Euroscepticism and Big-Data

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Data and Web Science Group
University of Mannheim

Background

Bachelor and Master in **Contemporary European History**

Final year PhD student in **Digital Humanities** at Centre for the History of Universities and Science, University of Bologna

Thesis: “The Web as a Historical Corpus: Collecting, Analysing and Selecting Sources On the Recent Past Of Academic Institutions”

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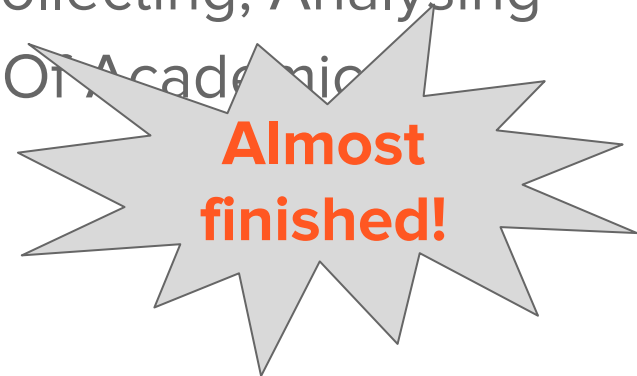

Working at the University of Mannheim

Researcher at the **Data and Web Science Group** and at the **Political Science Department.**

Project: building **topic-specific collections** for supporting research on the international relations of the United States.

New research proposal

Combining new sources and new methods for advancing our comprehension of **Euroscepticism**.

Today's talk

1. Quick overview on the topic and traditional approaches
2. Present new sources - and how to collect them
3. Describe the work we've been doing on new methods
4. Recap on how everything converges
5. Small surprise

Euroscepticism

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Euroscepticism

Literally, it means **criticism** of the European Union (EU).

Hard euroscepticism is a principled opposition to the EU and European integration.

Soft Euroscepticism is support for the existence of, and membership of, a form of European Union, but with opposition to specific EU policies.

Euroscepticism

It does not follow common left-right divisions of the political spectrum, but it could be represented as a **new one-dimensional scaling** (Proksch and Slapin, 2010):

Pro Eu Integration

Against EU Integration

How it is traditionally studied

Traditional approaches:

- **Polls** and **surveys**
- Establishing the position of political parties towards the EU using **party-manifestos** (Conti, 2013)
- analysing the **opinion** of **candidates** (McAllister and Studlar, 2000)
- hermeneutic **close reading** of political news (Vallaste, 2013).

How it is traditionally studied

Limits:

- Strong **top-down** view
- Works that analyse content are often based on **close reading**
- Does **not** easily **capture interactions** (media - elites - people)

Solution: Big Data!

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3) What **role** has the **web** played in it?
    a) What do we mean by “role”?
    b) What do we mean by “web”?
4) Different countries **different Euroscepticism**?

Challenges

1. Sources are **difficult to acquire**:
   -> not all countries have a National web archive
2. Sources are **complex to process**
   -> not only big data - but different languages
3. **Methods** are **not** as **reliable** as we think
   -> did someone say topic models? :D

Case Studies

I am currently working on studying the growth of Euroscepticism **during the last 17 years** (1999 - 2016), in three different countries: UK, Germany and Italy.

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Challenges:

- Three different languages
- No National web archive for Italy
- No access to the web archive for Germany (waiting for L3S)
- No text mining on UK web archive

Born Digital Sources Available

Political Manifestos:

- Manifesto Project website offers over 1000 parties from 1945 until today in over 50 countries on five continents.

Parliament Speeches:

- EuroParl covers all plenary debates held in the EP since July 1999, manually translated in 23 languages.
- Transcript of National Parliament debates (e.g. parliament.uk)

Government / Party / Campaign Websites:

- From the Internet Archive

Born Digital Sources Available

Media:

- Internet Archive provides snapshots of media websites
- TREC KBA web archive News Collection (2011-2013)
- Archive-Team News Grabber (still not available)
- Common Crawl News Dataset (2016 - ?)

People:

- Large datasets, e.g. Reddit Corpus (other collections you would suggest?)
- Topic-specific Twitter collections (#brexit, etc)

Methods we are developing

General goal: topic-based analyses

Task: Given a document, identify **central topics**.

