

Call for Abstracts: „Potentials of TA in sudden and enduring crises“

TATuP-Special topic in issue 02/2023

Extended deadline for your abstract: 12 October 2022

This TATuP Special topic has two specific aims: first, to ignite interest from authors to contribute their analytical takes on the issues central to technology assessment (TA) during the pandemic, as viewed through different disciplinary, inter- or trans-disciplinary lenses. Second, to elicit specific TA contributions on the key themes and the roles, functions and options for TA through and beyond the current crisis.

As the COVID-19 pandemic evolves from strict lockdown responses to contain the sudden and acute spread of the virus's first variants, towards coping and adaptive strategies for living with its continuous presence, reflexive and critical studies on the crisis have been getting on the way. These include, for example, the management of uncertainty (Rutter et al., 2020), broader health implications of measures (Douglas et al., 2020; Kontoangelos et al., 2020), economic effects of the pandemic (Baldwin and Weder di Mauro, 2020; Mena et al., 2022), medical innovation (Sampat and Shadlen, 2021), the diversity of government responses (Calvert and Arbuthnott, 2021; Farrar and Ahuja, 2021; Jasanoff et al., 2021), public trust in science (Plohl and Musil, 2021) and the role and staging of science during the pandemic (Hilgartner et al., 2021).

TA can contribute to this emerging collection of 'reflexive pandemic research' based on some of its core foci, approaches and methods:

Assessing unintended social consequences of the pandemic's technological aspects

The digital collection and diffusion of personal data have rapidly expanded during the pandemic, as has the use of innovative products and services, such as mRNA-based vaccines and PCR testing. Moreover, the requirements for physical distancing increased the demand for digital infrastructures and connectivity, and underlined their critical role in home-working, home-schooling, home-shopping and remote healthcare. Under these conditions, less critical attitudes towards technological innovations and fast-tracking of their implementation have intensified in search of quick fixes, postponing transparent assessment and discussion with

regards to their implications for human rights, shared social norms such as privacy, security, safety, autonomy, and dignity and societal imperatives such as sustainability.

Science-based policy advice during an unfolding pandemic

Scientific advice to policy-makers during the COVID-19 pandemic has been one of the most analysed and discussed topics in disciplines such as political science, sociology, health and public policy (Morgan, 2020; Greenhalgh, 2020; Hilgartner et al., 2021). The central role of biomedical issues, combined with an urgency in decision-making, increased governmental reliance upon inputs from experts and national advisory systems. The complex, evolving and long-lasting nature of the crisis changed the way science and polity interacted, resulting in the emergence of new advisory units, and constellations. The complexity and uncertainty in the science relevant to the pandemic and the widespread dissatisfaction with national governments begs further questions of intermediary functions and processes for managing conflicts and tensions between disciplines, social groups, sectors, regions and countries more generally. TA as a long-standing advisory institution holds practical as well as theoretical expertise on such issues and is well suited to contribute to these debates.

Participation and public engagement amid an urgent crisis

Throughout the COVID-19 pandemic, public and stakeholder participation in decision-making differed greatly across countries. While public needs for, opinions on and compliance with governmental measures were being regularly monitored throughout the pandemic, they were not always listened to and acted upon (Sclay et al. 2020). In the UK, the government failed to respond to urgent requests from local healthcare workers to stockpile personal protective equipment ahead of the pandemic, resulting in higher infection rates and death toll (Morgan, 2020). Studies confirmed that expert advice on human behaviour and social acceptance was insufficiently included in political decision-making on the type and timing of measures (Drury et al., 2020). Inclusion of publics in decision making is another central topic in TA studies. This is well illustrated by an exemplary study by the Rathenau Institute. This study showed that public trust in science was higher than in the judiciary, the media, the government and large companies throughout the pandemic, but that clear communication and a comprehensive strategy are crucial accompanying factors for maintaining public trust (Rathenau Instituut, 2021).

