Annika Hamachers M.A.

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PROFESSIONAL EXPERIENCE

DEPARTMENT OF COMMUNICATION, GERMAN POLICE UNIVERSITY — Münster, Germany since 2017

Research Assistant

INSTITUTE FOR INTERDISCIPLINARY RESEARCH ON CONFLICT AND VIOLENCE — Bielefeld, Germany

2017-2020

Research Assistant

DEANERY FOR THE SOCIAL SCIENCES, WESTFÄLISCHE WILHELMS-UNIVERSITÄT — Münster, Germany

2013-2016

Research Assistant

DEPARTMENT OF COMMUNICATION, WESTFÄLISCHE WILHELMS-UNIVERSITÄT — Münster, Germany

2011-2012

Research Assistant

EDUCATION

UNIVERSITÄT ZU KÖLN -- Cologne, Germany

enrolled in the doctoral program - since 01/2021

Media Psychology

<u>Thesis</u>: Speaking, feeling and acting alike. Online community alignment as predictor of collective radicalization and offline violence.

STANFORD SCHOOL OF ENGINEERING — Stanford, USA

postgraduate online program - 03/2020-10/2021

Artificial Intelligence Professional Program

FERNUNIVERSITÄT HAGEN — Hagen, Germany

enrolled in the B.A. program - 10/2013-10/2020

Business Informatics

WESTFÄLISCHE WILHELMS-UNIVERSITÄT - Münster, Germany

M.A. – 2011 (graduated with distinction)

Communication Science, Psychology, German Philology

Thesis: Storytelling as the core of entertainment. The operationalizability of narration in the context of empirical communication research.

FURTHER CERTIFICATIONS

ZERTIFIKAT HOCHSCHULLEHRE DES LANDES NORDRHEIN-WESTFALEN

2015

Westfälische Wilhelms-Universität Münster

JULIA SCIENTIFIC PROGRAMMING

2021

University of Cape Town

Certificate ID: CHYWHKY67XSQ

MIND & MACHINE SPECIALIZATION

2020

University of Colorado Boulder

consisting of the courses

- What is "the mind" and what is artificial intelligence?
- Methods for Solving Problems
- Computational Vision
- Interpersonal, Developmental, and Evolutionary Perspectives of the Mind

Certificate ID: C366H6RHE9UF

MATHEMATICS FOR MACHINE LEARNING: MULTIVARIATE CALCULUS

2020

Imperial College London

Certificate ID: <u>ZDX8EC3SGULR</u>

NEURAL NETWORKS AND DEEP LEARNING

2020

deeplearning.ai

Certificate ID: R3CUX75E5HKV

SQL FOR DATA SCIENCE

2018

University of California, Davis

Certificate ID: <u>W98S2JXDAL59</u>

PROGRAMMING MOBILE APPLICATIONS FOR ANDROID HANDHELD SYSTEMS

2016

University of Maryland

Certificate ID: <u>W2WLZEGQAGS5</u>

DATA SCIENCE SPECIALIZATION

2015

Johns Hopkins University

consisting of the courses

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- Data Science Capstone
- Developing Data Products
- Reproducible Research
- Statistical Inference
- Regression Models
- Exploratory Data Analysis
- Getting and Cleaning Data
- R Programming
- The Data Scientist's Toolbox

