

3RD INTERNATIONAL WORKSHOP ON SEMANTIC DIGITAL ARCHIVES

VALETTA, MALTA
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PUNDIT: CREATING, EXPLORING AND CONSUMING SEMANTIC ANNOTATIONS

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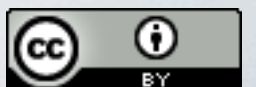


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(4) NET7 srl, Italy

(5) Scuola Normale Superiore, Italy

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OUTLINE

1.PUNDIT VISION

2.PUNDIT ANNOTATION MODEL

3.DISPLAYING ANNOTATION DATA

4.SOME EXAMPLES

5.CONCLUSIONS

Pundit

DEVELOPED BY:



Semia,
Università Politecnica delle Marche
<http://semia.dii.univpm.it>



Net7 SRL, Pisa
www.netseven.it/

SUPPORTING PROJECTS:



DM2E EU Project
<http://dm2e.edu/>



AGORA EU Project
<http://project-agora.eu/>



Semlib Project Eu Project
<http://semia.dii.univpm.it>



Pundit won the LODLAM Challenge 2013!

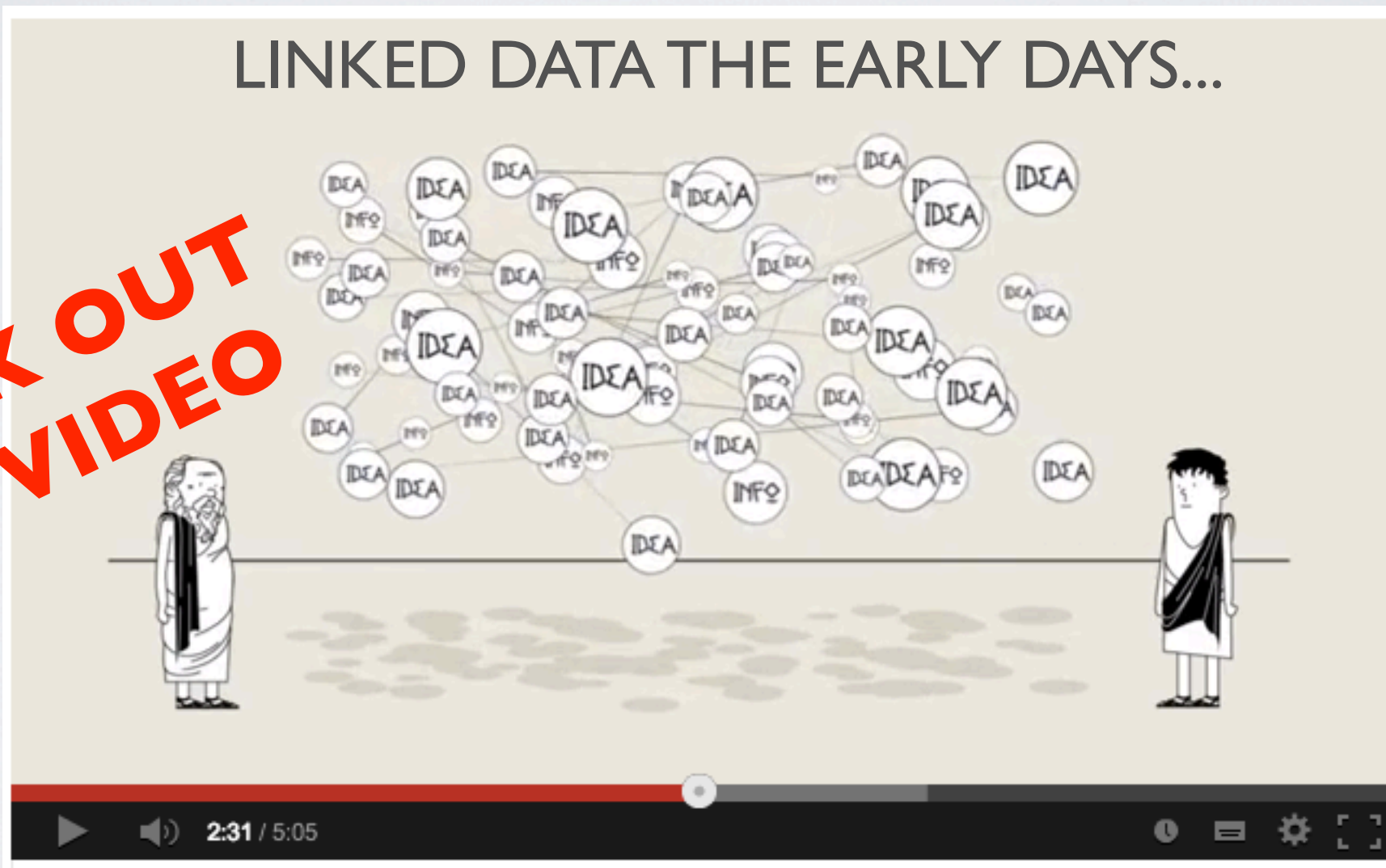
Data visualizations, tools, mashups for Linked Open Data in libraries, archives, and museums

<http://summit2013.lodlam.net>

LINKED DATA THE EARLY DAYS...

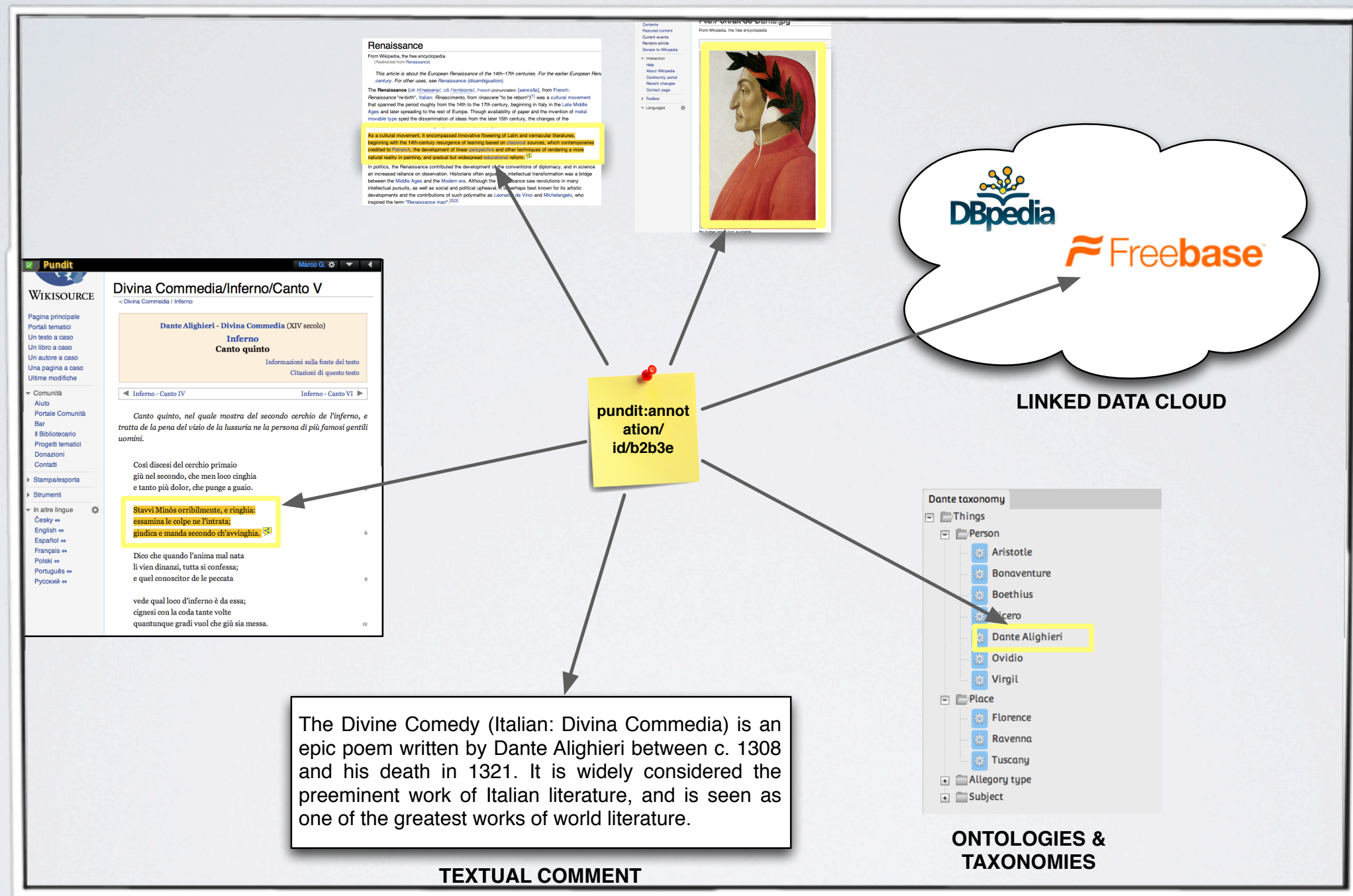


**CHECK OUT
THE VIDEO**



http://www.youtube.com/watch?v=6uUQ4f3z_E0

PUNDIT VISION



Pundit allows user to generate semantically structured data when they create annotations!

