

Registration form (basic details)

**1a. Details of applicant**

-Name, title(s): Dr.ir. P.P.C.C. Verbeek  
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Postbus 217,  
7500 AE Enschede  
  
-Preference for English correspondence: yes/no no  
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-E-mail: p.p.c.c.verbeek@utwente.nl  
-Website (optional): www.gw.utwente.nl  
  
-Doctorate (date): 08-12-2000  
-Use of extension clause (see Notes): yes/no no

**1b. Title of research proposal**

Technology and the Matter of Morality

**1c. Summary of research proposal**

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.

**Keywords:** philosophy of technology; ethics; engineering ethics; information and communication technology; Michel Foucault

**1d. NWO Council area**

GW - Humanities

**1e. Host institution (if applicable)**

Universiteit Twente / University of Twente  
Faculteit Gedragwetenschappen / Faculty of Behavioral Sciences  
Afdeling Wijsbegeerte / Department of Philosophy

**Research proposal**

**2. Description of the proposed research**

**Technology and the Matter of Morality**

**2a. Research topic**

During the past decades, philosophy of technology has paid growing attention 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.

## **2b. 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. Empirical data and contacts with designers are close at hand, since the research project is embedded in the *Centre for Telematics and Information Technology* of the University of Twente.

### **2c. Innovation**

The innovative character of the research project consists in the new approaches it aims to develop in ethical theory, philosophy of technology, engineering ethics, and the philosophy of information and communication technology. The moral dimension of material artifacts has hardly been investigated yet, as have the moral implications of the concept of technological mediation. To the descriptivist orientation of the philosophy of technology, the project adds a normative analysis of technological mediation. Besides this, the project opens an internalist perspective of technology for engineering ethics, to augment the current externalist focus on disaster cases and whistle blowing. And, last, it focuses on the moral dimensions of communication technologies, which receive very little attention in the philosophy and ethics of technology.

### **2d. Plan of work**

Year 1:

- literature study: ethical theory, Foucault, and ICT
- establishing contacts with designers and researchers in ICT
- writing 2 draft articles, to be presented as conference papers; one on artifacts and moral agency; the other on Foucault and the role of the autonomous subject in ethical theory

Year 2:

- elaborating conference papers to articles for international journals;
- writing 2 draft articles; one on engineering ethics and technological mediation; the other on the ethics of communication technologies.

Year 3:

- elaborating remaining papers to articles for international and journals;
- elaborating and expanding articles to a book

The research project will be conducted at the Department of Philosophy, Faculty of Behavioral Sciences, University of Twente, where it will be part of the research program 'Philosophy of the technological culture'. The project is embedded in the Netherlands Graduate School of Science, Technology and Modern Culture and the Centre for Telematics and Information Technology of the University of Twente.

**2e. Literature references**

- 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 Gennep
- Winner, L. (1986), 'Do Artifacts have Politics?'. In: L. Winner, *The Whale and the Reactor*. Chicago / London: University of Chicago Press

**Cost estimates**

**3a. Budget**

	2004	2005	2006	2007	TOTAL
<b>Staff costs: (in k€)</b>	(Mar - Dec)	(Jan - Dec)	(Jan - Dec)	(Jan - Feb)	
Applicant	Salary: 29,2 Rise 70%: 20,4 <b>Total: 49,6</b>	Salary: 35 Rise 70%: 24,5 <b>Total: 59,5</b>	Salary: 35 Rise 70%: 24,5 <b>Total: 59,5</b>	Salary: 5,8 Rise 70%: 4,1 <b>Total: 9,9</b>	Salary: 105 Rise: 73,5 <b>Total: 178,5</b>
<b>Non staff costs: (k€)</b>					
Equipment	Computer: 1,5	-	-	-	1,5
Consumables	Books: 3	Books: 3	Books: 3	Books: 1	10
Travel and subsistence	Conferences: 2	Conferences: 4	Conferences: 4	-	10
Other	-	-	-	-	-
<b>TOTAL</b>	<b>56,1</b>	<b>66,5</b>	<b>66,5</b>	<b>10,9</b>	<b>200</b>

