

Technology and the Matter of Morality

Abstract of research proposal

Peter-Paul Verbeek
University of Twente,
The Netherlands

p.p.c.c.verbeek@utwente.nl

Summary

During the past decade, many analyses have been made of the influence of technological artifacts on the actions and experiences of human beings. Up to now, such analyses have mainly functioned in descriptive settings. This research project will deploy them in a normative setting. The insight that technologies influence human actions - be it directly by steering behavior or indirectly by shaping experiences on the basis of which decisions are made - implies that technologies give 'material answers' to the ethical question 'how to act?'. Technologies are morally charged. This conclusion challenges ethical theory. Within the predominant ethical frameworks, after all, it is not only difficult to assign moral agency to inanimate objects, but also to consider behavior resulting from technological mediation as 'moral actions.' In both cases the autonomy is missing that is required for morality.

The project aims to meet this challenge by articulating a redefinition of moral agency and elaborating this to a 'material ethics of technology.' An analysis of the relations between the early and the late work of Foucault will serve as a starting point. Not only was Foucault one of the first to discern the moral charge of material artifacts; he also articulated a redefinition of ethics beyond the autonomous moral agent. The resulting perspective, in which the matter of morality is material as well, will be made fruitful for engineering ethics. If technological artifacts are morally charged, technology design is 'ethics by other means;' designers materialize morality. The project will investigate how engineering ethics can be augmented in such a way, that this implicit moral decision-making of engineers could happen in a more explicit and systematic way. It will do so in continual relation to the domain of information and communication technologies.

Research topic: the moral agency of technological artifacts

In the past decades, there has been growing attention in the philosophy of technology to the role of technological artifacts in the lifeworld of human beings (Borgmann 1984; Winner 1986; Ihde 1990/1993/1998; Latour 1992/1999). As opposed to classical

philosophy of technology, which was mainly interested in understanding the transcendental conditions of technology, it increasingly approaches technology in terms of specific material objects that play a role in human actions and experiences. As I elaborated in my dissertation (Verbeek 2000), the positions that have developed can be augmented and integrated into a philosophy of 'technological mediation.' The central idea in this approach is that technologies play an actively mediating role in the relationship between human beings and reality. Technological artifacts mediate how human beings are present in their world, by helping to shape their actions and existence; and how the world is present to human beings, by helping to shape human experiences and interpretations of reality.

Virtually all positions in this new direction in the philosophy of technology, however, take a descriptive point of view. Their main ambition is to *analyze* the role of technology in the lifeworld. Against this descriptivist orientation, which is characteristic of many contemporary approaches within the philosophy of technology (Light&Roberts 2000), the project 'Technology and the Matter of Morality' will deploy the concept of technological mediation in a *normative* setting. It aims to investigate the implications of technological mediation for ethical theory in general and for engineering ethics in particular.

The project will take as a starting the short discussion in The Netherlands about Hans Achterhuis' plea for a 'moralization of technology.' This discussion illustrates perfectly how ethics is embarrassed by the idea of technological mediation. Achterhuis (1995) proposed to apply Latour's analysis of 'technological scripts' - which imports that technologies, just like the script of a movie or a theater play, prescribe specific actions - to the context of technology design. Designers should build morality into the technology they are designing, by deliberately shaping its influence on the behavior of its users. This idea received severe criticism. Achterhuis was accused of attacking human freedom and jettisoning democracy (Achterhuis 1998). When human actions are steered with the help of technology, the critics hold, a technocracy comes about, in which moral issues are solved by technological devices instead of human beings. Moreover, behavior that is induced by technologies, rather than being chosen in freedom, does not deserve to be called 'moral.'

Yet, this criticism is highly problematic. After all, recent analyses of technological mediation show that the actions of human beings who are dealing with technologies are *always* mediated. This does not only imply that it seems wise to anticipate this mediation and give it a desirable form, instead of rejecting the whole idea of a 'moralization of technology.' It also shows that the concept of technological mediation gnaws at the roots of our very conception of morality and of what makes someone (or something) a moral agent. Underlying the criticism is

the assumption that moral agency requires intentionality and a high degree of autonomy. Precisely this assumption is challenged by the analyses of technological mediation. Firstly, these analyses show that in many situations human intentions are co-shaped by their material environment. When moral choices are made, technologies are often influencing human behavior, be it directly by co-shaping actions or indirectly by co-shaping interpretations of reality on the basis of which decisions are made (Verbeek 2002). And secondly, these analyses show that artifacts do 'act' - despite their lack of intentionality - and that these 'technological actions' have moral aspects and implications. The domain of ethics is the question 'how to act,' and artifacts appear to provide 'material answers' to this question.

