

**The Ambiguity of
(Media-)Technology
[and how to deal with it]**
Empowering Perspectives from
Media Pedagogy and Media Ethics

Paper prepared for and presented at
the symposium

**The Datafication
of the
Public Sphere**

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1. Introduction

The symposium „Bastard Crowding and The Datafication of the Public Sphere“, in its program, generally invites us to scrutinize phenomena of everyday mobile media usage. In particular, to my understanding, the conference theme suggests an array of opportunities and threats that are somewhat related to the usage of media technology and it situates them within the rather risk-oriented continuum of narcissistic navel-gazing on one pole and a surveillance society - or post-panopticon¹ - on the other.

Based on that, the symposium seeks to both understand which subversive and creative strategies might possibly be employed in order to realize the vision of an enlightened and democratic society and if there are any in-betweens between rigorous media austerity and excessive media participation or confinement. I will try to address those issues from a social scientific standpoint² in **two steps**.

First of all, I will conceptualize technology as being inherently ambivalent in character - that is the assumption that any advantageous technology always and already contains the ‚accident‘ and that this fact is inevitable. I will then use some mobile phone related examples to illustrate this point. **Secondly and to conclude**, I will then sketch out why I think that neither a complete retreat from media usage nor unconditional devotion to it seem to be appropriate ways out of „The Datafication of the Public Sphere“.

2. The ambiguity of technology (and the mobile phone)

2.1 Technology in general is ambivalent

Technology in general has utility, of course. We use technologies for example to make our lives easier, more efficient or more convenient. In this case, technology somewhat is a solution to a problem - it is sort of an enhancer.³

But besides being helpful, technologies also have the potential to create problems and we often have no idea if a technology is a help or a hindrance until we see it used in concrete context⁴ - and often over an extended period of time. This speaks to the (often unintended) consequences of technology.

2.1.1 The ambiguity of technology in micro-contexts

When it comes to technology use at the **level of the individual**, the Canadian philosopher and media theorist Marshall McLuhan (1970) points us towards the fact that technology is not - or not only - a neutral thing that can be put to good or bad use by humans, but that it is inherently ambiguous instead.

Drawing an analogy to the human body, McLuhan suggests that any technology is an extension and a self-amputation at the very same time. Extension includes reduction. Each gain comes with a loss. Each technological alteration modifies the entirety of the human and its environment⁵.

2.1.2 The ambiguity of technology in macro-contexts

Seen **in a wider context**, i.e. on a level that transcends the individual perspective, the French philosopher and media critic Paul Virilio cautions us that technologies always include risk.

„Whenever we invent a new technology we also invent the possibility of unintended and unfortunate outcomes. The invention of the ship creates the shipwreck, the invention of the airplane the plane crash. Invention spawns catastrophe.“⁶

With that said, Virilio points towards the 'accident' as the inversion of progress. He quotes Hannah Arendt saying that "progress and catastrophe are two sides of the same coin".⁷ Following the German historian Wolfgang Schivelbusch, we might add that "the more efficient the technology, the more catastrophic its destruction when it collapses".⁸

2.2 The ambiguity of the mobile phone

Let us consider what we have just explored theoretically by using the **mobile phone as a practical example of ambiguity**.

On the one hand side, the French philosopher and media theorist Jean Baudrillard fears that one day the only people left on the streets might be 'zombies' that are plugged into their various mobile devices while everyone

will be simultaneously elsewhere⁹ - the diversion of attention from the immediate surroundings might create a state that Kenneth Gergen calls „absent presence“.¹⁰ My occasional trip on Stockholms subway system sometimes makes me ponder if this thought was that far-fetched.

On the other hand side, mobile devices allow for yet another form of ‚privacy in public‘¹¹ - i.e. they allow us to be in intimate „perpetual contact“¹² with loved ones while commuting through anonymous urban spaces. So it seems that the mobile phone affords individual functionality *but also* ties us more securely into existing social networks.¹³ But then again, findings from my own ethnographic research on the everyday use of mobile phones in an urban Kenyan community suggest that mobile phones *unite as much as they divide* - or, as one participant stated: "they do make relationships, but also break it".

Other examples for the ambiguity of mobile phones are that they „destroy the tyranny of distance and allow for 24/7 communication, they provide for novel forms of entertainment and new ways of knowing, being and seeing.“¹⁴

However, they also present us with new problems such as sexting, cyber bullying, new ways of getting into debts, as yet another target for muggers and, talking about the conference topic in question, new forms of tracking and surveillance.¹⁵

2.3 Surveillance as 'accident' - privacy and 'big data'¹⁶

Certainly, a 'surveillance society' would have to be interpreted as an 'accident' in Virilios sense. An accident that now brings 'normal' technology into question.¹⁷ Concerns regarding the protection of personal privacy are very real, which should be evident at the latest since the case of Edward Snowden in 2013.

