



I am a computational social scientist (TU Dresden / MPI for Human Development), after five years building NLP systems at IBM and Deutsche Bahn—among the earliest in Spanish banking. My research is shaped by a lesson from the 2010s: the institutional response to social media and misinformation lagged; policy cannot afford to lag again now that generative AI is arriving on top of an ongoing polycrisis. I work on **LLMs for citizen-perspective elicitation at scale** and on **measuring GenAI's emerging societal risks**, with a forward focus on **quantifying AI-driven societal drifts**—epistemic, behavioural, cultural, cognitive—to inform policy in time.

Citizen-Perspective Elicitation · Qualitative Research · NLP · Network Science · Cultural Evolution · Misinformation · Collective Intelligence

2026 (expected) 
PhD, Computer Science
TU BERLIN


The Dual Impact of Large Language Models in Society and Policymaking.
DFG POLTOOLS.

2025 — Now 
Research Associate

TU DRESDEN – SYNOSYS/SCADS.AI
CSS group. Generative AI on collective sense-making, AI-mediated cognitive-behavioural drift, and citizen-perspective tools.

2022 — 2025 
Doctoral Researcher — primary developer, DFG POLTOOLS
MPI FOR HUMAN DEVELOPMENT – ARC, BERLIN

Lead developer across the three POLTOOLS workstreams (DFG #458366841): citizen-perspective elicitation with LLMs and network science; argument mining; machine-assisted rapid deliberation. Publications in *NHB, BS&P, Annals NYAS*.

2020 — 2022 
Research Affiliate (concurrent w/ industry)

UNED – NLP & IR GROUP, MADRID (REMOTE)
Concurrent with IBM Germany / DB Systel roles. Computational controversy detection in healthcare forums; argument-mining methodology and annotated dataset.

2020 
MSc, Human-Language Technologies
UNED, MADRID

Specialisation: NLP & Information Retrieval. Thesis: Controversy detection in online drug-review forums.


⚙️ Methods & Stack

Methods

LLM evaluation & measurement, prompt design & RAG, fine-tuning (LoRA), argument mining, computational text analysis, network science, behavioural experiments, mixed-methods design, large-scale data engineering.

Stack

Python, R, JavaScript, SQL; transformers, spaCy, PyTorch, scikit-learn; Ollama, vLLM, LangChain; MLflow; pandas, PyArrow, DuckDB; AWS, GCloud; Docker, git; Elastic-search, MongoDB.

2016 
BSc, Physics
UNIVERSIDAD DE GRANADA
Monte-Carlo simulations of 1D anomalous fluids.


★ Selected Work

Burton, J. W., Lopez-Lopez, E., Hechtlinger, S., ..., & Hertwig, R. (2024). How Large Language Models Can Reshape Collective Intelligence. *Nature Human Behaviour*. (Press: *Forbes, El País*.)


Yakura, H., Lopez-Lopez, E., Brinkmann, L., Serna, I., Gupta, P., & Rahwan, I. Empirical Evidence of LLMs' Influence on Human Spoken Communication. (Press: *Scientific American, The Verge, El País, DIE ZEIT, ABC Cultural*.)

Lopez-Lopez, E., & Herzog, S. M. (2025). Surfacing Citizens' Policy Perspectives at Scale in the Age of LLMs. *Behavioral Science & Policy*.


Lopez-Lopez, E., Abels, C. M., Holford, D., Herzog, S. M., & Lewandowsky, S. (2025). Generative AI-Mediated Confirmation Bias in Health Information Seeking. *Annals of the New York Academy of Sciences*. (Press: *Der Spiegel*.)

 2020 — 2021
Senior Specialist, NLP Business Services

DB SYSTEL (DEUTSCHE BAHN), BERLIN
ML/NLP services for text automation across the DB Group: classification, clustering, knowledge graphs, NER, argument segmentation, anonymisation.

 2018 — 2020
Watson AI & Data Consultant

IBM GERMANY — BERLIN / MUNICH
Watson AI consulting across banking, retail, insurance, and media. NLP combining Watson APIs with custom models; conversational systems and document-intelligence pipelines. IBM iX / Garage Factory, Berlin.

