

Editorial

A Technological Smartness All Over the Place: Small-Scale Thing-Power Experiments With Wider Inclusive Ambitions

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Abstract

We live in a societal realm where robotics, artificial intelligence, and digitalization are strongly reshaping our futures. Technological progress has created multiple possibilities. However, the unequally divided impact of technological progress reminds us of the danger of an uncontrolled detonation of technological smartness in society. Some of its experienced and anticipated effects are most likely undesirable. In this thematic issue, we present a compilation of small-scale experiments that help us think through the multiple challenges of a fast-evolving techno-mediated society. It sits on the cross-road between resisting technology or insisting on it in order to create a more socially inclusive sustainable society. The technological “smartification” of our society reshapes our notion of what it means to be human in the complex assemblage with non-human and other-than-human agents we are currently involved in. But it is also a catalyst for intelligent acts of human creativity that will strongly shape our collective future.

Keywords

digitalization; inclusive design; relational ontology; smart technology

Issue

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1. Introduction

Superintelligence penetrated our societal systems so deeply that software-mediated environments are now driving the work floor, trade and commercial logistics, political strategies, war zones, households, social innovation, creative development, and many other areas in civil society (Bostrom, 2014; Hambling, 2018). Meanwhile, digital information flows endlessly between different parts of the world. These data are intangible but they shape every bit of our culture, what we see, hear, how we live, and how we interact with each other. They inform how things and people are arranged, assembled, or related. Computers and mobile phones have literally become an extension of our hands. They act as gatekeepers to significant others. Robots we are not,

not yet, or not fully. However, the boundaries between (wo)mankind and machine are becoming increasingly blurred. And we, as humans, materialize differently as a result of the discursive-material socio-technical realities we are part of and the playful interactions with technology we engage in (Braidotti, 2013).

At the same time, we struggle to identify ourselves as people whose thoughts and actions now belong to the cloud. Some may fear an apocalypse scenario in which machines and artificial intelligence will take over and humanity is no longer in control. Others might argue that an advanced techno-mediated society undesirable installs exclusion mechanisms that pose a danger to both liberal democracy and social welfare levels of those in more vulnerable positions, as the negative impact of a fast digitalizing society is already unequally distributed in

workspaces, schools, and the life sphere. These new complexities and assemblages challenge our thinking and actions. Who is in? Who is out? When does technology become a marker of inclusivity or exclusivity? Can it be both at the same time? Who is rewriting the discourse on techno-mediated inclusive societies? A new generation of digital natives sits at the forefront of decision-making. We adopt and adapt technology in the absence of better alternatives to envision progress in society. In this particular climate of technological progress and ever-growing digitalization, small actions are undertaken to stimulate people to disconnect and return to the tangibility of their private and public spaces to re-evaluate the value of time spent with family members, friends, colleagues, and community members.

This movement creates possibilities to re-imagine what a playful fusion with technology might look like. It may also increase our awareness of the incessant intermingling of the digital and the physical and what that means for our perception of embodiment (Taylor, 2013). Perhaps it does matter that millions of youngsters are now disconnected from old-customed and analog strategies for the exchange of information. It makes us wonder whether we should become less dependent on grid power, particularly in turbulent times where critical infrastructure is under attack (Popuk, 2022), and where would a detailed cartography of the individual and social impact of becoming more machine or machine-dependent lead us. Our desires, expectations, and visions on whether to resist or insist on technological smartness all over the place might differ, just like our thoughts on whose point of view should be taken into account to define progress in society and what our future protected paradise might look like under disruptive planetary conditions (Hannes et al., 2022). Can we really build a more socially just, sustainable, affirmative, pleasure-prone relationship with the non-human, technological agents we have created? If so, how? Or on the other hand, should we start revaluing the symbiotic relationship we have with other-than-human organisms? The natural environment that so far has provided us with what we need but it is rapidly declining under human pressure. Can the power of nature and the active agency of technology be used to restore, promote, or introduce a new balance between people, the planet, and technology (Bennett, 2010)?

