
 ORCID: 0000-0002-4421-8963

Magdalena Zdrodowska

 ORCID: 0000-0002-2497-8463

Ewelina Twardoch-Raś

Institute of Audiovisual Arts
Jagiellonian University in Cracow

INTRODUCTION: TECHNOLOGY BETWEEN EMPOWERMENT AND EXCLUSION

The main theme of this issue of the “Arts & Cultural Studies Review” is the ambiguity of technology, the ways in which it exposes power relations, its emancipating as well as excluding aspects. These aspects are often not separate. They constitute a field of connections and entanglements of various functions of technology, depending on the context of use and specific social groups and individuals, which remain with technologies in complex relations of inclusion, exclusion, discrimination, accessibility, emancipation, or activism. The constantly changing technological and media environment means that new technological solutions appear every now and then, and the existing ones are relocated within the technosphere, where their users and values associated with them may alter and are in a process of constant change. They happen to become more accessible and therefore strengthen the excluded groups in how they navigate the job market, education, or social encounters. Information and communication technologies made self-representation and activist movements much easier for both communities and individuals whose possibilities of action are limited due to their minority status, disability, social, or political situation.¹ And while computer technologies and electronic media may act as barriers disabling users due to technical issues, and/or being a subject of surveillance and abuse, they also enable entering the public sphere, networking, and gaining representation.

The issue of surveillance and abuse in relation to technology has recently been underlined in particular in terms of access to technology, but also technological (algorithmic) profiling. In the racial context, Ruha Benjamin analyzes this problem in

¹ See e.g. M.L. Gray, *Out in the Country: Youth, Media, and Queer Visibility in Rural America*, New York University Press, New York 2009; S. Milan, *Social Movements and Their Technologies: Wiring Social Change*, Palgrave Macmillan, Basingstoke 2013.

his book *Race after Technology: Abolitionist Tools for the New Jim Code*, stating that there are no (and most likely never existed) technologies (primarily computational) that would not be racialized, and therefore neutral towards identity coding.² This type of coding is not only a showcase of the problematic use of artificial intelligence in political propaganda or cyberterrorism, but above all shapes everyday practices (such as using a web browser or social media³), which turn out to be heavily burdened with cognitive biases (which is rightly indicated by Gabbrielle M. Johnson⁴). This problem was widely addressed during the Ars Electronica 2022 New Media Art Festival (“Welcome to Planet B”), in the “Understanding AI” section. The projects presented in this section explored the unifying character of the application of artificial intelligence algorithms. On the one hand they indicated the rising possibilities of creating an artificial world that translates into real political events (e.g. a highly publicized situation of using the face recognition technique against the Uighurs in China⁵). On the other hand, they dwelled into a new nonhuman autonomy and perception that can be cognitive, emancipatory, or activist (as in the project “Learning to See: Gloomy Sunday” created by Memo Akten⁶).

Regardless of identity coding, which is an inherent aspect of the functioning of technology, technological protocols (as Lisa Gitelman understands the term⁷) are therefore also tools of emancipation, subversive and activist activities; in this sense, they are analyzed in many articles that may be found in the presented issue of the “Arts & Cultural Studies Review.” This “overview” indicates that the political nature of technology should be understood in a multi-context manner, without dichotomous distinctions between empowerment and exclusion. One of the examples can be the recent widespread shift online due to pandemic restrictions and recurring lockdowns, which caused multiple problems: chronic fatigue, relocating work-related costs to employees, disturbance of the families’ space and time management. This new situation had a debilitating impact on many individuals and communities, however, it also had an empowering effect for many people with disabilities, allowing them to participate in the job market and public activities to a greater extent.

An interesting show case is the emancipatory power of the massive shift online during the COVID-19 pandemic for Polish citizens with disabilities during the 2020 Women Strike in Poland, which broke out in response to the changes in abortion

² R. Benjamin, *Race after Technology: Abolitionist Tools for the New Jim Code*, Polity Press, Cambridge 2019.

³ See more: S. Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism*, New York University Press, New York 2018.

⁴ G.M. Johnson, *Algorithmic Bias: On the Implicit Biases of Social Technology*, “Synthese” 2021, no. 198 (1).

⁵ See the website of the project: MegaPixels created by Adam Harvey and Jules LaPlace: <https://ars.electronica.art/center/en/megapixels/> (accessed: 15.09.2022).

⁶ See the website of the project: <https://ars.electronica.art/center/en/learningtosee/> (accessed: 15.09.2022).

⁷ L. Gitelman, *Always Already New: Media, History, and the Data of Culture*, The MIT Press, Cambridge 2006.

law. Abortion due to serious or fatal “defects” of the foetus was declared to violate the Polish constitution. Disability was widely discussed by both opponents of abortion and defenders of women’s rights, as is usually the case. The pro-life discourse tends to use images of idealised children with disabilities (joyful, cheerful, often with trisomy) and at the same time accuse its opponents of the willingness to kill these children. However, pro-choice discourse threatens with the prospect of disability bringing inevitable suffering to mother and child; it sometimes presents the idea of a disabled child who puts their mother in danger. The entanglement of abortion and disability has been well described in disability studies.⁸ At the same time, however, this conflict has led to unprecedented exposure of women with disabilities. They participated in the protests, refuting the perception of a disabled person as a child at risk or a child putting their mother in danger, and joined the public discourse as citizens who demanded exercising their rights, including the right to safe motherhood.

