

List of contributors

Clemens Apprich is head of the Department of Media Theory as well as the Peter Weibel Research Institute for Digital Cultures at the University of Applied Arts in Vienna, where he holds the Professorship for Media Theory and History since 2021. He is guest researcher at the Centre for Digital Cultures at Leuphana University of Lüneburg, as well as an affiliated member of the Digital Democracies Institute at Simon Fraser University, of the Global Emergent Media Lab at Concordia University, and of the Research Centre for Media Studies and Journalism at the University of Groningen. His current research deals with filter algorithms and their application in data analysis as well as machine learning methods. Apprich is the author of “Technotopia: A Media Genealogy of Net Cultures” (Rowman & Littlefield International, 2017), and, together with Wendy Hui Kyong Chun, Hito Steyerl, and Florian Cramer, co-authored “Pattern Discrimination” (University of Minnesota Press/meson press, 2019). Currently, he is working on a new book about Animated Intelligence (Amsterdam University Press, forthcoming).

Gérard Biau is a full professor at the Probability, Statistics, and Modeling Laboratory (LPSM) of Sorbonne University, Paris. His research is mainly focused in developing new methodologies and rigorous mathematical theory in statistical learning and artificial intelligence, whilst trying to find connections between statistics and algorithms. He was a member of the Institut Universitaire de France from 2012 to 2017 and served from 2015 to 2018 as the president of the French Statistical Society. In 2018, he was awarded the Michel Monpetit – Inria prize by the French Academy of Sciences. He is currently director of Sorbonne Center for Artificial Intelligence (SCAI).

Isabelle Bloch graduated from the Ecole des Mines de Paris, Paris, France, in 1986, and received the master degree from the University Paris 12, Paris, in 1987, the Ph.D. degree from the Ecole Nationale Supérieure des Télécommunications (Télécom Paris), Paris, in 1990, and the Habilitation degree from University Paris 5 (Université Paris Cité), Paris, in 1995. She has been a Professor at Télécom Paris until 2020 and is now a Professor at Sorbonne Université. Her current research interests include symbolic and hybrid artificial intelligence, mathematical morphology, spatial reasoning, fuzzy set theory, 3D image understanding, structural, graph-based, and knowledge-based object recognition, and medical imaging.

Johannes Breuer is a senior researcher in the team Survey Data Augmentation at GESIS – Leibniz Institutes for the Social Sciences and (co-) leads the team Research Data & Methods at the Center for Advanced Internet Studies (CAIS). His research interests include the use and effects of digital media, computational methods, and open science. Further information: <https://www.johannesbreuer.com/>

Anna Echterhölter is professor for the history of science at the University of Vienna. She habilitated in 2017 at the Humboldt University Berlin. In addition to fellowships at the Max Planck Institute for the History of Science in Berlin and the GHI in Washington, she held interim professorships at the Humboldt and Technical University Berlin. Her research interests include the history of data and quantification, epistemic decolonization, German Pacific colonies.

Engineer and philosopher by training, **Jean-Gabriel Ganascia** is currently Professor of Computer Science at the Sorbonne University. He continues his research in artificial intelligence at LIP6 (Laboratory of Computer Science of Sorbonne University), where he leads the ACASA team. A specialist in data mining and machine learning, his current research activities focus on the literary aspects of digital humanities, computational ethics, and the ethics of digital technologies. He is a Fellow of EurAI (European Association for Artificial Intelligence) and a member of the CPEN-CCNE, the Subcommittee on Digital Ethics of the CCNE (French National Ethics Committee). He is also Chairman of the Steering Committee of the CHEC (Cycle des Hautes Études de la Culture), Chairman of the Ethics Committee of “Pôle Emploi”, the French National Employment Agencies, and Chairman of the AFAS (“Association Française pour

l'Avancement des Sciences"). Finally, he was the Chairman of the Ethics Committee of the CNRS (COMETS) between 2016 and 2021.

Matthieu Komorowski is a Clinical Senior Lecturer at Imperial College London and a consultant in intensive care and anaesthetics at Charing Cross Hospital in London. He was previously a visiting scholar at MIT, and an associate of Harvard University where he taught on machine learning in healthcare. Matthieu holds additional qualifications in space, mountain, diving and hyperbaric medicine. In 2022, he reached the final stages of the European Space Agency astronaut selection. His research group at Imperial College London has secured around £1.3 million in funding to develop and test artificial intelligence-based tools for sepsis in the NHS.

Sybille Krämer was Professor of Philosophy at the Free University of Berlin until her retirement in April 2018 and has been Senior Professor ("Guest Researcher") at the Leuphana University of Lüneburg since March 2019. The University of Linköping, Sweden, awarded her an honorary doctorate (Dr. h.c.) in 2016.

