Andreas Küpfer

Computational Social Scientist

✉ andreas.kuepfer@tu-darmstadt.de
🌐 andreaskuepfer.github.io
🦋 @ankuepfer.bsky.social

My research focuses on (multimodal) political communication, combining computational with traditional methods to address substantial questions on party competition and political behaviour.

Current Position

2022-present	**Political Science Ph.D. Candidate and Research Associate** Technical University of Darmstadt Supervisors: Christian Stecker (Technical University of Darmstadt) and Christian Arnold (University of Birmingham) Thesis: *Multimodal Data and Methodological Transparency: Innovations in the Study of Political Communication and Behaviour*

Education

2019-2022	**M.Sc. Data Science**, University of Mannheim Supervisors: Thomas Gschwend and Denis Cohen Thesis: *When local context trumps party unity: Using Twitter and NLP to explain geographical heterogeneity in legislators' policy communication*
2015-2019	**B.Sc. Business Information Systems**, University of Applied Sciences Karlsruhe
2017	**ERASMUS Student, B.Sc. Informatics**, Metropolia University of Applied Sciences in Helsinki, Finland

Publications

2025	**The sound of party competition: how applause reflects unity, disagreement, and the electoral cycle in parliaments** *A. Küpfer*, J. Müller, C. Stecker West European Politics (WEP)
2025	**The Politics of Seeking and Avoiding Discourse in Parliament** E. Koch, *A. Küpfer* European Journal of Political Research
2024	**Nonrandom Tweet Mortality and Data Access Restrictions: Compromising the Replication of Sensitive Twitter Studies** *A. Küpfer* Political Analysis
2024	**The Role of Hyperparameters in Machine Learning Models and How to Tune Them** C. Arnold, L. Biedebach, *A. Küpfer*, M. Neunhoeffer Political Science Research and Methods

Working Papers

Look Who's Confronting: Opposition Status, Gender, and the Far Right
A. Küpfer
Under Review

Structuring Quantitative Image Analysis with Object Prominence
C. Arnold, *A. Küpfer*
Under Review

Alignment Helps Make the Most of Multimodal Data
C. Arnold, *A. Küpfer*

Measuring Media Slant through Image Analysis
C. Arnold, *A. Küpfer*, O. Rittmann, M. Torres

A Pipeline for Extracting Data from Complex Political Events
M. Holman, *A. Küpfer*, T. Simko

When Words Divide: A Causal Examination of Polarizing Language on Digital Civic Platform abgeordnetenwatch.de
C. Arnold, *A. Küpfer*, C. Sheldon

Research Visits and Summer Schools

10/2024-10/2025	**Data and Methods Unit**, Mannheim Centre for European Research (MZES), University of Mannheim, Germany
06/2024	**Video Research Institute, Center for C-SPAN Scholarship & Engagement (CCSE) (Bryce Dietrich)**, Purdue University, US
02/2024-03/2024	**Centre for Artificial Intelligence in Government (CAIG) (Slava Jankin)**, University of Birmingham, UK

Grants, Certificates, and Awards

2025	**Grant: APSA Political Communication Travel Award, 600$**
2025	**Certificate: TU Darmstadt Higher Education Teaching Certificates: Professional Competence Level (200 work units)**
2024	**Grant: German Research Foundation (DFG) Grant "Analysing Legislative Politics with Aligned Text, Audio, and Image Data" with Christian Arnold and Christian Stecker, 285'000€**
2024	**Grant: APSA Political Communication SPARK Travel Award, 750$**
2023	**Award: Athene Award for Excellent Teaching (TU Darmstadt), 2'000€**

Teaching and Supervision

Master Thesis Supervisions: 1

Student Assistant Supervisions: 5

2024	**Machine Learning for Social Scientists**, PhD graduate school course, MZES (with Ruben Bach)
2024	**Introduction to Analysis and Comparison of Political Systems**, Undergraduate proseminar, Technical University of Darmstadt
2023	**Quantitative Text Analysis in R**, Postgraduate seminar, Technical University of Darmstadt
2023	**Data Analysis: From Data Crawling to Visualization**, Guest lecture (180 minutes), National University of Kyiv-Mohyla Academy

2023	**Getting started with Python: A how-to guide for social scientists**, Workshop with two sessions à 90 minutes, MZES Social Science Data Lab (with Ruben Bach)
2022, 2023	**Introduction to Quantitative Methods in R**, Postgraduate seminar, Technical University of Darmstadt
2022	**Collection, Management, and Analysis of Twitter Data: Using the Twitter API for Academic Research and BERT**, Workshop (90 minutes), MZES Social Science Data Lab
2017	**IT Security and Operating Systems**, Undergraduate tutorial, University of Applied Sciences Karlsruhe
2016	**Programming II**, Undergraduate tutorial, University of Applied Sciences Karlsruhe
2016	**Introduction to Business Informatics**, Undergraduate tutorial, University of Applied Sciences Karlsruhe