The ethics of technology, therefore, finds itself in a paradoxical situation. If it adheres to a conception of ethics in which moral agency requires a high degree of autonomy, there cannot be such a thing as an 'ethics of technology.' There could only be such an ethics when technologies were neutral instruments, which implies that the ethics of technology would have to deny the phenomenon of technological mediation and its moral implications. Yet, an ethical theory which takes the notion of technological mediation seriously cannot entirely reject the notion of autonomy either, since some degree of autonomy is needed to maintain the idea of responsibility.

Approach

In order to find a way out of this deadlock, I will develop four 'building blocks' to elaborate a new approach to the ethics of technology. The first two blocks concern the implications of technological mediation for the status of both the subject and the object in ethical theory. The third block focuses on engineering ethics and the possibilities to translate the expanded understanding of ethics to the activities of designers. The fourth and last block concerns the domain of information and communication technologies, which will form the background for most examples and elaborations in this project.

I. Technology and moral agency: the status of the object in ethical theory

A first set of questions that need to be resolved concerns the possibilities to qualify technologies as moral agents. What does technological mediation imply for the conceptualization of moral agency? Can and should artifacts be seen as moral agents? And if so, how? In the past millennia, the community of moral agents has been expanded more than once; after including slaves and women, we are now faced with the question if material things should be included too (Swierstra 1999; Verbeek 2003). In order to answer this question, I will thoroughly analyze the main positions in

ethical theory (virtue ethics, deontology, utilitarianism, ethics of care) with regard to their implicit and explicit definitions of and requirements for moral agency. After this, I will develop a notion of moral agency that does include material entities and at the same time recognizes and articulates the differences between several types of moral agency.

*II. Autonomy and heteronomy:
the status of the subject in ethical theory*

A second field of research concerns the status of the *subject* in ethical theory. Within the predominant ethical frameworks it is not only difficult to assign moral agency to inanimate objects, but also to consider behavior resulting from technological mediation as 'moral actions.' Therefore, it is necessary to articulate a definition of moral agency that not only includes objects, but also does justice to the mediated character of actions and decisions of the subject. An analysis of the relations between the early and the late work of Foucault will serve as a starting point here.

Foucault's early work focuses on the forces and structures that determine the subject, or better: that generate specific subjects. In his analysis of the panopticon in *Surveiller et Punir* he shows that material artifacts can be reckoned among these forces and structures (Foucault 1975). Human intentions are not 'authentic' but result from structures of power which can also be present materially; instead of being autonomous, human beings are heteronomous. The later Foucault, however, started elaborating a new perspective on ethics. In this perspective - which is less well-known, but is currently being rediscovered in such approaches as 'life ethics' and 'aesthetics of existence' (Dohmen 2002; Schmid 1991/1998) - he does not revoke his earlier analysis, but investigates how, amid of these structures of power, human beings can constitute themselves as (moral) subjects (Foucault 1984a/b). Humans are not only the objects of power, but also subjects that create their own existence against the background of and in confrontation with these structures.

This shift makes his work highly important for the ethics of technology. Not only was Foucault one of the first to discern the moral charge of material artifacts and the constitutive role of objects in the coming about of subject definitions; he also tried to articulate a redefinition of ethics beyond the concept of the autonomous moral agent. His work makes it possible to redefine the concept of autonomy in such a way that it is in line with the phenomenon of technological mediation. Foucault's work is especially promising because it seeks connection with classical ethical approaches that are based on the question of the good life, rather than taking the autonomous subject as a starting point (De Vries 1999). I will investigate to what extent Foucault's analysis of subject-constitution and his association

with classical Greek ethics could form the basis for a new ethical framework, which is compatible with technological mediation.

III. Engineering ethics and the morality of technology

The conclusion that technological artifacts give 'material answers' to the ethical question 'how to act?' has important implications for engineering ethics and the responsibility of designers. By designing technologies that will inevitably play a mediating role in the lives of their users, engineers implicitly 'materialize morality.' Technology design appears to be 'ethics by other means.' I will investigate how engineering ethics can be augmented in such a way, that this implicit moral decision-making of engineers could happen in a more explicit way. This approach would overcome the predominant focus within engineering ethics on disaster cases which could have been prevented by responsible behavior of engineers ('whistle blowing'). By incorporating the notion of mediation, engineering ethics can get beyond this externalist approach to technology and this individualist approach to ethics.