PUNDIT VISION

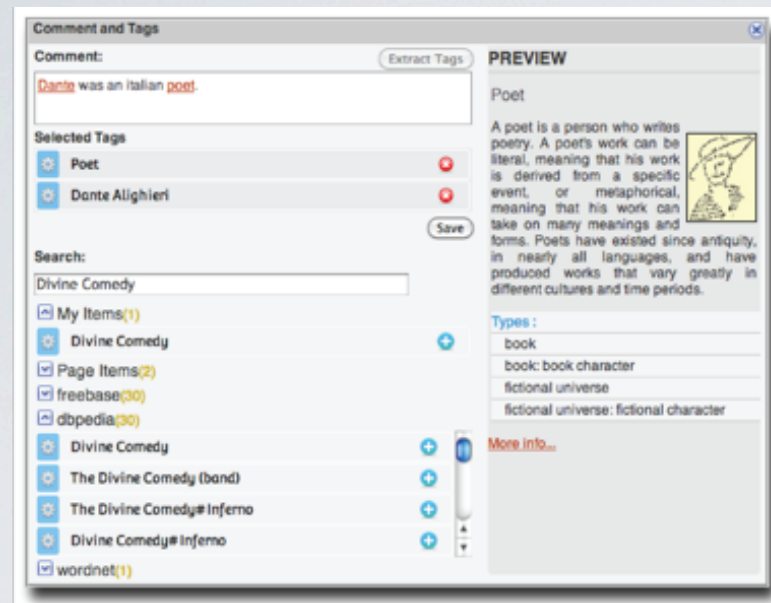
RESTful APIs are provided to consume created annotations (data):

