

The 3TU. Centre for Ethics and Technology: Supplementary document for the quality assessment of research 2003-2009 TPM

For detailed and up to date information about the centre, please consult the website
<http://www.ethicsandtechnology.eu/>

1. Mission of the 3TU.Centre for Ethics and Technology

The 3TU.Centre for Ethics and Technology (in the following, 3TU.Ethics) was founded in early 2007 following the initiative of the three philosophy departments of the three Dutch Technical Universities of Delft, Eindhoven and Twente. As one of the six research centers of excellence of the 3TU Federation, 3TU.Ethics is meant to promote and conduct academic research at the highest level and to contribute to the educational programmes of the 3TU Federation, which include both Master and PhD tracks.

The added value of having a centre that unites the ethics research of the three philosophy departments is to allow for a platform for genuine collaboration in which leading researchers bundle their expertise. Each of the constituting philosophy departments of 3TU.Ethics brings in highly selected senior and junior staff and an established international visibility. Building upon these premises 3TU.Ethics kept growing as a unique leading international organization in the field of ethics and technology by promoting innovative research on a variety of ethics- and technology- related issues, such as IT applications, healthcare technologies, human enhancement and technological risks.

One of the main motivations for valuing ethical research and education within the technical scientific environments of Delft, Eindhoven and Twente universities is the growing awareness of the relevance of technology for contemporary social, political and economic developments. This influence goes beyond the mere functionalities of artifacts. Technology does not only drive contemporary economical and societal developments, but interferes with how society is organized, how individuals think and behave and hence how values are created and experienced. This has inevitable ethical implications that sensitive political and policy decisions, together with technology design and regulation, cannot ignore. Questions of moral acceptability, impact of artifacts on quality of life and well-being, influence of technology on how individuals relate to their living environment and matters of intergenerational justice are to be considered when technology is designed and used.

In the light of these considerations, the 3TU.Ethics research agenda has been organized according to the following objectives:

- Stimulating and undertaking fundamental as well as applied research in the field of ethics and technology,
- Designing and managing innovative graduate and post-graduate educational programmes in the field of ethics of technology, and
- Acting as an intermediary between the philosophy departments involved in 3TU.Ethics on the one hand and public debates and the media on the other.

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The three technical universities of the Netherlands, who are at the forefront of this field internationally, have welcomed the challenge of investing in these objectives and opening new pathways of investigations.

2. National and international positioning

3TU.Ethics uniquely combines a decentralized organizational lay-out and diversity of backgrounds among the staff members with focused ethics-in-technology research. For this reason, it is rather difficult to compare 3TU.Ethics with other international and national organizations.

From a national perspective, 3TU.Ethics collects the most prominent national scholars in the field of ethics of technology in the Netherlands. From an international perspective, the closest research institutes in both mission and visibility are probably 1. the Uehiro Centre for Practical Ethics of Oxford University, directed by the bioethicist and philosopher Professor Julian Savulescu, 2. CAPPE (Center for Applied Philosophy and Public Ethics) in Australia (ANU, Charles Sturt University and University of Melbourne), co-directed by professors Tom Campbell, Seamus Miller (who is also a visiting professor at 3TU.Ethics) and Andrew Alexandra, and 3. the Department of Philosophy and the History of Technology of the Royal Institute of Technology in Stockholm (KTH), directed by the philosopher Professor Sven Ove Hansson. Note that these three groups are partner institutions of 3TU.Ethics. 3TU.Ethics and these other institutions supplement each other in the following ways. The Uehiro Centre and CAPPE have a strong focus on biomedical ethics, which is not a key focus of 3TU.Ethics, as 3TU.Ethics focuses mainly on topics in engineering technologies. This is also the case at KTH, which mainly focuses on the philosophy of risk. However, whereas the staff and activities of this Swedish department gravitate around the successful direction of Professor Hansson, 3TU.Ethics has several prominent scholars and researchers working on a wider spectrum of topics. A second distinctive element of 3TU.Ethics in comparison to the Department of Philosophy of the Royal Institute of Technology in Stockholm is the involvement of 3TU. Ethics researchers in the actual development and regulation of technology. This could be seen as a rigorous attempt to “operationalize ethics”. This involvement stems from a clear and explicit presumption, which is that ethics is not only a theoretical discipline that reflects on technology and its implications, but also an instrument to design, regulate and use technology. Unlike the majority of academic organizations active in ethical research, 3TU.Ethics does therefore not only investigate, but also promote a precise interpretation of ethics of technology, which consists of an “operational” interpretation in addition to a “reflective” interpretation.