IV. The ethics of communication technologies

The fourth and last building block for constructing a new ethical framework that takes the notion of technological mediation seriously is formed by an analysis of information and communication technologies (ICT's). ICT's play a pervasive role in our technological culture, and therefore they form an interesting domain for analyzing the morality of technology. Against the predominant focus on issues of privacy, I will especially pay attention to the technological mediation of *communication*. This form of mediation, which receives only little attention in philosophy, has profound implications for our daily lives: the character of interpersonal relationships, the separation of the spheres of private and public, leisure and work. Communication technologies, therefore, form an interesting domain for investigating the moral charge of technological artifacts, their role in subject constitution, and the possibilities to anticipate this 'material morality of technology' in design.

(homepage:
<http://www.gw.utwente.nl/onderwijs/wijsb/medewerkers/Verbeek/index.html>)

Bibliography

- Achterhuis, H. (1995), 'De moralisering van de apparaten'. In: *Socialisme en Democratie* 52 nr. 1, 3-12
- Achterhuis, H. (1998), *De erfenis van de utopie*. Amsterdam: Ambo
- Borgmann, A. (1984), *Technology and the Character of Contemporary Life*. Chicago / Londen: University of Chicago Press
- Borgmann, A. (1995), 'The Moral Significance of the Material Culture'. In: A. Feenberg and A. Hannay (eds.), *Technology and the Politics of Knowledge*, Bloomington/Minneapolis: Indiana University Press
- Dohmen, J. (2002), *Over levenskunst: de grote filosofen over het goede leven*. Amsterdam: Ambo
- Foucault, M. (1975), *Surveiller et punir : naissance de la prison*. Paris: Gallimard
- Foucault, M. (1984a), *La volonté de savoir*. Paris: Gallimard
- Foucault, M. (1984b), *Le souci de soi*. Paris: Gallimard
- Ihde, D. (1990), *Technology and the Lifeworld*. Bloomington/Minneapolis: Indiana University Press
- Ihde, D. (1993), *Postphenomenology*. Evanston, Il.: Northwestern University Press
- Ihde, D. (1998), *Expanding Hermeneutics*. Evanston, Il.: Northwestern University Press
- Latour, B. (1988), 'Veiligheidsgordel - de verloren massa van de moraliteit'. In: M. Schwartz en R. Jansma, *De technologische cultuur*. Amsterdam: De Balie
- Latour, B. (1992), 'Where are the Missing Masses? - The Sociology of a Few Mundane Artifacts'. In: W.E. Bijker and J. Law, *Shaping Technology / Building Society*. Cambridge: MIT Press
- Latour, B. (1999), *Pandora's Hope*. Cambridge en Londen: Harvard University press
- Light, Andrew and Roberts, David, 'Toward New Foundations in Philosophy of Technology: Mitcham and Wittgenstein on Descriptions'. In: *Research in Philosophy and Technology* 19 (2000): 125-147
- Schmid, W. (1991), *Auf der Suche nach einer neuen Lebenskunst. Die Frage nach der Grund und die Neubegründung der Ethik bei Foucault*. Frankfurt/M: Suhrkamp
- Schmid, W. (1998), *Philosophie der Lebenskunst. Eine Grundlegung*. Frankfurt/M: Suhrkamp
- Swierstra, Tsj., (1999), 'Moeten artefacten moreel gerehabiliteerd?'. In: *K&M - tijdschrift voor empirische filosofie* 1999 nr. 4, 317-326
- Verbeek, P.P. (2000), *De daadkracht der dingen*. Amsterdam: Boom
- Verbeek, P.P. (2002) 'Pragmatism and Pragmata - bioethics and the technological mediation of experience'. In: J. Keulartz e.a., *Pragmatist Ethics for a Technological Culture*. Dordrecht: Kluwer
- Verbeek, P.P. (2003), 'De moraliteit van de dingen'. In: Ignaas Devisch en Gert Verschraegen (red.), *De verleiding van de ethiek - over de plaats van de ethiek in de huidige maatschappij*. Amsterdam: Boom
- Vries, G. de (1999), *Zeppelins - over filosofie, technologie en cultuur*. Amsterdam: Van Genneep
- Winner, L. (1986), 'Do Artifacts have Politics?'. In: L. Winner, *The Whale and the Reactor*. Chicago / London: University of Chicago Press