➔ SEARCH / EXPLORE / SHARE THE ANNOTATIONS

➔ EASILY CREATE DYNAMIC DATA VISUALIZATIONS



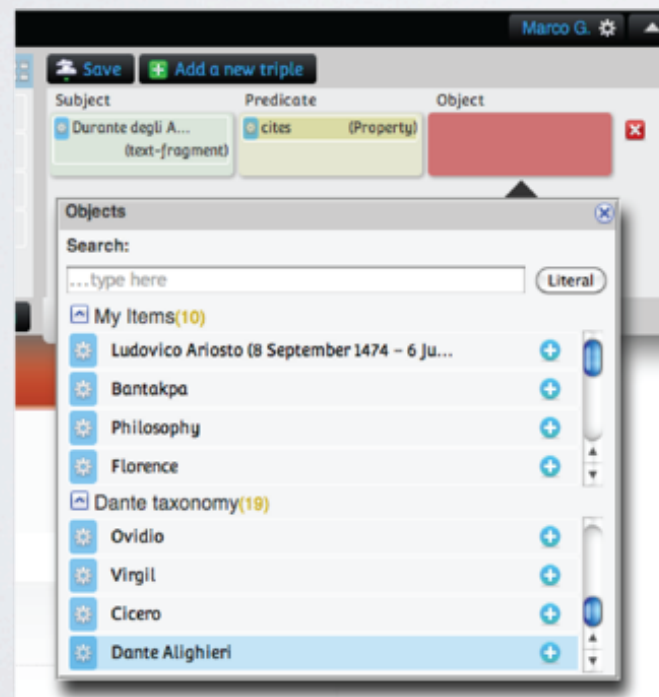
CREATING SEMANTIC ANNOTATIONS



COMMENT/ SEMANTIC TAGS



TEXT RELATIONS



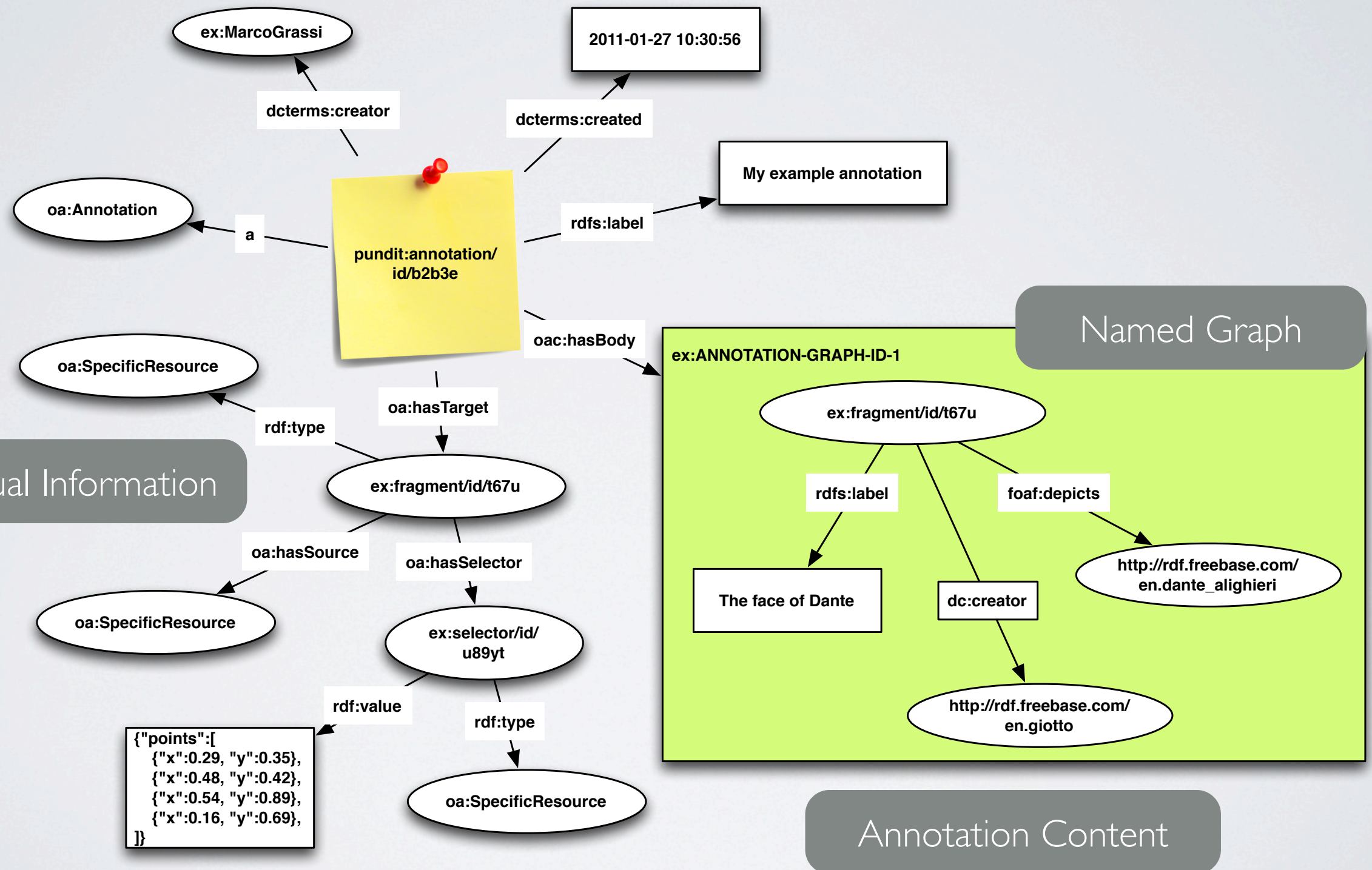
TRIPLE COMPOSER



IMAGE ANNOTATION

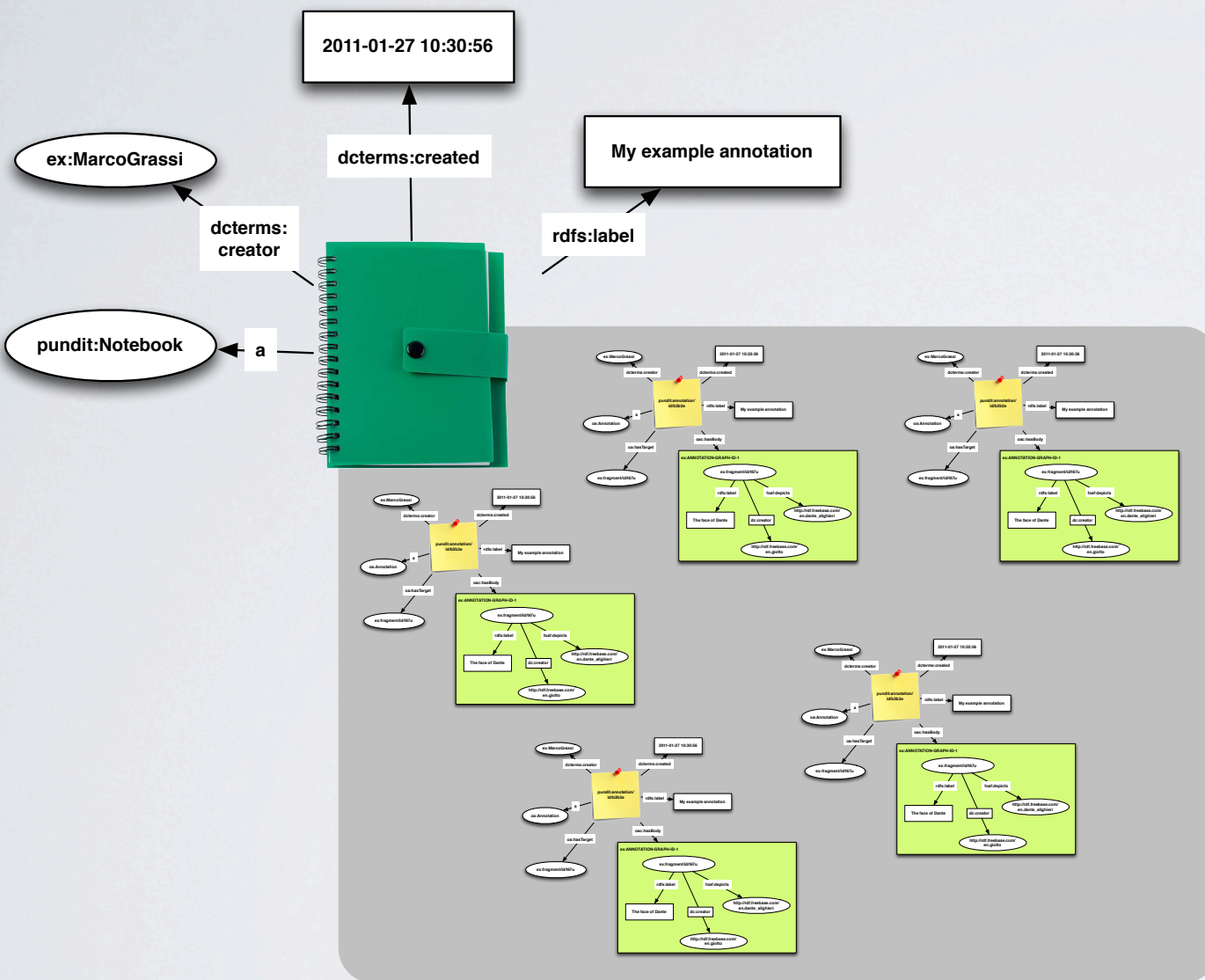
ANNOTATION MODEL

- Based on Open Annotation Collaboration (OAC)



NOTEBOOKS

- Annotations are collected in **notebooks**

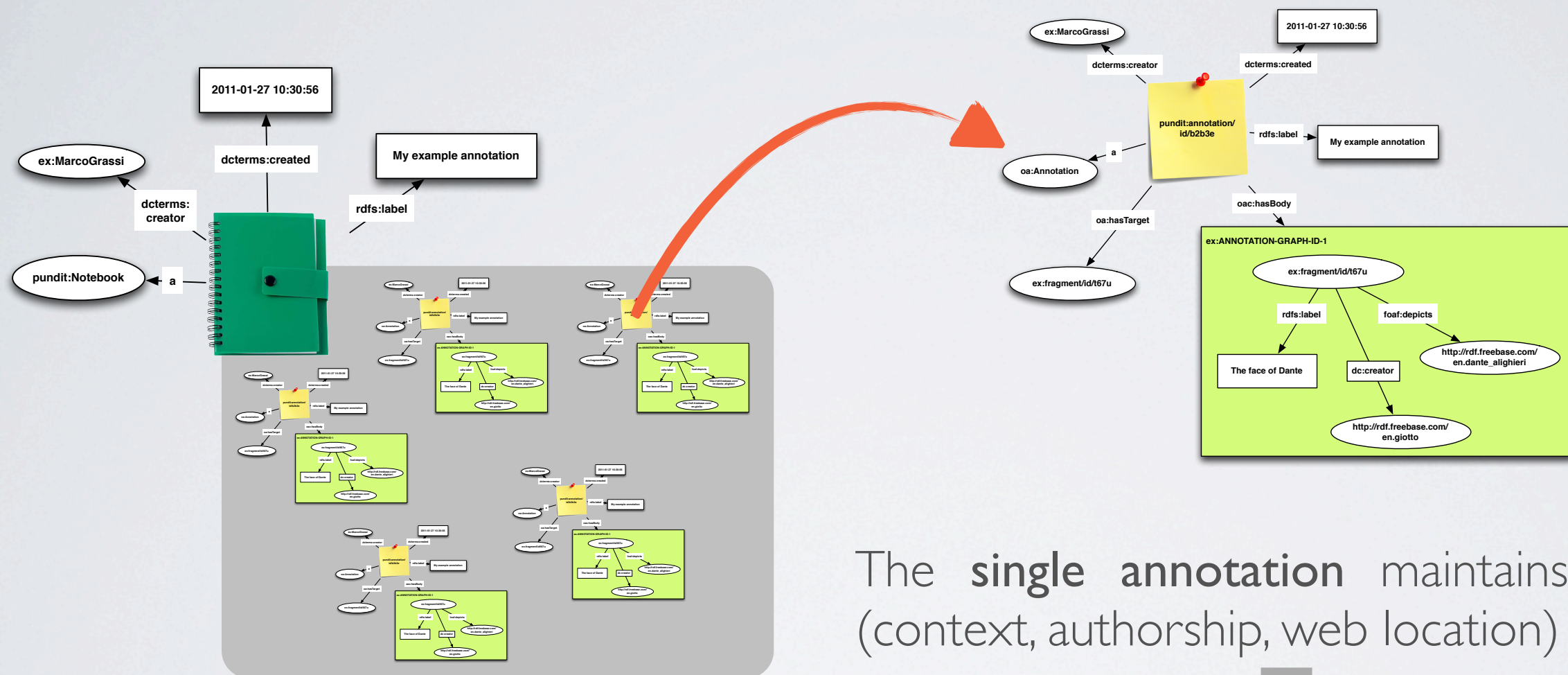


- Users can **organize** their annotations in different notebooks
- Set as **Public/Private**
- Activate/Deactivate** to filter the amount of public annotations visualizing only those of interest.
- Identified by a (dereferenciable) **URI**

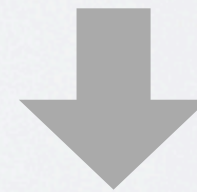
- Annotations are **shared** at notebook level.

DATA VISUALIZATION ANNOTATION CENTRIC

- play a fundamental role for data visualization:



The **single annotation** maintains its integrity
(context, authorship, web location)



Explore collection of annotation grouped into notebooks

ANNOTATION CENTRIC VISUALIZATION CONTEXTUAL VISUALIZATION

The screenshot displays the Pundit application interface, which is designed for creating and visualizing semantic annotations on documents. The interface is divided into several main sections:

- PREVIEW:** On the left, it shows a preview of the document being annotated. The document is titled "Anton Springer" and includes a portrait. Below the title, it lists types: topic, person, deceased_person, and author. The main text of the document is visible, with several words highlighted in yellow, indicating they are part of a semantic annotation. The highlighted words include "Hannover", "den 11ten Febr 1863", "15n Sept v J", "über zwei Monaten", "ein paar ruhige Wochen", and "1863-02-11".
- Freebase, DBPedia, Word Net, Europeana EDM:** These are tabs for selecting semantic resources. The "Freebase" tab is currently active, showing a list of entities related to "Anton Springer".
- Triple Composer:** On the right, this section allows users to create and manage semantic triples. It includes fields for "Subject", "Predicate", and "Object". The "Subject" field contains "Römisc... (Text Fragment)", the "Predicate" field contains "is relat... (RDF Property)", and the "Object" field is empty. There are buttons for "Save" and "Add a new triple".
- Annotations List:** At the bottom right, there is a list of annotations. Each entry shows the creator ("By Costanza Giannaccini"), the date ("on 2013-07-15"), and a checkbox. Below this list, there are fields for "Created by", "On", "ID", and "period of dates ends at".

The document text being annotated is a letter from Anton Springer to Hermann Kestner, dated 11th February 1863. The text discusses the receipt of a letter from Kestner, the author's current situation, and the discovery of a young traveler from Osnabrück who has brought back several historical photographs.

ANNOTATION CENTRIC VISUALIZATION ASK (THE PUNDIT)

NotebooksMy Ask

Logged in as Marco G.
— margra75@gmail.comLogout

Create a notebook

Your notebooks

public Pundit Notes
— 2012-09-22T16:55:31
— 7 annotations
BrowseDelete

public Italian Literature
— 2012-09-25T21:48:09
— No annotations
BrowseDelete

public Smart Home
— 2012-12-07T18:21:48
— 18 annotations
BrowseDelete

public OWL to Java
— 2012-11-28T12:46:34
— No annotations
BrowseDelete

BETA Import your annotations here


NotebooksMy AskMy N: Pundit Notes

Pundit Notes fa0fe246

Close

Visibility	public
By	Marco G.
Created at	2012-09-22T16:55:31
# annotations	7

[img: big-lebowski-still-hr-3.jpg?resize=506,340]



Marco G.
2013-09-23T16:13:00
jonesreportla.com/ailec_eve ..

