

Social Networks in Dutch Parliament

Cooperation and opposition networks

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Content

- PoliticalMashup project: aims
- Network information in Parliamentary Proceedings
- Debate graphs and graphs of debaters



Politicalmashup project

Connect political data.

- 4 data sources
 - ★ Promises and actions of politicians
 - ★ Reactions on those in media and by general public
- Connect data on
 - ★ Political entities
 - ★ Time
 - ★ Topics



Data sources

Promises

- Election manifestos
- Party websites and blogs
- Twitter, personal blogs, YouTube, LinkedIn

Actions Parliamentary proceedings, 1814–yesterday

Reactions

- News media
- User generated content Fora, Twitter, Comments on news.



Used technique

Make implicit structure and information explicit.

- text mining
- data normalization
- data integration



Two main aims

Make advanced search easy and possible.

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- about **Irak**

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- in **answers** to **interruptions** by **PVV** members.

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Queries which mix **Content** and **Structure**



Example

- Wie heeft het in de Kamer over Hitler, en wat zeggen ze dan?
- <http://xml.politicalmashup.nl/rest/db/test/HANsearchform.xquery?q=hitler>
- For comparison: same query with overheid.nl



Aim 2

Make large-scale longitudinal and comparative analysis possible.

- Queries which mix **Content** and **Structure**.
- Extensive control on output format.
- Export results to Excel, SPSS, GraphML, ...



Example (Vliegenthart)

- Query**
- 'immigra* OR minorit* OR ethni* OR asylum* OR (race AND relations) OR migrat*'
 - 'Immgra* OR minderhe* OR vreemdeling OR ethni* OR asiel* OR (ras AND relaties) OR migra*'
 - and in Danish, Swedish, Norwegian, ...

Data sources Hansard data of NL, UK, EU parliament, Scandinavian Parliaments.

Periods As long as possible, NL: 1975–2010, UK 1935–2010, EU: 1999–2010, ...

Comput ...

Example (continued)

Output Excel file with for each speech in Parliament which matches the query:

- date
- speakername
- speakerid
- speaker-party
- speechdocno
- title of debate
- number of characters of speech
- number of paragraphs of speech
- text of speech



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Networks from proceedings

Cooperation Together creating and/or filing documents: (undirected graph)

- motions
- amendments
- *initiatief wetsvoorstel*

Opposition Debating a topic: directed graph (attackogram).



Cooperation network data

- Example
- Data and analysis available at

[http://data.politicalmashup.nl/PoliticalMashup/
SocialNetworks/](http://data.politicalmashup.nl/PoliticalMashup/SocialNetworks/)

- Funky Visualizations



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Deeply nested structure in Proceedings

- Rich data model
- Meeting (1 Day)
 - Topic
 - Stage direction
 - Scene
 - Stage direction
 - Speech
 - Paragraph



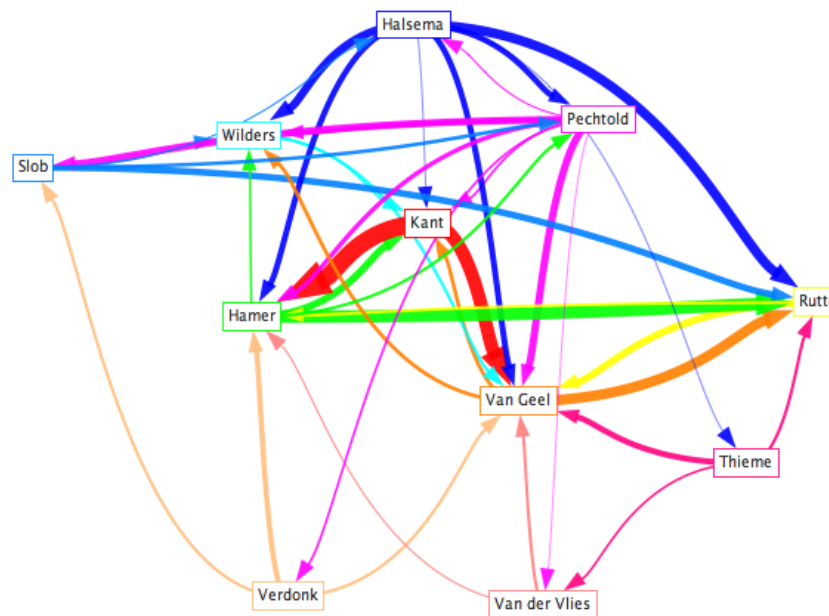
Several applications

- Summarization of one debate.
- Studying large collections of debates.
- (Evolving) interruption networks of politicians and parties.



Summary: Interruption Graphs

- Summary of one debate [Kaptein, Kamps, M. 2008].
- Recent Debate



Large collections of debates

- Debategraphs available for each debate since 1996:
- <http://data.politicalmashup.nl/debates/nl/>
- Debate on Davids Report



Networks of people and parties

- Network of debate-”friends” available for each politician:
- <http://data.politicalmashup.nl/politici/nl/02220.xml>
- Easy to lift to party level using our biographical database.



Conclusions

- Very rich (evolving) network data available.
- Longitudinal analysis possible.
- PoliticalMashup is happy to assist in data preparation.
- We need to be pushed a little for the older stuff ...
- But it is easy to push us and we love to cooperate.



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