

ParlaMint

Networks of Power

Group Members:

Jan Angermeier, Alexandra Bruncrona, Bojan Evkoski, Zhixu Gu, Oleg Harlamov, Jobair Islam, Maciej Janicki, Larissa Leiminger, Jani Marjanen, Jure Skubic, & Minna Tamper



Parliamentary debate is at the heart of political decision making and hence manifests political power. Still, power is a complex phenomenon which has been widely theorized in the study of culture and society. We worked with a ground definition inspired by Foucauldian power-knowledge. This poster aims at shedding light on the manifestations of different aspects of power in political debate by analyzing the networks that emerge from parliamentarians mentioning one another.

Research Questions

In order to reduce the complexity of the theme of power, we have approached the networks through two questions:

- 1. Argumentative Power:** How can speeches given by MPs and the mentions of them give insights into the power of MPs within political debates?
- 2. Structural Power:** How do the speech practices of female and male MPs relate to topic and power distribution in parliament?

Data

We use the CLARIN ParlaMint Dataset, which contains parliamentary debates from 17 European countries. The datasets are linguistically annotated with information about part-of-speech, universal dependencies, and Named Entities. The data is based on transcripts of parliamentary debates (see Erjavec, T. et al. 2022).

For a comparative perspective on active and passive roles in particular discourses we focused on three different countries:

Slovenia: Državni Zbor

United Kingdom: House of Commons

Spain: Congreso de los Diputados

Methods

DATA EXTRACTION

We created subcorpora by handpicking a selection of non-ambiguous key terms that relate to

- **healthcare,** • **education,** as soft topics (talked about by female MPs)
- **immigration,** as an ambiguous topic
- **finance,** • **energy,** as hard topics (talked about by male MPs)

(see Osborn, 2012 and Wängnerud, 1996).

We identified **Named Entities** related to persons and kept those that target actual MPs. We improved the accuracy by adapting to country specific customs.

NETWORKS ANALYSIS AND STATISTICS

The networks have been created using Python and NetworkX and have been qualitatively analyzed in Gephi. To support the qualitative analysis, we applied general statistics on the speaker metadata and mentions.

For the qualitative analysis of nodes and edges, we defined **active relevance** as the number of speeches and **passive relevance** as indegree, which represents the frequency of them being mentioned.

visa
migrant
detention centre
displaced
immigration
refugee
migration
displacement
asylum
escapes

Selected Results

SLOVENIA- Državni Zbor

Term 7: 2014 – 2018
Topic – Immigration

- **Cerar** was the Prime Minister.
- **Grims, Gorenak,** and **Janša** are anti-immigration far-right politicians who challenged Cerar.
- **Grims** has high active and low passive relevance.
- **Top 30** most relevant MPs
 - Active: M = 73%, F = 27%
 - Passive: M = 83%, F = 17%
 → dominated by male speakers.

UNITED KINGDOM- House of Commons

Term 57: 2017 – 2019
Topic – Immigration

- **Nokes** was Minister of State and Immigration.
- **Javid** was Home Secretary.
- **May** was Prime Minister.
- **Top 30** most relevant MPs
 - Active: M = 50%, F = 50%
 - Passive: M = 53%, F = 47%
 → dominated by female speakers.

(NB: share of overall female MPs is 32.4%.)

SPAIN- Congreso de los Diputados

Term 12: 2016 – 2019
Topic – Immigration

- **Sánchez** was the opposition leader and successor of Rajoy.
- **Rajoy** was the President and a MP.
- **Zoido** was the Minister of Interior and Home Affairs.
- **Top 30** most relevant MPs
 - Active: M = 70%, F = 30%
 - Passive: M = 90%, F = 10%
 → dominated by male speakers.

