



*La parte más importante de la tecnología
son las personas que la utilizan*

Human-Computer Interaction & Data Integration Research Group

Computer Science and Engineering Department

Universitat de Lleida

Member of:





Vision

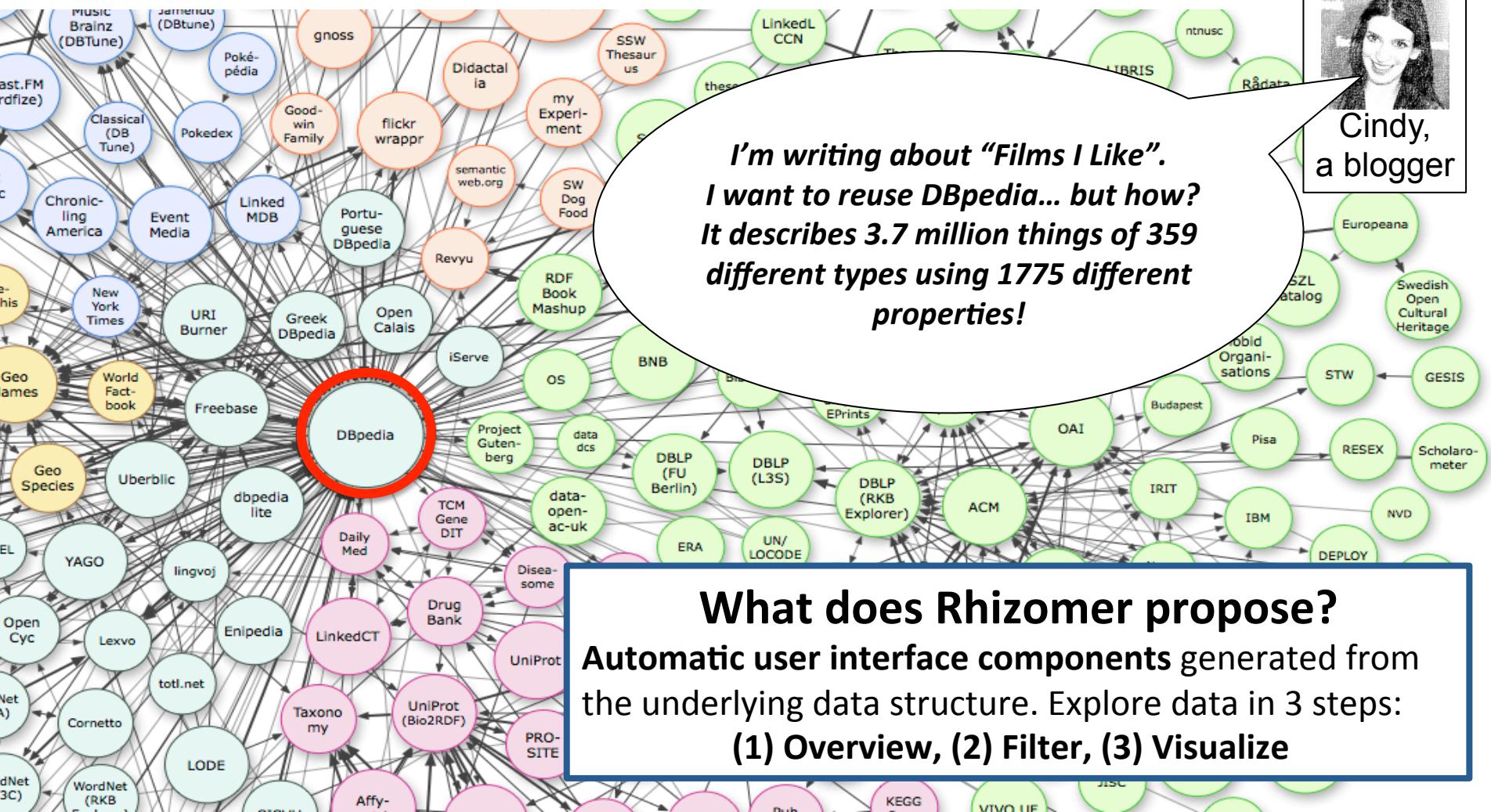
“The most important part of technology are the
people using it”