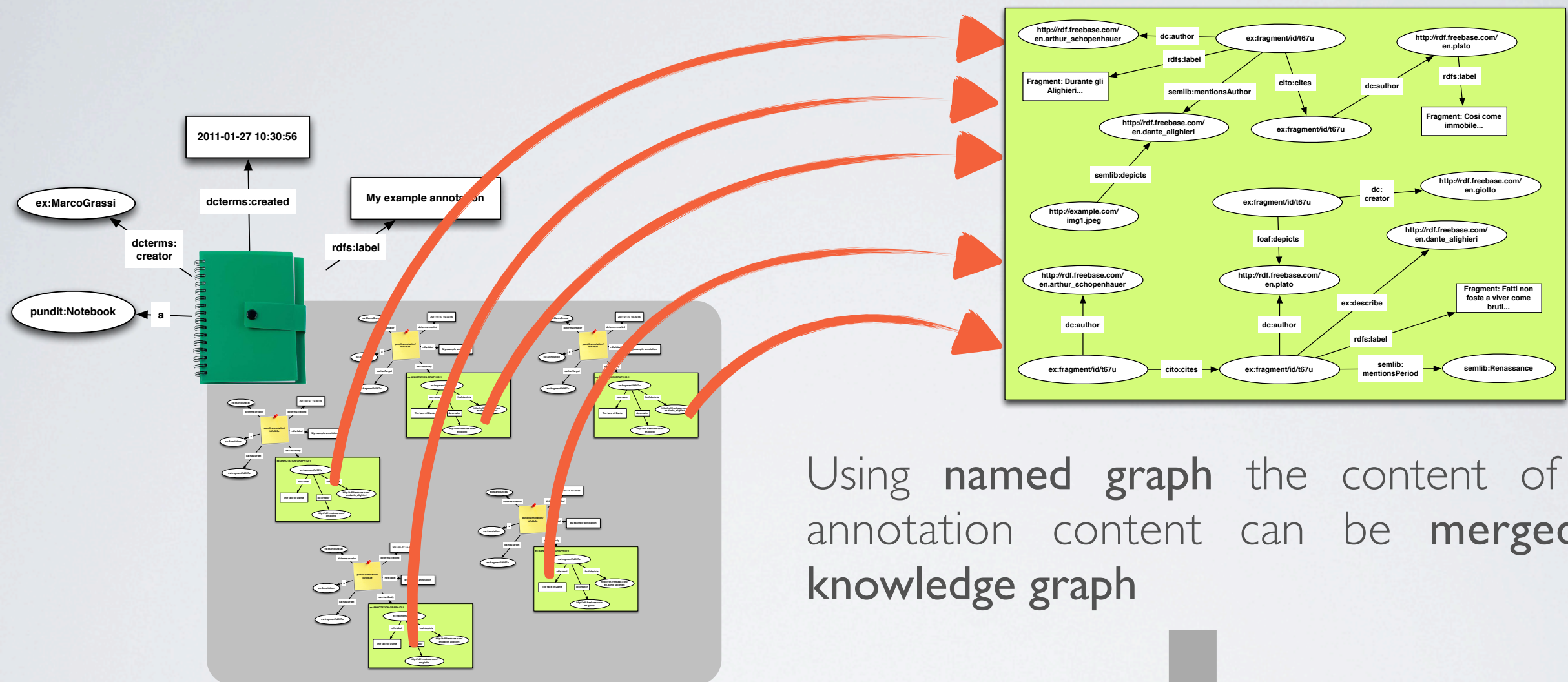
http://schema.org/comment

The dude takes it easy.

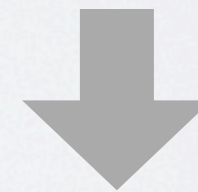
A portal to manage annotations, share them and explore public notebooks

<http://ask.thepund.it/>

DATA VISUALIZATION ITEM CENTRIC



Using **named graph** the content of single annotation content can be **merged** into knowledge graph



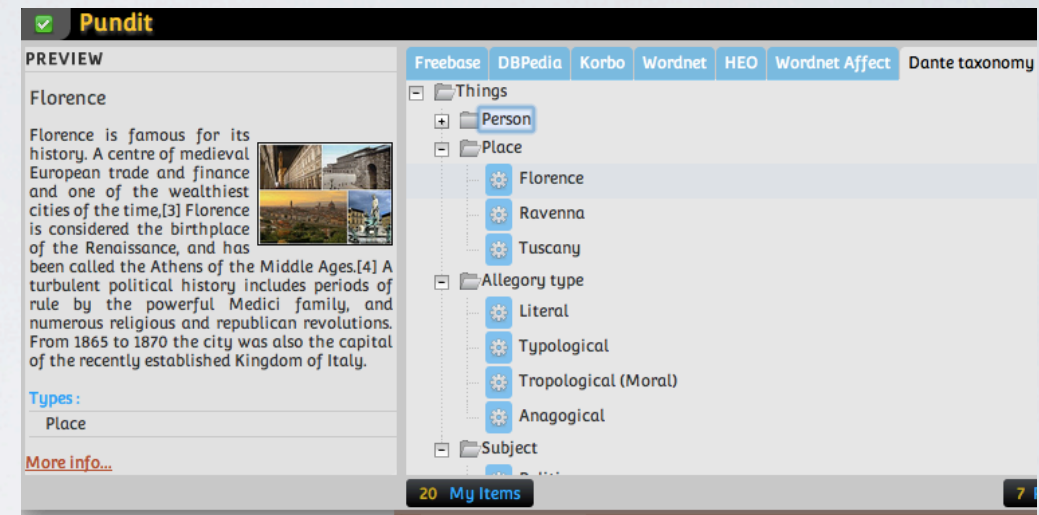
Visualization on the **annotated items** and their **relations** with other items

A-priori knowledge on ontologies/custom vocabularies and relations used in annotations is **beneficial!**

ITEM CENTRIC VISUALIZATION CONFIGURING PUNDIT

Custom Vocabularies/Taxonomies:

- Online JSONp file (created manually or automatically from an ontology)
- Add URL to Pundit configuration

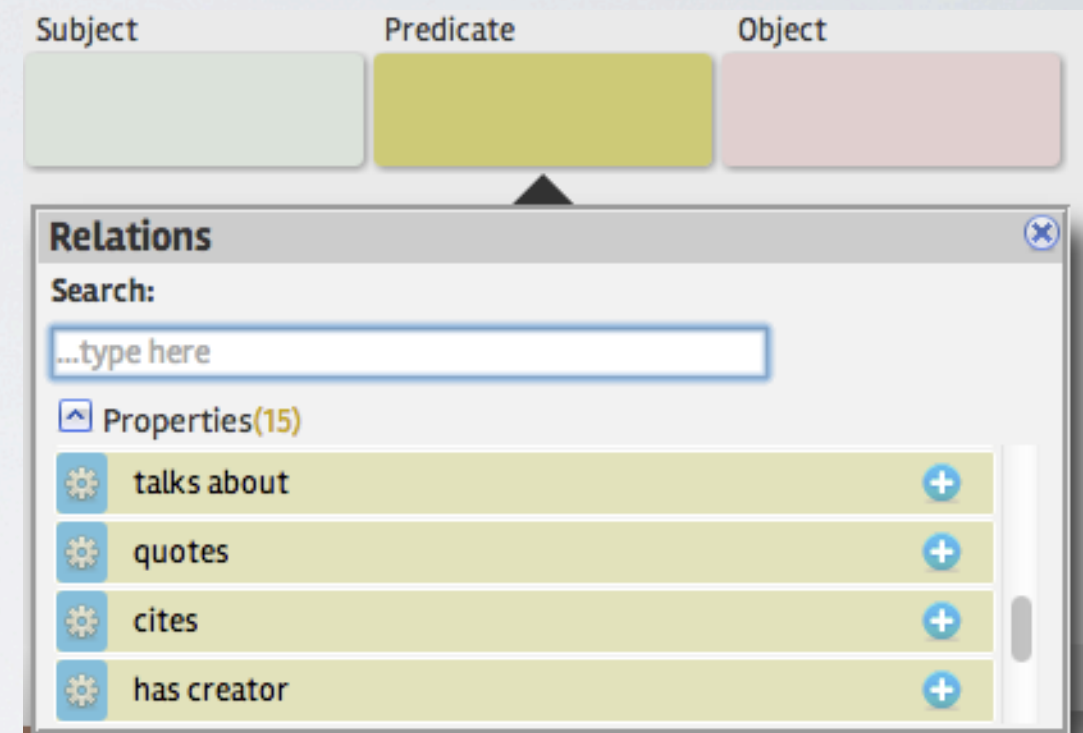


Linked Data Selector:



ITEM CENTRIC VISUALIZATION CONFIGURING PUNDIT

Predicates used in relations:



- ➔ address **different communities** and foster **data reuse**
- ➔ create **specific pattern** in the annotations to create **engaging user interfaces**