We invited the scholarly community to help us think through the multiple challenges a fast-evolving techno-mediated society brings. This thematic issue presents a compilation of scholarly encounters with “smart solutions” in response to real-life challenges and opportunities, such as accessibility to services, safe passage in the public and the digital sphere, obstacles to participation in society, and changing perceptions about how to inclusively co-act with creatures and elements beyond the homo sapiens (Haraway, 2016) to increase the welfare of our scholarly, planetary system, and, most profoundly, of those people living in challenging circumstances.

2. Overview of Contributions

Statistics show that more vulnerable target groups are often less engaged with smart technology and digital devices. Consequently, they suffer the most from the digital divide (Reisdorf & Rhinesmith, 2020). Wahl and Kiuppis (2023) look deeper into this issue, in particular in the context of intellectual disabilities, in their contribution “Increasing Participation of Persons With Intellectual Disabilities With Smart Socio-Technical Arrangements.” They build an argument that addresses the need to start from a socio-relational understanding of disability and the effort to look for “smartness” in the situational arrangement rather than to people, devices, or applications. Their study illustrates how the establishment of smart socio-technological arrangements for persons with intellectual disability can contribute to “smart situations” in which an increase in activities and participation is more likely to occur. They discern, as part of such an arrangement, the technology used, the users, the activity to be supported, and environmental factors such as internet access, social environment, and socio-economic factors. The focus of these arrangements is to decrease these disabilities in different areas of life, as a means of social inclusion. For this, the authors stress the importance to shift the core attention from smart devices or applications to the arrangements that make the situation more inclusive. It involves the pursuit of more suitable access to electronic devices and applications to achieve a higher degree of participation in the “digital society” for this target audience. This approach helps to shift the focus away from technological questions to broader questions of what a person with an intellectual disability needs for a sustainable and successful use of technology.

A different approach to the challenge of including people whose voices are seldom heard is found in “The StoryMapper: Piloting a Traveling Placemaking Interface for Inclusion and Emplacement” by Vrebos et al. (2023). In this article, an interdisciplinary team of authors tries to assess the use of a place-making tool to facilitate inclusion in a situation where participation is aimed at different publics. The tool focuses on the visualization of complex emplaced ideas for cultural heritage, in which a bridge is made between past, present, and future, phrased as “placemaking in the middle.” It puts agency front and center when researching and conceptualizing place and planning placemaking interventions. The article offers a reflection on the StoryMapper pilot for the larger placemaking project, from which the authors discuss the lessons learned and assess the encountered limitations. In particular, they make the reservation that StoryMapper only offers one modality to express emplacement ideas; this means participants feeling uncomfortable with “morphing”—the key process in the StoryMapper interaction—might feel hindered. In this sense, the authors plead for multimodality approaches for inclusion projects. It also entails

that success metrics should not be limited to who participates, but also to how they can engage. The authors further spotted a tension between the usability of the placemaking tool and the type and volume of data that researchers consider necessary for evaluating inclusion. For future research, the authors suggest an investigation of the impact of StoryMapper on participants and its ability to break through community barriers to engage the hard-to-reach publics through the concept of chains of engagement.

It is this community focus that is also featured in the article “Intersecting Positionalities and the Unexpected Uses of Digital Crime and Safety Tracking in Brooklyn” by Riddell (2023). The author describes an ethnographic work in Brooklyn, focusing on how (counter)surveillance apps—in this case, the Citizen app—impacts experiences of social inclusion and exclusion. Citizen is an AI-based live crime and safety tracking app that monitors police scanners. The idea is that citizens can add events and footage of incidences affecting “public safety.” This way events are documented from different points of view—and more importantly by the affected communities. It is a typical use of “sousveillance” software. It functions as a social network in which people also express their feelings and emotions. Riddell’s (2023) research aims to investigate the impact of these digital environments on how crime and safety are experienced in Brooklyn’s neighborhoods, at the interplay of law enforcement, community empowerment, crime, and gentrification. Paradoxically, the tool both encourages community building and a sense of safety, as well as being in danger of promoting fearmongering and racial profiling, all coming down to how users interact with it. It is those individual localized aspects that the author aims to study.