Roles, functions and methods of TA

The COVID-19 pandemic has met scientists, governments and publics with problems of massive scale and complexity. Many disciplines and organisations were not prepared for producing evidence and making rapid decisions based on relatively scarce data. In the past, 'Real-Time' as well as constructive TA approaches have been advanced to meet the needs of delivering helpful contributions in evolving contexts. However, there is still a lot of room for elaborating on TA's role and modus operandi in expanding crises (Hahn et al., 2020). In most national contexts, TA engaged rather late in COVID-19 crisis management. TA-based advice is traditionally grounded in the integration of existing evidence from a wide range of sources. With the sudden occurrence of unforeseen events, the adoption of different approaches may be required, such as the formalisation of rapid response mechanisms (for example, building on the expertise of the UK Parliamentary Office of Science and Technology (POST)). It remains unclear which role TA institutes should opt for in urgent and unfolding situations (Bauer and Kastenhofer, 2019) such as the sudden COVID-19 crisis, as well as for other urgent and pervasive crises such as climate change. The global nature of COVID-19 and climate change

calls for reflections on the role of TA as transnational broker, supporting cooperation, coordination and exchange (for example, through GlobalTA).

Guiding research questions

The following list of questions represents a suggestion of possible directions for creating linkages between cases and processes underlying the pandemic, core TA concerns, and learning outcomes for future crises for the field of TA:

Assessing unintended social consequences of the pandemic's technological aspects

How have our attitudes, perceptions and acceptance of digitalisation in areas such as home-working, schooling, shopping, entertainment, and at-home testing kits and health monitoring changed during the COVID-19 crisis? What do these changes, coupled with growth in technology areas such as cryptofinance, digital currencies and the metaverse, signify for big data and integrations across other areas of life? How has home-working affected people's work and daily lives? What are the impacts of the proliferation of health-related monitoring and surveillance on privacy? Do TA concerns of privacy, security, and the precautionary principle no longer matter in a crisis? Are critical and cautionary analyses of technological innovations made redundant during a pandemic, and hence which role for TA is required in such situations?

Science-based policy advising during and unfolding pandemic

How have national and international experiences in science-based policy advising during the COVID-19 pandemic changed the roles and functions of science for public policy? Which advantages and disadvantages of national policy advisory systems have been revealed? How have TA organisations and scholars researched and advised during the COVID-19 crisis? What are the experiences gained from public participation and engagement in TA and the advisory process throughout the crisis? How have the media and other intermediaries influenced the relationships between science advice, the public, and COVID-19 mitigation policies?

Participation and public engagement amid an urgent crisis

How was the public involved in decision-making during the pandemic? How were public needs met and opinions listened to? Which types of stakeholders played important roles, and who was ignored? Which structures and processes were used to improve public understanding and trust in science and policy-making? What are the consequences for the public of authoritarian approaches to policy-making during the crisis?

Roles, functions and methods of TA

What has been learned, going forward, from the COVID-19 crisis for addressing other global challenges such as climate change and sustainability? How have the successes and failures of science advisory practices, public engagement, technological innovations, and government policy-making during the pandemic influenced the way in which we view the role of TA in crisis mitigation? How can TA approaches and methods be adapted to and developed for situations with high uncertainty in problem-solving and rapid decision-making? How can TA strengthen its role in longer lasting and pervasive problems such as climate change reduction?

Guest editors of this TATuP Special topic

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Submissions

- Please send your abstract by email to redaktion@tatup.de by 12 October 2022 at the very latest;
- length of the abstract: max. 1.5 pages;
- please state full names, email addresses and institutional affiliations of all co-authors of the abstract;
- the editorial office will correspond with the author submitting the abstract.

Schedule

12 October 2022:	Extended deadline for submitting your abstract.
October 2022:	Decision on inviting authors to submit a full manuscript.
January 2023:	Deadline for submitting your full manuscript, followed by a double non-blind review process.
February 2023:	Feedback from the reviewers, followed by authors' revisions by mid of April 2023.
April 2023:	Feedback on revisions.
May 2023:	End of revision period.
June/July 2023:	Publication (print and online).

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