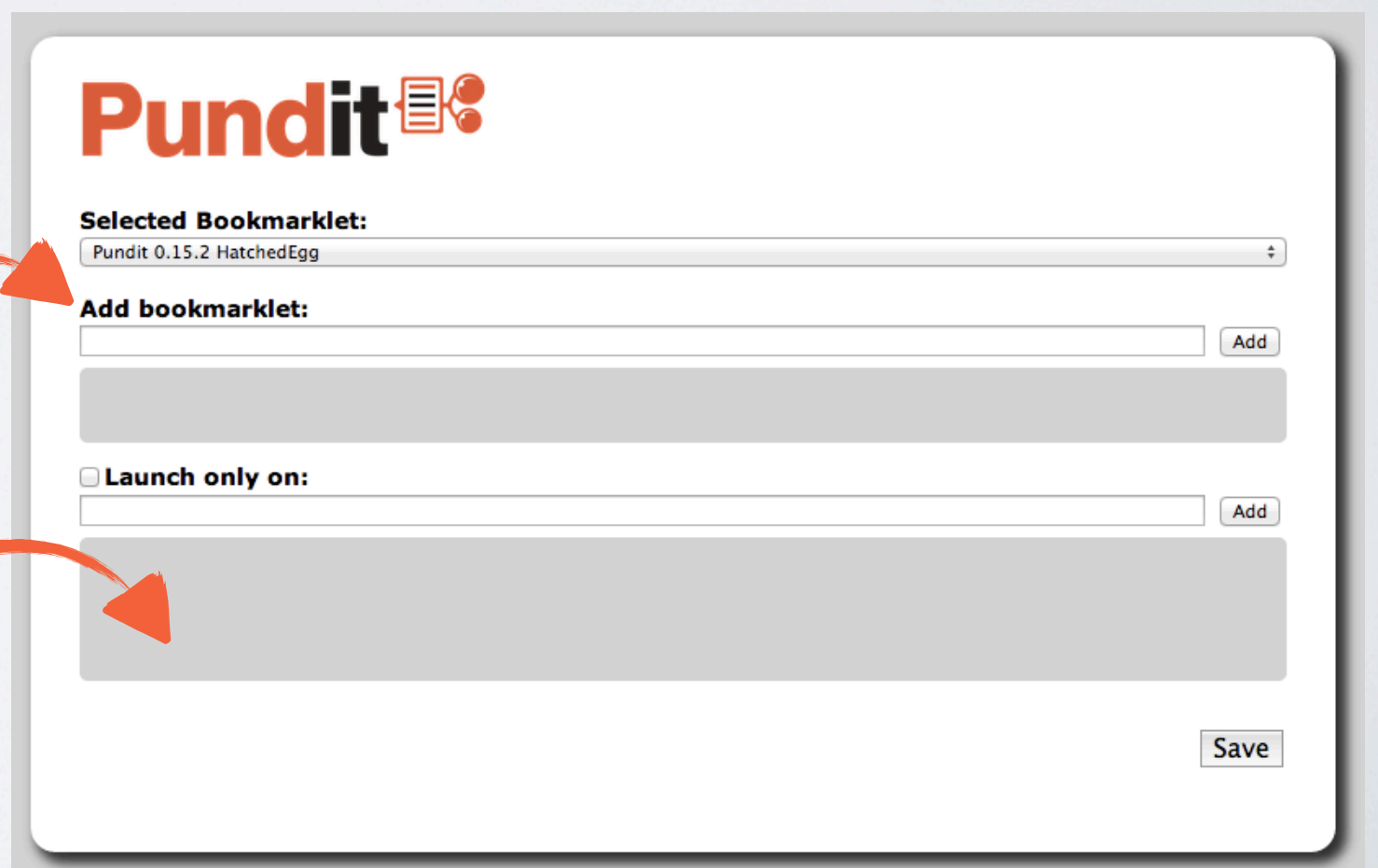
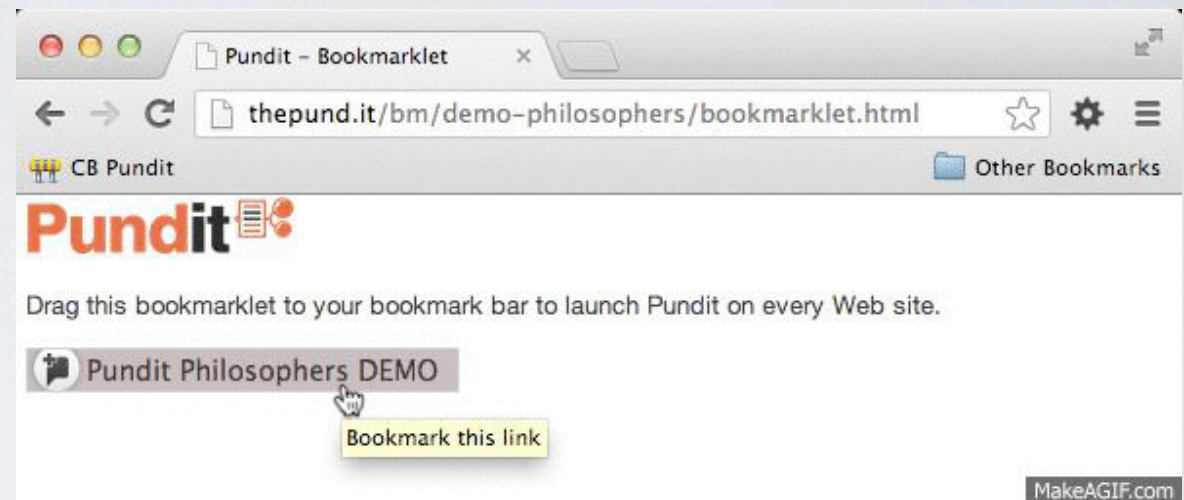
ITEM CENTRIC VISUALIZATION DEPLOYING PUNDIT

- As a JavaScript library
- As a bookmarklet
- As a Browser Extension (Chrome and Firefox)