In “The Digital Divide and Futurist Imaginings of Zelle-ous Resisters,” Peluso (2023) does not necessarily promote inclusivity in the use of smart technology but tries to understand resistance to digital technology, in particular, financial tech—focusing on the case of the US multi-bank owned Zelle payment system. The author conceptualizes the Zelle system not as an expression of the digital divide, but as the ability to imagine a future where these very systems lead to more dependence and vulnerability than to the promotion of inclusion. The non-adopters highlighted in this study warn of the “cruel optimism” behind the “there is an app for every problem” idea, which is partly driven by previously encountered negative experiences. Peluso (2023) investigates the particular stance of users towards these supposedly helpful apps and how this influences the perspective of their future selves. Very different from the digital divide discourse—where the focus lies on the possible inability of users to embrace digital tools—the author brings to our attention other concerns at play: These reticent possible users are not just focused on having seamless services at their disposal, but rather want to consciously be in control of their journey, they want to have time on their side, know where they stand, and are

not interested in living an externally imposed life. In sum, citizens are wary of possible future digital dependencies that would generate new exclusions.

The very idea of dependencies on technology and more-than-human agents in society is also explored in the bio-art study “Co-Creatively Producing Knowledge With Other-Than-Human Organisms in a (Bio)Technology-Controlled Artistic Environment,” by Jacobs et al. (2023). The premise of this research is the need to rethink the relationship with the natural environment by transcending the anthropocentric point of view. The case study of choice focused on five projects from the Dutch Bio Art & Design Award and was approached with a mix of visual and context analysis as well as qualitative interviews. The research reveals that the true epistemic relevance of bio-art lies in the multispecies perspective, forcing the rethinking of the relation between nature and culture. This should lead to new, more ecocentric ways of knowing and acknowledging agency from other-than-human organisms. This becomes clear in the discussed cases where artists and organisms are engaged and entangled in a co-creative process, where both are dependent on one another and new technology. The study stresses the living “materiality” of works of art and the often playful role technology adopts in design processes. It is a stark reminder of the need to overcome the well-entrenched idea of “human exceptionalism.” As argued by the authors, this epistemic insight has a profound impact on the concept of adequate research methodologies. It also challenges what it means to function as an academic.

The changes in our academic fabric as a consequence of digitalization are central to the study “Collaborative Writing as Bio-Digital Quilting: A Relational, Feminist Practice Towards ‘Academia Otherwise’” by Vackova et al. (2023). Here, digitalization is introduced as a social experience. Their approach of quilted poetry is portrayed as a methodology that helps us attune, through collaborative writing, to the often unnoticed aspects of our bio-digital ways of working. The authors conceptualize this as a way of resisting “normative, exploitative practices in the neoliberal academia” and describe themselves as “group of academics with different journeys and localities, connected by a common interest in the effects of boundaries, the dynamics of power, and the desire to do things differently” (Vackova et al., 2023, p. 65). What makes the study interesting is its focus on the daily, almost ubiquitous, intertwining of the digital and physical dimensions of daily academic life. Becoming attentive to this reality by writing poetry is a way to attend to how our bodily presence is entangled with technologies and helps a growing consciousness of its impact. With a methodological focus on ethical approaches, the authors want to recalibrate their way of working in academia, with attention to the embedded precarity of relations. This should lead to a re-imagination of ethical work relations to redefine and transcend inclusion in a post-digital future.

3. Conclusion

Imagining the virtual mediated world outside normality has become different for many. But it cannot be taken as a given. As illustrated in this thematic issue, the technological “smartification” of our society reshapes the notion of what it means to be human. As much as inclusion is on the radar of scholars working in the field of social design and social innovation there is little evidence that suggests that the gap between the resourceful and the resourceless has been eliminated. Nevertheless, the small-scale scholarly experiments presented in this issue provide insight into what a techno-mediated society for all might become, should become, or would become if we pay enough attention to the very notion of inclusivity; an affirmative project that strongly shapes a collective future in which creativity flows in multiple directions and differences in the needs and learning curves of different groups of citizens are accounted for.

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Conflict of Interests

The authors declare no conflict of interests.

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