Certificate ID: <u>UDBVREFHALBW</u>

STATISTICAL ANALYSIS OF FMRI DATA

2014

Johns Hopkins University

Certificate ID: <u>4JMM9G5K97</u>

Publications & Conference Contributions

- Hamachers, A. (in preparation). *X-Sonar ReporteR Interactive Project Analytics using R and Shiny* [Interactive web application].
- Hamachers, A. (in preparation). Literate Coding and Interactive Data Sharing in R & Python [Tutorial].
- Hamachers, A. (in preparation). Creating statistical twins from pseudo-panel survey data [Tutorial].
- Hamachers, A. (in preparation). Wahrnehmung islamistischer Agitation im Netz Formen, Verbreitung und Selbstregulierungsmechanismen der Online-Community. Münster: Deutsche Hochschule der Polizei Hochschulverlag.
- Hamachers, A. (in preparation). *Speaking, feeling and acting alike. Online-Community-Alignment als Prädiktor kollektiver Radikalisierung und realweltlicher Gewalt.* Köln: UzK [Thesis].
- Hamachers, A. (in preparation). Leveraging a TRANSFORMed label propagation algorithm for emotion recognition on Reddit.
- Hamachers, A., Papadopulos, M., Rosenkranz, F., Yalim, Y., Weber, K. & Jarolimek, S. (2022). Extremistische Instrumentalisierung des Islam. Hintergründe, Erklärungs- und Präventionsansätze (DHPol@Campus – Materialien zum Studium, Vol. 1). Münster: Deutsche Hochschule der Polizei - Hochschulverlag.
- Landmann, H., Hamachers, A., Grünhage, T., & Rohmann, A. (2022, September). *A question of measurement: Differences between liberals' and conservatives' moral values are exaggerated when using the Moral Foundation Questionnaire*. Paper presented at the 52nd Congress of the German Psychological Society, Hildesheim, 10.–15.09.2022.
- Fonio, C., Clark. N., Bach Nielsen, A., Blom Andersen, N. Bonati, S., Claessen, M., Graziani, F., Habig, T., Hamachers, A., Hingmann, N., Lüke, R., Raju, E., & Rijkx, L. (2021). Second work plan for the five cases Deliverable D6.2 of LINKS: Strengthening links between technologies and society for European disaster resilience, funded by the European Union's Horizon 2020 Research and Innovation Programme. https://links-project.eu/wp-content/uploads/2022/07/6.2.pdf
- Nielsen, A. B., Raju, E., Bandecchi, A. E., Baron, N., Blom Andersen, N., Boersma, K., Cellini, F., Claessens, M., dos Santos Almeida, S., Graziani, F., D., Habig, T., Hamachers, A., Intrieri, E., Kongsager, R., Lillelund, C., Mortensen, J., Nüssler, D., op het Veld, J., Pazzi, V., Rosenkranz, F.,

Starmans, J., Stolpe Meyer, L., & Toseroni, F. (2021). *DMP Knowledge Base – A Consolidated Understanding of Disaster Management Processes. Deliverable 3.1 of LINKS: Strengthening links between technologies and society for European disaster resilience, funded by the European Research and Innovation Programme.* https://links-project.eu/wp-content/uploads/2021/11/3.1.pdf

- Hamachers, A. 2021. *Advanced Network Visualization with R and Gephi* [Tutorial]. https://doi.org/10.13140/RG.2.2.35790.38722
- Hamachers, A. 2021. *Giving your data a face Chernoff plots in R* [Tutorial]. https://doi.org/10.13140/RG.2.2.32434.94403
- Hamachers, A. 2021. *Reporting with KNIME: Literate Programming, BIRT, & Guided Analytics* [Tutorial]. https://doi.org/10.13140/RG.2.2.34112.66562
- Hamachers, A. 2021. *Data Science without Programming? The Potential of KNIME Analytics* [Tutorial]. https://doi.org/10.13140/RG.2.2.14032.43522
- Hamachers, A. 2021. *Codeless Topic Modelling with KNIME* [Tutorial]. https://doi.org/10.13140/RG.2.2.14871.29608
- Eppert, K., Falkenhein, K.-S., Hamachers, A., Hertel, D., Roth, V., Tsolak, D., & Zick, A. 2021.

 Individuelle und kollektive Radikalisierung im Bereich islamistisch-dschihadistischer

