

# WHO TALKS WHAT ABOUT AI?

Analysis of Topic Networks and Actors in the German AI Ecosystem

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## Introduction

- Artificial Intelligence (AI) => reaches into wide variety of areas of human life (incl. politics, economy, jurisdiction, etc.)
- Research gap in mapping main topics of the AI discourse in Germany

## Research Questions

- Media discourse:** What are the main topics in the AI discourse in Germany?
- Parliamentary discourse:** What partisan patterns can be observed in the AI discourse?
- To what extend do the two discourses align?**

## Methods

- Natural language processing
- Statistical analysis
- Co-occurrence analysis
- Dictionary analysis

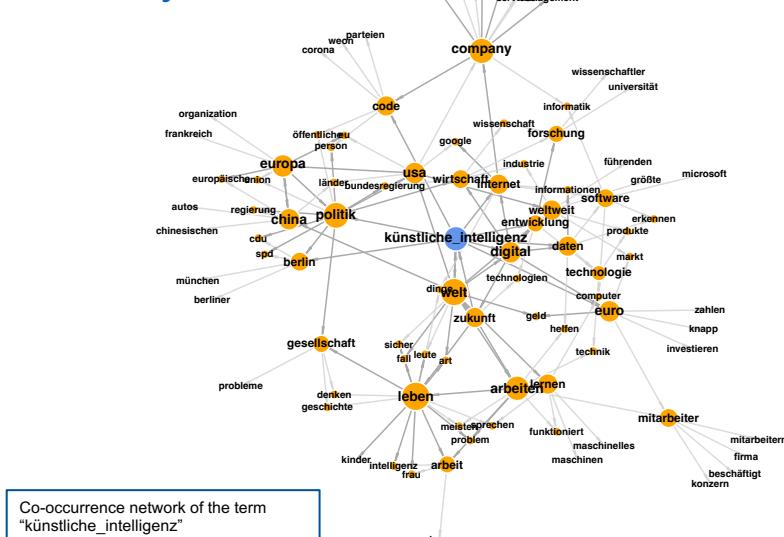
## Data

- Data years: 2018 – 2021
- Search terms: "Künstliche Intelligenz"
- Media discourse:** LexisNexis
  - Narrowed by: Publikationsort (Germany), Regionen (Deutschland), Sprache (German)
  - Data set: ca. 20,000 articles
  - Source: LexisNexis.com
- Parliamentary discourse:** Bundestag
  - Data set: ca. 2500 documents
  - Source: <https://dip.bundestag.de/>

## Results 1 & 2

- Main topics include: "**International**", "**Automatization**", and "**Economy**"
- FDP the most involved; FDP & Grüne very close in topics; **Linke** focuses mostly on labour-related topics

## Media Analysis



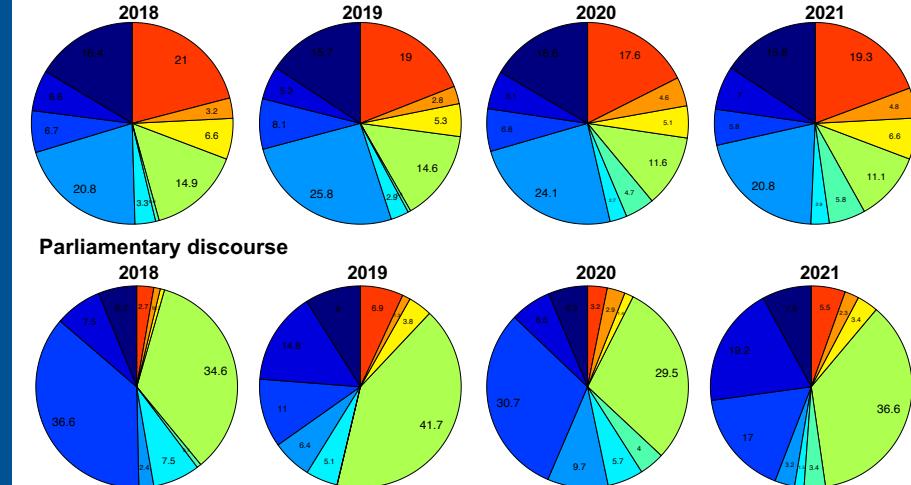
## Dictionary

Topic	N
Automatisierung	17
Bildung & Forschung	13
EU	5
International	9
Moral	10
Pandemie	17
Politik	19
Sicherheit	13
Umwelt	19
Wirtschaft	28

