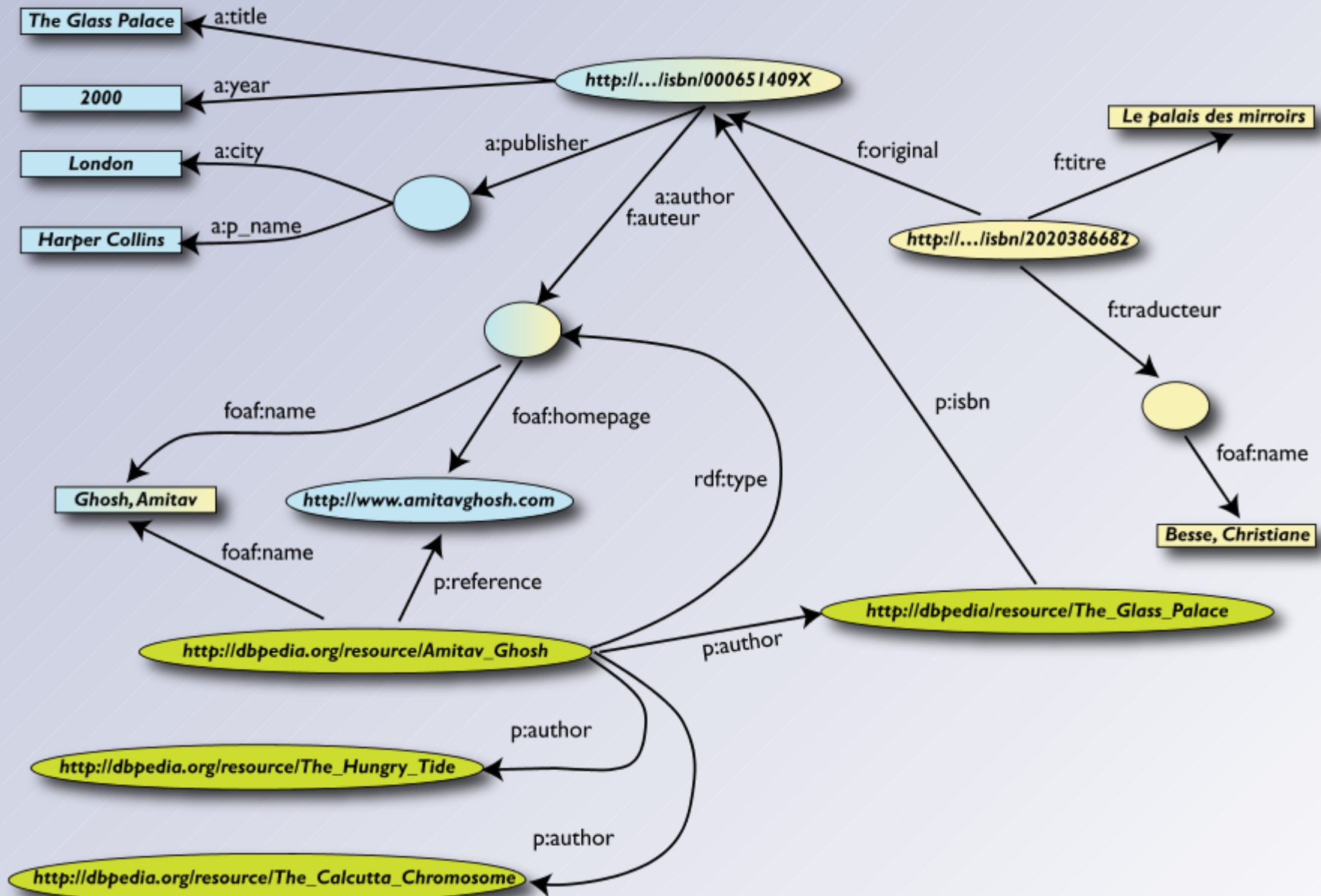
Combine with different datasets

- Using, e.g., the “Person”, the dataset can be combined with other sources
- For example, data in Wikipedia can be extracted using dedicated tools
 - e.g., the “[dbpedia](#)” project can extract the “infobox” information from Wikipedia already...

