

Call for Abstracts: “The ambivalence of emergent technologies: Malevolent creativity and civil security”

TATuP Special topic in issue 2/2024

Extended Deadline for submitting your abstract: 22 September 2023

Background: The democratic decline that is evident throughout the world (Papada et al. 2023) poses challenges to society, some of which are amplified by new technologies in areas ranging from communications to artificial intelligence. Social media enables the radicalization of vulnerable individuals without the need for physical support structures or networks. The social media campaign that led thousands of European Muslims to join ISIS is just one example (Gates and Podder 2015). Currently, rapidly developing technologies such as artificial intelligence are emerging and could become appealing to extremists. There are already signs of this (Nieweglowska, Stellato, and Sloman 2023). Raising awareness of technology-related hazards and unintended and undesirable consequences of technology has been a concern of technology assessment (TA) since its inception. However, this has tended to be focused on the opportunistic intentions of scientists, engineers, entrepreneurs, or investors, unaware of societal and environmental consequences. The question of how technology might be used - deliberately - by malevolent actors to undermine civil security has rarely been addressed in TA research, sometimes as a by-product, sometimes in thematic sidebars (usually as dual-use capabilities, i.e., military and civilian uses).

What is it about? For this special issue, we want to shed a TA light on the nexus of emerging technologies and their potential for malevolent (mis)use. The focus lies on how civil security is affected by malevolent use cases and how they might be prevented or coped with. Using technology in another capacity as intended by developers and with the intent to harm others is an inherently creative process. Cropley, Kaufman and Cropley (2008) call this “malevolent creativity”. They define it as a form of creativity that “is deemed necessary by some society, group, or individual to fulfill goals they regard as desirable, but has serious negative consequences for some other group, these negative consequences being fully intended by the first group” (2008, 106). When we talk about “malevolent actors” we mean those whose acts intentionally harm or negatively affect other groups or individuals, for example extremists. The fact that technologies can become the object of malevolent creativity is related to their frequently existing openness to unintended uses. This characteristic of technologies is often referred to as dual use. Identifying and clarifying the dual-use potential of new technologies at

an early stage is one of the tasks of technology assessment (Grunwald 2018, 25). However, the meaning of the term dual use is far less obvious than its use might imply. Forge (2010) points out that no generally accepted definition of the term exists. In the context of ethical issues in research and development, the term is often reduced to the problem of the use of civilian technologies for military purposes, while ignoring other relevant areas of potential misuse, such as civil security or politics (Mahfoud et al. 2018). This special issue is intended to partially fill this scientific paucity. We invite scholars from different fields to contribute to this analysis of how new technologies can influence civil security, what can be done to mitigate malevolent use of technologies, or how new technologies might help in curbing the influence of malevolent actors. With this special issue, we want to open this pressing societal topic as a research area for TA and beyond.

Expected contributions

1. New technologies and malevolent use:

- How can new technologies be used by malevolent actors for their purposes (propaganda, organization, strategy, action etc.)?
- Who is affected by malevolent use cases of new technologies and how?
- What are cases of malevolent use of new technologies?
- What are future trends of malevolent use of new technologies?

2. New technologies and prevention/societal resilience:

- How can new technologies be used to prevent malevolent acts (extremism, radicalization, disinformation etc.)?
- How can new technologies be designed to prevent malevolent use cases?
 - Is it even possible or desirable to design technologies in this way?
 - What are the consequences of such an approach?
 - Who is responsible for the prevention of malevolent use cases of new technologies?
- How can new technologies foster societal resilience against malevolent use (e.g. radicalization and/or extremism)?
 - How can civil society (stakeholder inclusion?) be included into a comprehensive approach of societal resilience in new technologies?

3. Technology assessment and societal security

- How has TA so far contributed to questions of unintended/dual use? What can be learned from this for civil security?
- Can the problems that may arise in the field of civil security as a result of technological innovations be adequately described by the concept of dual use? Are there alternative conceptions that offer added value?
- Which methodological approaches of technology assessment are best suited to examine the ambivalences of new technologies with regard to civil security, and how can such technologies be socially shaped?
- How can and should society deal with new technologies whose use by malevolent actors poses significant challenges to civil security and democracy, but which at the same time bring great potential for societal benefits?

Literature:

Cropley, David H., James C. Kaufman, and Arthur J. Cropley. 2008. 'Malevolent Creativity: A Functional Model of Creativity in Terrorism and Crime'. *Creativity Research Journal* 20 (2): 105–15. <https://doi.org/10.1080/10400410802059424>.

- Forge, John. 2010. 'A Note on the Definition of "Dual Use"'. *Science and Engineering Ethics* 16 (1): 111–18. <https://doi.org/10.1007/s11948-009-9159-9>.
- Gates, Scott, and Sukanya Podder. 2015. 'Social Media, Recruitment, Allegiance and the Islamic State'. *Perspectives on Terrorism* 9 (4): 107–16.
- Grunwald, Armin. 2018. *Technology Assessment in Practice and Theory*. London ; New York: Routledge.
- Mahfoud, Tara, Christine Aicardi, Saheli Datta, and Nikolas Rose. 2018. 'The Limits of Dual Use'. *Issues in Science and Technology* 34 (4): 73–78.
- Nieweglowska, Maja, Cal Stellato, and Steven A. Sloman. 2023. 'Deepfakes: Vehicles for Radicalization, Not Persuasion'. *Current Directions in Psychological Science*, March, 096372142311613. <https://doi.org/10.1177/09637214231161321>.
- Papada, Evie, David Altman, Fabio Angiolillo, Lisa Gastaldi, Tamara Köhler, Martin Lundstedt, Natalia Natsika, et al. 2023. 'Defiance in the Face of Autocratization'. 2023. Democracy Report. Gothenburg: University of Gothenburg: Varieties of Democracy Institute (V-Dem Institute). <https://www.v-dem.net/publications/democracy-reports/>.

Special topic editors:

Dr. Georg Plattner¹, georg.plattner@kit.edu
 Dr. Octavia Madeira¹, octavia.madeira@kit.edu
 Dr. Christian Büscher¹, christian.buescher@kit.edu
 Alexandros Gazos¹, alexandros.gazos@kit.edu
 Tim Röller¹, tim.roeller@kit.edu

¹ Institute for Technology Assessment and Systems Analysis (ITAS), Karlsruhe Institute of Technology (KIT)

Submissions

- Send your abstract to redaktion@tatup.de by **22.09.2023** at the very latest (extended deadline);
- Length of your abstract: max. 1.5 pages;
- State full names, e-mail addresses, and institutional affiliations of all co-authors of the abstract;
- The editorial office will communicate only with the corresponding author.

Editorial process

22/09/2023	Deadline for submitting your abstract
End of September 2023	Decision on inviting authors to submit a full manuscript
End of December 2023	Deadline for submitting your full manuscript, followed by a double non-blind review process
mid/end-February 2024	Feedback from the reviewers, followed by authors' revisions (four weeks)
mid-April 2024	Feedback on revisions.
end-April 2024	End of revision period.
Mid-June 2024	Publication (print and online).