**3b. Have you requested any additional grants for this project either from NWO or from any other institution?**

no

**Curriculum vitae**

**4a. Personal details**

Title(s), initial(s), first name, surname: dr.ir. P.P.C.C. (Peter-Paul) Verbeek  
Male/female: male  
Date and place of birth: December 6, 1970, Middelburg  
Nationality: Dutch

**4b. Master's ('Doctoraal')**

University/College of Higher Education: Universiteit Twente  
Date: December 15, 1994  
Main subject: The relation between Karl Jaspers' existential philosophy of technology and the approach of constructive technology assessment

**4c. Doctorate**

University/College of Higher Education: Universiteit Twente  
Date: December 8, 2000  
Supervisor ('Promotor'): prof.dr. H.J. Achterhuis  
Title of thesis: De daadkracht der dingen - over techniek, filosofie en vormgeving (Amsterdam: Boom, 2000)

**4d. Work experience since graduating**

- Feb. 1995 - Aug. 1998: Assistent in Opleiding (PhD student), Universiteit Twente, vakgroep Systematische Wijsbegeerte (fixed-term); 0,8 fte
- Aug. 1998 - present: Universitair Docent (Assistant Professor), Universiteit Twente, Afdeling Wijsbegeerte (tenured term); 0,8 fte.
- Besides this tenured term appointment: fixed-term appointment (0,2 fte) as secretary of the faculty council (Jan. 1999 - March 2003)

**4e. Man-years of research**

Since obtaining doctorate:

- Jan. 2001 - Jan. 2002: 0,4 fte x 12 months = 4,8 months
- Jan. 2002 - Jan. 2003: 0,4 fte x 12 months x 0,75 (parental leave) = 3,6 months
- Jan. 2003 - May 2003: 0,4 fte x 4 months = 1,6 months

TOTAL: 10 months

**4f. Brief summary of research over last five years**

The main question guiding my PhD research during the past years was: how to elaborate a new perspective in the philosophy of technology that overcomes the 'thesis of alienation' that is present in most classical approaches and instead does justice to technology's complexity and ambivalence? I developed the thesis that philosophy of technology should overcome its transcendentalist orientation: the reduction of technology to its conditions of possibility. As an alternative, I elaborated an approach in terms of 'technological mediation,' which is inspired by Don Ihde's 'postphenomenological' work and which analyzes technology in terms of concrete, material artifacts that play a role in the relationship between human beings and reality. In establishing such relationships, technologies co-determine how human beings are present in their world (pragmatically / existentially), and how the world can be present to them (hermeneutically). I applied this perspective of technological mediation to the domain of industrial design.

After finishing my PhD project, I have been working as a scientific coordinator of an interdisciplinary project on 'Technology and Behavior' (funded by the Dutch Ministry of Environment and of Transport), resulting in a book (to be finished this summer) which makes an inventory of conceptual frameworks and empirical approaches for analyzing the relationships between technology and behavior, and applies these frameworks and approaches to technology design and policy-making. I also have been taking initial steps towards elaborating the concept of technological mediation to the domains of information and communication technologies and of ethics.

**4g. International activities**

- General editor of *SPT newsletter* (newsletter of the *Society for Philosophy and Technology*); 2002 - present
- Invited lecture (forthcoming) at Industrial Design conference 'Tangible Interaction', University of Southern Denmark (June 2003)
- Invited lecture at conference 'Technology, the City, and Public Life', University of Lisbon, Institute of Social Science, Lisbon, Portugal (September 2002)
- Invited lecture at (NSF funded) conference on 'Value Sensitive Design', the University of Washington, Seattle, USA

- Invited lecture at the *Universität für angewandte Kunst*, Vienna, Austria (June 1999)
- Invited lecture at conference 'Beyond Taste' (about aesthetics and industrial design), Institute of Contemporary Arts, London, UK (April 1999)