 2016 — 2018
Cognitive Data Scientist

IBM SPAIN (COGNITIVE COMPUTING), MADRID
Enterprise NLP from R&D to production across banking, insurance, energy, retail, and media. Built and launched **EVO Bot** (EVO Banco, 2017–18, one of the first banking chatbots in Spain) and an internal **Insurance Employee Assistant** for Banco Santander.

 2015
Engineering Trainee

EUROPEAN SPACE AGENCY (ESAC), MADRID
Prototype data-mining tool (IDL) for the ESA Cluster Science Archive; applied to the 2009–2012 Auroral Acceleration Region campaign.

Year	Type	Reference	Cited
2025	journal	Lopez-Lopez, E. , Abels, C. M., Holford, D., Herzog, S. M., & Lewandowsky, S. <i>Generative AI-mediated confirmation bias in health information seeking. Annals of the New York Academy of Sciences. (Media : Der Spiegel.)</i>	19
2025	journal	Abels, C. M., Lopez-Lopez, E. , Burton, J. W., Holford, D., Brinkmann, L., Herzog, S. M., & Lewandowsky, S. <i>The governance & behavioral challenges of generative AI's hypercustomization capabilities. Behavioral Science & Policy. (Media : Der Spiegel.)</i>	10
2025	journal	Lopez-Lopez, E. , & Herzog, S. M. <i>Surfacing citizens' policy perspectives at scale in the age of LLMs. Behavioral Science & Policy.</i>	1
2024	journal	Burton, J. W., Lopez-Lopez, E. , Hechtlinger, S., Rahwan, Z., ..., & Hertwig, R. <i>How large language models can reshape collective intelligence. Nature Human Behaviour. (Media : Forbes, El País.)</i>	179
2024	journal	Holford, D., Lopez-Lopez, E. , Fasce, A., Karlsson, L. C., & Lewandowsky, S. <i>Identifying the underlying psychological constructs from self-expressed anti-vaccination argumentation. Humanities and Social Sciences Communications.</i>	9
2026	under review	Lopez-Lopez, E. , Abels, C. M., Lorenz-Spreen, P., Lewandowsky, S., & Herzog, S. M. <i>Boosting metacognition in entangled human–AI interaction to navigate cognitive–behavioral drift. arXiv :2602.01959.</i>	1
2025	under review	Avendaño, D., Lopez-Lopez, E. , Sánchez-Zavala, A., Gayozzo, P., Brisuela Blume, L., Díaz, J., Santibáñez-Palma, J. F., Martínez-Vázquez, A., García-Belaunde, V., Arango, E., & Fasce, A. <i>A comprehensive systematic review of the psychometrics of left-wing ideology.</i>	–
2025	under review	Fasce, A., Rosales-Trabuco, J., Rodríguez-Ferreiro, J., Barbería, I., Pinedo-Yzaguirre, E., Nuñez, J., Ortiz-Treviños, W., Moncada, C., Reyes-Bossio, M., Carbajal-León, C., & Lopez-Lopez, E. <i>Psychosocial predictors and justification patterns of traditional and alternative medicine in Peru.</i>	–
2024	under review	Yakura, H., Lopez-Lopez, E. , Brinkmann, L., Serna, I., Gupta, P., & Rahwan, I. <i>Empirical evidence of LLMs' influence on human spoken communication. arXiv :2409.01754. (Media : Scientific American, The Verge, El País, DIE ZEIT, ABC Cultural.)</i>	70
2024	preprint	Lopez-Lopez, E. , Abels, C. M., Holford, D., & Hahn, U. <i>Rapid Think Tanks (RTTs) : An atomic approach to accelerating collective deliberation. OSF.</i>	–
2026	in prep.	Lopez-Lopez, E. , & Herzog, S. M. <i>Characterizing similarities and differences in people's views based on open-ended expressions.</i>	–
2026	in prep.	Lopez-Lopez, E. , Stinson, C., ..., & Lewandowsky, S. <i>A scalable LLM-based framework for linking information environments and collective perceptions : Evidence from the 2023 Australian Voice referendum.</i>	–
2025	in prep.	Lopez-Lopez, E. , & Lorenz-Spreen, P. <i>Misinformation and narrative evolution in climate disasters : Evidence from the 2024 Valencia flash floods.</i>	–
2026	in prep.	Lopez-Lopez, E. , Oswald, L., Lorenz-Spreen, P., & Herzog, S. M. <i>What does Europe think? Citizen-perspective elicitation on the challenges of our time across six countries.</i>	–
2026	in prep.	Lopez-Lopez, E. , Abels, C. M., Herzog, S. M., & Lewandowsky, S. <i>Structuring scalable collective deliberation via Rapid Think Tanks : The Zeitenwende case study.</i>	–
2026	in prep.	Lopez-Lopez, E. , & Zöller, N. <i>The Homogenization Dilemma : Generative AI's challenges and opportunities for task groups.</i>	–
2026/27	book ch. (in prep.)	Lopez-Lopez, E. <i>Generative AI at the Science–Policy–Society Interface : Risks, Opportunities, and Research Directions.</i> In S. Grassini (Ed.), <i>Research Perspectives on Human-Centered AI.</i> Edward Elgar (UK).	–
2025	handbook	Lewandowsky, S., Kempe, V., Armaos, K., Hahn, U., Abels, C. M., Wibisono, S., ..., Holford, D., Lopez-Lopez, E. , & Cook, J. <i>The Anti-Autocracy Handbook : A Scholars' Guide to Navigating Democratic Backsliding.</i> Zenodo. doi :10.5281/zenodo.15696097.	9
2021	conf. proc.	Lopez-Lopez, E. , Carrillo-de-Albornoz, J., & Plaza, L. <i>Combining transformer-based models with traditional ML approaches for sexism identification in social networks. Proceedings of IberLEF 2021, CEUR Workshop Proceedings.</i>	4