 Bestrebungen. In U. Kemmesies, P. Wetzels, B. Austin, A. Dessecker, E. Grande, I. Kusche, & D. Rieger (Eds.) *Motra Monitor 2020* (pp. 341–349). Bundeskriminalamt Forschungsstelle Terrorismus/Extremismus. Wiesbaden.
- Hamachers, A., Weber, K., & Jarolimek, S. (Eds.) (2020). <u>Extremistische Dynamiken im Social Web.</u>
 <u>Forschungsbefunde zu den digitalen Katalysatoren politisch und religiös motivierter Gewalt.</u>
 Frankfurt a.M.: Verlag für Polizeiwissenschaft.
- Hamachers, A. (2020). <u>Islamistische Inhalte im Internet. Typologisierungsansätze und</u>
 <u>Rezipientenperspektive</u>. In A. Hamachers, K. Weber, & S. Jarolimek (Eds.). *Extremistische Dynamiken im Social Web. Forschungsbefunde zu den digitalen Katalysatoren politisch und religiös motivierter Gewalt* (pp. 27–68). Frankfurt a.M.: Verlag für Polizeiwissenschaft.
- Weber, K. & Hamachers, A. (2020). Aus dem radikalen Netzwerk in den Jihad. Radikale Prediger als Schlüsselakteure im Umfeld deutscher Syrienreisender. In A. Hamachers, K. Weber, & S. Jarolimek (Eds.). Extremistische Dynamiken im Social Web. Forschungsbefunde zu den digitalen Katalysatoren politisch und religiös motivierter Gewalt (pp. 225–270). Frankfurt a.M.: Verlag für Polizeiwissenschaft.
- Hamachers, A., Gundlach, J., Heereman, W., Selzer, A., & Yannikos, Y. (2020). <u>Data Mining zur Erfassung extremistischer Aktivitäten in Online-Netzwerken. Technische und juristische Rahmenbedingungen bei der Erfassung und Aufbereitung von Social Media-Daten für wissenschaftliche Zwecke.</u> In A. Hamachers, K. Weber, & S. Jarolimek (Eds.). *Extremistische Dynamiken im Social Web. Forschungsbefunde zu den digitalen Katalysatoren politisch und religiös motivierter Gewalt* (pp. 141–168). Frankfurt a.M.: Verlag für Polizeiwissenschaft.
- Hamachers, A., Weber, K., & Jarolimek, S. (2020). Einleitung. In A. Hamachers, K. Weber, & S. Jarolimek (Eds.). Extremistische Dynamiken im Social Web. Forschungsbefunde zu den digitalen Katalysatoren politisch und religiös motivierter Gewalt (pp. 1–6). Frankfurt a.M.: Verlag für Polizeiwissenschaft.
- Hamachers, A. (2020, May). <u>The Domain-Specificity of Affective Language. An Attempt to Enhance Automated Discourse Analyses with Supervised Machine Learning.</u> Paper presented at the virtual preconference "Open Methods, Open Data" to the annual conference of the International Communication Association, Gold Cost, Australia, 21.05.2020.
- Hamachers, A. (2019, May). <u>Adolescents Countering Islamist Online Propaganda. The Moderating Role of Different Dimensions of Internet Literacy.</u> Paper presented at the annual conference of the International Communication Association, Washington D.C., 27.05.2019.

Hamachers, A. (2019, May). <u>Topic Modelling' von Da'wa & Co. Semi-automatisierte Ansätze zur Erkennung radikalisierender Sprache im Internet</u>. Poster presented at the 25th Day of Prevention, Berlin, 20.–21.05.2019.

- Hamachers, A. (2019, May). <u>Umgang mit jihadistisch-islamistischer Propaganda im Social Web (II).</u> Paper presented at the 25th Day of Prevention, Berlin, 20.-21.05.2019.
- Hamachers, A., Galic, A., Böckler, N., & Groß, E. (2019, April). <u>Profiling Malignant Rhetoric. Linking cognitive linguistics and machine learning algorithms to evaluate the emotionality of populist discourse.</u> Paper presented at the ECPR Joint Workshop Session 'Populism & Emotions', Mons, 09.–12.04.2019.
- Hamachers, A., Gundlach, J., & Groß, E. (2018, September). Akteurszentrierte Konzeptanalyse zur Detektion extremistischer Bestrebungen in sozialen Medien Ein Framework zur simultanen Integration von Netzwerk- und Diskursdaten. Paper presented at the workshop session 'Aktuelle Entwicklungen in der Netzwerkforschung' of the section 'Soziologische Netzwerkforschung der Deutschen Gesellschaft für Soziologie', Göttingen, 24.–28.09.2018.
- Groß, E., Gundlach, J., Borchardt, L. & Hamachers, A. (2018, August). *Right-Wing Extremist and Djihadist Ambitions in Social Media Networks: Identification, Analysis and Management of Violent Radicalisation in Germany A Mixed Methods Approach.* Paper presented at the VOX-Pol workshop 'Violent Extremism, Terrorism, and the Internet: Present and Future Trends', Amsterdam, 09.–12.04.2018.
- Kubera, T., Hamachers, A., & Jarolimek, S. (2018). Deutungshoheit. In T. Kubera, T. Dierschke, G. Duttler, & A. Werner (Hgg.), Sicherheit und Kommunikation bei Fußballgroßveranstaltungen: Praxishandbuch für Akteure im Netzwerk der Sicherheitsgewährleistung. Stuttgart: Richard Boorberg Verlag.
- Hamachers, A., & Jarolimek, S. (2018, June). *Umgang mit jihadistisch-islamistischer Propaganda im Netz.* Paper presented at the 23rd German Day of Prevention, Dresden, 11.–12.06.2018.
- Hamachers, A., & Jarolimek, S. (2018, May). <u>Particularly vulnerable? Migrants' contact with and reactions towards jihadist online propaganda.</u> Paper presented at the preconference 'Refugees, Religious Threats, and Political Radicalization: Theoretical and Empirical Perspectives' at the annual conference of the International Communication Association, Praha, 23.05.2018.
- Hamachers, A., & Jarolimek, S. (2018, May). *Establishing 'Interpretational Sovereignty' Online in the Context of Law Enforcement*. Paper presented at the annual conference of the International Communication Association, Praha, 24.05.–28.05.2018.
- Hamachers, A., & Gehrau, V. (2018). Der Stellenwert der Beobachtung innerhalb der Kommunikationswissenschaft. Eine Analyse empirischer Beiträge aus 22 Internationalen Fachjournals. In J. Vogelgesang, J. Matthes, C. Schieb, & T. Quandt (Eds.) (2016): Beobachtungsverfahren in der Kommunikationswissenschaft. Köln: Herbert von Halem.
- Gehrau, V., & Hamachers, A. (2018). Spezifika kommunikationswissenschaftlicher Beobachtungen. In J. Vogelgesang, J. Matthes, C. Schieb, & T. Quandt (Eds.) (2018): Beobachtungsverfahren in der Kommunikationswissenschaft. Köln: Herbert von Halem.
- Hamachers, A., Kane, R. J., & Jarolimek, S. (2018, March). <u>From coercion to communication. Opportunities to establish 'interpretational sovereignty' online in the context of policing and challenges of cross-cultural transferability.</u> Paper presented at the International Crisis and Risk Communication Conference, Orlando, 12.–14.03.2018.
- Hamachers, A., & Jarolimek, S. (2018, Febuary). *Islamismus who cares?!. Ergebnisse einer repräsentativen Umfrage zur Rezeption extremistischer Inhalte im Internet.* Paper presented at the Workshop 'Multidisciplinary Perspectives on Radicalisation, New Media and Education' of the CONTRA-Project, Köln, 22.–23.02.2018.