Giacomo Landeschi is Associate Professor of Archaeology and researcher at Lund University. He obtained his master's degree from the University of Pisa in 2005 and received his PhD from the IMT Institute for Advanced Studies in Lucca. As of 2013, Landeschi is employed by Lund University where he is one of the founding members of the Digital Archaeology Lab and research engineer in the Humanities Lab. His research interests include digital archaeology, archaeological theory, and landscape archaeology. Landeschi has been teaching BA and MA-level courses in several institutions including University of Pisa, Lund University, Umeå University, University of Copenhagen.

Sabina Leonelli is Professor of Philosophy and History of Science at the University of Exeter; Director of the Centre for the Study of the Life Sciences (Egenis); lead of the "Data Governance, Ethics and Openness" strand of the Exeter Institute for Data Science and Artificial Intelligence; Fellow of the Alan Turing Institute; Editor-in-Chief of History and Philosophy of the Life Sciences and Associate Editor of the Harvard Data Science Review; and recipient of the Lakatos Award 2018 and the Patrick Suppes Prize 2022 for research on the epistemology of data-intensive science. She has been awarded many competitive grants including two from the European Research Council, "The Philosophy of

Data-Intensive Science” (2014–2019, www.datastudies.eu) and “A Philosophy of Open Science for Diverse Research Environments” (2021–2026, www.opensciencestudies.eu). She is an alumna of the Global Young Academy and regularly engages with a variety of national and international initiatives in science policy, especially concerning the governance and use of large data infrastructures.

Matteo Pasquinelli is Professor in Media Philosophy at the University of Arts and Design Karlsruhe where he is coordinating the research group on Artificial Intelligence and Media Philosophy KIM. His research focuses the intersection of philosophy of mind, political economy and the automation of knowledge and cultural production. He edited the anthology “Alleys of Your Mind: Augmented Intelligence and Its Traumas” (Meson Press, 2015) and wrote, with Vladan Joler, the visual essay ‘The Nooscope Manifested: AI as Instrument of Knowledge Extractivism’ (AI & Society, 2022; also online as nooscope.ai). For Verso Books he wrote the monograph “The Eye of the Master: A Social History of Artificial Intelligence” (October 2023). Among others, he published essays for the Journal of Interdisciplinary History of Ideas, Qui Parle, Radical Philosophy, Les Mondes du Travail, South Atlantic Quarterly, Parrhesia, Theory Culture & Society, Multitudes, and e-flux.

Evangelos Pournaras is Associate Professor at University of Leeds, UK, where he leads the Distributed Intelligent Social Computing (DISC) lab. He is also a UKRI Future Leaders Fellow, an Alan Turing Fellow and a research associate at the UCL Center of Blockchain Technologies. He has a significant track record of high-profile publications and international research experience at ETH Zurich, EPFL, Delft University of Technology (PhD) and IBM T.J. Watson Research Center. Evangelos has won the Augmented Democracy Prize, the 1st prize at ETH Policy Challenge, including 5 paper awards and honors. Two of his projects are in the UNESCO IRCAI Global Top-100 list of AI projects that tackle sustainable development goals.

Markus Elias Ramsauer is a PhD candidate in the Department of History at the University of Vienna as part of the Volkswagen Foundation funded research project “How is Artificial Intelligence Changing Science? Research in the Era of Learning Algorithms”. He has completed MA degrees in Cultural and Social Anthropology as well as in the History and Philosophy of Science at the Univer-

sity of Vienna. His current research interests are centered around questions of world and large-scale modeling in the second half of the 20th century.

Fabian Retkowski is a PhD candidate associated with the Interactive Systems Lab (ISL) at the Karlsruhe Institute of Technology (KIT). He holds a master's degree in computer science from KIT, earned in 2020. Currently, Mr. Retkowski is actively involved in the research project "How is Artificial Intelligence Changing Science?" funded by Volkswagen Foundation. His research focuses on the fields of artificial intelligence and natural language processing, particularly on topical segmentation and text summarization.

Gabriele Schabacher is Professor of Media and Culture Studies at the Institute for Film, Theatre, Media, and Cultural Studies (FTMK) at Johannes Gutenberg University Mainz. Since 2021 she is deputy spokesperson of the CRC 1482 "Studies in Human Categorization" and principal investigator of the project "Urban Control Regimes. Railway Stations as Infrastructure of Human Categorization". Her research areas include the media history of traffic, mobility, and infrastructures, digital technologies of surveillance, the cultural techniques of repair, the media history of seriality, and the theory of autobiography. Among her recent publications is a monograph on infrastructure work (2022), co-edited volumes on the cultures of repair (2018, together with Stefan Krebs and Heike Weber) and on the practices of workarounds (2017, together with Holger Brohm, Sebastian Gießmann, and Sandra Schramke), as well as the articles "In Control of Algorithms: Video Analytics and Human–Machine Relations at the Train Station" (forthcoming) and "Time and Technology. The Temporalities of Care" (2021).

