Mercedes Bunz

The Need for a Dialogue with Technology

2017

https://doi.org/10.25969/mediarep/12500

Veröffentlichungsversion / published version
Sammelbandbeitrag / collection article

Empfohlene Zitierung / Suggested Citation:
Bunz, Mercedes: The Need for a Dialogue with Technology. In: Mirko Tobias Schäfer, Karin van Es (Hg.): *The Datafied Society: Studying Culture through Data.* Amsterdam: Amsterdam University Press 2017, S. 249–254. DOI: https://doi.org/10.25969/mediarep/12500.

19. The Need for a Dialogue with Technology

Mercedes Bunz

In her book, *The Silent Revolution*, Mercedes Bunz describes a relentless transformation that unfolds silently. Algorithms and data merge in automatized processes of intellectual labour: algorithms produce journalistic articles, stock reports, and sports news. This slippery slope into an algorithmic society unfolds relatively unnoticed and without the occasional hypes that usually mark milestones of technological progress. However, it has effects on the heart of our society in that it reshapes our understanding of media industries and public discourses. With this, it questions our identity as *zoon politikon.* What once was opinion forming has now been taken over by decision-making machines that have become an inherent part of our social organization. Bunz shows the need to consciously interact and understand technology.

Why do you describe the digital revolution as a silent one?

What we socially want from digital technology is rarely discussed. It is apparent that we understand digital technology and its 'disruption' foremost as an economic sensation. If there is a political promise at all, it is one that can be described with Christopher Kelty (2015) as a 'Fog of Freedom'. Interestingly, this is very different from the role technology played in our past, when the transformative powers that technologies offer our societies were understood as political; here Elizabeth Eisenstein's *The Printing Press as an Agent of Change* but also Donna Haraway's *Cyborg Manifesto* (1987) are prominent examples for research addressing the political side of technology. Following their approaches, my book addresses our approach towards algorithms as a missed chance as much as a problem. I agree with Wendy Chun, who points out in her forthcoming *Habitual New Media* (2016) that media matter most when they seem not to matter at all. Thus, I am interested in the fact that we don't debate what we want from technology. Instead of understanding it as something that *can be shaped* and *turn towards it*, we approach it in a rather stereotypical manner: we are either *for* or *against* technology, as my critical discourse analysis looking into how we talk about technology shows.

What do you mean by 'turning towards technology'? Why is criticality not enough?

Of course, we need to critically analyse technology, but criticizing algorithms must go beyond pointing out its negative aspects. Technology studies (Fuller 2003; Parisi 2012; Brunton 2013) have shown again and again that when it comes to technology, effective critique needs to be followed up with action. The overwhelmingly negative view of Google and its dealing with data we find in Germany is a good example of this: while being highly critical of Google, the market position of its search engine just in that country for 2015 is 94.84%; in the US Google's market share is only 64%. This shows clearly that a negative critique of technology is in danger to fail when it does not actively change anything.

Following the French philosopher of technology Gilbert Simondon (1958), I understand this change as a dialogue with technology. Simondon understood the human as being in an 'ensemble' with the machine, instead of being the master above it. This is where critique that keeps an objective distance to technology goes wrong; apart from the fact that is has not been proven as being very effective. In short, 'turning towards technology' does not mean to become non-critical, but to apply one's critique in a dialogue with technology. Also for political reasons: one cannot leave the detailed knowledge of technology and its technical development in the hands of businesses, simply hoping that hackers like Anonymous or the Chaos Computer Club do their best pointing out the fundamental problems; Gabriella Coleman (2014) has recently shown their important role. As digital technology has become part of our daily environment, as we leave data with every usage, we are all asked to make more of an effort of consciously interacting with technology, and in understanding it; apart from insisting on having a right over our own data, of course.

Your book focuses especially on how the digital revolution is changing skilled work. How are algorithms changing the work of experts?

It is obvious that algorithms and big data change the work culture of skilled work and expertise. Inspired by Erik Brynjolfsson's and Andrew McAfee's research (2012), which gave a general picture of how algorithms transform our economies in the 21st century, my research digs down in some more detail as to what this means for 'skilled work'. My question here was whether the algorithm does to the skilled worker what the machine in the industrial age has done to the manual worker.

That there is change, is clear. Something as simple as the search function performed by various algorithms has fundamentally changed skilled work, which amounts to up to 75% in Western post-industrial societies. So far, expertise was exclusive and as such the decisive factor. Now the knowledge of teachers, doctors, journalists and even plumbers or engineers has become accessible to everyone. Furthermore, skilled work can also partly be automated besides being accessible. In the US, lawyers who were formerly allocated to do a document review are already being replaced by software called 'e-discovery'. It scans 1.5 million documents for less than $100,000. Of course, both developments triggered by algorithms unsettle experts.

Case studies in my book, however, show that algorithms will not replace the expert. Even though information has become accessible and can be automated, the studies show that this information needs contextual knowledge to be judged. This is also the case for the automation of knowledge, which needs to be guarded by experts. In a nutshell, one can say that it is not that the expert is replaced by algorithms. It is more that their areas of work are changing.

What is the role for concerned citizens as knowledge and its distribution are partially shaped by algorithms?