Underlying goal: linking topics to the **semantic web.**

Final goal: map how **topical-opinions** spread:

- Country-based
- Across countries

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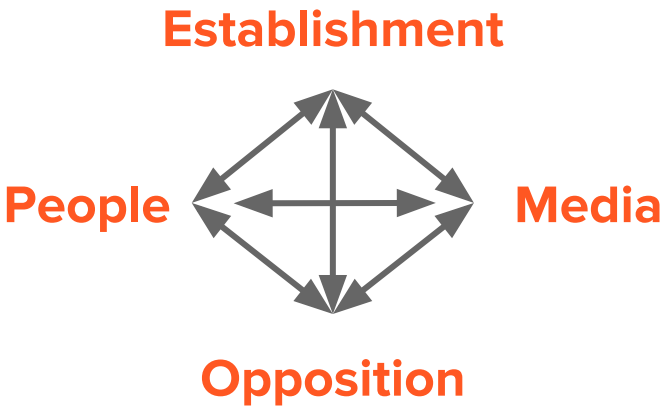
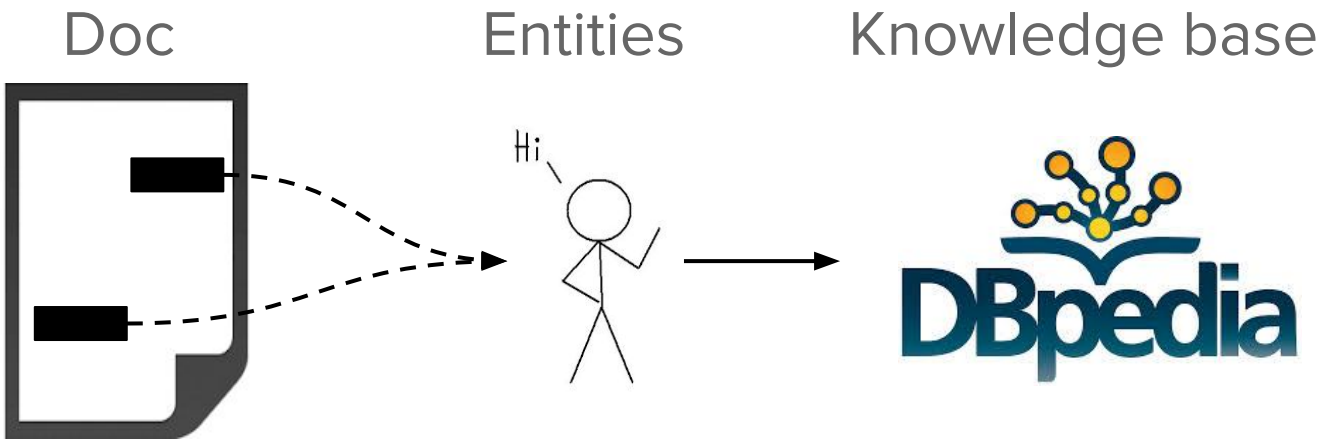


Entities as Topic Labels (with Anne Lauscher)



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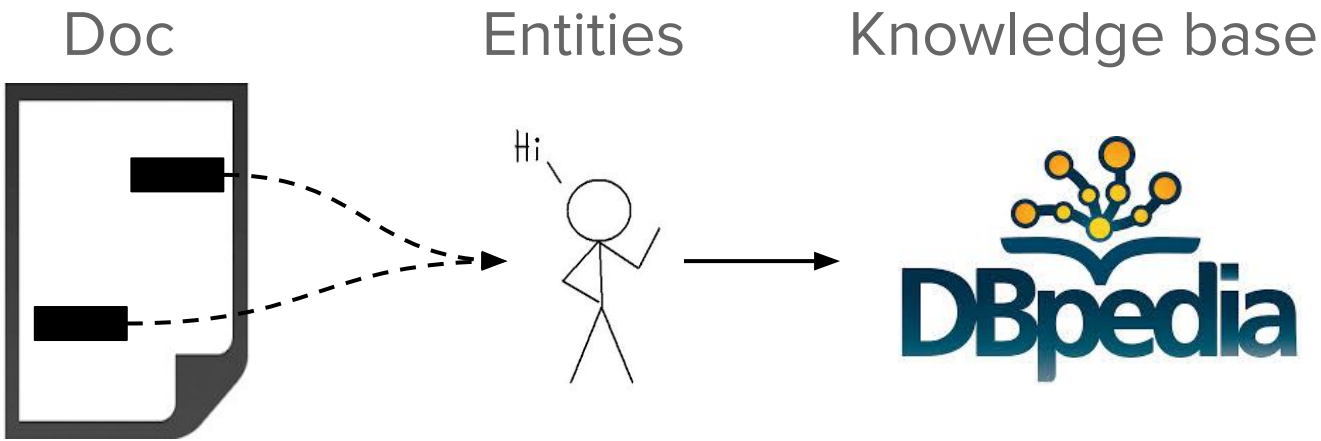


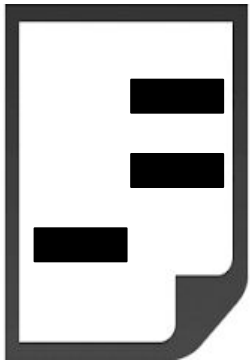
fy Babelfy "Word sense disambiguation and entity linking together!"

