

Let's Make Things Better: A Reply to My Readers

Peter-Paul Verbeek

© Springer Science+Business Media B.V. 2009

Abstract This article is a reply to the three reviews of my book *What Things Do: Philosophical Reflections on Technology, Agency, and Design* (Verbeek 2005) in this symposium. It discusses the remarks made by the reviewers along five lines. The first is methodological and concerns the question of how to develop a philosophical approach to technology. The second line discusses the philosophical orientation of the book, and the relations between analytic and continental approaches. Third, I will discuss the metaphysical aspects of the book, in particular the nature and value of the non-modernist approach it aims to set out. Fourth, I will discuss the social and political relevance of the book. Fifth, this will bring me to some concluding remarks about how the postphenomenological perspective developed in the book relates to liberalism, focusing on its suggestions to deliberately design our material environment in terms of mediation.

Keywords Philosophy of technology · Ethics of technology · Mediation · Liberalism · Modernity

In his provocative lecture *Rules for the Human Park*, Sloterdijk (1999) described the book as an old-fashioned medium. It used to play a role in the humanist tradition, which he considers to be a kind of literary society, where books have the function of letters sent to the other members of the club. In our post-humanist culture, Sloterdijk claims, there is hardly any chance that such letters will actually still arrive, because new media of “political–cultural telecommunication” have developed that are much more powerful. Fortunately, though, the thought-provoking commentaries on my book *What Things Do* in this section of *Human Studies* show that books still have at

P.-P. Verbeek (✉)
Department of Philosophy, University of Twente, P.O. Box 217, 7500 AE Enschede,
The Netherlands
e-mail: p.p.c.c.verbeek@utwente.nl

least some power. They still appear to arrive at relevant destinations, and they even receive replies. It is an honor, therefore, to get the opportunity to send a letter back to my readers—a letter, in fact, that uses the humanist medium of text to discuss the post-humanist social and cultural roles of *things*.

In equally congenial as critical ways, Andrew Feenberg, David Kaplan, and Katinka Waelbers open up spaces for a fruitful discussion about the question of what technologies do in culture and society. In my reply to their comments, I would like to focus on five main issues that play a role in their commentaries. First, there is the issue of *method*. Against my rejection of transcendentalism, both Feenberg and Kaplan argue—for good reasons—that the philosophy of technology cannot avoid analyzing technology as a *conditioned* phenomenon. This asks for a further discussion about the roles of the transcendental and the empirical-philosophical methods in philosophy of technology. Second, I will address the issue of *conceptual clarity* that Waelbers raised, by discussing the descriptive and disclosive character of concepts. This will, third, culminate in a discussion about *metaphysical* issues, focusing on the specific conceptual problems that are connected to the non-modern approach of the book. The fourth and fifth part of this response, to conclude, will be devoted to the *political* dimensions and relevance of *What Things Do* and, more specifically, to its relations to *liberalism*.

Conditioning Technology

Both Andrew Feenberg and David Kaplan address the issue of method in the philosophy of technology. They question my rejection of the transcendentalist orientation of classical philosophy of technology, and plead for rehabilitation of an approach to technology in terms of its conditions. Feenberg asks why I do not consider “the basic structures of meaning” as “conditions of possibility” for technology. He equates my distinction between classical and contemporary philosophy of technology with the distinction between function and meaning—which is, by the way, not an equation I intended to make myself—and argues that rather than rejecting the classical reduction of technology to functionality, I should have approached meaning as a condition of technology as well. This would then bring me close to his own two-level instrumentalization theory, in which technological functionalities (level one) always acquire ethical and aesthetical meaning (level two) in specific social contexts.

Kaplan argues that I should have paid more attention to *non-transcendental* conditions of technology, which become visible from a historical-materialist perspective. He indicates that technologies “are enabled by history, understood materially.” Any technology, therefore, embodies specific historical and material conditions. Ignoring this “conditioned” character of technology leads to an inadequate and decontextualized approach. Mediation, in Kaplan’s words, relates “not only to subjects and objects but to the historic development of entire environments.”