Select between different instances of Pundit

Restrict the web pages where Pundit is automatically launched

<https://github.com/marcograssi/PunditBookmarklet>



ITEM CENTRIC VISUALIZATION CREATING DATA VISUALIZATION

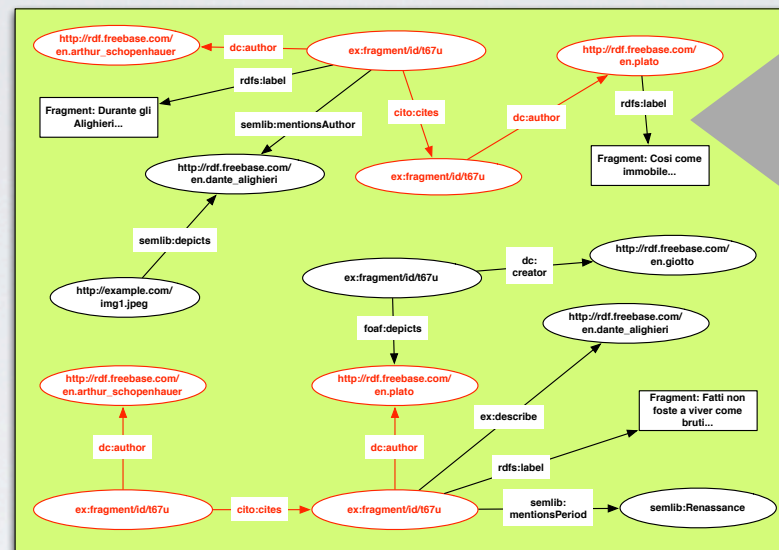
COMMUNITY USERS



PUNDIT
custom



PUNDIT
custom

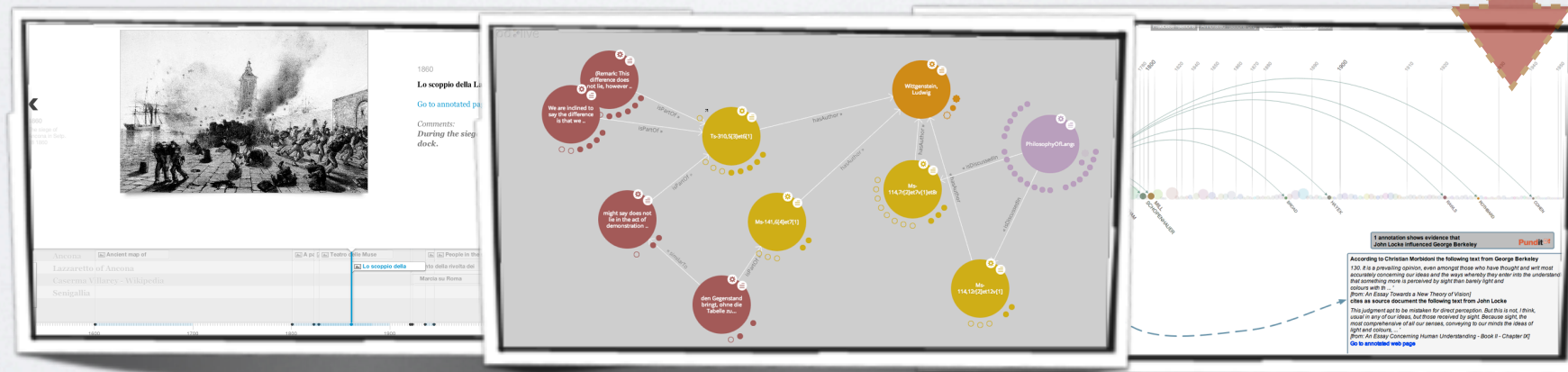


Specific patterns &
Standardized vocabularies

Other data sources

REST API + SPARQL

Third party
libraries and tools

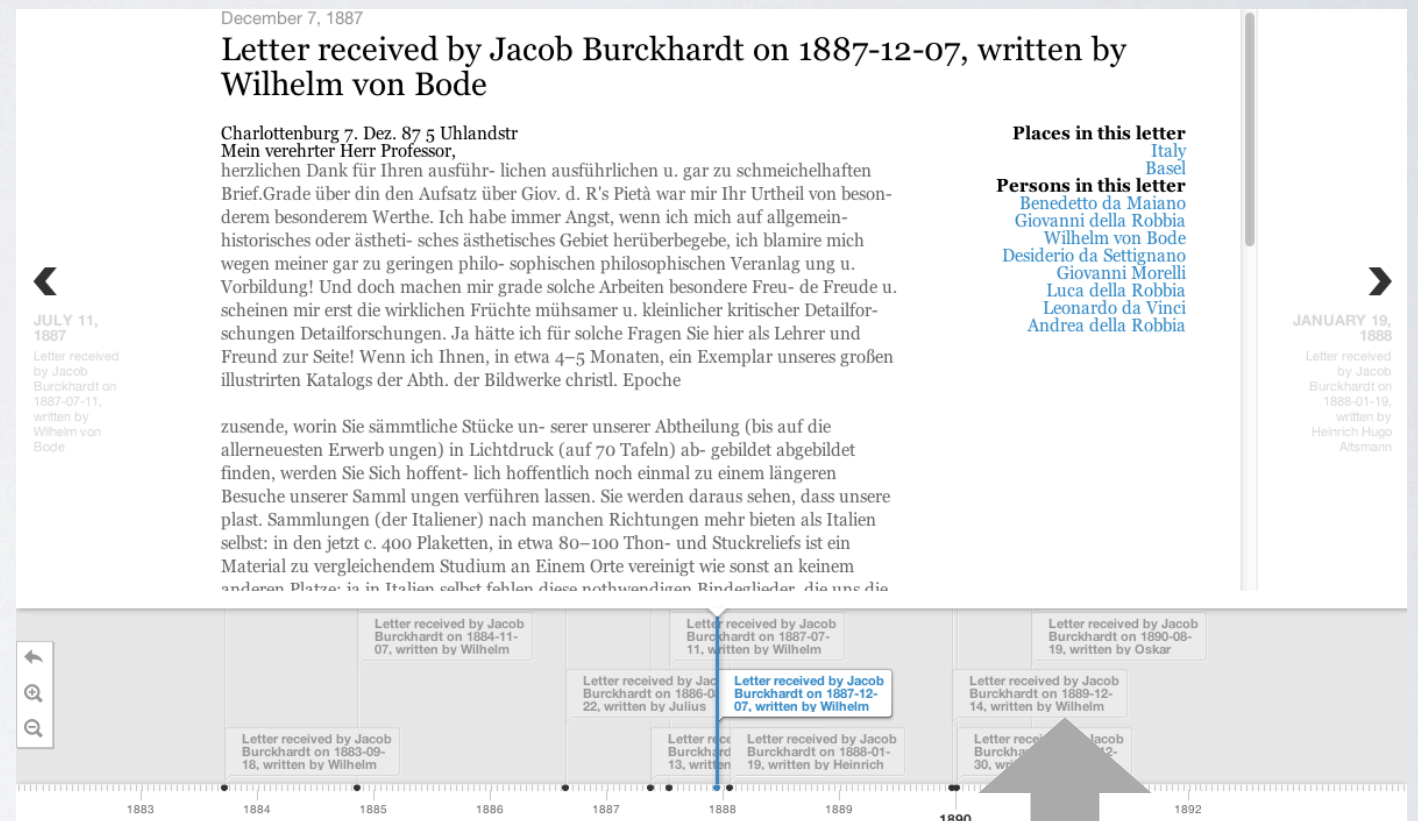
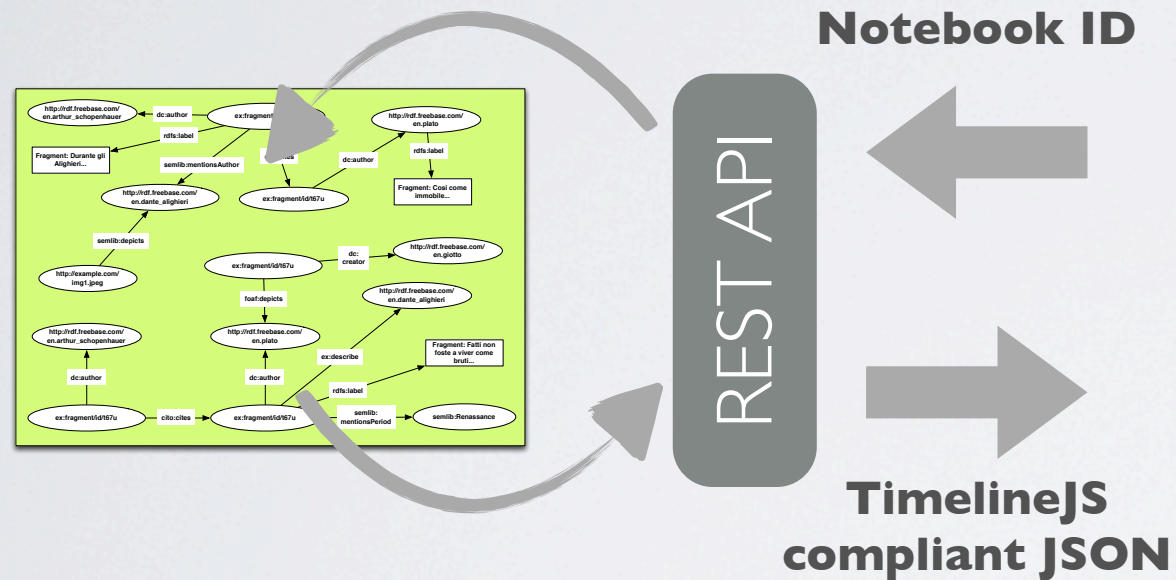


SPECIALIZED DATA VISUALIZATION

TIMELINE

EASILY CREATE INTERACTIVE TIMELINE USING PUNDIT...

- Create annotations in a notebook of text fragment or images, containing a date, title and creator.



- Reuse TimelineJS (<http://www.timeline.verite.co/>)

TimelineJS

TIMELINE

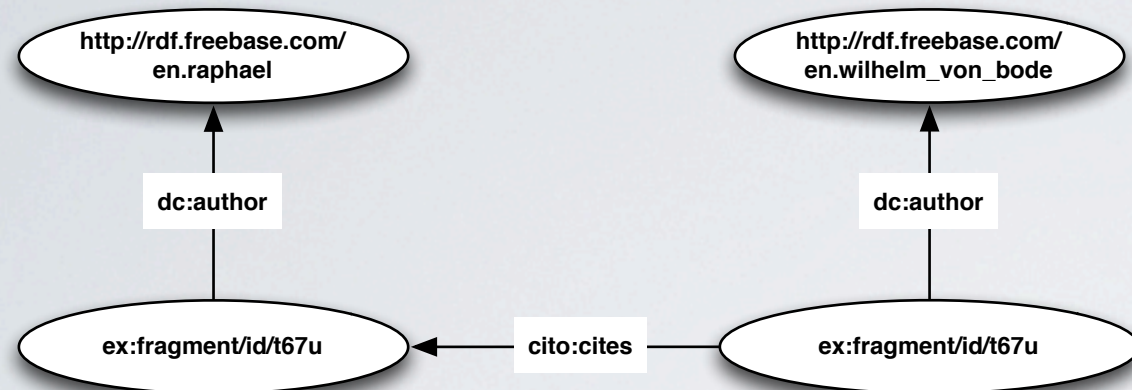
...JUST LIKE THIS ONE I'VE CREATED DURING THE WORKSHOP