Some Results

Rhizomer



Cindy,
a blogger



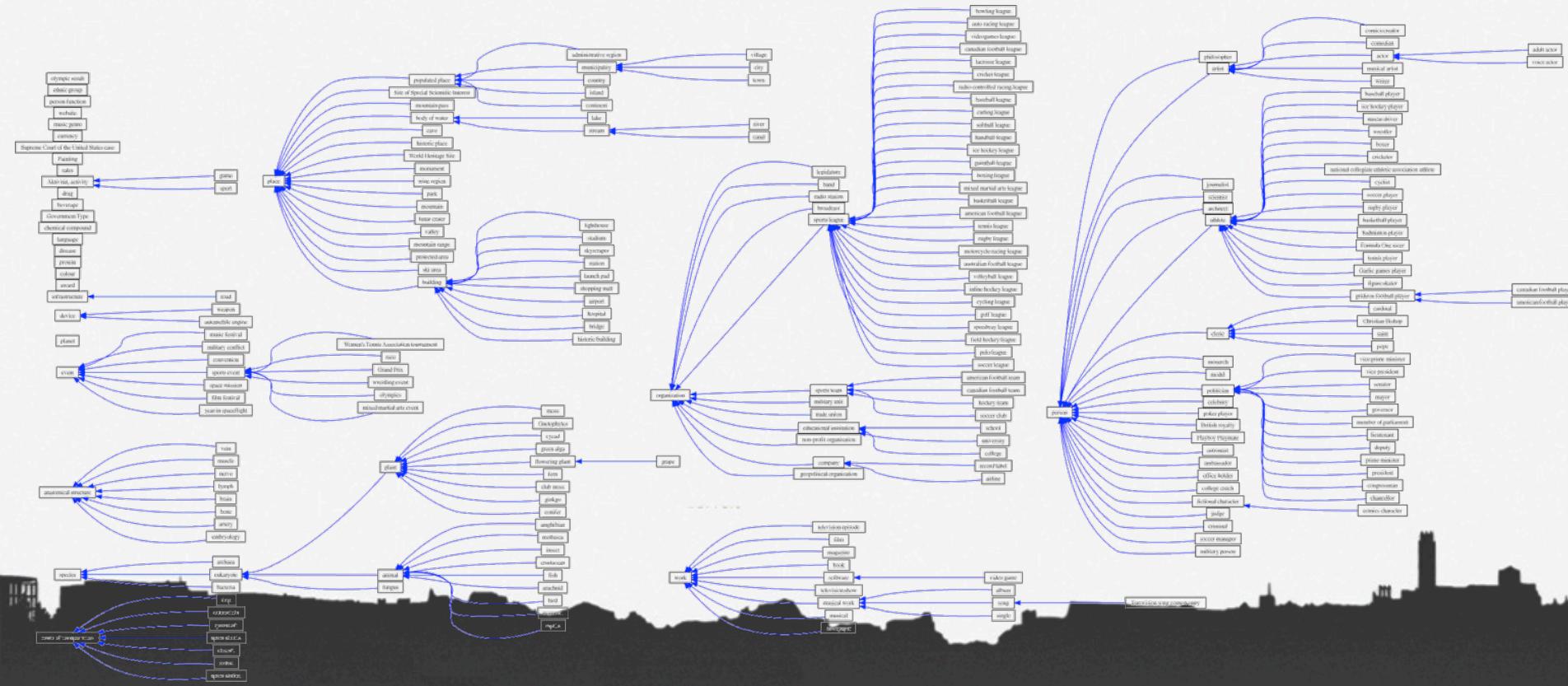
Publishing with Rhizomer

Rhizomer

- Deployed on top of SPARQL endpoint
- Publish as Linked Data for machine and human consumption
 - Automatic user interface generation from data shape and ontologies
- Winner Intelligent Data Exploration (IESD) Challenge 2013
 - IESD year collocated with International Semantic Web Conference (ISWC'15), Bethlehem, Pennsylvania