Jarolimek, S., Hamachers, A., & Widmann, J. (2017, December). *Projekt X-SONAR: Analyse* extremistischer Bestrebungen in sozialen Netzwerken. Paper presented at the conference 'Postfaktische Sicherheitspolitik?! Gewährleistung von Sicherheit in unübersichtlichen Zeiten' of the Arbeitskreis Innere Sicherheit, Münster, 11.–12.12.2017.

- Hamachers, A., Kahr, R., & Jarolimek, S. (2017, September). <u>'Oscillation' with a Terrorist's Mindset.</u>

 <u>Transportation, Identification, and Narrative Assimilation in the Process of Political Radicalization.</u>

 Poster presented at the annual conference of the Media Psychology Devision of the German Psychological Society, Landau, 06.–08.09.2017.
- Hamachers, A., & Djerkovic, D. (2017, October). *Maintaining law enforcement legitimacy in times of digital media: Managing the balancing act between operational efficacy and the public's demand for information during major police operations*. Paper presented at the 5th International Crisis Communication Conference, Lisbon, 19.–21.10.2017.
- Hamachers, A., Widmann, J., & Roth, V. (2017, October). *Narrative Ästhetiken in der medialen Berichterstattung über IS-Terroristen und ihre unbeabsichtigte Wirkung auf jihadistische Radikalisierungsprozesse*. Paper presented at the 17th workshop of the 'Netzwerk Terrorismusforschung', Tübingen, 05.–06.10.2017.
- Jarolimek, S., & Hamachers, A. (2017, May). Social Media & mediale Inszenierung Strukturwandel der Öffentlichkeit und die Bedeutung für die Polizei. Paper presented at the annual conference of police chaplains, Magdeburg, 03.05.2017.
- Hamachers, A., & Kahr, R. (2016, November). Can media 'story-tell' migrants into terrorists? The unintended effects of narrative ISIS coverage on political radicalization. Paper presented at the preconference "Media and Migration" to the annual conference of the European Communication Association, Praha, 09.11.2016.
- Hamachers, A., & Gehrau, V. (2016, June). *Data gathering across communication research: a meta-analytic review from 2000 to 2015.* Paper presented at the preconference "Communication Research Methods 2016: Practices and Challenges" to the annual conference of the International Communication Association, Fukuoka, 09.06.2016.
- Hamachers, A. (2015, May). *Towards a study of narrative media effects in cultural context.* Paper presented at the preconference "Stuart Hall and the Future of Media and Cultural Studies" to the annual conference of the International Communication Association, San Juan, 20.05.2015.
- Hamachers, A. (2014, November): 'Stories are to entertain...'!? An investigation into defining narrative features and their impact on enjoyment. Paper presented at the annual conference of the European Communication Association, Lisbon, 13.11.2014.
- Hamachers, A. (2014, July). *The operationalizability of narration. An attempt to empirically validate defining textual features.* Paper presented at the annual conference of the International Society for the Empirical Study of Literature and Media, Torino, 21.07.–25.07.2014.
- Hamachers, A. (2014, July). *Non-invasive brain stimulation in 'Neuro Narratology'. Advantages*, *advantages*, *and applicability of tDCS and TMS*. Paper presented at the annual conference of the International Society for the Empirical Study of Literature and Media, Torino, 21.07.–25.07.2014.
- Hamachers, Annika (2014, July): *How mutual is an audience's narrative intuition? An exploratory attempt to empirically validate defining narrative features.* Paper accepted for the annual conference of the International Association for Media and Communication Research, Hyderabat.
- Maleckar, B., & Hamachers, A. (2014, June). *This story has a point: Persuasion as a consequence of seeking the narrative meaning.* Paper presented at the StoryNet workshop "Narrative effects on the individual and the social", Budapest, 17.06.–28.06.2014.