Overall Statistics

	Slovenia	UK	Spain
Total Speeches	21988	168272	11222
Total Speeches w/ mentions	13463 (61.2%)	61663 (36.6%)	8665 (77.21%)
Female MPs percentage	36.6%	32.4%	41.5%
Female Speech	27.8%	32.6%	36.8%

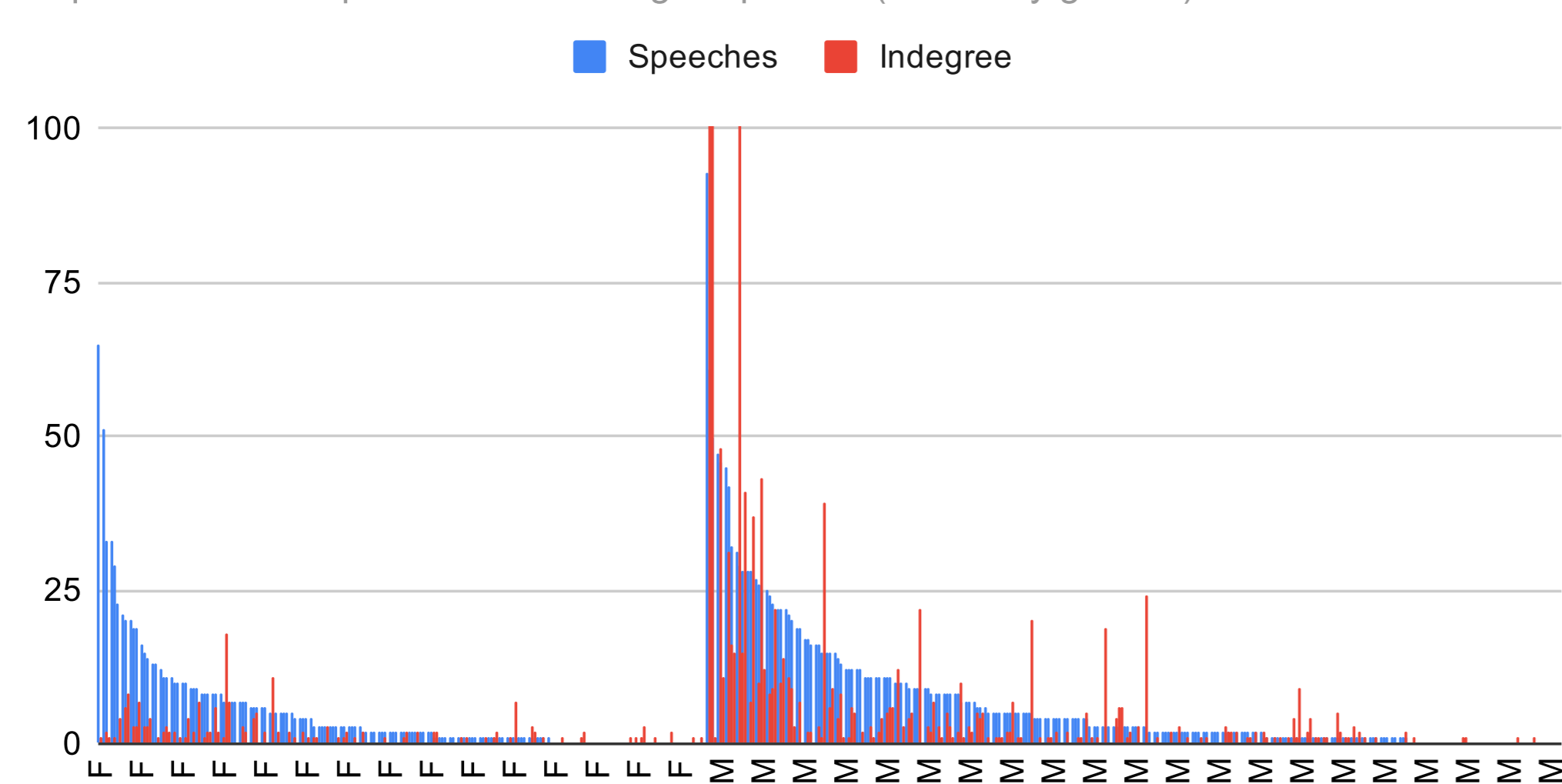
NETWORK LEGEND

Immigration colored by gender
Speeches: text size
Indegree: node size
Male MPs = Magenta
Female MPs = Green

Figure 1: Active vs. Passive Relevance

Congreso de los Diputados Term 12

Topic: Finance - Speeches and Indegree per MP (sorted by gender)



Discussion

- The mere presence of female MPs in the parliament does not warrant their participation in debates. They hold fewer speeches and are mentioned less than their male colleagues (see Figure 1).
- Country-specific political culture influences the networks to such a crucial extent that their analysis would not be feasible by employing solely computer-based methods.
- Although the keywords for topics were handpicked, we managed to generate networks which reflect the existing structural power (e.g. ministry positions) of the MPs within specific topics.