CONFERENCES AND TALKS

- conf. talk Lopez-Lopez, E. (2026). *Boosting metacognition in entangled human–AI interaction to navigate cognitive-behavioral drift*. Kraków Conference on Misinformation and Polarization, Centre for Social Cognitive Studies, Jagiellonian University, 14 May 2026.
- invited talk Lopez-Lopez, E. (2025), *The Impact of Generative AI (Large Language Models) in Society*, University of Bergen.
- conf. talk Lopez-Lopez, E. (2025), *GenAI-Mediated Confirmation Bias in Health Information Seeking*, *4th International Behavioral Public Policy Conference*, London.
- conf. talk Hiromu, Y., Lopez-Lopez, E., Brinkmann, L., Serna, I., Gupta, P., Soraperra, I., & Rahwan, I., E. (2025), *Empirical evidence of Large Language Model’s influence on human spoken communication*. *IC²S² 11th International Conference on Computational Social Science*, Norrköping, Sweden.
- conf. talk Burton, J. & Lopez-Lopez, E. (2025), *How generative artificial intelligence is changing master’s theses*. *IC²S² 11th International Conference on Computational Social Science*, Norrköping, Sweden.
- invited talk Lopez-Lopez, E. (2025), *Characterizing Similarities and Differences in People’s Views based on Open-ended expressions*, University of Basel.
- conf. poster Lopez-Lopez, E. & Herzog, S. M. (2024). *Leveraging LLMs and Networks to Analyze Collective Knowledge*. *European Group of Process-Tracing Studies (EGPROC)*, Berlin.
- invited talk Lopez-Lopez, E. & Herzog, S. M. (2024). *Surfacing and quantifying citizens’ perspectives*. *Center for Planetary Health*, University of Erfurt.
- conf. poster Lopez-Lopez, E. & Herzog, S. M. (2024). *Enhancing Knowledge Exploration Skills through AI-Assisted Brainstorming*. *Machine+Behaviour Conference*, Berlin.
- conf. poster Lopez-Lopez, E. & Hahn, U. (2024). *Rapid Think Tanks (RTTs) - A Collectively-Intelligent Methodology for Collective Deliberation*. *ACM Collective Intelligence Conference, Work-in-Progress and Demonstrations*, Delft, Netherlands.
- conf. talk Lopez-Lopez, E. & Herzog, S. M. (2024). *How do people navigate their ideas during problem scoping of open-ended ill-defined problems? A knowledge graph-based approach*. *IC²S² 9th International Conference on Computational Social Science*, Copenhagen, Denmark.
- invited talk Lopez-Lopez, E., Holford D., Lewandowsky S. (2023). *Identification of Anti-Vaccination Trigger Arguments*. *TeDCog / BCSG Miniconference*, University of Bristol, Bristol, UK.
- conf. poster Herzog, S. M., & Lopez-Lopez, E. (2021). *Assisting behavioral science and evidence-based policy making using online machine tools*. *DFG virtual Research Conference “Preparedness for future pandemics from a global perspective”*, Bonn, Germany.

