

Andreas Küpfer

Computational Social Scientist

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I analyze multimodal political communication, including social media, speeches, and advertisements, using a combination of machine learning models and traditional methods to address substantial questions in Political Science and advance methodological research.

Current Position

2022-present

Ph.D. Candidate and Research Associate

Technical University of Darmstadt

Supervisor: Prof. Christian Stecker (Technical University of Darmstadt)

Co-Supervisor: Dr. Christian Arnold (University Cardiff)

Education

2019-2022

M.Sc. Data Science, University of Mannheim

Supervisor: Prof. Thomas Gschwend and Dr. 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 Science Karlsruhe

2017

ERASMUS Student, B.Sc. Informatics, Metropolia University of Applied Sciences in Helsinki, Finland

Publications

2024

The Role of Hyperparameters in Machine Learning Models and How to Tune Them

C. Arnold, L. Biedebach, A. Küpfer, M. Neunhoeffler

Political Science Research and Methods (PSRM)

Cond. Accept

Non-random Tweet Mortality and Data Access Restrictions: Compromising the Replication of Sensitive Twitter Studies

A. Küpfer

Political Analysis (PA)

Working Papers

2023

How Alignment Helps Make the Most of Multimodal Data

C. Arnold, A. Küpfer

- 2024 **Structuring Quantitative Image Analysis with Metric Depth**
C. Arnold, A. Küpfer
- 2023 **The Temporal Dimension of Parliamentary Dialogue: When are MPs Seeking and Avoiding Discourse Strategically?**
E. Koch, A. Küpfer
- 2024 **Gendered patterns of parliamentary behavior: Do men and women differ when asking questions during debates?**
C. Juen, E. Koch, A. Küpfer, C. Stecker
- 2022 **What we can and cannot learn from responses to legislative speeches. Evidence from the German Bundestag, 1949-2021**
A. Küpfer, J. Müller, C. Stecker
- 2022 **The housing crisis on social media: Housing markets and the subnational diversification of policy supply**
D. Cohen, A. Küpfer, T. Allinger

Research Dissemination

Conferences

- 2023 IASGP Annual Conference 2023^P, Mannheim, Germany
- 2023 ECPR Standing Group on Parliaments^{P,d,c}, Vienna, Austria
- 2023 EPSA^{P,d}, Glasgow, Scotland
- 2023 COMPTXT^{P,c}, Glasgow, Scotland
- 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

Press

- 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 Kandidatenschwungel \(FAZ\)](#), (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](#), Method Bites, Blog of the Mannheim Centre for European Research (MZES) Social Science Data Lab
- 2022 [Collection, Management, and Analysis of Twitter Data](#), Method 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*)

Teaching

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

Awards

Athene Award for excellent teaching (TU Darmstadt) (11/2023)

Referee

Political Analysis

Community Service

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-present **Research Assistant at Social Science Data Lab**, MZES (Dr. Denis Cohen)

10/2020-12/2021 **Research Assistant at Chair of Political Science, Quantitative Methods in the Social Sciences**, University of Mannheim (Prof. Thomas Gschwend)

09/2021-12/2021 **Project Data Science and Big Data at Schools** [Prodabi](#), Paderborn University (Prof. 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