The activists with disabilities and their allies soon made themselves known in the media, particularly social media. For example, a mini-dictionary related to the area of protesting was created in the Polish Sign Language; there was a set of rules generated that concerned protesting in ways free from exclusion (pointing to the discriminatory nature of the popular manifest slogan: “hop hop, kto nie skacze, ten nie z nami”, translating as “if you are jumping up, it means you are with us” to expose the exclusive assumption that opposition should be expressed through bodily activity which is not available to every protester). Above all, the conflict was accompanied by a significant revival in the public debate: there were numerous discussion panels analysing current political situation which, due to the pandemic restrictions, were held in the form of online video-conferences. This shift online has made these manifestations of public life available to people with disabilities on an unprecedented scale (as long as disability allows them to use online platforms and access the equipment they need). The participants of meetings that might have had difficulties in reaching the event due to transportation barriers were able to take part in those events because these were held remotely. What is more, they could take part in many events over a period of just a few days: they did not need to travel between cities (which for a person with disabilities is a challenge even in times free from pandemic restrictions), get fatigued, meticulously plan their journeys or engage third parties. Although for many people a pandemic is a crushing experience at multiple levels, to a large extent it caused disability to become widely represented. Numerous online discussions and debates

⁸ See: R. Hubbard, *Abortion and Disability: Who Should and Should Not Inhabit the World?* [in:] L. Davis (ed.), *Disability Studies Reader*, 4th ed., Routledge, New York–London 2013; D. Baynton, *Disability and the Justification of Inequality in American History* [in:] L. Davis (ed.), *Disability Studies Reader*, op. cit., pp. 24–25. In Polish disability studies see: A. Król, *Niepelnosprawność i sprawiedliwość reprodukcyjna. Zarys wybranych zagadnień dotyczących kobiet z niepełnosprawnościami*, “Annales Universitatis Paedagogicae Cracoviensis. Studia de Cultura” 2018, no. 10 (1); N. Pamuła, “Czy adoptowałeś już niepełnosprawne dziecko?”: przyczynek do analizy niepełnosprawności w dyskursie pro-choice w Polsce, “Teksty Drugie” 2020, no 2.

have provided representation of disabled female citizens guided by themselves, demanding respect for their rights, brave, and self-aware. Their voice became audible and was used to transmit into the public transcript information, that was usually kept within groups of specialists.

This case study presents one of the many local examples that shapes the contemporary perspective of intersectional feminism as well as the xenofeminism⁹ movement in reference to technology. It allows to rethink the relations between gender (gender abolitionism), race, (dis)ability, social status and technologies, the availability of technology, also in reproductive terms, the alienating effects of capitalist forces, and finally social micropolitics related to technologies, which are also manifested by creating digital platforms for meetings and discussions for specific groups and communities.

Therefore, crucial is also that the online transfer triggered by the pandemic strengthened the voices of (some) people with disabilities through the mechanics on which social media are based: content sharing.¹⁰ Also significant was the auto-recording of Facebook events where a large part of the discussions and meetings were held; the recording could be replayed or watched asynchronously by consecutive users. Importantly, many online events were broadcast with a translation into the Polish Sign Language (PSL), which has become the standard for such meetings and a declaration to include everyone in the discussion and empower all participants. The presence of PSL was particularly telling considering the official discourse in traditional media, where it was lacking or its quality was poor.

The ambivalence of the life sign language interpretation is highlighted by Octavian Robinson in the article published in this issue. The author considers interpreters as political figures, which aligns with the deaf emancipatory discourse, but also as a source of entertainment for non-disabled gaze. The topic of translating and interpreting has also been taken up by Wojciech Figiel, who concentrates on Polish blind translators and interpreters. Figiel's article is based on interviews conducted with blind translators and presents a historical perspective on their relation with the specialized equipment they use at work.

Kamila Albin presents a concept of reading emancipation of blind readers that is related to the growing access of people with no or low vision to reading. As Albin argues, the changing technological landscape played a fundamental role for blind people in gaining independence in relation to books or texts in general. Michael Skyer contextualizes operations of power relative to multimodality theory as read through the cultural history of technology in deaf education and applied in the pedagogic contexts of deaf higher education.

⁹ To see more: H. Hester, *Xenofeminism*, Polity, Cambridge 2018.

¹⁰ H. Jenkins, S. Ford, J. Green, *Spreadable Media: Creating Value and Meaning in a Networked Culture*, New York University Press, New York 2013.

The articles published in this volume undertake the relations between technology and social interactions (including empowerment as well as weakening of the minority communities) from a very diverse spectrum of perspectives. Ewelina Twardoch-Raś devoted her considerations of strategies of technosensation in artistic project based on bio-parametrisation's techniques, pointing to the relationship between automated decision-making systems and machine learning processes, and the issue of technological discriminatory and emancipation policies. Agnieszka Urbańczyk discussed the anti-shipper movement and its call for exclusion of problematic content from online repositories of fanwork, focusing her considerations on the (dis) emancipatory potential of technology towards fan practices and platforms. Barbara Cyrek and Malwina Popiołek investigate the practice of livestreaming, which is an opportunity to participate in digital social life, for both streamers and their audience. The authors emphasize that the trash streaming phenomenon they analyze generates a specific kind of engagement of the audience and the online community in relation to everyday technologies, as is often the case in fan circles.

Kamil Wrzeszcz's article on the phenomenon of children's books in the field of liberature corresponds with papers by Figel and Albin. The author considers technological properties and creative solutions used in these kind of books that go beyond the linguistic mediation.

Finally, the article by Piotr Zawojcki broadens the thematic concept of the issue and refers to Jacques Derrida's reflection on the essence of the photographic medium, which he understood as a kind of "writing of shade" (or sciagraphy), that invites reader to reflect and think critically about the supposedly well-known and over-theoretised media.

The selected set of reflections provokes critical thinking about technologies, their mainstream and non-standard uses. As editors, we hope that this set of texts written from different perspectives and by a diverse group of authors will provide a basis for further research on the ambivalent relations between technologies and their users – often relocated outside their comfort zone.