# **CURRICULUM VITAE**

# JOHANNES B. GRUBER

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EMPLOYMENT -	
Apr. 2024—current:	<b>Post-Doc Researcher</b> at the Department of Language, Literature and Communication at Vrije Universiteit Amsterdam. Project: NEWSFLOWS. Modeling news flows: How feedback loops influence citizens beliefs and shape democracy.
Apr. 2023—Mar. 2024:	<b>Post-Doc Researcher</b> at the Department of Communication Science at the University of Amsterdam. Project: NEWSFLOWS. Modeling news flows: How feedback loops influence citizens beliefs and shape democracy.
Oct. 2022—Sep. 2023:	<b>Post-Doc Researcher</b> at the Department of Communication Science at Vrije Universiteit Amsterdam. Project: OPTED – Observatory for Political Texts in European Democracies.
Jul. 2021—Sep. 2022:	<b>Post-Doc Researcher</b> at the Chair of Political Theory and Digital Democracy, European New School of Digital Studies (ENS), European University Viadrina Foundation Frankfurt (Oder).
Nov. 2015—Jun. 2021:	Public Relations Officer at Heinrich-Böll-Stiftung Hessen e.V. (Niddastr. 64; 60329 Frankfurt/Main). Roles: Student Assistant, Research Assistant (Wissenschaftliche Hilfskraft; since 2020). Work included: managing website, creating and managing social media channels (Facebook, Twitter, Instagram, YouTube), planning and realisation of digital political education events.
Sep. 2020—Nov. 2020:	Technical director Symposium "Politische Dimensionen kultureller Bildung" (Political Dimensions of Cultural Education) at Jewish Museum Frankfurt. Work included: planning and implementation of video conferences between panellists as well as broadcasting the online symposium to participants.
Dec. 2017—May. 2018:	Research Assistant for Dr. Philip Leifeld at the University of Glasgow.  Development and documentation of Discourse Network Analyzer (DNA) and its companion R package rDNA.
Sep. 2016—Nov. 2016:	Freelance Researcher for Prof. Dr. Daniela Grunow, Faculty of Social Sciences Goethe-University.  Project: "THE APPARENT PROJECT. International and national studies of norms and gender division of work at the life course transition to parenthood" Role: creating a newspaper article dataset on parenthood depictions in <i>The Guardian</i>
Mar. 2015—Dec. 2016:	Research Assistant for Dr. Iñaki Sagarzazu and Dr. Ana Inés Langer at the

Updated: September 13, 2024

Project: "Personalisation of UK politics in the media".

Work included: downloading, parsing and cleaning newspaper articles about

UK cabinet members in Westminster parliament from 1992 to 2015.

University of Glasgow.

Nov. 2015—Sep. 2016:

Freelance Researcher for Dr. Patrick Sachweh at Goethe-University Frankfurt, Department of Sociology.

Project: "Comparative media analysis (US/GER) The One Percent during and after the global economic and financial crisis".

Work included: designing and conducting a comparative study on German

and US media coverage of extreme wealth.

### EDUCATION =

Sep. 2016—Jul. 2021

PhD in Politics (Funded by College of Social Sciences Scholarship).

University of Glasgow, School of Social and Political Sciences.

Thesis title: "Troublemakers in the streets? A framing analysis of newspaper

coverage of protests in the UK 1992-2017".

Supervisors: Dr. Ana Inés Langer, Dr. Sergi Pardos-Prado & Dr. Brian Foga-

rty.

Sep. 2014—Sep. 2015:

MSc Political Communication, University of Glasgow.

Dissertation: "Media coverage and public opinion towards protests. A case study of media frames in the coverage of the protests against Stuttgart 21,

testing supervised machine learning for content analysis of frames".

Classification: With Distinction

Oct. 2012—Jun. 2017:

MA Political Theory, Goethe University of Frankfurt/Main & TU Darmstadt.

Thesis: "The 1% in the news. Critique and justifications of income and wealth concentration in German and US news media during and after the global fi-

nancial crisis".

Classification: Very Good (1,3)

Oct. 2009—Sep.2012:

BA Political Science; Economics and Economic Studies in History, RWTH

Aachen-University.

Bachelor Thesis: "Social acceptance of (major) projects in the German public

sphere".

Classification: Very Good (1,5)

#### Publications

**Gruber, Johannes B.** and Votta, F. (2025). Large language models. In Nai, A., Grömping, M., and Wirz, D., editors, *Elgar Encyclopedia of Political Communication*. Edward Elgar Publishing. Accepted version. https://www.johannesbgruber.eu/publication/2024-09-06-large-language-models/.

