

$\begin{array}{c} SPT2013 \\ \text{Technology in the Age of Information} \end{array}$

ABSTRACTS

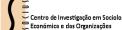
4-6 July 2013













Designing norms: Rethinking the relationships between design, ethics and technology

Asle KIRAN
Department of Philosophy
Norwegian University of Science and Technology, Norway
asle.kiran@ntnu.no

Nelly Oudshoorn Department of Science, Technology, and Policy Studies University of Twente, The Netherlands n.e.j.oudshoorn@utwente.nl

Peter---Paul VERBEEK
Department of Philosophy
University of Twente, The Netherlands
p.p.c.c.verbeek@utwente.nl

TA studies have assessed the implications of new technologies for safety, health or the environment, the so---called 'quantifiable risks', but ethical implications have been largely ignored (Palm and Hansson 2006; Boenink et al 2010). More recently, ethicists and philosophers have tried to fill this gap by introducing tools for ethical technology assessment (eTA) that should 'serve as a tool for identifying adverse effects of new technologies at an early stage of technological development' (Palm and Hansson 2006:543). However, there are three major disadvantages in Palm and Hansson's approach. First, the method they developed only focuses on assessing adverse effects of new technologies. We don't deny the importance of assessing adverse effects, but a serious consequence of this focus is that it restricts TA to evaluating how new technologies put constraints on, or violate, existing norms and values. Consequently, the ways in which new technologies may open up new forms of morality and co---produce positive norms or identities of future users are made invisible. For example, the introduction of telecare technologies, ICT systems that support virtual contacts between healthcare professionals and patients, means that healthcare professionals cannot rely on stereotypical assumptions about patient identities, based on gender, age or ethnicity, because they cannot see the patient. The absence of visual cues prevents telecare nurses from making hasty judgments based on visual characteristics. Telecare technologies thus provide a new form of interaction and communication between healthcare professionals and patients based on 'digital proximity' which prevents a discriminatory attitude towards patients (Oudshoorn 2009; 2011:137). An eTA of telecare technologies that only addresses adverse effects would have neglected such positive implications.

A second problem of the eTA method is that it relies on a checklist approach. As other methods currently used, the assessment of ethical implications of new technologies is narrowed down to evaluating a list of pre---defined ethical issues. These approaches thus reflect a principle---based ethics in which 'established ethical principles are applied to new moral problems as they emerge' (Shelley---Egan 2011:5). A serious consequence of the checklist approach is that it conceptualizes ethics as fixed and reinforces a TA method in which potential ethical implications of new technologies are evaluated

according to given ethical principles and rules. Scholars in STS have convincingly shown how technology co---evolves with society. In this view norms and values are not given but will be (re)constituted in relation to new technologies and vice versa. In a similar vein, philosophers have argued that the assessment of ethical implications of new technologies should be based on a co---evolutionary approach to ethics, technology and society (Shelly---Egan 2011; Boenink et al 2010). Such approaches argue for a pragmatist ethics, 'an ethical perspective that allows for an open treatment of novelty and uncertainty' (Shelley---Egan 2011: 4). We suggest that this alternative approach to assessing the ethical implications of new technologies is crucial because it enables us to understand how technology, morality and their interaction may evolve over time and how this interaction eventually may change the very foundations of normative judgments (Kiran 2012; Boenink et al 2010).

A last, but equally problematic consequence of the checklist approach in eTA is that it adopts a rather universal approach which neglects the differences between various technologies as well as users. Consequently, this approach will fall short of catching or even understanding the unforeseen/unanticipated ethical consequences in different local, cultural settings and the diversity in how users appropriate new technologies (Oudshoorn et al 2005; Oudshoorn and Pinch 2003).

This paper aims to contribute to the further development of ethical assessment approaches that go beyond a checklist approach. Reflecting on insights developed in the philosophy of technology and STS and drawing on examples of telecare technologies, we introduce a method that can best be portrayed as an ethical constructive technology assessment approach: eCTA. The key feature of this approach is that ethical implications of technology are evaluated and judged on the basis of an analysis of processes, particularly how technologies mediate human---technology relations, rather than a checklist of given ethical principles.

References

Boenink M, Swierstra TE, Stemerding D. (2010) Anticipating the interaction between technology and morality: a techno---ethical scenario study of experimenting with humans in bionanotechnology. *Studies in Ethics, Law, and Technology*; 4, 1–38.

Kiran AH (2012) Responsible design. A conceptual look at interdependent design---use dynamics. *Philosophy and Technology*; 25, 179–98.

Oudshoorn N (2009) Physical and digital proximity: Emerging ways of health care in face---to---face and telemonitoring of heart---failure patients. *Sociology of Health & Illness*, 31(3), 390---405.

Oudshoorn N (2011) *Telecare technologies and the transformation of healthcare*. Basingstoke: Palgrave Macmillan.

Oudshoorn N, Pinch T (eds) (2003) *How Users Matter. The Co---construction of Users and Technology.* Cambridge, Mass.: MIT Press.

Oudshoorn N, Brouns M, van Oost E (2005) Diversity and Distributed Agency in the Design and Use of Medical Video---Communication Technologies. In Harbers H (ed.) *Inside the Politics of Technology*. Amsterdam: Amsterdam University Press.

Palm E, Hansson SO (2006). The case for ethical technology assessment (eTA). *Technological Forecasting & Social Change*, 73(5), 543---558.

Shelley---Egan C (2011) Ethics in Practice: responding to an evolving problematic situation of nanotechnology in society. Proefschrift Universiteit Twente, Enschede.

* * *