

Ontodia

Check out:

<https://wikidata.metaphacts.com/resource/app:Start>

Linked Data Visualization

Based on content bei HPI / Harald Sack

<https://www.youtube.com/watch?v=lgxGzSNgbIA&list=PLoOmvuyo5UAFY6jb46jCpMoqb-dbVewxg&index=37>

Our example

- Goal: Get number of authors per country
- And then visualize this number on a map

Example

- Look at a random author in DBpedia – eg Jules Verne
- a) How to find the information (birthplace → country, etc)

How to make the charts

- Eg:

<https://developers.google.com/chart/interactive/docs/gallery/geochart>

- Use JS Fiddle to prototype

Data conversion

- You can save the data from DBpedia SPARQL as csv
- Then you need to convert it to the format used in Google Charts

ask: Draw a Map Chart...

- SPARQL Query:
 - **Country and Number of authors per country**

```
■ ?author rdf:type dbo:Writer .  
■ ?author dbo:birthPlace ?birthplace .  
■ ?birthplace dbo:country ?country .  
■ ?country rdfs:label ?country_name  
■ FILTER (lang(?country_name)="en")  
■ GROUP BY ?country_name  
■ COUNT(?author)  
■ xsd:string(?country_name)
```

Query Text

```
SELECT DISTINCT xad:string(?country_name) COUNT(?author) as ?count WHERE {  
  ?author rdf:type dbo:Writer ;  
           dbo:birthPlace ?birthplace .  
  ?birthplace dbo:country ?country .  
  ?country rdfs:label ?country_name FILTER (lang(?country_name)="en") .  
}  
GROUP BY ?country_name  
ORDER BY DESC(?count)
```


For more details:

<https://www.youtube.com/watch?v=lgxGzSNgbIA&list=PLoOmvuyo5UafY6jb46jCpMoqb-dbVewxg&index=37>

Show sparqlwrapper

https://github.com/gwohlgen/dig_hum_course_oct2019/blob/master/test_sparqlwrapper.py

A) Discuss basics of ML and DH/NLP on whiteboard

B) Show distant supervision using Semantic Kbs

<https://colab.research.google.com/github/gwohlgen/colab/blob/master/>

SW_Course_2019_unit10_relation_extraction.ipynb

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https://github.com/gwohlgen/dig_hum_course_oct2019/blob/master/test_sparqlwrapper.py