I fully share Feenberg’s and Kaplan’s conviction that we need a contextual account of technology, which takes seriously the fact that the social and cultural

impact of technologies is co-shaped by historical developments, material environments, and ethical and aesthetic meaning. Actually, this contextuality forms the core of the postphenomenological approach I develop in *What Things Do*. Phenomenology, after all, focuses on the *relations* between human beings and their world, and from this perspective it does not make much sense to focus on technologies-in-themselves, as decontextualized phenomena. Yet, the point of my rejection of transcendentalism was not to deny that technologies are conditioned by contexts and meaning, but rather to claim that their social and cultural roles cannot be *reduced* to these conditions.

The transcendentalist approaches of Martin Heidegger and Karl Jaspers did not merely aim to show that the impact of technologies is conditioned in various ways; they aimed to lay bare the conditions of possibility for the broad phenomenon of “Technology,” and spoke about the impact of “Technology” while actually only addressing the impact of these *conditions*. This way of dealing with technology’s conditioned character, as Kaplan and Feenberg will probably agree, is not really adequate. The conditioned character of technology should show forth in the impact of the technologies *themselves*, not in decontextualized extrapolations of the impact of these conditions.

What Things Do, therefore, aims to show that the impact of technologies is not exhausted by the impact of their conditions, and that their social and cultural impact cannot be grasped in terms of “Technology.” The impact of technologies emerges from the often unexpected contexts and relations with human beings in which they function, which become visible in a more empirically oriented approach. In such contexts and relations, things are appropriated and “enacted” in specific ways. And on the basis of the contextual identity they develop, they help to shape human actions and experiences. When people use a technology, this technology starts to organize a relation between users and their environment, in which actions, decisions, experiences and interpretations get shaped in a technologically mediated way.

Technologies do not simply *facilitate* actions and experiences—they help to shape them, and the ways in which they do this cannot be reduced to context and meaning, even though they are entirely contextual. That is the main thesis of the book. And, actually, this is not very far from the historical-materialist idea that society is not primarily driven by immaterial ideas but also by material entities and arrangements. Not only ideas have consequences—artifacts have consequences too. As conditioned entities, technologies condition human life.

Doing Things with Words

Katinka Waelbers addresses another important issue by focusing on the conceptual clarity of my analysis. The concept of mediation, for her, is not defined precisely enough. It rather functions as what she calls an “umbrella concept” which unites many aspects of the impact of technology in a quite undifferentiated way. This causes two problems. First, it veils the many different forms of human-technology

interaction, and second, it makes a false claim to exclusivity, pretending that the social role of artifacts can be entirely understood in terms of mediation. Waelbers therefore argues that we need a more differentiated account of the social roles of technology, which does not reduce them to mere instances of “mediation.”

Waelbers is entirely right in pointing to the need to develop a more detailed account of the mediating roles of technology. The vocabulary I develop in *What Things Do* is only a first step in this direction, distinguishing pragmatic and hermeneutic aspects of mediation, and indicating the structures these forms of mediation can take. This vocabulary should be expanded, especially to the social and political level so as to augment the current focus on individual human-technology-world relations. Yet, questioning the value of the whole concept of mediation altogether because it functions as an umbrella concept and because it lacks a strictly defined meaning does not really do justice to the actual role and function the concept has in my text.

Concepts can be used to indicate one specific phenomenon as exactly as possible, describing its meaning M in context C with variants $V_1 \dots V_x$. This, indeed, is not the way I developed the concept of mediation throughout the book. But concepts can also be used to open up a specific way of interpreting and disclosing reality. Rather than claiming to give an accurate description of a phenomenon in reality, they help to reveal reality in a new way. The concept of mediation, as I develop it in *What Things Do*, belongs to the latter category. The function it has in the book is to lay bare a new approach to the social and cultural role of technologies, which moves beyond the common-sense approach that technologies are merely functional and at the same time stays away from the alienation discourse of classical phenomenological approaches.

To be sure, this use of concepts requires accuracy, and for that reason I develop my approach by investigating and expanding “continental” philosophical positions in a rather “analytic” way—if this old-fashioned philosophical distinction is still useful at all. In order to make my approach not only evocative but also analytically disclosive, I worked toward a vocabulary around the concept of mediation which gives a more detailed account of the interpretive space that the concept opens up.

