

How to Put the Data Subject's Sovereignty into Practice. Ethical Considerations and Governance Perspectives

Peter Dabrock

Friedrich-Alexander-University Erlangen Nuremberg/German Ethics Council
peter.dabrock@fau.de

ABSTRACT

Ethical considerations and governance approaches of AI are at a crossroads. Either one tries to convey the impression that one can bring back a status quo ante of our given “onlife”-era [1,2], or one accepts to get responsibly involved in a digital world in which informational self-determination can no longer be safeguarded and fostered through the old fashioned data protection principles of informed consent, purpose limitation and data economy [3,4, 6]. The main focus of the talk is on how under the given conditions of AI and machine learning, data sovereignty (interpreted as controllability [not control (!)] of the data subject over the use of her data throughout the entire data processing cycle [5]) can be strengthened without hindering innovation dynamics of digital economy and social cohesion of fully digitized societies. In order to put this approach into practice the talk combines a presentation of the concept of data sovereignty put forward by the German Ethics Council [3] with recent research trends in effectively applying the AI ethics principles of explainability and enforceability [4-9].

Author Keywords

AI ethics; data sovereignty; responsible governance; controllability; explainability; enforceability; German Ethics Council

BIOGRAPHY

Professor Peter Dabrock is the Chair of the German Ethics Council and Chair for Ethics in the Department of Theology at the University of Erlangen-Nuremberg (Germany).

After several positions in academia as researcher, Assistant, Associate and Full Professor in Bochum and Marburg (from 1995-2010) he has been Chair of Systematic Theology (Ethics) at the University of Erlangen-Nuremberg since October 2010. Beyond serving in many high-level national and international advisory bodies in academia, Church, and Society including the European Group on Ethics in Science and New Technology (2011-2016) he has been an appointed member of the German Ethics Council

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the Owner/Author.

AIES '20, February 7–8, 2020, New York, NY, USA.

© 2020 Copyright held by the owner/author.

ACM ISBN 978-1-4503-7110-0/20/02.

DOI: <https://doi.org/10.1145/3375627.3377142>

since 2012. Since 2016 he has been its elected Chairperson. Since 2017 he has been an appointed member of ACATECH (German National Academy of Science and Engineering).

Dabrock has published several books and more than 200 articles with special focus on ethics of emerging technologies, ethics of life sciences, on social justice, and on sexual ethics.



(Photograph: German Ethics Council/R. Zensen)

REFERENCES

- [1] Privacy for Europe, ed. iapp.org.
https://iapp.org/media/pdf/resource_center/giovanni_mamanifes.pdf
- [2] Data Ethics Commission. Opinion of the Data Ethics Commission.
<https://t1p.de/v677>.
- [3] German Ethics Council. Big Data and Health – Data Sovereignty as the Shaping of Informational Freedom. Opinion. Executive Summary & Recommendations. Berlin: German Ethics Council, 30.11.2017, 2018.
<https://www.ethikrat.org/fileadmin/Publikationen/Stellungnahmen/englisch/opinion-big-data-and-health-summary.pdf>
- [4] Patrik Hummel, Matthias Braun, Steffen Augsburg and Peter Dabrock. Sovereignty and Data Sharing, in: ICT Journal 2018, ICT Discoveries, Special Issue No. 2, 23 Nov. 2018
<https://www.itu.int/en/journal/002/Documents/ITU2018-11.pdf>
- [5] Patrik Hummel, Matthias Braun and Peter Dabrock. Data Donations As Exercises Of Sovereignty, in: J. Krutzinna, L. Floridi (ed.), The Ethics of Medical Data Donation. Cham 2019, 23-54.
- [6] Peter Dabrock. From data protection to data sovereignty. A multidimensional governance approach for shaping informational

freedom in the 'onlife'-era, in: *Cursor_ Zeitschrift für explorative Theologie*. URL: <https://cursor.pubpub.org/pub/rj7m8s8h>.

- [7] Sandra Wachter and Brent D. Mittelstadt. A Right to Reasonable Inferences: Re-thinking Data Protection Law in the Age of Big Data and AI (October 5, 2018), *Columbia Business Law Review* 2019 (2). <https://ssrn.com/abstract=3248829>.
- [8] Sandra Wachter, Bernt D. Mittelstadt and Chris Russell. Counterfactual Explanations Without Opening the Black Box:

Automated Decisions and the GDPR, *Harvard Journal of Law and Technology* 31 (2) 2018. <https://dx.doi.org/10.2139/ssrn.3063289>.

- [9] Jessica Morley, Luciano Floridi, Libby Kinsey and Anhat Elhalal. From What to How: An Initial Review of Publicly Available AI Ethics Tools, Methods and Research to Translate Principles into Practices. *Sci Eng Ethics* 2019. doi:10.1007/s11948-019-00165-5.