Chan\*, C.-h., Schatto-Eckrodt, T., and **Gruber, Johannes B.** (2024). What makes computational communication science (ir)reproducible? *Computational Communication Research*. https://doi.org/10.5117/CCR2024.1.5.CHAN.

**Gruber, Johannes B.** and van der Velden, M. A. C. G. (2024). A research note on rethinking software documentation: Creating inclusive computational tools for social sciences. https://doi.org/10.31219/osf.io/a3kwf.

**Gruber, Johannes B.** and Weber, M. (2024). rollama: An R package for using generative large language models through ollama. https://doi.org/10.48550/arXiv.2404.07654.

<sup>\*</sup>All authors contributed to this project equally. The order of the names was determined by a random draw.

- **Gruber, Johannes B.**, van Atteveldt, W., and Welbers, K. (2023). Sharing is caring (about research): Three avenues for sharing (copyrighted) text collections and the need for non-consumptive research. https://opted.eu/fileadmin/user\_upload/k\_opted/OPTED\_Deliverable\_D7.6.pdf.
- Vaughan, M., **Gruber, Johannes B.**, and Langer, A. I. (2023). The tension between connective action and platformisation: Disconnected action in the GameStop short squeeze. *New Media & Society*. https://doi.org/10.1177/14614448231182617.
- Weigand, M., Weber, M., and **Gruber, Johannes B.** (2022). Conspiracy narratives in the protest movement against COVID-19 restrictions in Germany. a long-term content analysis of telegram chat groups. In *Proceedings of the Fifth Workshop on Natural Language Processing and Computational Social Science (NLP+CSS)*, pages 52–58, Abu Dhabi, UAE. Association for Computational Linguistics. https://aclanthology.org/2022.nlpcss-1.8.
- **Gruber, Johannes B.** (2023). Troublemakers in the Streets? A Framing Analysis of Newspaper Coverage of Protests in the UK 1992-2017. *The International Journal of Press/Politics*, 28(2):414–433. https://doi.org/10.1177/19401612221102058.
- **Gruber, Johannes B.** (2021). Troublemakers in the Streets? A Framing Analysis of Newspaper Coverage of Protests in the UK 1992-2017. https://doi.org/10.5525/gla.thesis.82346.
- Langer, A. I. and **Gruber, Johannes B.** (2021). Political Agenda Setting in the Hybrid Media System. Why Legacy Media Still Matter a Great Deal. *The International Journal of Press/Politics*, 26(2):313–340. https://journals.sagepub.com/doi/10.1177/1940161220925023.
- Leifeld, P., **Gruber**, **Johannes B.**, and Bossner, F. R. (2018). *Discourse Network Analyzer Manual*. https://github.com/leifeld/dna/releases/download/v2.0-beta.24/dna-manual.pdf.

#### SOFTWARE •

- **Gruber, Johannes B.** (2023). askgpt. A chat package connecting to API endpoints by 'OpenAI' to answer questions (about R). R package version 0.1.3. https://github.com/JBGruber/askgpt. Cranlogs download count: 8,353.
- **Gruber, Johannes B.**, Guinaudeau, B., and Votta, F. (2024). *atrr: Wrapper for the AT Protocol Behind 'Bluesky'*. R package version 0.0.2, https://github.com/JBGruber/atrrr. https://jbgruber.github.io/atrrr/. Cranlogs download count: 2,762.
- **Gruber, Johannes B.** (2022). rwhatsapp. An R package for working with WhatsApp data. R package version 0.2.4. https://github.com/JBGruber/rwhatsapp. Cranlogs download count: 33,738.
- **Gruber, Johannes B.** and Weber, M. (2024). *rollama: Communicate with 'Ollama'*. R package version 0.0.2. https://CRAN.R-project.org/package=rollama. Cranlogs download count: 4,297.
- **Gruber, Johannes B.** (2023a). paperboy. A comprehensive collection of news media scrapers. R package version 0.0.5.9000. https://github.com/JBGruber/paperboy.
- **Gruber, Johannes B.** (2023b). *traktok. Getting TikTok data through the official and unofficial APIs.* R package version 0.0.4.9000. https://github.com/JBGruber/traktok.
- **Gruber, Johannes B.** (2023c). *cookiemonster: Your Friendly Solution to Managing Browser Cookies in R.* R package version 0.0.3. https://github.com/JBGruber/cookiemonster. Cranlogs download count: 2,560.
- **Gruber, Johannes B.** (2024). LexisNexisTools. An R package for working with newspaper data from 'LexisNexis'. R package version 1.0.0. https://github.com/JBGruber/LexisNexisTools. Cranlogs download count: 43,593.