This vocabulary aims to do justice to the many forms the technological mediation of human-world relations can take. It does not, however, claim the *exclusive* potential to reveal and analyze the social and cultural roles of technology. In fact, claims to exclusivity become highly problematic when concepts are not intended to describe reality but rather to reveal it in a specific way. Other conceptual spaces will open up different accounts of reality. Yet, this does not take away the fact that the mediation approach is a powerful one, because it makes it possible to analyze and anticipate the manifold roles of technologies in society and in people’s everyday lives. Approaching technologies in terms of their roles in human-world relationships leads to a specific and illuminating perspective of the impact of technology. Rather than veiling other forms of human-technology interaction, it intends to unveil forms that would remain hidden otherwise. If it is an umbrella at all, the umbrella does not have the ambition to cover the entire reality of technology and to keep out other

aspects and approaches. It rather makes it possible to access this reality in a specific way—explicitly showing how the structure of its spokes keeps it together.

Morphing Metaphysics

A second line in Waelbers' critique of the conceptual framework developed in *What Things Do* concerns its diffuse boundaries between subjects and objects. Waelbers claims that it is confusing to speak about objects with concepts that indicate typically human properties, like agency and intentionality. Quoting Laurier and Philo (1999), she calls this a form of "X-morphizing." By approaching objects in terms that are commonly reserved for describing human properties, I "anthropomorphize" objects. This is especially problematic, according to Waelbers, because it is at odds with the nonmodern approach that I am to develop. Rather than overcoming the subject-object dichotomy in a nonmodern way, Waelbers states, I reinforce this dichotomy by reducing the "objectivity" of things to a form of "subjectivity," stretching the meaning of "human" concepts to also cover the "nonhuman."

Here, we touch upon the very heart of what I aim to set out in the book, and upon the complexity of giving an adequate conceptual account of the intricate relations between technology and society. What from a modernist point of view might seem to be a form of anthropomorphizing objects is actually a *hybridization* of subjects and objects to nonmodern eyes. I readily admit the slightly provocative title "What Things Do" might raise the impression that I intend to defend a form of animism which claims that artifacts actually do form intentions and do have agency. But animism, of course, is not the position I defend in the book. What the book actually shows is not that things have agency and intentionality *in themselves*, but that in technologically mediated situations, intentions come about in a complex interplay between humans and nonhumans, resulting in a form of agency that is distributed over humans and nonhumans. Rather than applying a "human" conception of agency to nonhumans, I rework the concept of agency in order to show that it should actually be seen as a "property" of hybrids rather than of humans only.

This does imply, to be sure, a subtle difference between Bruno Latour's definition of nonmodernism and my "postphenomenological" version of it. As I explain in the book, I do not want to give up the distinction between humans and nonhumans. Human beings have the ability to experience a world, and to act intentionally in it; things don't. But distinguishing humans and nonhumans should not lead to a *separation* of both. A separate approach to humans and nonhumans, in which intentional agency is located in the human realm and mute functionality in the nonhuman realm, fails to see that actions and intentions are actually hardly ever *human* actions and intentions, but rather the product of manifold complex interactions between humans and nonhumans. Only to modernist ears is this a problematic form of "X-morphizing." Once we give up the dualist *apartheid* metaphysics that locks up people and things in separate areas, the reproach of "X-morphizing"—apart from its stylistic shortcomings—becomes a metaphysical pseudomorph. If there is any

morphing in *What Things Do*, it does not consist in transforming nonhumans into humans or the other way round, but in blending both.

Politics by Other Means

I will conclude this reply by discussing the two points of criticism that I found most challenging, because they open interesting lines for future elaboration of the mediation approach to the political realm. Both Feenberg and Kaplan focus on the political dimensions of technological mediation, which receive too little attention in the book, in their view. The “rarefied air” breathed by Don Ihde’s and Latour’s work is too thin for Feenberg; it fails to see the political dimension of technology and the importance of economic classes and corporations. And Kaplan finds the analysis in *What Things Do* “surprisingly apolitical.” Rather than only analyzing “how *subjects* and objects are coshaped,” he thinks it is important to investigate as well “how *societies* and objects are coshaped.” If technology is world-making, he says, the question is what *kind* of world we are making. Issues like social relations, freedom, justice, and community deserve to be analyzed as well.