ORGANISED WORKSHOPS AND SYMPOSIA

- 2025 Erster deutscher Workshop zur Erkennung und Bekämpfung von Desinformationen, Misinformation und Hate Speech für Medienschaffende und Kommunikationspraktiker :innen, (**co-organizer**), May 26th, 2025, Max Planck Institute for Human Development.
- 2025 SciBeh 2025 Virtual Workshop on “Safeguarding Scholarship and Research in (Emerging) Autocracies” (**co-organizer**), February 25th, 2025, Virtual.
- 2024 On-site Workshop on “Zeitenwende : Rethinking Foreign Policy | How Do We Initiate a Change in People’s Minds?” (**co-organizer**), July 6th, 2024, Hertie School Summit 2024, Berlin.
- 2024 SciBeh 2024 Virtual Workshop on “Epistemic Boundaries” (**co-organizer**), March 6th-7th, 2023, Virtual.
- 2023 SciBeh 2023 Virtual Workshop on “Collectively Intelligent Science Communication - Lessons learned for a post-COVID era” (**key organizer**), March 1st-2nd, 2023, Virtual.

SELECTED MEDIA COVERAGE

- 2025 **DIE ZEIT**, “Das Besorgniserregende ist : Die Kontrolle liegt in wenigen Händen” [*The worrying thing : control is in few hands*], interview with H. Yakura and E. Lopez-Lopez by E. Wolfangel and L. Jacobsen, 29 Jul 2025.
- 2025 **Scientific American**, “ChatGPT Is Changing the Words We Use in Conversation,” 11 Jul 2025.
- 2025 **The Verge**, “You Sound Like ChatGPT,” 20 Jun 2025.
- 2025 **Der Spiegel**, “Ist ChatGPT ein Schleimer?” [*Is ChatGPT a sycophant?*], 21 Jun 2025.
- 2025 **El País – Ideas**, “Efecto ChatGPT : ya empezamos a hablar todos como robots” [*The ChatGPT effect : we’re all starting to talk like robots*], K. Vázquez, 19 Oct 2025.
- 2024 **El País – Tecnología**, “Los humanos ya repiten palabras que aprenden de ChatGPT” [*Humans are already repeating words learned from ChatGPT*], J. Pérez Colomé, 24 Oct 2024.
- 2024 **Forbes**, “AI Is Now Co-Creator Of Our Collective Intelligence So Watch Your Back,” L. Eliot, 18 Nov 2024.
- 2026 **ABC Cultural**, “La neolengua de la IA” [*The newspeak of AI*], B. Pardo Porto, 13 Mar 2026.

SUPERVISION AND MENTORING

Master’s thesis Hyosang Kim

Intern Fedor Grigoryevich Pogulskiy (Student Research Project)

Student research assistants Hyosang Kim, Maja Kohler, Mahn Lihn Phan (POLTOOLS project)

PEER REVIEW

Journals *BMC Public Health · Digital Health · Psychological Science.*

ORGANIZATIONS

DPG	Deutsche Physikalische Gesellschaft (German Physical Society)	member
ACM	Association for Computing Machinery	member
SciBeh	<i>Behavioural Science for Crisis Knowledge Management</i>	co-organizer (2023–2025); Anti-Autocracy Summit committee (2025)
SaveScience.EU	community wiki (SciBeh-coordinated; companion to <i>The Anti-Autocracy Handbook</i>)	contributor