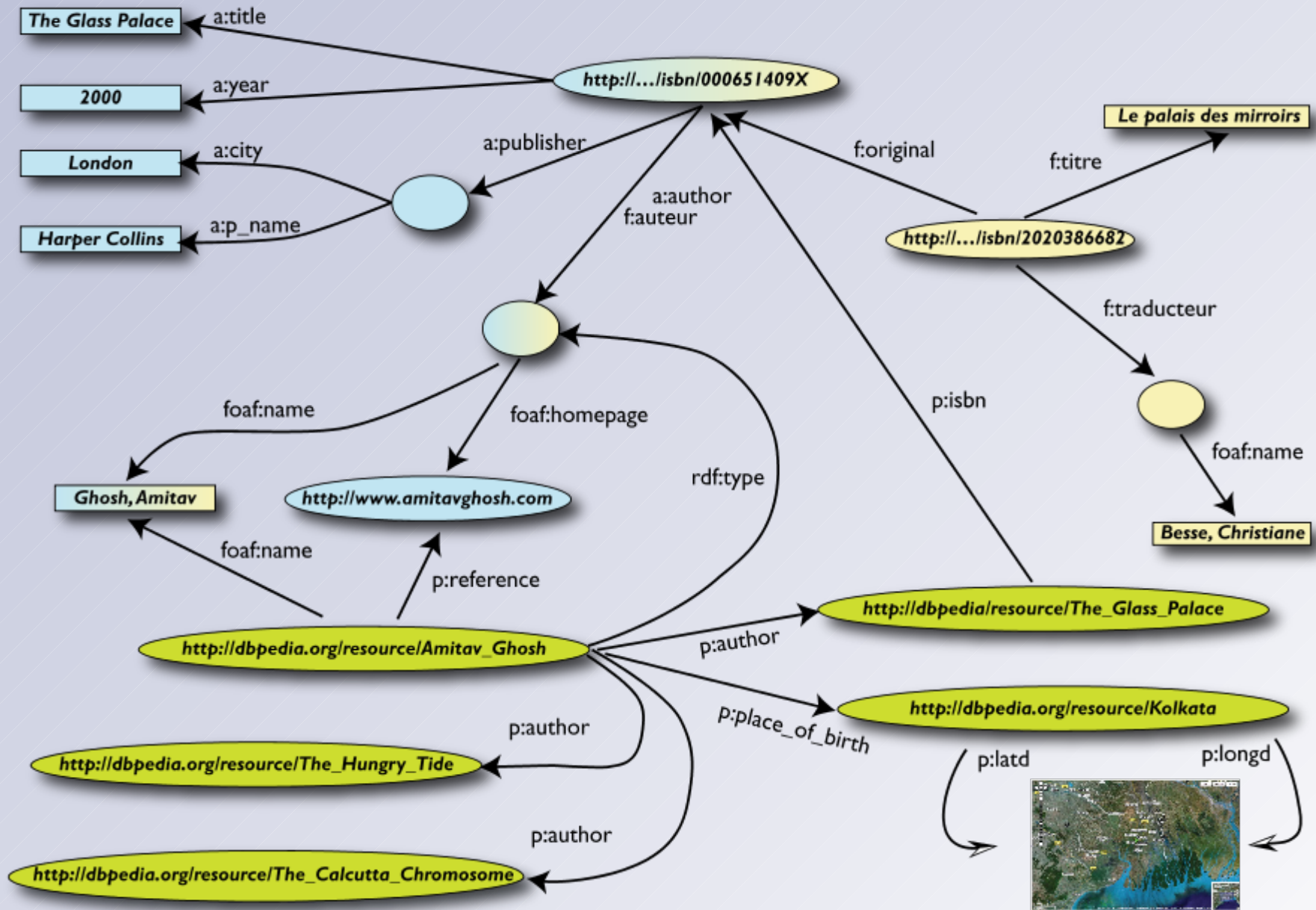
Merge with Wikipedia data



Merge with Wikipedia data



Merge with Wikipedia data



Is that surprising?

- It may look like it but, in fact, it should not be...
- What happened via automatic means is done every day by Web users!
- The difference: a bit of extra rigour so that machines could do this, too

What did we do?

- We combined different datasets that
 - are somewhere on the web
 - are of different formats (mysql, excel sheet, XHTML, etc)
 - have different names for relations
- We could combine the data because some URI-s were identical (the ISBN-s in this case)
- We could add some simple additional information (the “glue”), possibly using common terminologies that a community has produced
- As a result, new relations could be found and retrieved

It could become even more powerful

- We could add extra knowledge to the merged datasets
 - e.g., a full classification of various types of library data
 - geographical information
 - etc.
- This is where ontologies, extra rules, etc, come in
 - ontologies/rule sets can be relatively simple and small, or huge, or anything in between...
- Even more powerful queries can be asked as a result