Feenberg and Kaplan raise a serious issue here, and they are entirely right in pointing out the need for more political elaborations of the approach of technological mediation. By making visible the often implicit ways in which technologies help to organize society, after all, the mediation approach can be an important ingredient in a political theory of technology. Yet, Feenberg’s statement that the book is merely a “prolegomena to a more constructive statement” about the relations between technology and politics overlooks the political relevance the book has already. By offering a framework for making visible the social and cultural impact of technologies, *What Things Do* actually politicizes technology itself, as well as the work of technology designers and users.

While the classical instrumentalist and determinist accounts of technology made it in fact impossible to speak about technology in constructive political terms—reducing it to politically neutral instruments or reifying it into a substantive political force beyond human control—the mediation approach shows how any technological artifact-in-use has a social and cultural impact and therefore always makes a political intervention that can be addressed in political terms. In order to make things better, we don’t get there by producing yet another analysis of the importance of companies and economic classes. We will have to inspire practices of use and design, and of policy-making. To make a change, we cannot suffice with analyzing social structures and the roles of class and capital—we need to address the materiality of technology as well. And for this reason, *What Things Do* is not an apolitical book at all. Rather than merely lamenting the undesirable social impact technology can have, the book opens a perspective that equips designers and policy makers with the means to make things better in a literal sense.¹

¹ See the edited volume *User behavior and technology development: Shaping sustainable relations between consumers and technologies* for an attempt to locate the mediation approach in a whole range of other approaches to the impact of technologies on practices and experiences of users, and to make this confrontation fruitful for technology design and policy-making (Verbeek and Slob 2006).

A next important step, indeed, would be to explicitly link analyses of technological mediation to political theory. But this should happen in a somewhat different way than Kaplan proposes, I think. Rather than taking issues like freedom, responsibility, and justice as pre-given criteria that technological mediations have to comply with, we need to investigate how technologies actually *help to shape* our freedom and responsibility and our conceptions of justice. Everything is political—but politics is not everything.

Genetic diagnostic tests, for instance, are not just neutral instruments to predict the risk that someone will develop a specific disease. Such tests reorganize practices and interpretations surrounding disease. Between the categories of healthy and ill they introduce being “not-yet-ill.” From being subjected to fate, they make people *responsible* for their own diseases or those of their children. Women carrying the genes for hereditary breast cancer can choose to have their breasts resected, after all; and parents expecting a child with a significant risk of having a serious disease can choose to have an abortion. Political issues regarding responsibility and morality, then, are co-shaped by technologies here. Humans don't take on their responsibilities autonomously, but in highly mediated ways.

This, again, is not to say that technologies have politics in themselves, and that human beings can only await passively how technologies will change society. Rather, making visible these politically relevant social roles of technologies charges designers, users, and policy makers with the responsibility to deal with this in a careful and prudent way. The approach developed in *What Things Do*, therefore, directly politicizes technologies, designers, and users. Instead of making it impossible to attribute responsibility, as Waelbers fears, it *organizes* responsibilities in new ways and produces new elaborations of what it means to be responsible. Redesigns of genetic tests, alternative organizations of health care practices, and different ways of appropriating and dealing with medical technologies will result in different social impacts. From this perspective, *What Things Do* is actually a thoroughly political book. It is not merely a free-floating academic attempt to develop a systematic account of technological mediation but an engaged attempt to make the philosophy of technology relevant for technological practices.

The final chapter of the book aims to make this political ambition explicit, by applying the analysis developed to industrial design, and to eco-design in particular. Kaplan is right in pointing out that the work of the *Eternally Yours* group of industrial designers I discuss in the final chapter might be too narrowly directed at fostering the attachment between humans and products. I will be the first to admit that the future of our planet cannot be put entirely in the hands of the designs I discuss in this chapter. But the point of the chapter actually was to recognize the political role of designers and to equip them with the means to play this role in a responsible way. The chapter suggests how designers could approach the products they are designing not only in terms of their functionality, but also in terms of the ways in which they will reorganize human actions and perceptions, practices and decisions, and that it offers them a vocabulary to do so. Technology design, then, becomes a “continuation of politics by other means.”