However, it is not only secret services that store and process vast amounts of private digital data - commercial enterprises do the same. Knowingly and unknowingly, we leave behind our digital traces in social media, search engines, through web browsing, online shopping, the usage of apps or cloud computing. To perfect the case, we may add the ‚internet of things‘, i.e. the networked home, smart cars or self-tracking devices.

The problem with that regarding privacy is a potential *loss of control* over ones own circulating data *in combination* with the fact that digital information

persists over extended periods of time, can be found through the use of search engines and subsequently duplicated, de-contextualized and re-composed.

All this makes it extremely difficult for people to assess the potential long term consequences of their online behavior and the privacy-risks that might evolve from this very behavior - especially when we take into consideration *both* the invention of technologies, real time data analysis-techniques or fusions of major economic players *and* their respective impact on a complex and interlinked technosphere in a state of endless evolution; all of which are yet to be known.

The way out?

After having talked about the ambivalent potential that is inherent in technology and that we most likely will not be able to circumnavigate, we might now, **in the final next step** and along the lines of the symposiums theme, ponder over possible approaches we might want to consider in order to realize the vision of an enlightened and democratic society and without having to lean towards either of the extremes of rigorous media austerity or submissive acceptance of a supposed ‚way of the world‘.

For a way out, my suggestion is to **consult media pedagogy and media ethics, which is what I would like to do next.**

3. Empowering the people: media pedagogy and media ethics

3.1 Media Pedagogy

The primary aim of media pedagogy is to empower people to live a sovereign life with media - not against or without them.¹⁸ In our more and more mediatized everyday lives, it is desirable that people are able to use digital media autonomously and competently to appropriate, navigate through and participate in those life-worlds¹⁹. Outright digital escapism, I think, is counter-productive and would lead to individuals exclusion of many facets of modern life. Having that said, the agenda must be to empower people to a meaningful use of media and technology.

This is, what media pedagogy, and especially the concept of **media competencies**, strive for. For our matter in question, I would like to briefly point towards one competency-dimension, namely the one of **media critique**.

Media critique seeks to broaden peoples meta-knowledge and -skills in relation to media's analytical, reflexive and ethical dimensions. It shall empower people to understand and assess the logic, structure, organizational forms, aims and strategies of media systems. This, in turn, shall enable people to develop an own morale towards those media systems as well as their personal media actions and to then embed media autonomously into their day-to-day living.²⁰

This approach can be complemented by a **perspective of media ethics**.

3.2 Media Ethics²¹

In this view, the need to protect ones own privacy will often compete with other personal objectives or needs - and that is okay. However, it is important to be aware of those ‚values in conflict‘ in order to be able to reflect on their relative importance - not only at any given present time, but also in the long run. Some examples for such ‚values in conflict‘ may be: the **protection of my own privacy**, versus:

- **Either self-realization**, like for example self-expression or trying different roles in social media in exchange for personal data, *or*
- **Incentives**, that is being able to consume free services or enjoy discounts in exchange for personal data, *or*
- **Usefulness or convenience**, when it comes to using mobile data or cloud synchronization services in exchange for personal data.

We might add some more, but that should do as an illustration.

To conclude, and in order to be able to get to a balance between the useful achievements of digitization and the protection of personal privacy, I would like to suggest a wider agenda that colleagues and I in a recent publication have called „**digital self-defense**“. Part of that agenda is the development of a certain skill-set that we called „**digital privacy competency**“, which

comprises four core competencies:

- **Ethical competence**, i.e. being able to reflect on why it is important to protect private data
- **Structural competence**, i.e. to know who is collecting, processing and sharing private data and for which purpose
- **Risk competence**, i.e. being able to gauge possible consequences that might evolve from the publication of private data, and last but not least
- **Legal and technological competence**, i.e. having knowledge about data protection policy and directives as well as technical safeguard measures.

All those empowering concepts are to be established and sustained in educational systems as well as in public discourse. Which is not to forget or marginalize the responsibility of politics and regulatory frameworks that I have not delved into today.

4. Conclusion

All in all, a meaningful way out of the ‚privacy misery‘ is to get to a point where media and technology can be meaningfully, competently and securely integrated in peoples everyday lives. It is important to pick up on the ambiguities of media and technology and work with them, not against them. Neither cultural pessimism nor an accepting subordination to the logics of often capitalistic media systems are productive perspectives, in my opinion.

Endnotes

¹ See Bauman, 2000, pp. 9-11.

² The academic fields that I draw insights from are media anthropology, media pedagogy, and media sociology.

³ See Matthewman, 2011, p. 12.

⁴ See Matthewman, 2011, p. 23.

⁵ McLuhan, 1970, p. 53. Cited from Mersch, 2008, p. 198.

⁶ Cited from Matthewman, 2011, p. 25.

⁷ See Virilio, 2002.

⁸ Schivelbusch, 1986, p. 131. Cited from Matthewman, 2011, p. 25.

⁹ See Baudrillard, 2003, p. 24.