Interacting

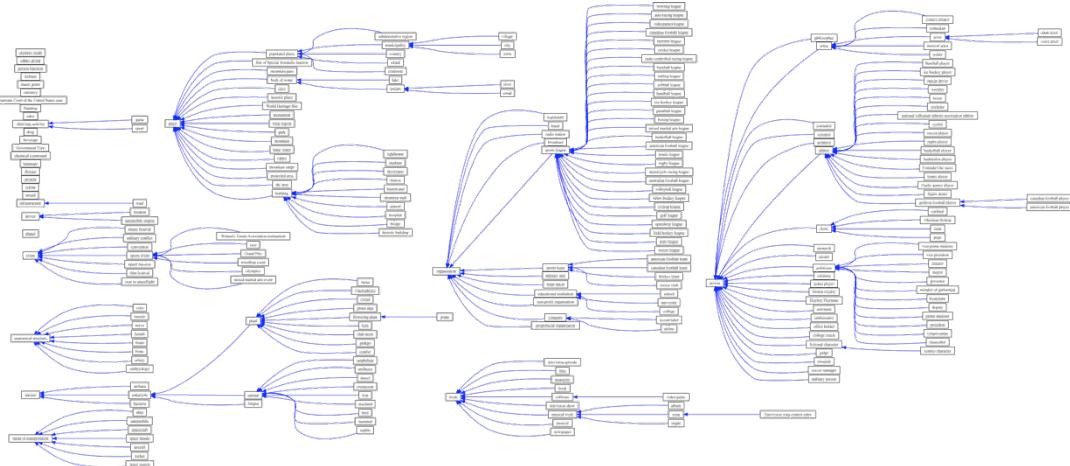
- Example: What to do with DBpedia?
 - 3.5 million things described
 - Ontology: 257 classes y 1276 properties





Rhizomer

Automatic Generation



About mean of transportation (32712) organisation (134972) person (317015)

aircraft (6187)
automobile (6517)
rocket (206)
ship (19698)
space shuttle (20)
space station (22)
spacecraft (62)

band (21862)
broadcast (6775)
company (31251)
educational institution (31297)
military unit (9393)
non-profit organisation (1443)
radio station (15703)
sports team (11705)
trade union (1209)
Other organisation (1400)

artist (78829)
athlete (114848)
cleric (5423)
fictional character (8635)
military person (13494)
office holder (16526)
politician (19285)
scientist (8475)
soccer manager (8490)
Other person (16874)

body of water (327)
building (327)
historic place (327)
lunar crater (327)
mountain range (84)
mountain (84)
populated place (84)
protected area (84)
World Heritage Site (84)
Other place (84)

| 5) place (413404) species (141660) work (320048) Other (113563) Contact

vater (26717)
(32780)
place (23297)
ter (1449)
range (1473)
1 (8479)
d place (310970)
area (4521)
heritage Site (1118)
ice (2144)

archaea (164)
bacteria (163)
bird (12334)
fish (11134)
fungus (6960)
insect (36245)
mammal (8274)
mollusca (8677)
plant (39528)
Other Animal (15930)

album (94033)
book (20490)
film (49184)
magazine (2182)
musical (1010)
newspaper (3337)
software (22633)
television episode (74397)
television show (15779)
Other MusicalWork (37003)

anatomical structure (3851)
chemical compound (6273)
device (19626)
disease (4647)
drug (4348)
event (12244)
person function (22377)
planet (12348)
road (8914)
Other Other (18935)



