MEETING REPORT

Changing Values, Changing Technologies

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The conference Changing Values, Changing Technologies took place on 12 and 13 October 2021 at the Delft University of Technology. Around 40 scholars from the fields of philosophy, social science, law, and anthropology came together to listen to and discuss presentations addressing the interactions of values and technologies. The majority of presentations highlighted different facets of the interrelations between value change and technological change, put value change into context with technical and moral progress, or discussed different methods for studying and anticipating value change.

Keynotes

Tsjalling Swierstra started with a presentation on technologically induced moral change (TiMC). He proposed to approach and study moral change as a force field of changing relationships, which he memorably compared to the functional interrelationships of keys and levers on a DJ's mixing console. In her keynote, Helen Nissenbaum discussed whether there is currently a change in values regarding privacy. What I found particularly remarkable were her experiences with the *privacy paradox*, i. e., the phenomenon that people often make contradictory statements on the importance they (allegedly) attribute to privacy and their actual behavior. The conference concluded with Webb Keane's keynote. He examined social media, robots, and algorithms and showed how ethical questions about life with technical devices expand not only the boundaries of ethics but also the boundaries of being human.

Interrelations between value change and technological change

The dynamics and interrelations between value change and technological change were a prominent topic of the conference, dis-

This is an article distributed under the terms of the Creative Commons Attribution License CCBY 4.0 (https://creativecommons.org/licenses/by/4.0/) https://doi.org/10.14512/tatup.30.3.80 Received: Oct. 06, 2021; revised version accepted: Oct. 07, 2021; published online: Dec. 20, 2021 (editorial peer review) cussed with reference to various modern technologies and related research questions. Lonneke Poort and Sanne Taekema looked at the relationship between ethics, technology, and law. As a case study, they used the EU regulatory framework on genetically modified crops, the regulatory suitability of which is currently being questioned by some EU member states in light of the developments around CRISPR-Cas9. Based on this case study, Poort and Taekema admitted that the law can hardly keep up with the pace of technical developments. However, they argued that law should not be seen as rigid and inflexible as it is sometimes perceived. Rather, in their view, law can enable communication about moral and social values and technology. In their presentation, they also addressed the double role of legal regulation of modern technologies, which can take the form of a facilitator of innovation or a gatekeeper protecting the moral limits of technology - a complex (because occasionally contradictory) task, as is also well known in technology assessment (TA).

Joshua Schulz presented his research on the use of AI systems in medicine. He showed that due to the increased use of AI systems, more and more digital models are applied in medical practice, which encourages medicine to focus on disease prediction, risk management, and behavior optimization. From this development, he derived that Western clinical ethics and medical practice will face a paradigm crisis in the future. He justified this assessment by arguing that the shift to lifelong medical management will shift the identification of appropriate life goals to medicine. In Western societies, however, the identification of appropriate life goals usually falls into the domain of ethics, religion, or society itself, which is why medicine may not be suitable for the task. Schulz also pointed out that predictive medicine may perceive patients increasingly as 'bundles of risk' - a statement that has a special flavor considering the COVID-19 pandemic. Overall, his research represents another example of direct and indirect consequences of technologies and may foreshadow upcoming fields of work for TA.

Katharina Bauer and Julia Hermann spoke about moral education in the light of techno-moral change. Using human-robot interaction in elderly care, they showed that coming into contact with new technologies can require individuals to refine their existing moral skills and sensibilities, even to the point of developing completely new moral skills. With reference to robots in elderly care, they illustrated that the use of robots may not only change work processes but also the self-image of the nursing staff. From the standpoint of moral education, Bauer and Hermann's main thesis is that learning 'moral resilience' should be fostered. To support this position, they explore mechanisms of moral learning and shed some light on psychological aspects of those mechanisms. The goal of their research is to learn how people can best be trained to reinterpret existing moral norms and values in the light of new technological developments.

Value change, technical progress, and moral progress

Five presentations dealt with the relationship between value change, technical progress, and moral progress. I attended the

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talk by Matthew Dennis and Steven Umbrello, who addressed the COVID-19 pandemic and the associated value conflicts and value disruptions. One of their research objects were the socalled 'immunity passports' that are currently being discussed in several countries. They pointed out that science is often critical of these immunity passports and criticized that governments often downplay these scientific concerns. This in turn results in individuals often not having a choice to use such immunity tools, as most of them are mandatory. Regarding the role of technology in the pandemic, they pointed out that many people were and still are forced to rethink how they work, study, shop, and entertain themselves, sometimes even in radically new ways. To accomplish this, digital technologies have often been promoted Fabio Tollon's presentation focused on the relationship between affordances and artifacts in particular. He put forward the following thesis: When a value changes, the intended design of a technical artifact also changes. Building on Michael Klenk's affordance account, he aimed to show that a more holistic approach and interpretation of affordances can help explain why certain actions might be made more likely than others. For this purpose, it is not sufficient to merely consider the designed properties of artifacts but that the psychology of those who will use these artifacts must also be included: human beings. Interesting parallels of his work to TA are the questions of how to deal with the unintended use of technical artifacts and how to account for value change in the design and development of technology.

AI leads predictive medicine to perceive patients increasingly as 'bundles of risk.'

to compensate for direct and indirect limitations in the social sphere. They argued that such 'technofixes,' however, often lack important components compared to a sound, socially negotiated solution. Overall, they see the danger of a "digitally divided world" on the horizon, which will particularly affect people who do not have a stable and secure home environment. This is another link to TA, since it sheds light on the people who are among the losers of technologically induced change.

Methods for studying and anticipating value change

Another subject of the conference was methods that can be used to study and anticipate value change. From the point of view of empirical philosophy, Marianne Boenink and Olya Kudina showed that the four methods - living labs, socio-technical systems modeling, techno-moral scenarios, and participatory design - could be useful not only for studying value change and the interaction of values and technology but also for integrating them into the design and development of technology. The speakers' opinion is that identifying and facilitating value change is possible through sensitivity to dynamics and enabling anticipation, but admitted that the presented methods also have the weak point of being normatively inconclusive. How these methods can be applied in practice has been shown through a case study of the Dutch 'CoronaMelder' app. In the development of this app, ethicists were involved in the design process, where they helped identify and prioritize the values of privacy and solidarity as most important. Boenink and Kudina concluded that a pragmatic and constructivist approach to values is necessary, but that this view always comes with the risk of falling into the trap of contemporary value bias. Empirical philosophy and TA can learn a lot from each other here, since both fields work with these methods and existing experiences and best practices promise fruitful discussions.

Tristan de Wildt and Ibo van de Poel presented a pragmatic view on values and value change with their agent-based model. Their overall object of investigation is value change and how it can result from the interaction between technology and society. Their model simulated negotiation processes that are set in motion when a society is confronted with issues or conflicts that arise in relation to the use of a technology. Within the model, they were able to modify the four variables of needs, technologies, values, and moral problems and demonstrated how different characteristics and combinations of these variables affected the result of a simulation. In addition, they showed how they were able to simulate different types of society in terms of adoption of values and preferences for innovation. As with most simulations, the question remains of what insights can be derived from such simulations for practice. Nevertheless, their presentation was a refreshingly practical and illustrative stimulus for the conference.

Further information

The conference was part of the ERC funded research project 'Design for Value Change.' For more information, see https:// www.valuechange.eu/.