Research Dissemination

Invited Talks

2025	**Data Science Brown Bag Series**, Hertie School, Berlin, Germany
2025	**Social Data Science Seminar**, University of Mannheim, Germany
2024	**Mittelbau Colloquium**, MZES, University of Mannheim, Germany
2024	**Text-as-Data (TADA) Speaker Series**, Virtual

Conferences

2025	**APSA (Main Conference and Political Communication Pre-Conference)**[p], Vancouver, Canada
2025	**COMPTEXT**[p,c,d], Vienna, Austria
2025	**PSA**, Birmingham, UK
2024	**APSA**[p], Philadelphia, US
2024	**EPSA**[p], Cologne, Germany
2024	**COMPTEXT**[p], Amsterdam, Netherlands
2024	**IASGP Annual Conference**[c], Darmstadt, Germany
2023	**IASGP Annual Conference**[p], Mannheim, Germany
2023	**ECPR Standing Group on Parliaments**[p,d,c], Vienna, Austria
2023	**EPSA**[p,d], Glasgow, UK
2023	**COMPTEXT**[p,c], Glasgow, UK
2022	**DVPW Group Comparative Research on Parliaments**[p], Bremen, Germany
2022	**EPSA**[p], Prague, Czech Republic
2022	**PolMeth Europe**[p], Hamburg, Germany
2021	**PolMeth Europe**, Virtual
	p = Presenter, d = Discussant, c = Panel Chair/Roundtable

Press

2025	**Applaus-O-Meter: Zwei Fraktionen applaudieren vor allem sich selbst**, Frankfurter Allgemeine Sonntagszeitung (FAS) (with Jochen Müller and Christian Stecker)
2025	**When do politicians engage in discourse – and when do they avoid it?**, LSE EUROPP – European Politics and Policy Blog (with Elias Koch)
2023	**Der Frankfurter Wahlkompass VOTO zur OB-Wahl 2023**, FAZ (with Thilo Dieing and Christian Stecker)
2023	**Wahlrecht ab 16, mehr autofreie Zonen und gebührenfreie Kinderbetreuung? Die Positionen der Kandidierenden zur Oberbürgermeisterwahl in Darmstadt in der Online-Wahlhilfe VOTO**, Darmstädter Echo (with Christian Stecker)
2023	**Wahlkompass bietet Orientierung im Kandidatendschungel (FAZ)**, (with Christian Stecker)
2023	**Viele Köpfe und ein breites Angebot. Die Positionen der Kandidierenden zur Frankfurter Oberbürgermeisterwahl**, FAZ (with Christian Stecker)

Web Publications

2023	**BERT and Explainable AI**, Methods Bites, Blog of the Mannheim Centre for European Research (MZES) Social Science Data Lab
2022	**Collection, Management, and Analysis of Twitter Data**, Methods Bites, Blog of the Mannheim Centre for European Research (MZES) Social Science Data Lab

Software

2022	**triviz**, Triangular visualizations for the significance of pairwise differences from multigroup comparisons (Denis Cohen and *Andreas Küpfer*)

Referee

Computational Communication Research • Computational Linguistics for the Political and Social Sciences at KONVENS (Workshop), 2024 & 2025 • Nature Scientific Data • Political Analysis • ZPol

Service

Co-Organizer/Contributor of the Social Science Data Lab (SSDL) at MZES (since 03/2021) • Co-Organizer of the 2024 ECPR Summer School on Parliaments (08/2024) • Member of the decision committee for the German public-private scholarship (Deutschlandstipendium) (since 11/2023) • Data infrastructure representative (since 11/2023)

Selected Work Experience (Academia)

03/2021-09/2024	**Student Research Assistant at Social Science Data Lab**, Mannheim Centre for European Research (MZES) (Denis Cohen)
10/2020-12/2021	**Student Research Assistant at Chair of Political Science, Quantitative Methods in the Social Sciences**, University of Mannheim (Thomas Gschwend)
09/2021-12/2021	**Student Research Assistant at Project Data Science and Big Data at Schools Prodabi**, Paderborn University (Rolf Biehler)

Selected Work Experience (Industry)

07/2018-02/2020	**Working Student Data Science/Finance**, SAP SE in Walldorf, Germany

02/2018-07/2018   **Internship Custom Solution Development**, Capgemini in Stuttgart, Germany

09/2012-07/2015   **Traineeship Software Developer**, KUMAVISION AG in Tiengen, Germany