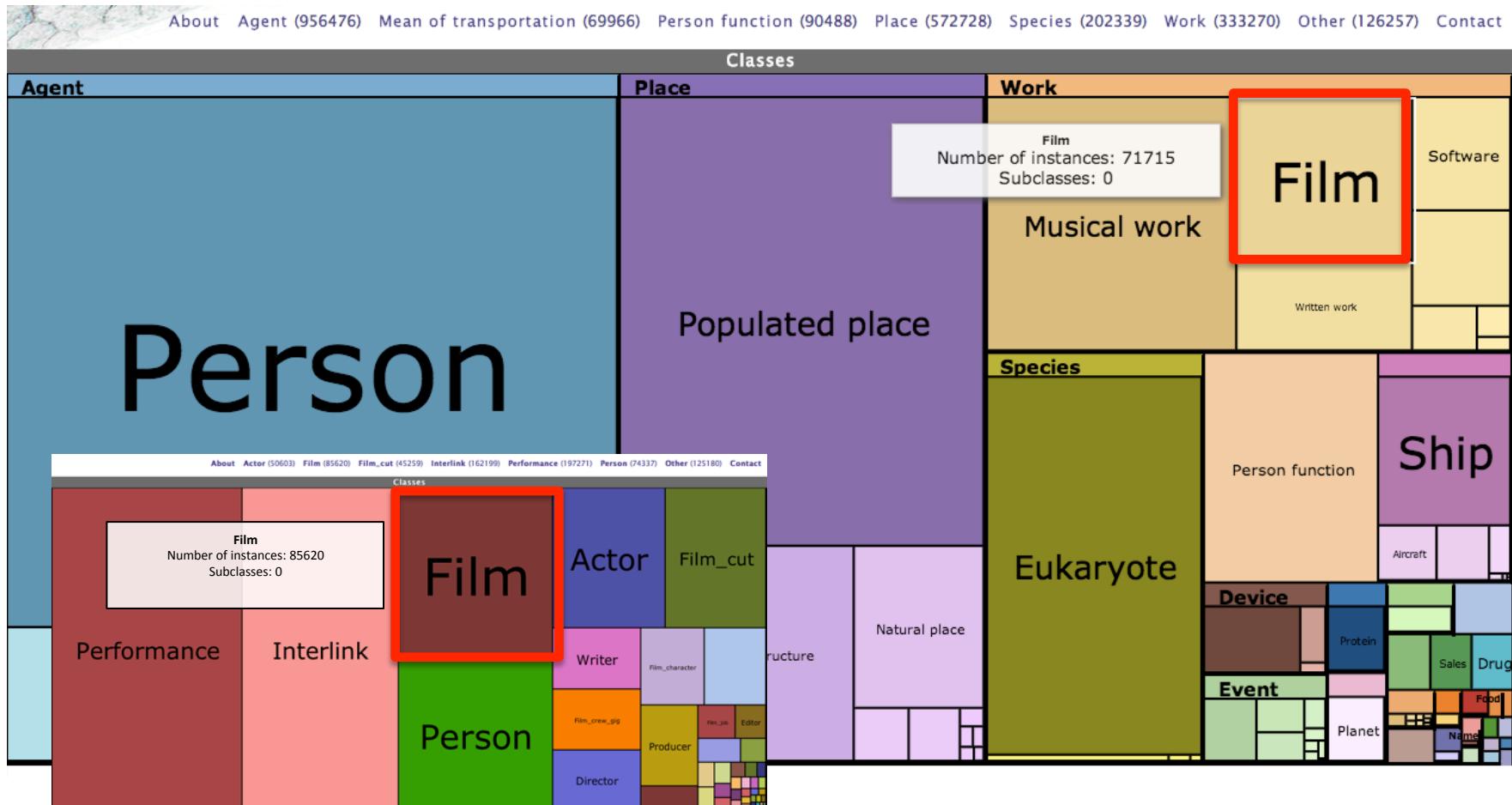
★ Overview

What is a dataset about?
Navigation menus, Treemap, site map...