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Hamachers, A. (2014, March). Dissecting texts. An empirical attempt to validate defining narrative features. Paper presented at the workshop "Empirical Approaches to Narrative" of the Center of Narrative Research, Wuppertal, 15.03.2014.

- Gehrau, V., & Hamachers, A. (2013, September). Spezifika von Beobachtungsstudien in der Kommunikationswissenschaft. Eine Analyse von Fachzeitschriftenpublikationen 2000 bis 2010. Paper presented at the annual conference of the DGPuK-Fachgruppe 'Methoden der Publizistikund Kommunikationswissenschaft', Münster, 28.09.2013.
- Hamachers, A., & Gehrau, V. (2013, September). Die aktuelle Stellung der Beobachtung in der Kommunikationswissenschaft. Eine Metaanalyse empirischer Beiträge aus 21 einschlägigen Fachjournals über die Jahre 2000 bis 2010. Paper presented at the annual conference of the DGPuK-Fachgruppe 'Methoden der Publizistik- und Kommunikationswissenschaft', Münster, 28.09.2013.
- Hamachers, A. (2011). <u>Erzählen als Kern von Unterhaltung. Zur Operationalisierbarkeit von Narration in der Kommunikationswissenschaft.</u> Münster: WWU. [Thesis]
- Blöbaum, B. (Ed.) (2008). *Hauptsache Medien: Berufsbiographische Interviews mit Journalisten, PR-Praktikern und Werbern.* Münster: Lit. [Co-author]

TEACHING

UNIVERSITY COURSES

Internship preparation

practical course, undergraduate level, Spring 2012, 2014 & Fall 2012, 2013, University of Münster

Introduction into Communication Research seminar, undergraduate level, Spring 2013, University of Münster

Data analysis with R

workshop, graduate and postgraduate level, Fall 2012 & Spring 2013, University of Münster

Advanced multivariate statistics

lecture, graduate level, Fall 2015, University of Münster

Data visualization – from Excel to d3.js

practical course, graduate/undergraduate level, Spring 2016, University of Münster

Interpersonal Communication and Leadership

seminar, graduate level, Summer 2017, German Police University

Quantitative vs. Qualitative Research

lecture, graduate level, Summer 2018, German Police University

Social Science Research Methods

lecture, graduate level, Summer 2018 & Summer 2021, German Police University

Extremist Instrumentalization of the Islam

lecture, graduate level, Spring 2022 & 2023, German Police University

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INVITED LECTURES

Umgang mit extremistischen Inhalten in der Online-Community. Ergebnisse einer repräsentativen Umfrage Talk in the context of the expert panel 'Islamismus im Netz - Wissenschaft und Praxis' at the Bundeszentrale für politische Bildung, 26. September 2018, Bonn

Story Points – Problems Operationalizing 'Narration'
Talk at the graduate level seminar of Dr. Barbara Maleckar, Fall 2014, University of Augsburg

FURTHER ACTIVITIES

MEMBERSHIPS

- ◆ International Communication Association (ICA)
- ◆ European Communication Association (ECREA)
- Deutsche Gesellschaft für Publizistik und Kommunikationswissenschaft (DGPuK)
- International Society for the Empirical Study of Literature and Media (IGEL)

REVIEWING EXPERIENCE

- International Communication Association (ICA) annual conference, since 2013
 - o Mass Communication division
 - o Information Systems division
 - Communication and Technology division
 - o Popular Communication division
- International Journal for Conflict and Violence, since 2019

UNIVERSITY COMMITTEE SERVICES

- Admission committee for the MA program, 2013 & 2014, University of Münster
- ◆ Appointments committee for the professorship of Dr. Jens Woelke, 2014, University of Münster
- Selection committee for the PROMOS grant, 2012–2014, University of Münster