¹⁰ Gergen, 2002.

¹¹ See Matthewman, 2011, p. 137.

¹² See Katz & Aakhus, 2002.

¹³ See Ling, 2014, p. 212.

¹⁴ Matthewman, 2011, p. 10.

¹⁵ See Matthewman, 2011, p. 10.

¹⁶ The elaborations of this subsection are largely based on Grimm, Neef, Waltinger, Kimmel & Rack, 2015, pp. 13-52.

¹⁷ Wynne (1988, cited from Matthewman, 2011, p. 24) writes: „Technologies are normalized through unanticipated developments, and accidents are the events which bring normal technology into question“.

¹⁸ See Theunert, 2009, p. 199.

¹⁹ See Süß, Lampert & Wijnen, 2013, p. 122.

²⁰ See Baacke, 1973, cited from Bachmair, 2009, p. 172; Meister, 2011, p. 370 and Theunert, 2009, p. 201. More generally on media critique, see e.g. Niesyto, 2009.

²¹ The elaborations of this subsection are based on Grimm, Neef, Waltinger, Kimmel & Rack, 2015, pp. 13-52.

References

Baacke, Dieter (1973): Kommunikation und Kompetenz. Grundlegung einer Didaktik der Kommunikation und ihrer Medien. München: Juventa.

Bachmair, Ben (2009): Medienwissen für Pädagogen. Medienbildung in riskanten Erlebniswelten. Wiesbaden: VS Verlag für Sozialwissenschaften/GWV Fachverlage.

Baudrillard, Jean (2003): Cool memories IV: 1995-2000. London: Verso.

Bauman, Zygmunt (2000): Liquid modernity. Cambridge; Malden: Polity Press.

Gergen, Kenneth J. (2002): The challenge of absent presence. In: Katz, James; Aakhus, Mark (eds.): Perpetual contact: mobile communication, private talk, public performance. Cambridge: Cambridge University Press, pp. 227-241.

Grimm, Petra; Neef, Karla; Waltinger, Michael; Kimmel, Birgit; Rack, Stefanie (2015): „Ethik macht klick“ – Werte-Navi fürs digitale Leben. Arbeitsmaterialien für Schule und Jugendarbeit. In cooperation of the Institute for Digital Ethics (IDE)/Stuttgart Media University (HdM) and the EU-project “klicksafe”. [Available online](#) [in German].

Katz, James; Aakhus, Mark (2002): Perpetual contact: mobile communication, private talk, public performance. Cambridge: Cambridge University Press.

Ling, Rich (2014): Mobile communication and mediated interpersonal communication. In: Waisbord, Silvio (ed.): Media sociology: a reappraisal. Cambridge; Malden: Polity Press, pp. 212-223.

Matthewman, Steve (2011): Technology and social theory. Basingstoke; New York: Palgrave MacMillan.

Meister, Dorothee (2011): Medienkompetenz. In: Mertens, Gerhard (ed.):

Erziehungswissenschaft und Gesellschaft. Handbuch der Erziehungswissenschaft 6. Paderborn; et al.: Ferdinand Schöningh, pp. 365-376.

McLuhan, Marshall (1970): Die magischen Kanäle. Frankfurt am Main: Fischer.

Mersch, Dieter (2008): Kritik des Medienteleologismus. McLuhan, Flusser und Hegel. In: de Kerckhove, Derrick; Leeker, Martina; Schmidt, Kerstin (eds.): McLuhan neu lesen. Kritische Analysen zu Medien und Kultur im 21. Jahrhundert. Bielefeld: transcript Verlag, pp. 196-212.

Niesyto, Horst (2009): Medienkritik. In: Schorb, Bernd; Anfang, Günther; Demmler, Kathrin (eds.): Grundbegriffe Medienpädagogik - Praxis. München: kopaed, pp. 205-208.

Schivelbusch, Wolfgang (1986): The railway journey: the industrialization of time and space in the 19th century. Berkeley; Los Angeles: University of California Press.

Süss, Daniel; Lampert, Claudia; Wijnen, Christine W. (2013): Medienpädagogik. Ein Studienbuch zur Einführung. 2nd ed. Wiesbaden: Springer VS.

Theunert, Helga (2009): Medienkompetenz. In: Schorb, Bernd; Anfang, Günther; Demmler, Kathrin (eds.): Grundbegriffe Medienpädagogik - Praxis. München: kopaed, pp. 199-204.

Virilio, Paul (2002): „Kein Fortschritt ohne Unfälle“. Der französische Philosoph Paul Virilio zu seiner Pariser Ausstellung über Katastrophen. Im Interview mit Eva Herrschender. Die Welt, 02.12.2002. Internet: <http://www.welt.de/print-welt/article281818/Kein-Fortschritt-ohne-Unfaelle.html>.

Wynne, Brian (1988): Unruly technology: practical rules, impractical discourses and public understanding. In: Social Studies of Science, 18 (1), pp. 147-167.