*Is DBpedia relevant
for films? And
compared with the
LinkedMDB dataset?*



Rhizomer





Filter

View properties and values. Filter them.
Pivot among entities through relations

Facets, pivoting, breadcrumbs...

Rhizomer

Pivoting

Filter Agent by:

► Birthdate Reset filters

Common values

► Birthdate

Common values

► Birthplace Filter Place

Common values

► Birthplace Filter Place

Common values

► Caps

Common values

► Clubs

Common values

Context

Data Charts Map

[Reset all filters \[x\]](#)

Showing Agent

has Film where Director is Werner Herzog [x]
has birthPlace Place where Country is Germany [x]

TimeLine (3)

+ Udo Kier a Person, agent, person, Person, Thing
comment Udo Kier (born Udo Kierspe; 14 October 1944) is a German actor, known primarily for his work in horror and exploitation movies.
[edit](#) - [new](#) - [del](#)
[Referrers](#) - [TimeLine](#)

+ Volker Prechtel a Person, agent, Thing, person, Person
comment Volker Prechtel (9 August 1941 – 7 August 1997) was a German actor. He appeared in 52 films and television shows between 1974 and 1997.
[edit](#) - [new](#) - [del](#)
[Referrers](#) - [TimeLine](#)

+ Werner Herzog a Person, agent, person, Thing, Person
comment Werner Herzog Stipetić (born 5 September 1942), known as Werner Herzog, is a German film director, producer, screenwriter, actor, and opera director. He is often considered one of the greatest figures of the New German Cinema, along with Rainer Werner Fassbinder, Margarethe von Trotta, Volker Schlöndorff, Werner Schröter, and Wim Wenders.
[edit](#) - [new](#) - [del](#)
[Referrers](#) - [TimeLine](#)

[More...](#)

DBpedia films have actors that have birthplaces, LinkedMDB doesn't...





Rhizomer

★ Visualise

Services and Plugins

Visualisations declaratively associated to data

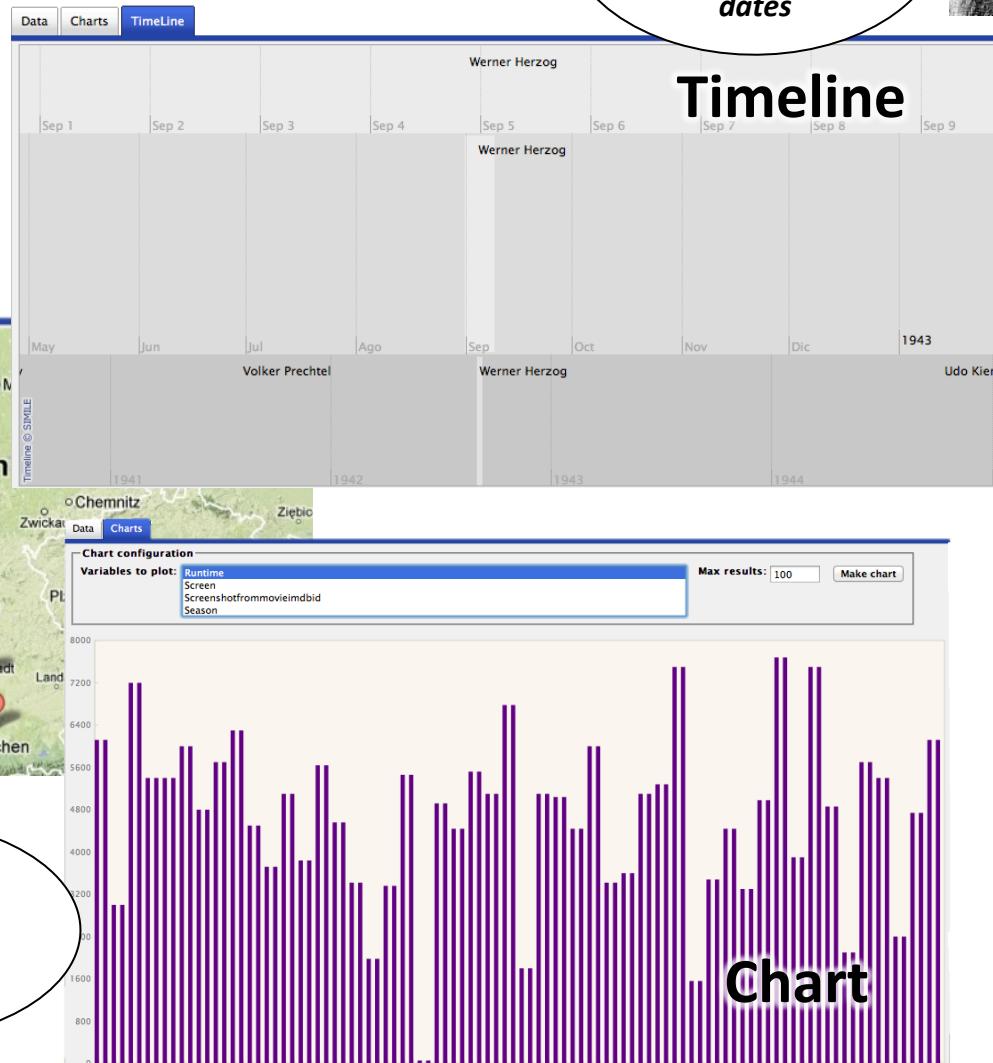
Timelines to show anything with a date, like actors' birth dates