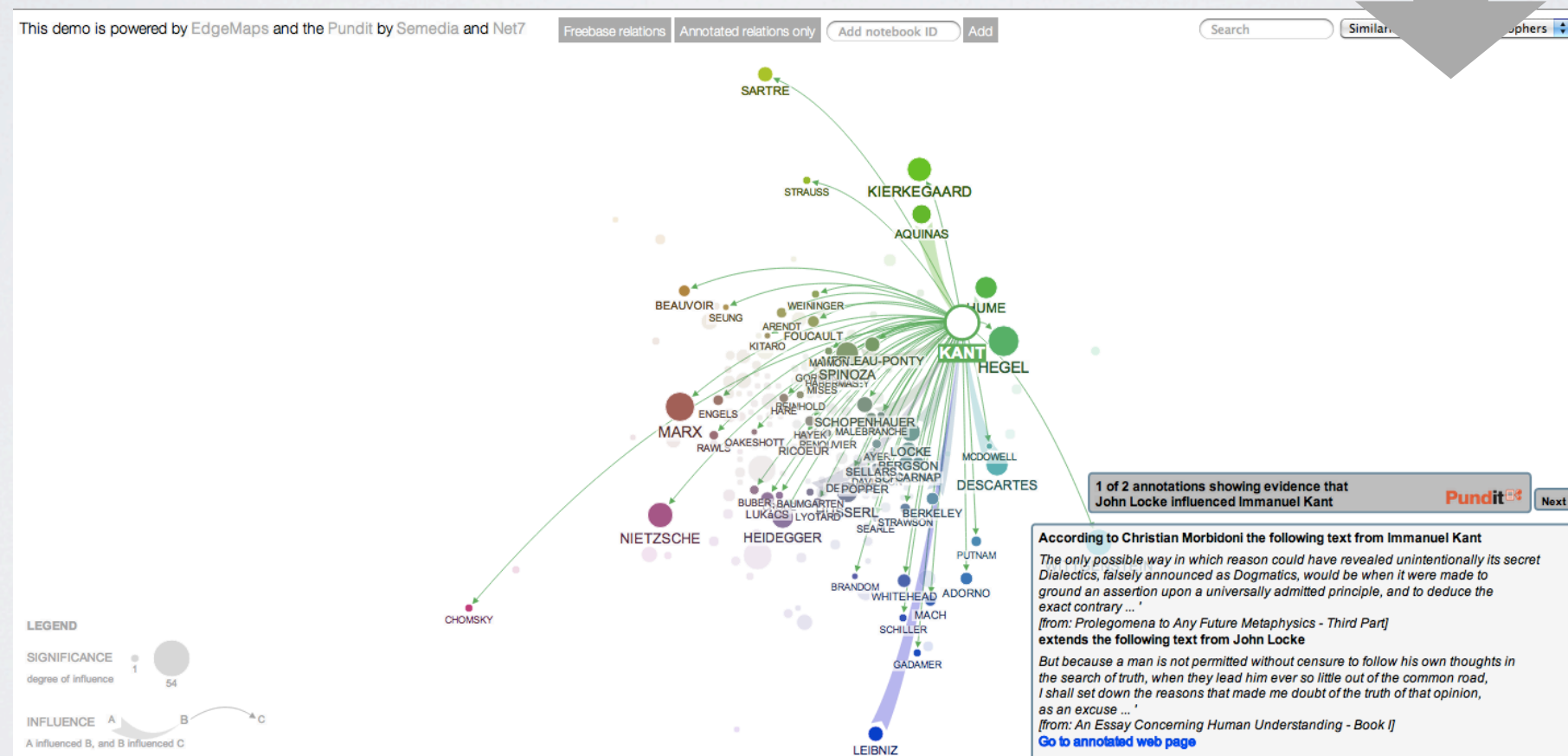
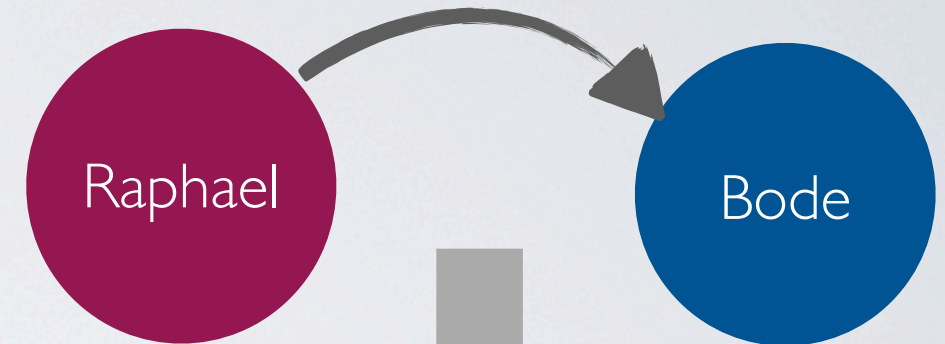
<http://semedia.dii.univpm.it/news/16-having-fun-with-pundit-sda-2013>

EDGEMAPS VISUALIZATION

Every-time that an annotation like this is created



A relation is generated between the authors
influenced

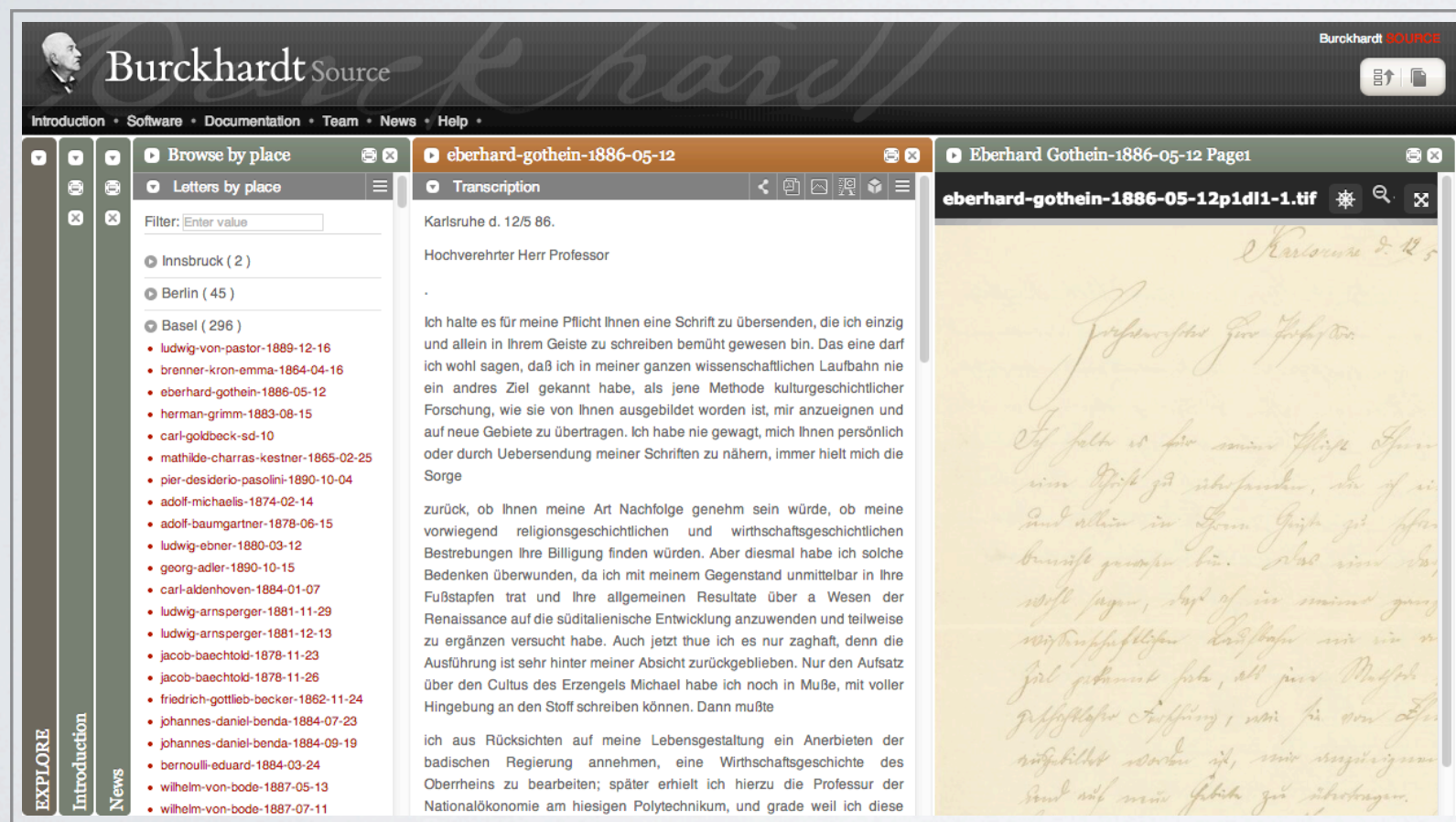


<http://mariandoerk.de/edgemaps/>

BURCKHARDT SOURCE

<http://burckhardtsource.org/>

- Burckhardtsource.org platform aims at mapping and producing a critical edition of the extensive correspondence of 400 European intellectuals with Jacob Burckhardt over a period of more than half a century from 1842 to 1897.