- Benoit, K., Matsuo, A., and **Gruber, Johannes B.** (2023a). *spacyr: Wrapper to the 'spaCy' 'NLP' Library*. R package version 1.3.0. https://CRAN.R-project.org/package=spacyr. Cranlogs download count: 355,277.
- Benoit, K., Watanabe, K., Wang, H., Perry, P. O., Lauderdale, B., Gruber, J., and Lowe, W. (2023b). *quanteda.textmodels: Scaling Models and Classifiers for Textual Data*. R package version 0.9.6. https://CRAN.R-project.org/package=quanteda.textmodels. Cranlogs download count: 152,272.
- Leifeld, P., **Gruber, Johannes B.**, and Henrichsen, T. (2019). *rDNA. A Package to Control Discourse Network Analyzer from R.* University of Glasgow, School of Social and Political Sciences, Glasgow. R package version 2.1.18. http://www.philipleifeld.com.

#### Awards and Grants

- Top Paper Award, ICA Computational Methods Division, 74th Annual International Communication Association Conference (ICA 2024)
- Ninth Conference on New Directions in Analyzing Text as Data (TADA 2018) travel grant and registration fee waiver
- Text Learning Workshop at the LSE travel funding 2017
- University of Glasgow College of Social Sciences PGR experience fund 2017
- University of Glasgow College of Social Sciences PhD Scholarship 2016/17 (funding period: 2016 2020)
- Best Performance Prize, 2014 MSc/MRes in Political Communication
- Deans list Award, 2011 (best 3% of cohort Political Science)
- Deans list Award, 2010 (best 3% of cohort Political Science)

#### Conferences and Talks

- The 2nd Post-API Conference, "Social media data acquisition in a Post-API world", Queensland University of Technology, Brisbane, presentations: "Sharing is Caring (about Research): Four Avenues for Sharing (Copyrighted) Text Collections and the Need for Non-Consumptive Research".
- 74th Annual International Communication Association Conference (ICA 2024), Gold Coast, presentations: "What Makes Computational Communication Science (Ir)reproducible?"; "Whose Voices Are Heard? Making Sense of Framing Patterns in Protest Coverage".
- OPINION | COST Action CA21129 Working Group Meeting 2024, University of Salamanca, Masterclass: "The Good, The Bad, and The Generated: Opinion Mining with (local) AI".
- COMPTEXT Conference 2024, Amsterdam, Keynote: "We should use local GPTs (and it's very easy to do!)".
- COMPTEXT Conference 2024, Amsterdam, presentations: "Short-Form, Broad Reach: Multimodal Political Communication on TikTok"; "The TikTok EuroParty database: Analyzing Political Party Activity on TikTok across 30 European Countries".
- Etmaal van de Communicatiewetenschap conference (Etmaal 2024), Rotterdam, presentation: "Dancing to the partisan beat. A comparative analysis of political parties TikTok use across Europe".
- Invited Talk "Using open source generative large language models with Ollama" at the Vrije Universiteit Amsterdam Societal Analytics Lab New Year's meetup and LLM-workshop, 30/01/2024.

- 13th annual conference of the European Political Science Association (EPSA 2023), Glasgow, presentations: "How Political Agendas Form: Relations Between Legacy, Social and Web Media in the Hybrid Media System", "Whose voices are heard? Making sense of framing patterns in protest coverage".
- 73rd Annual International Communication Association Conference (ICA 2023), Toronto, presentations: "Why WallStreetBets Isnt Occupy 2.0: How the Rise of Platforms Can Disrupt Connective Action"; "[Tool Demo] AmCAT(s): The Amsterdam Content Analysis Toolkits Suite".
- COMPTEXT Conference 2023, Glasgow, presentation: "How Political Agendas Form: Relations Between Legacy, Social and Web Media in the Hybrid Media System".
- 2022 (In)Visibility in the Digital Age, DGPuK-Fachgruppe Digitale Kommunikation, Düsseldorf, presentation: "Fragmentierung im Facebook-Feed? Die (Un-)Sichtbarkeit politischer Inhalte im Bundestagswahlkampf 2021".
- 2022 ECREA 2022 9th European Communication Conference, Aarhus, presentation: "Fragmentation in Your Feeds? What voters saw on Facebook in the 2021 German election campaigns".
- 2022 APSA Annual Meeting & Exhibition, Montreal, presentation: "Why WallStreetBets isnt Occupy 2.0: How the Rise of Platforms can Disrupt Connective Action".
- Invited Talk "Semi-Automated Content Analysis of Media Frames" at Text as Data PoliSci Reading Group, 05/07/2022.
- 72nd Annual International Communication Association (ICA 2022) Conference, Paris, presentation:
   "Troublemakers in the Streets? A Framing Analysis of Newspaper Coverage of Protests in the UK 1992-2017", https://youtu.be/uA4rs2at-bc.
- Third Annual COMPTEXT Conference, online event (COMPTEXT 2020), attendee only.
- European Consortium for Political Research 2019 General Conference (ECPR 2019), Wrocław, presentation: "Troublemakers in the streets? 26 years of UK newspaper coverage of protest".
- Fifth International Conference on Computational Social Science (IC<sup>2</sup>S<sup>2</sup> 2019), Amsterdam, presentation: "Troublemakers in the streets? 26 years of UK newspaper coverage of protest".
- Ninth annual conference of the European Political Science Association (EPSA 2019), Belfast, presentation: "Semi-automated Content Analysis of Media Frames".
- Quantitative Text Analysis Dublin (QTA-DUB 2019), Dublin, presentation: "How to Analyse Media Reports of Protest? An Automated Content Analysis Approach".
- Invited talk "How to Analyse Media Reports (Fast)" at Mittelbaukolloquium, Goethe University of Frankfurt/Main, 13/06/2019.
- Ninth Conference on New Directions in Analyzing Text as Data (TADA 2018), Seattle, poster-presentation:
   "Semi-automated Content Analysis of Media Frames".