Maps for things geolocated, like actors' birth places



And charts for numbers, like Herzog films runtimes...



User Interface helps Error-Spotting then Assisted Edition...

▼ country

United States (13532)

United

The United Arab Emirates <http://rhizomik.net/ontologies/2011/06/iso3166a2.owl#AE>

The United Kingdom <http://rhizomik.net/ontologies/2011/06/iso3166a2.owl#GB>

United States Minor Outlying Islands <http://rhizomik.net/ontologies/2011/06/iso3166a2.owl#UM>

The United States <http://rhizomik.net/ontologies/2011/06/iso3166a2.owl#US>

Philippines (1122)

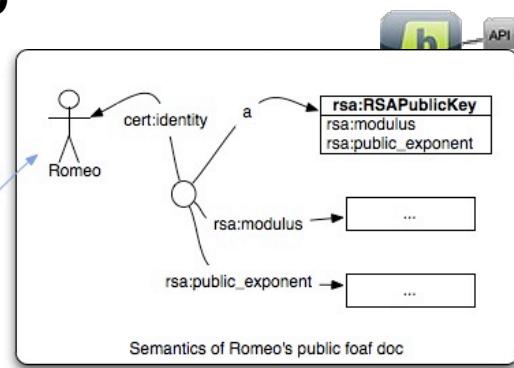
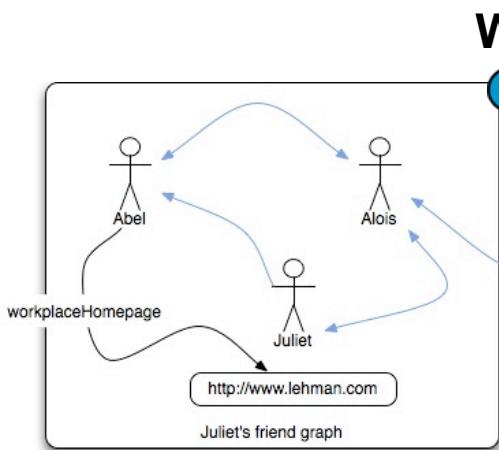
United Kingdom (814)

Japan (668)