Jens Schröter, Prof. Dr., is chair for media studies at the University of Bonn since 2015. Since 4/2018 director (together with Anja Stöffler, Mainz) of the DFG-research project "Van Gogh TV. Critical Edition, Multimedia-documentation and analysis of their Estate" (3 years). Since 10/2018 speaker of the research project (Volkswagen Foundation; together with Prof. Dr. Gabriele Gramelsberger; Dr. Stefan Meretz; Dr. Hanno Pahl and Dr. Manuel Scholz-Wäckerle) "Society after Money – A Simulation" (4 years). Director (together with Prof. Dr. Anna Echtermöller; PD Dr. Sudmann and Prof. Dr. Alexander Waibel) of the Volkswagen Foundation main grant "How is Artificial Intelligence Changing Science?" (Start: 1.8.2022, 4 years); April/May 2014: "John von Neumann"-fellowship at the University of Szeged, Hungary. September

2014: Guest Professor, Guangdong University of Foreign Studies, Guangzhou, People's Republic of China. Winter 2014/15: Senior-fellowship at the research group "Media Cultures of Computer Simulation". Summer 2017: Senior-fellowship IFK Vienna, Austria. Winter 2018: Senior-fellowship IKKM Weimar. Winter 2021/22: Fellowship, Center of Advanced Internet Studies. Recent publications: *Medien und Ökonomie*, Wiesbaden: Springer 2019; (together with Christoph Ernst): *Media Futures. Theory and Aesthetics*, Basingstoke: Palgrave 2021; (together with Julia Eckel, Christoph Ernst, eds.): *Tech /Demos (Navigationen 1, 23)*. Visit www.medienkulturwissenschaft-bonn.de / www.theorie-der-medien.de / www.fanhsiu-kadesch.de

Urvi Sonawane is a final year medical student studying at Imperial College London. She completed her Remote Medicine intercalated BSc with 1st class honours and received the National Lung and Heart Institute Outstanding Achievement Prize in Remote Medicine for her final project. This project involved examining the impact of shear forces from facemasks on the skin, and testing the effects of an intervention on comfort, erythema and inflammation. Aside from this, she is an active volunteer for Streetdoctors, which is a national charity that aims to provide first-aid skills to young people. She had the role of co-team lead for the West London branch, during which 520 young people were trained. She has a keen interest in acute care and anaesthetics and is fascinated by the ways in which artificial intelligence may change healthcare in the future.

Andreas Sudmann teaches media studies at the University of Bochum and currently serves as the scientific coordinator and principal investigator for the research group "How is Artificial Intelligence Changing Science? Research in the Era of Learning Algorithms" (funded by the Volkswagen Foundation, started in 2019/2022) at the University of Bonn. Current research interests include: digital media cultures and in particular artificial intelligence, digital methods, theory and history of media, media critique, science and technology studies.

Alexander Waibel is a Professor of Computer Science at Carnegie Mellon University (USA), and at the Karlsruhe Institute of Technology (Germany). He is the director of the International Center for Advanced Communication Technologies (interACT). Prof. Waibel is known for his work on AI, Machine Learning, Multimodal Interfaces and Speech Translation Systems. He proposed early Neural Network based Speech and Language systems, including

the TDNN (the first shift-invariant “Convolutional” Neural Network), Modular Neural Networks neural transfer learning and sequential learning models. Combining advances in ML with work on multimodal interfaces, Waibel and his team developed pioneering solutions to cross-lingual communication, including the first consecutive (1991) & simultaneous (2005) translation systems, mobile speech translators, multimodal smart rooms and human-robot interfaces. Waibel published extensively in the field (>800 papers, >30.000 citations) and received many patents and awards. He is a member of the National Academy of Sciences of Germany and a Fellow of the IEEE. He received his BS, MS and PhD degrees from MIT and CMU, respectively.

Sabine Wirth is Junior Professor for Digital Cultures at the Department of Media Studies at Bauhaus-Universität Weimar. Her research interests are the history and media theory of interfaces within personal, mobile and ubiquitous computing environments, digital image cultures, and the popularization of AI technologies. Current research project: “Curating the Feed: Interdisciplinary Perspectives on Digital Image Feeds and Their Curatorial Assemblages”.