Seen in the perspective of their explicit goal to change the throw-away culture—for which the work of many industrial designers can be kept partly responsible—the

focus of *Eternally Yours* on the attachment between humans and products is actually a political statement rather than a mere attempt to replace technological alienation with affective relations with devices, as Kaplan reads it. The bonding between humans and products is indeed only one aspect of human-technology relations, and a very specific one at that. But this application of the analysis of technological mediation does not aim to undo a form of technological alienation; it aims to enable designers to anticipate and help to shape the social and cultural roles of technology. In this light, the work of *Eternally Yours* needs to be seen as a “material intervention” in the political debate about sustainability and technology.

Liberalism and Mediated Freedom

In this discussion about the political relevance of technological mediations, David Kaplan asks for special attention to the issue of liberalism. Kaplan raises the question of how we should evaluate the moral dimensions of technological mediation, and concludes that *What Things Do* in fact only discusses non-liberal frameworks. According to Kaplan, such frameworks—like the ones developed by Don Ihde, Evan Selinger, Bruno Latour, and Albert Borgmann—fail to address the moral dimensions of technology adequately. Instead of focusing on social relations, freedom, justice, and responsibility, they do not bring my analysis further than “caring for objects” in the context of industrial design.

Apart from the fact that the approach of technological mediation has many more political implications than merely pleading caring for objects, as I just explained, Kaplan’s criticism here clearly shows how much work there still is to be done by philosophers of technology in political theory. All of the issues that he would like to see discussed in order to morally assess technologies—like freedom, community, responsibility, and justice—do not exist *outside* the realm of technology, after all, but are rather the *products* of technological mediations. In fact, these issues are the places *par excellence* where the political relevance of technology shows forth.

From the perspective of technological mediation, for instance, freedom cannot be understood as the mere absence of constraints. Technologies inevitably play mediating roles in human existence, and as such they always help to shape the *ways in which* we can be free. The freedom to try to have children or to decide about preventive breast amputation, just to mention a few examples, can only be realized in technologically mediated ways. While liberalism likes to think that it can realize freedom by leaving open the question of the good life, and leaving decisions about how to live life to personal choice, it overlooks how technologies actually help us, in myriad ways, to answer the question of how to live. Choices about preventive breast amputation are mediated by the specific ways in which technologies help to shape interpretations of and responsibilities connected to disease. And the decision to try to have children would not even be meaningful in a world without contraception. Human freedom is always situated in a field of technological mediations.

The problem of questioning liberalism, however, is that it immediately raises the suspicion that one would be “against” freedom. Just as Michel Foucault noticed

with regard to the Enlightenment, there is a form of blackmail in it: criticizing liberalism implies being against it. Still, I think it is more important to refine our understanding of politics in a technological culture than to be politically correct. What we need are analyses of the mediating roles of technologies in human practices and experiences that show how freedom, responsibility, justice, and community are reorganized by technology rather than taking liberalism—and the autonomous subject implied in it—as a pre-given moral and political framework.

This does *not* imply, to be sure, that we should refrain from normative analyses of technology. To the contrary; producing such analyses is the very aim of the whole book, and of the work I am currently doing to expand the mediation approach to ethical theory and the ethics of design. The normative significance of technology is to be found in its very impact on issues like freedom, justice, responsibility, and community—and as such it forms the points of application for normative analyses of technology. Not in the sense that we should defend all of these issues against technology, and use them as external criteria in some form of liberalist ethical technology assessment; but in the sense that we need to assess and interfere in how technologies help to shape what all of these issues can entail.²

I am afraid, however, that the “universally binding moral claims” that Kaplan wants to invoke here in order to assess technologies will be hard to obtain. Calling for such claims actually misses the very point of the mediation approach, which implies that these claims are technologically mediated as well. Normative analyses of technology need to account for the fact that the normative frameworks we use develop with the very technologies they refer to. To use an example elaborated by Gerard de Vries (de Vries 1993): while anesthesia was seen as immoral only 150 years ago, because God would have created humans differently if he wanted us to experience no pain during surgery, it would be immoral nowadays to operate on somebody without using anesthesia. Rather than approaching this development as a perversion of ethics, or entering a slippery slope, we need to see that our moral standards actually get defined in interaction with technologies. Ethics should *accompany* technological developments, analyzing in critical ways how they reorganize practices and experiences and change the quality of our lives, opening possibilities to reshape their impact in fruitful ways, and recognizing that the moral frameworks from which this happens are always provisional and open for change and discussion.