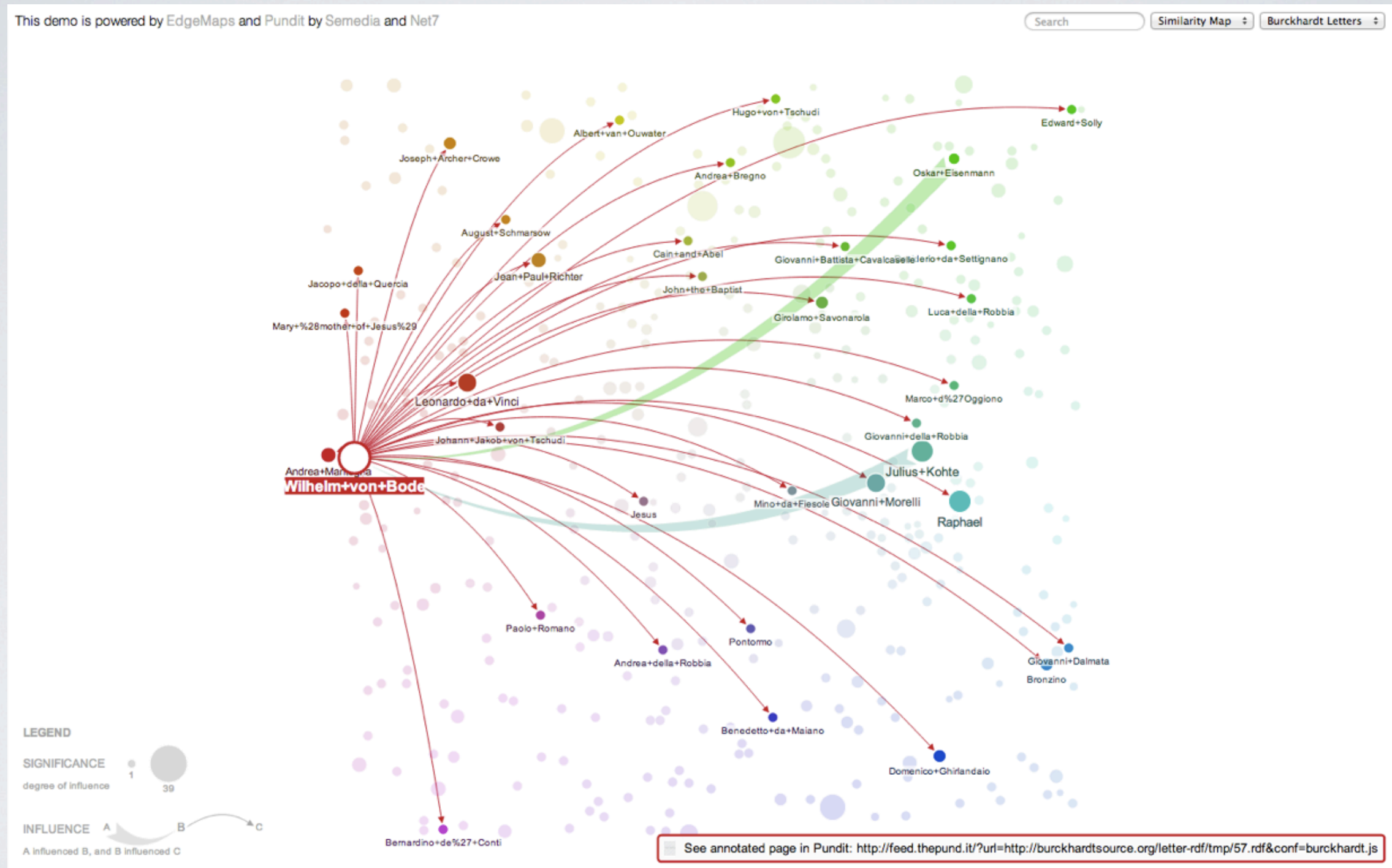
- Resources of interest:
Person, Places, Works of art
- Named entities source:
Freebase
- Missing resources have been added to Freebase

TIMELINE



<http://metasound.dibet.univpm.it/timelinejs/examples/bur-bode.html>

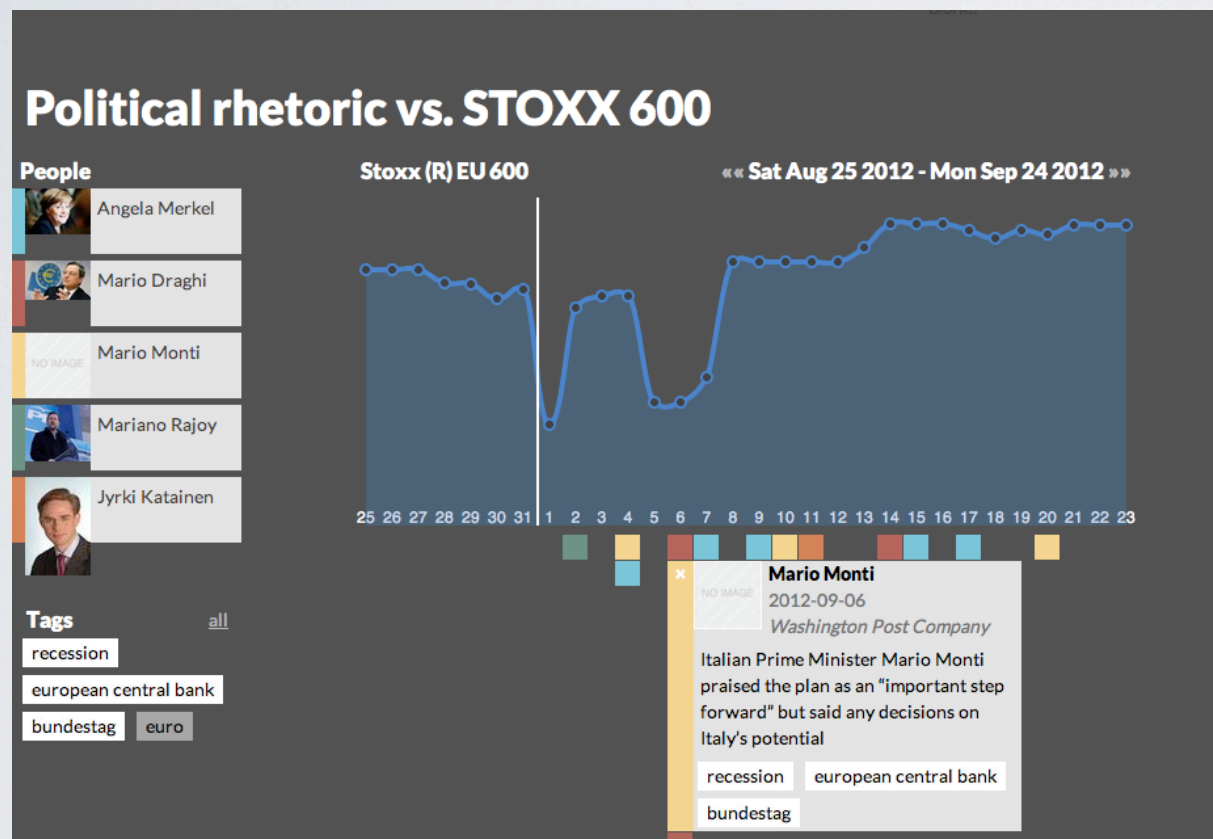
EDGEMAPS VISUALIZATION



<http://metasound.dibet.univpm.it/edgemaps/maps/test.html#letters;map;;>

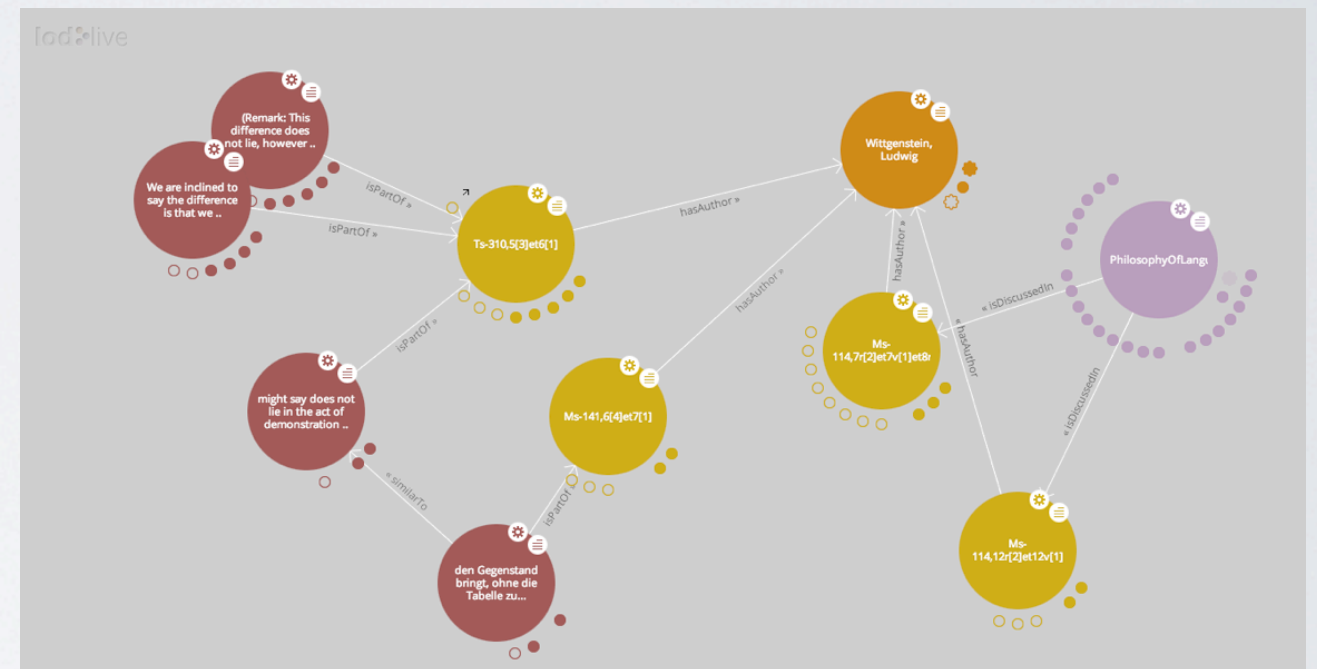
MORE ON <http://thepund.it>

DATA JOURNALISM



<http://ask.thepund.it/#!/timeline/31951d93>

LOD LIVE



CONCLUSIONS

- Pundit a **customizable** and **flexible semantic web annotation tool**.
- **Custom instances** can be created for specific use scenarios...
- ...and easily **deployed to users** (bookmarklet or browser extension).
- **Specific data visualization** can be created also using **third party applications**.

THANK YOU!

Pundit 

<http://thepund.it>



Semedia
SEMANTIC WEB AND MULTIMEDIA

<http://semedia.dii.univpm.it>



www.netseven.it/



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