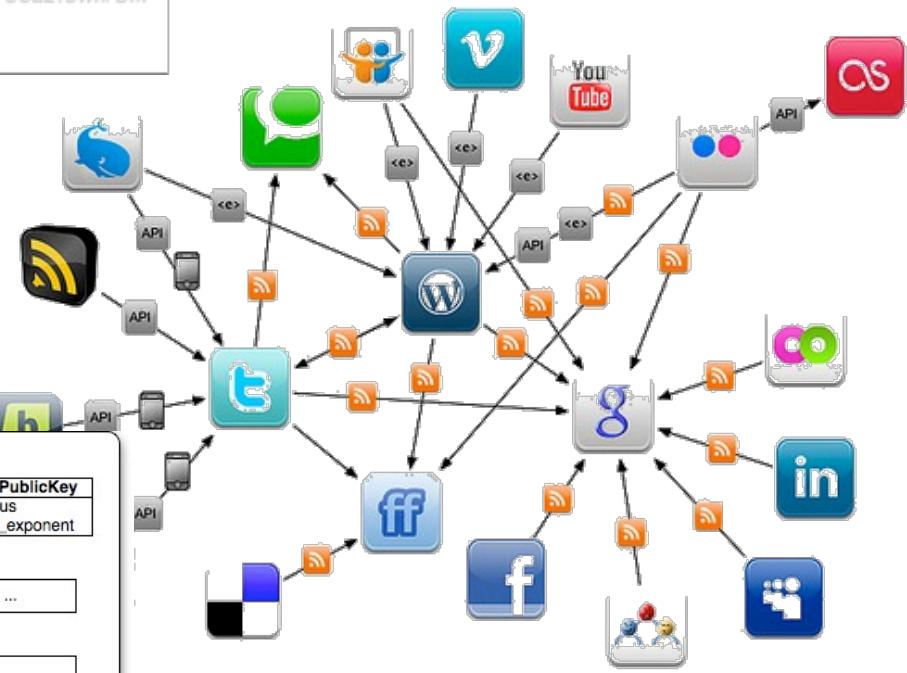
United States of America (646)

[more values](#)

...and Trust



<http://www.w3.org/2008/09/msnws/papers/foaf+ssl.html>



Pest Editor for/by biologists

Common Name ?

Emerald ash borer	<input checked="" type="checkbox"/>	Language English	Remove
Besouro-verde	<input checked="" type="checkbox"/>	Language Portuguese	Remove
Agrile du frêne	<input checked="" type="checkbox"/>	Language French	Remove
Asiatischer eschenprachtkäfer	<input checked="" type="checkbox"/>	Language German	Remove
Green beetle	<input checked="" type="checkbox"/>	Language English	Remove
Emerald ash beetle	<input checked="" type="checkbox"/>	Language English	Remove
	<input type="checkbox"/>	Language undefined	Remove

Add new Common Name

Comment ?

oscar: crec que quan es creen simptomes per una fitxa aquests han de incorporar-se automaticament a la fitxa. anar a buscar després les descripcions que hem creat i afegir-les 1 a 1 es lent i sera complicat quan en tinguem moltes. també està bé poder veure i imprimir tot el llistat de titols de les descripcions existents per poder decidir si n

Same As ?

http://dbpedia.org/resource/Emerald_ash_borer

Add new Same As

Eppo Code ?

AGRLPL Language undefined Remove

Add new Eppo Code

Affected Crop ?

Walnu Replace Edit Remove

+ Click to create 'Walnu'
+ (add new local resource)

- nueces(nueces; nuez; walnut)
(local resource)
- nuez(nueces; nuez; walnut)
(local resource)
- walnut(nueces; nuez; walnut)
(local resource)
- walnut
(from Taxon - http://virtuoso.udl.cat:8890/sparql)
- walnuts
(from Taxon - http://virtuoso.udl.cat:8890/sparql)

Autocomplete and Provenance

Versioning