This ethical accompaniment of technology has three different aspects. First, it should be directed at *anticipating* technological mediations. This is a complicated affair, since technologies can always enter unexpected contexts of use in which they will develop different roles than intended by their designers. Second, it should, of course, direct itself to *assessing* mediations. And contrary to what Kaplan suggests, utilitarian and deontological moral frameworks can play an important role here; it is even very well possible to expand the often-used method of stakeholder analysis in applied ethics to also include technological mediation. In some cases, however, an ethical approach in terms of the good life will prove to be more fruitful. This is especially true for technologies that have the potential to drastically shape the

² See also Verbeek (2006a, b) for further elaboration of the ethical implications of the approach of technological mediation.

character and the quality of our lives. Assessing these technologies merely in terms of their consequences or in terms of pre-existing norms fails to connect to moral concerns about the ways they shape *new* forms of existence. A third, and crucial, step is to *design* mediations, or to contribute to their design. As soon as it becomes clear that technologies inevitably play mediating roles, it becomes a moral responsibility to give these mediations a desirable form. The ethics of technology is not limited to discussion rooms then, but extends to the drawing table.

The phenomenon of technological mediation, then, definitely deserves to be elaborated further in a political context. Technologies *are* political, and the theory of mediation can help to anticipate, analyze, and modify this “material politics.” In this sense, the book can indeed be read as a prolegomena to a political philosophy of technology. But if that is true, the book at the same time is an epilogue—an epilogue to the outdated liberalist and dialectical attempts to frame the political role of technologies in terms of an opposition between human beings as moral agents and patients on the one hand and technologies as potentially threatening powers on the other. Ethical and political approaches to technology need to move beyond their fixation on the dialectics between autonomy and oppression. Technology helps to shape the subject and the society we live in. This is not a matter of oppression but of constituting subjects and societies—and that is precisely where politics is to be found and to be done.

As Bruno Latour brilliantly illustrated in his article *Making Things Public*, the very word *thing* is etymologically related to the old German word *Ding*, indicating not only “material object” but also “gathering place,” or “that which brings together.” And the literal translation of *res publica*—from which the word “republic” originates—is “public things” (cf. Latour 2005). Just like Heidegger did in his text *Das Ding* (1951), Latour points out that “things” can be seen as entities that gather humans around them in order to discuss the affairs in public life.

Mediating technologies should be approached in this way as well. The politics of technology starts where people gather around technologies to anticipate, analyze, and modify the impact they have on their lives. While human subjects and societies are shaped by the powers of technology, politics should focus on the question of how to deal with these powers in good ways—in practices of technology design, technology use, and organizing the social and material structures in which technologies play their mediating roles. Only such an approach to the politics of technology would really have the potential to make things better.

References

- de Vries, G. (1993). *Gerede twijfel: Over de rol van de medische ethiek in Nederland*. Amsterdam: De Balie.
- Heidegger, M. (1951). *Das Ding*. In *Vorträge und Aufsätze*. Pfullingen: Neske.
- Latour, B. (2005). From *Realpolitik* to *Dingpolitik*—or how to make things public. In B. Latour & P. Weibel (Eds.), *Making things public: Atmospheres of democracy* (pp. 4–31). Cambridge, MA: MIT Press.
- Laurier, E., & Philo, C. (1999). X-morphising: Review essay of Bruno Latour’s *Aramis* or the love of technology. *Environment and Planning A*, 13(6), 1047–1072.
- Sloterdijk, P. (1999). *Regeln für den Menschenpark*. Frankfurt am Main: Suhrkamp.

- Verbeek, P. P. (2005). *What things do: Philosophical reflections on technology, agency, and design*. University Park: Pennsylvania State University Press.
- Verbeek, P. P. (2006a). Materializing morality: Design ethics and technological mediation. *Science, Technology and Human Values*, 31(3), 361–380.
- Verbeek, P. P. (2006b). The morality of things: A postphenomenological inquiry. In E. Selinger (Ed.), *Postphenomenology: A critical companion to Ihde*. Albany: State University of New York Press.
- Verbeek, P. P., & Slob, A. (Eds.). (2006). *User behavior and technology design: Shaping sustainable relations between consumers and technologies*. Dordrecht: Springer.