As concerned citizens, we have the duty to be more curious about what an algorithm can do and what it cannot do. Or why a company knows more about me, thanks to analysing data, than I can. I am afraid this concern, however, cannot be outsourced – it is not that Google or Facebook publish their algorithms, and the problem is solved. As our algorithms play a more important part in Western societies, we all need to become more digitally literate. This does not necessarily mean to learn programming, but to understand what programs can do and what they cannot do. As my colleague Luciana Parisi (2013) puts it: when we are interested in what knowledge and thinking is today, we need to study 'algorithmic thought'. For this, we need to turn towards it and not away from it – also for political reasons: technology is way too important for our societies. Following here again Gilbert Simondon, my book tries to understand technological shifts in great detail, and tries to explain how digital technology and its cultural technique of 'search' affects knowledge and with it work as well as the public sphere; besides being a researcher, I have worked for several years as a journalist.

With your experience as a journalist, what would you say is happening to the public sphere in today's media environment?

Regarding the public sphere, we can observe two very different aspects: On the one hand, the internet has a democratizing effect in the sense that it has opened an alternative channel for each single member of the public. Due to this, social media has become one important source for journalism, which my former employer *The Guardian* understood early on. Its digital director, Emily Bell, now director of the Tow Center for Digital Journalism at Columbia University, once said: you have to produce journalism *with* the internet, not *on* the internet. Buzzfeed, profitable since 2013, currently understands this best with their production of sharable entertaining news as well as exciting investigative journalism.

But the digital public is not only a rich source for journalism, it also assists where it is helpless or fails as it allows to voice alternative opinions; we have seen important adjustments to existing reporting for example with the death of teenager Michael Brown in Ferguson, one of far too many incidents that have led to 'Black Lives Matter'. But of course, there is a flipside to this much more populated public sphere. That we can engage there more easily also means that each one of us can be 'reached' more easily – mass surveillance and trolling are the ugly outcomes of this. As it stands, it must be understood that technology is not simply a solution for political problems but also causing some.

Something we also need to be aware of is that the shape of that digital public – the long tail – is one of those problems. From a technical perspective, as long as we have net neutrality, the internet follows an end-to-end-principle in which application-specific functions ought to reside in the *end hosts*. While it is important to fight for this, we also need to be aware of the fact that all ends are not the same. The social functions of those ends are far less democratic than the technical functions. Some ends are far better connected than others and have more reach: the thick 'head' has an advantage over its thin long tail. While the technicality of the internet is democratic, some get all the attention.

What is the role of the university when it comes to digital technology, algorithms and data?

In the future, universities could play an essential role when it comes to exploring technology, which they should not only do in their computer science departments. Today, algorithms are a cultural technique, so from

my perspective, it is the humanities that are concerned with human culture. Humanities scholars have been experts of human knowledge storing ever since the invention of, first, writing, and then books. I believe when being open to explore today's knowledge storing more hands-on, they can very productively draw from their past. This is why the humanities scholars should establish their very own dialogue with technology. After all, 'What can we know?' is a classic question posed in the humanities.

How can we make the silent revolution heard?

As things are just about to start babbling with the so-called "Internet of Things" (Bunz 2016), I think it will soon be hard to ignore it. But as a many of my brilliant colleagues have pointed out (Bratton 2016, Chun 2016, Parisi 2015, Pasquinelli 2015, Fuller & Goffey 2012): if we don't want to live with a technology that is a black box, we all need to interact with it more attentively.

References

Bratton, Benjamin H. 2016. *The Stack: On Software and Sovereignty*. Cambridge, MA: The MIT Press. http://mitpress.mit.edu.proxy.library.uu.nl/books/stack.

Brunton, Finn. 2013. *Spam: A Shadow History of the Internet*. Cambridge, MA: The MIT Press.

Brynjolfsson, Erik & Andrew McAfee. 2011. *Race against the Machine: How the Digital Revolution Is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*. Digital Frontier Press. www.change-management.net/Race.docx.

Bunz, Mercedes. 2015. "Things Are Not to Blame: Technical Agency and Thing Theory in the Age of Internet of Things." In *New Media, Old Media: A History and Theory Reader*, ed. Wendy Chun and Anna Watkins Fisher. London: Routledge.

Campbell-Kelly, Martin. 2003. *The History of Mathematical Tables: From Sumer to Spreadsheets*. Oxford: Oxford University Press.

Coleman, Gabriella. 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Story of Anonymous*. London: Verso.

Eisenstein, Elizabeth L. 1980. *The Printing Press as an Agent of Change*. Vol. 1. Cambridge University Press.

Fuller, Matthew. 2003. *Behind the Blip: Essays on the Culture of Software*. New York: Autonomedia.

Fuller, Matthew & Andrew Goffey. 2012. *Evil Media*. Cambridge, MA: The MIT Press.

Haraway, Donna. 1987. "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s." *Australian Feminist Studies* 2 (4): 1–42.

Kelty, Christopher M. 2014. "The Fog of Freedom." In *Media Technologies: Essays on Communication, Materiality, and Society*, ed. T. Gillepsie, P.J. Boczkowski & K.A. Foot, 195–220. Cambridge, MA: The MIT Press.

Parisi, Luciana. 2013. *Contagious Architecture*. Cambridge, MA: MIT Press.

Pasquinelli, Matteo, ed. 2015. *Alleys of Your Mind: Augmented Intelligence and Its Traumas*. Meson Press by Hybrid.

Simondon, Gilbert. 1980. *On the Mode of Existence of Technical Objects-1958*. Translated by Ninian Mellampy. Ontario: University of Western Ontario.

—. 1989. *Du Mode D'existence Des Objets Techniques*. Paris: Editions.