TAG·ME

DBpedia Spotlight

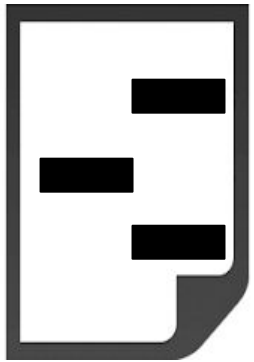
Entities as Topic Labels (with Anne Lauscher)

Doc1



Entity1
Entity2
Entity3

Doc2



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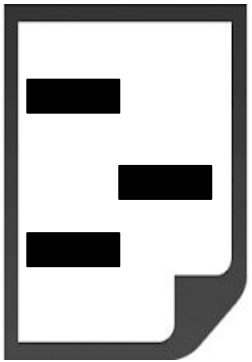

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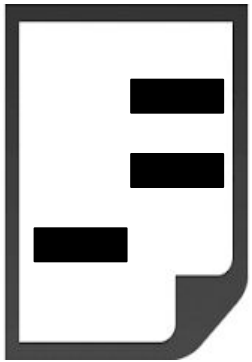

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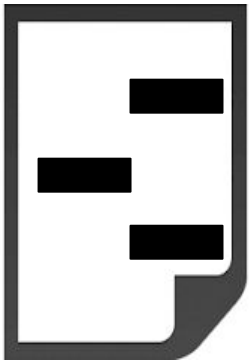

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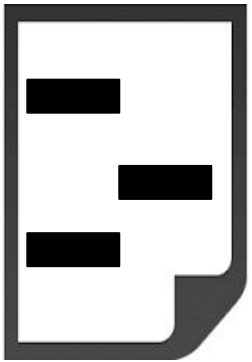

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Entity3

Labeled LDA!

Entities as Topic Labels (with Anne Lauscher)

Examined most relevant topics addressed by each party in the European Parliament's fifth term (1999-2004).

Les Verts (France)

	Label: Consumer (47%)	**Label: GMO** (34%)
Topic words	product directive consumer safety law market	human health agreement food measure sustainable

Topic-based political scaling (with G. Glavas, C. Zirn)

Measuring lexical and semantic textual similarities between politicians.

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Refugee Crisis

Pro Eu Integration

Against EU Integration

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Cross-lingual political scaling (with G. Glavas)

Given a series of texts about the same topic in two different languages we scale them from pro-EU to against-EU.

Economic Crisis

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Economic Crisis

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We are also working on

Measuring **disputed topics** in UK political speeches (with Mahmoud Hussein).

Detecting fine-grained **controversial aspects** in political topics (with Aya Mobayad).

Identifying topic-based **agreement and disagreement** in political discussions (with Stefano Menini and Sara Tonelli).

Where are we, so far

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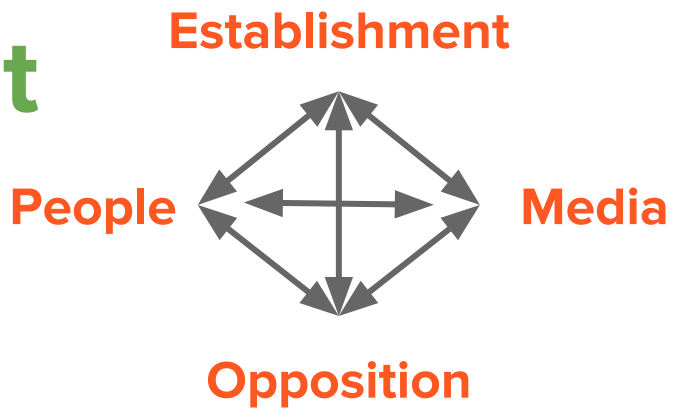
#brexit



Karlsruher Institut für Technologie

UNIVERSITY OF MANNHEIM

Take away

New sources and new methods could guide us in **better understanding** Euroscepticism.

National web archives are **essential** resources to expand this kind of study (esp. for understanding the **role of the web**).

Interdisciplinary competencies and **source + tool criticism** strongly needed, to not get caught by big-data rhetoric.

Hackathon on Euroscepticism and Big Data Summer 2017!

Three days at the beautiful **Lake Garda**, Italy.

20 scholarships available for PhD Students and Post-Docs, from humanities, social sciences and computer science.

Call for application out soon!

UNITELMA SAPIENZA

UNIVERSITY OF MANNHEIM

FONDAZIONE BRUNO KESSLER

TECHNISCHE UNIVERSITÄT DARMSTADT

Questions?

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