#### 4h. Other academic activities

- Editor of *Krisis, tijdschrift voor empirische filosofie (Krisis - journal for empirical philosophy)*; 2002 - present
- Referee work for NWO (*Ethiek, Onderzoek en Bestuur*) (2003)
- Referee work for *Journal Information, Communication & Ethics in Society* (2002 - present)
- Referee work for *Journal History of the Human Sciences* (2002 - present)
- Member of Advisory Committee of Visual Arts, Mondriaanstichting (Mondriaan Foundation) (2001-2002)
- Externally funded research project 'Technology and Behavior' (with NOVEM Utrecht and TNO-STB Delft); funded by the *Dutch Ministry of Environmental Affairs and the Dutch Ministry of Transport* (2001-2002)
- Organization of seminar *The Empirical Turn in the Philosophy of Technology*, with Don Ihde (State University of New York at Stony Brook), University of Twente (February 1998)

#### 4i. Scholarships and prizes

- 2001: NWO translation grant for translation of dissertation 'De Daadkracht der Dingen' (USD 5000)
- 2000: Publication grant for publication of dissertation by the De Bussy Stichting (De Bussy Foundation) (NLG 2000)
- 2000: Publication grant for publication of dissertation by the Netherlands Graduate School *Science, Technology and Modern Culture* (NLG 1000)

### List of publications

#### 5. Publications:

(Publications marked with an **S** are key publications which are directly relevant to the proposed research)

#### -International (refereed) journals

- **S** Verbeek, P.P. (2002a), '**Devices of the Good Life - on Borgmann's Philosophy of Information and Technology**', in: *Technè*, Vol. 6 nr. 1, ISSN 1091-8264, pp. 69-92
- **S** Verbeek, P.P. (2000a), '**The Thing about Technology**', in: C. Mitcham (ed.), *Research in Philosophy and Technology*, vol. 19, ISSN 0161-7249, ISBN 0-7623-0681-5, pp. 281-299
- Verbeek, P.P. and P. Kockelkoren (1998), '**The Things that Matter**', in: *Design Issues* 14 - 3, ISSN 0747-9360, pp. 28-42
- Tijmes, P. and P.P. Verbeek (1998), '**The Place on the Map**', in: *Research in Philosophy and Technology*, vol. 17, ISSN 0161-7249, ISBN 0-7623-0414-6, pp. 3-8

**-National (refereed) journals**

- Verbeek, P.P. (1999a), '**Techniek in het geding**', in: *K&M - tijdschrift voor empirische filosofie*, 1999-1, ISSN 0167-2444, pp. 78-96
- Verbeek, P.P. (1999b), '**De technologische cultuur en het museum van de filosofie**', in: *Filosofie en Praktijk* 20-3, najaar 1999, ISSN 0167-2444, pp. 164-167
- Verbeek, P.P. (1999c), '**De daadkracht der dingen**', in: *De Gids*, juni 1999, ISSN 0016-9730, pp. 401-413
- Verbeek, P.P. and P. Kockelkoren (1997a), '**Voor altijd de jouwe? - over het platonisme in de industriële vormgeving**', in: *K&M - tijdschrift voor empirische filosofie*, 1997-4, ISSN 0165-1773, pp. 283-307
- Verbeek, P.P. (1996a), '**De dingen doorzien - het technologisch ontsluiten van de natuur**', in: *Filosofie en Praktijk* 17 - 3, najaar 1996, ISSN 0167-2444, pp. 113-126

**-Books, or contributions to books**

books:

- **S** Verbeek, P.P. (2000b), *De daadkracht der dingen*, Boom, Amsterdam, ISBN 90-5352-630-7, NUGI 611 (304 pp.) (dissertation, appeared in commercial edition as well; currently under translation as *The Acts of Artifacts - Philosophy, Technology, Design* and under consideration with Penn State University Press)

book contributions:

- **S** Verbeek, P.P. (2003b), '**De moraliteit van de dingen**', in: I. Devisch en G. Verschraegen (red.), *De verleiding van de ethiek - Over de plaats van ethische argumenten in de huidige cultuur*, Amsterdam: Boom, ISBN 90-5352-825-3 (forthcoming May 2003)
- **S** Verbeek, P.P. (2002b), '**Pragmatism and Pragmata - bioethics and the technological mediation of experience**', in: J. Keulartz e.a. (eds.), *Pragmatist Ethics for a Technological Culture*, Kluwer, ISBN 1-4020-1115-6, pp. 119-123
- Verbeek, P.P. (2001a), '**Don Ihde: The Technological Lifeworld**', in: Hans Achterhuis (ed.), *American Philosophy of Technology: the Empirical Turn*, Bloomington/Minneapolis: Indiana University Press, ISBN 0-253-33903-0, pp. 119-146
- Verbeek, P.P. and P. Kockelkoren (1997b), '**Matter Matters**', in: Ed van Hinte (ed.), *Eternally Yours: Visions on Product Endurance*, 010 Publishers, Rotterdam, ISBN 90-6450-313-3, pp. 101-119
- Verbeek, P.P. (1997), '**Don Ihde: de relatie tussen mensen en techniek**', in: H.J. Achterhuis (red.), *Van stoommachine tot cyborg - denken over techniek in de nieuwe wereld*, Ambo, Baarn, ISBN 90-263-1496-5, pp. 139-158

-Other

professional publications:

- Verbeek, P.P. (2002c), **De Macht der Materie - vormgeving voorbij functionaliteit en symboliek**, Rotterdam: Stichting Academie voor Beeldende Kunsten en Technische Wetenschappen, sterrenwachtlesing nr. 4, 31 pp. (no ISBN; limited edition)
- Verbeek, P.P. (2002d), **'Think Big, Start Small'**, in: *Krisis*, Fall 2002, ISSN 0168-275X
- Verbeek, P.P. (2002e), **'Wil de echte Latour nu opstaan?'**, in: *Filosofie* 12-5, pp. 57-58, ISSN 0925-9449
- Verbeek, P.P. (2001b), **'Voorbij de empirische wending'**, in: *Filosofie* 11-2 (april/mei 2001), pp. 30-33, ISSN 0925-9449
- Verbeek, P.P. (2001c), **'Naar een materiële esthetica - design voorbij functionaliteit en stijl'**, *Vormberichten* 6, juni 2001, ISSN 0923-9111, pp. 14-16.
- Verbeek, P.P. (2001d), **'Wat dingen doen - over de invloed van producten op mensen'**, in: *Product - tijdschrift voor productontwikkeling* 9-6, ISSN 0929-7081, pp. 22-23.
- Verbeek, P.P. (2000c), **'Naar een materiële techniekfilosofie'**, in: *Wetenschap, Technologie en Samenleving* 2000-5, ISSN 1386-4289, pp. 188-193
- Verbeek, P.P. (1996b), **'Eén knotserige boel - over de filosofie van Belcampo'**, in: *Bzzletin* 234, maart 1996, ISBN 90-5501-252-1, pp. 43-46
- Verbeek, P.P. (1996c), **'Spoorlijnen okee, maar niet in mijn denken - naar aanleiding van een debat over Marc van den Bossche's "Kritiek van de technische rede"'**, in: *Filosofie* 6 -3, juni-juli 1996, ISSN 0925-9449, pp. 37-38

Conference papers and invited lectures:

- Verbeek, P.P., **'Technopolis - the Public Life of Technological Artifacts'**, paper presented at conference *Technology, The City, and Public Life*, University of Lisbon, Institute of Social Science, Lisbon, Portugal, September 20-21 2002 (invited)
- Verbeek, P.P., **'Materializing Morality'**, paper presented at *EASST conference* (European Association for Studies of Science and Technology), York, UK, July 2002 (accepted paper; published on conference-CDROM)
- Brey, P. and P.P. Verbeek, **'New Media and the Quality of Life'**, workshop *Value Sensitive Design*, University of Washington, Seattle, USA, September 10-12, 2000 (invited)
- Verbeek, P.P., **'Het woord is aan de dingen - over communicatiekundig ontwerpen en techniekfilosofie'**, conference *Communicatiewetenschappen: de groeistuipen voorbij*, Universiteit Twente, Enschede, March 2000 (accepted paper)
- Verbeek, P.P., **'Another Sense of Taste'**, paper presented at workshop *Configuring Use, Producing Taste, Performing Citizenship*, organized by WTMC graduate school The Netherlands & CSI Paris, Maastricht, November 1999 (accepted paper)

- Verbeek, P.P., '**To the things themselves - or: how to think about things?**', paper presented at conference *Sociality/Materiality: the status of the object in social science*, Brunel University, Uxbridge, UK, September 1999 (accepted paper)
- Verbeek, P.P., '**Things of Good Taste**', paper for conference *Beyond Taste*, Institute of Contemporary Arts, London, UK April 10, 1999 (invited)
- Verbeek, P.P., '**Philosophy from Things**', Universität für angewandte Kunst, June 1999, Vienna, Austria (invited lecture)

Forthcoming:

Books:

- Verbeek, P.P. (forthcoming 2003 / 2004), **The Acts of Artifacts - Philosophy, Technology, Design**. Currently under consideration with Penn State University Press (translation of Peter-Paul Verbeek, *De daadkracht der dingen*; made possible by an NWO translated grant)
- P.P. Verbeek and Adriaan Slob (eds.) (forthcoming 2003 / 2004), **Technology, Behavior, and the Environment** (working title; to be published with Kluwer, Dordrecht)

Book contributions:

- Verbeek, P.P. (forthcoming 2003 / 2004), '**Artifacts and Attachment - a Post-script Philosophy of Mediation**', in: H. Harbers (ed.), *Inside the Politics of Technology*, under consideration with MIT Press, Massachusetts
- Verbeek, P.P. and A. Slob (forthcoming 2003 / 2004), '**Technology and Behavior: an Introduction**', in: P.P. Verbeek and Adriaan Slob (eds.), *Technology, Behavior, and the Environment* (working title; to be published with Kluwer)
- Verbeek, P.P. and A. Slob (forthcoming 2003 / 2004), '**Epilogue: a Conceptual Framework for Technology and Behavior**', in: P.P. Verbeek and Adriaan Slob (eds.), *Technology, Behavior, and the Environment* (working title; to be published with Kluwer)
- Heijs, W. and P.P. Verbeek (forthcoming 2003 / 2004), '**Conceptual Frameworks for Analyzing Technology-Behavior Interactions**', in: P.P. Verbeek and Adriaan Slob (eds.), *Technology, Behavior, and the Environment* (working title; to be published with Kluwer)
- Verbeek, P.P. (forthcoming 2003 / 2004), '**Acting Artifacts - the Technological Mediation of Action**', in: P.P. Verbeek and Adriaan Slob (eds.), *Technology, Behavior, and the Environment* (working title; to be published with Kluwer)

Articles:

- Van de Poel, I.R. and P.P. Verbeek (eds.) (forthcoming 2004), **Special issue on Ethics and Engineering Design**, under consideration with *Science, Technology and Human Values*

**Vernieuwingsimpuls / Innovational Research**  
**Grant application form 2003**



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- Van de Poel, I.R. and P.P. Verbeek (forthcoming 2004), '**Ethics and Engineering Design**', editorial of special issue on Ethics and Engineering Design, under consideration with *Science, Technology and Human Values*
  - Verbeek, P.P. (forthcoming 2004), '**Materializing Morality - design ethics and technological mediation**', in: Special Issue on Ethics and Engineering Design, under consideration with *Science, Technology and Human Values*
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**Signature**

I hereby declare that I have completed this form truthfully:

Name: P.P.C.C. Verbeek

Place: Enschede

Date: April 29, 2003

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