### TEACHING EXPERIENCE

- GESIS Fall Seminar in Computational Social Science: Introduction to Computational Social Science with R, 30/08 - 05/09/2024
- Essex Summer School in Social Science Data Analysis: Introduction to Web Scraping and Data Management for Social Scientists, 22/07-02/08/2024
- Comptext24 Workshop: Intro to web scraping, 02/05/2024

- Essex Summer School in Social Science Data Analysis: Introduction to Web Scraping and Data Management for Social Scientists, 24-28/07/2023
- 2-day workshop: Text Analysis in R at Vienna Doctoral School of Social Sciences, 06-07/07/2023
- NCRM/Exeter Computational Communication Methods Spring School: Collaborative annotation projects for supervised machine learning with AmCAT, 28/04/2023
- Text Analysis in R: An Introduction at Goethe-University Frankfurt, 27-28/03/2023.
- Python for R users (#WorkshopsForUkraine), 16/02/2023.
- Introduction to Data Science with R for Social Scientists. European New School of Digital Studies (ENS). Summer Semester 2022
- Introduction to Political Communication. European New School of Digital Studies (ENS). Winter Semester 2021/22
- Introduction to Data Science with R for Social Scientists. European New School of Digital Studies (ENS). Winter Semester 2021/22
- Preparatory Colloquium for Master Students. European New School of Digital Studies (ENS). Winter Semester 2021/22
- Teaching Assistant, Scottish Graduate School of Social Science, course: "Quantitative Approaches
  to Linguistic and Textual Analysis and Data Visualisation Using R" by Dr. Stefan Müller (University
  College Dublin) and Dr. Theresa Gessler (University of Zürich). 4-18/11/2020
- Invited guest lecture in course "Automatisierte Inhaltsanalyse für Textdaten mit R" (Automated content analysis for text data with R), Goethe-University Frankfurt, topic: "Introduction to LexisNexisTools". 29/05/2019.
- Teaching Assistant, ECPR Winter School, course: "Introduction to Discourse Network Analysis (DNA)" by Philip Leifeld (University of Glasgow). 22-23/02/2019.
- Tutor for Stata and MAXQDA at Goethe-University Frankfurt, Department of Social Sciences. 2013-2014.

# PROFESSIONAL MEMBERSHIPS

- International Communication Association.
- COST action network OPINION Vice Chair Working Group 2 (Tools).

# Service to Profession

### **Referee for Journals**

- Political Analysis
- Computational Communication Research
- EPJ Data Science
- Mass Communication and Society
- Media and Communication
- Medien & Kommunikationswissenschaft (M&K)

- Politics and Governance
- The International Journal of Press/Politics

2023—2024

Co-organizer of COMPTEXT Conference, Amsterdam May 2024

SKILLS =

## Languages

- German (native), English (fluent)

# **Programming/Statistical Software**

- R, Python, Stata

# Markup languages

- Quarto/R Markdown, Markdown, LATEX, HTML/CSS

### System administration

- Linux, Docker, virtual machines, cloud computing

### RESEARCH INTERESTS

Methodologically my main interest lies in the systematic analysis of media—mainly via automated content analysis and natural language processing methods. I predominantly use R for this and also started to develop several open-source software packages with functions that I use in my current research or I think will be interesting for future research projects.

My main empirical interest remains in political communication and especially in the topic of media coverage of protest events and their significance for political discourse in representative democracies. Currently I also develop my own research line on diffusion of ideas in hybrid media systems. Both topics are closely connected to my interest in media discourse as well as representation of dissent and demonstrations in the media.