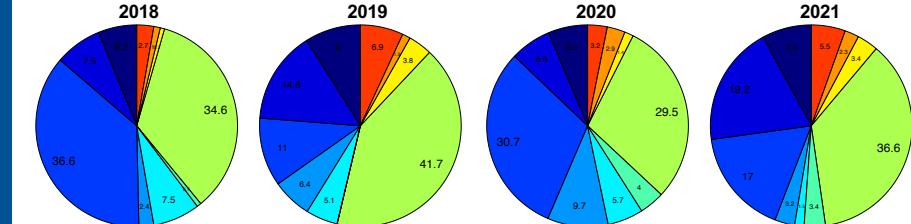
Dictionary created based on first research results of the data (i.e. topteatures, wordclouds, co-occurrence analysis, NLP analysis)  
 ➤ Topic comparison based on dictionary

## Topic comparison of media and parliamentary discourse

### Media discourse



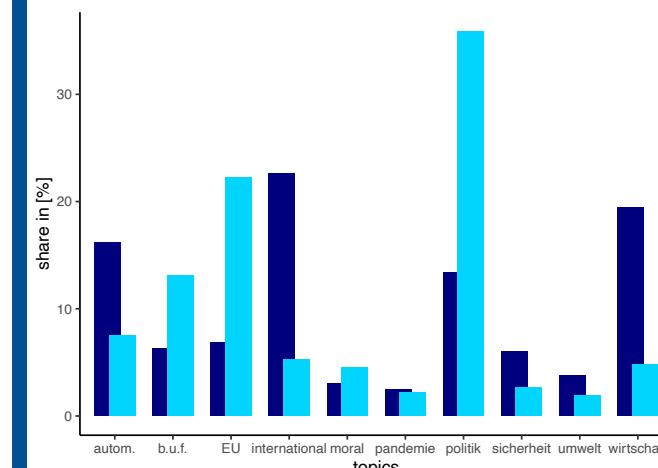
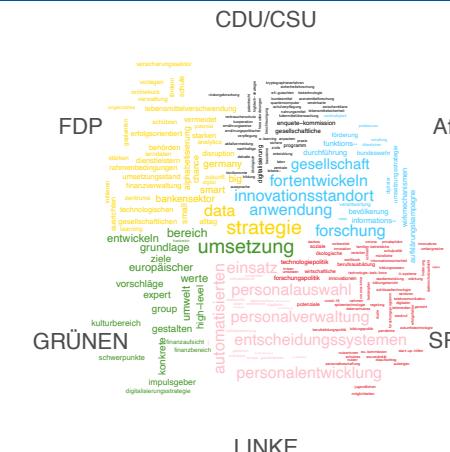
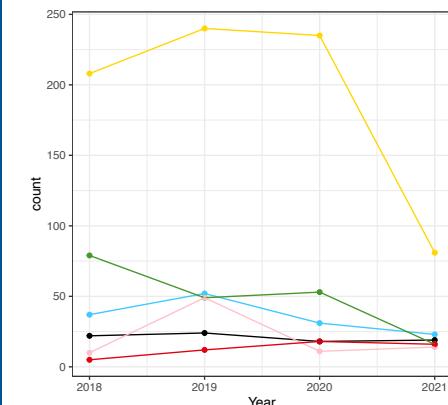
### Parliamentary discourse



TOP: Pie charts show proportion distributions of the topics mentioned in the two datasets  
 BOTTOM: Bar chart shows aggregated proportions of topics for all years per dataset

discourse  
 — media  
 —— parlimentary

## Parliamentary Analysis



## Results 3

- Substantial differences regarding topic coverage and focus
- Media discourse slightly more balanced
- Neither one of the two discourses is a good representation of the other
- Overall align for the topics "Moral" and "Pandemic"