3. Research themes

At present, 3TU.Ethics activities focus on the following three main research themes:

a) *Moral issues in engineering design and R&D*

13 projects are currently part of this programme. Examples are *Responsible Innovation in Food Technology* (funded by NWO) and *Value Sensitive Design for IT Governance: an Intercultural Perspective* (funded by NWO). The common denominator among the projects developed within this programme can be captured in the following research question: to what extent and in what ways are (moral) values embedded in engineering design and in R&D, and how can they be made more accommodating and sensitive with regard to accepted moral values? This raises further questions about the methodologies and institutional safeguards that exist or can be developed for value-sensitive design and R&D.

b) Moral issues in the use and regulation of technology

9 projects are related to this programme, which focuses on ethical issues regarding the use of technology, technology policy and regulation. The assumption in this programme is that once developed, technical artifacts and systems are used by consumers, professionals and organizations to a variety of ends and in a variety of settings; but such uses may violate ethical standards. For example, the use of computer systems to access personal data may violate standards of privacy, and the use of engineered tissues to replace healthy tissues may violate principles of non-maleficence. The aim of this research theme is hence to analyze and propose morally adequate standards and principles for the use of particular technologies, with particular attention for new and emerging technologies.

c) Values in engineering and society

This research theme focuses on foundational research, including research on central concepts like values, rationality and moral knowledge, and research on shifts in societal values resulting from technological change. The research conducted within this theme provides tools for the other two more practice-oriented research themes. The programme counts 5 ongoing projects.

More information about the research themes of 3TU.Ethics can be found at:

<http://www.ethicsandtechnology.eu/research/themes/>

A detailed overview of the various research projects of 3TU.Ethics can be found at:

<http://www.ethicsandtechnology.eu/research/projects/>

4. Quality of research

Key publications:

Here follows a list of key publications of members of 3TU.Ethics:

- Illies, C. and A. Meijers (2009), “Artefacts Without Agency”, *The Monist* vol. 92, no. 3, pp. 420–440.
- Koepsell, D. (2009), *Who Owns You? The Corporate Gold Rush to Patent Your Genes*, Wiley-Blackwell;
- Peterson, M. (2009) *An Introduction to Decision Theory*. Cambridge: Cambridge University Press.
- Asveld, L. and Roeser, S. (eds.) (2009), *The Ethics of Technological Risk*, London: Earthscan
- Oosterlaken, Ilse (2009). Design for Development; A Capability Approach. In: *Design Issues*, 25(4)
- Hoven, J. van den, and Weckert, J. (eds.) 2008. *Information Technology and Moral Philosophy*, Cambridge Studies in Philosophy and Public Policy, Cambridge University Press.
- Verbeek, P.P.C.C. (2008), Cyborg Intentionality; Rethinking the Phenomenology of Human-Technology Relations. *Phenomenology and the Cognitive Sciences* 7 (3):387-395
- Brey, P.A.E. (2007), Theorizing the Cultural Quality of New Media, *Techné: Research in Philosophy and Technology*, Fall 2007, 11(1): 1-18
- Verbeek, P.P.C.C (2005), *What Things Do- Philosophical Reflections on Technology, Agency, and Design*, Penn State University Press

You can find an overview of publications at <http://www.ethicsandtechnology.eu/publications/>

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Editorship:

The senior staff of 3TU.Ethics is involved in the board of the main scientific journals in the field, for example:

- Professor Jeroen van den Hoven: editor-in-chief of *Ethics and Information Technology* and (together with Seumas Miller and Thomas Pogge) of the Springer On-line *Encyclopedia of Applied Ethics TERP*; he is member of the editorial board of *Information, Computers and Society* (Routledge), *Journal of Information, Communication and Ethics in Society* and consulting editor of *Episteme*;
- Professor Philip Brey: member of the editorial board of *Theoria, Ethics and Information Technology*, *The Journal of Information, Communication and Ethics in Society*, and *Nanoethics: Ethics for Technologies that Converge at the Nanoscale*;
- Professor Anthonie Meijers: co-founder and since 2005 editor of the international journal *Philosophical Explorations*, editor of the handbook *Philosophy of Technology and Engineering Sciences* (Elsevier 2009);
- Professor Tsjalling Swierstra: member of the editorial board of *Krisis - Tijdschrift Voor Empirische Filosofie* (English: *Crisis - Journal for Empirical Philosophy*) and co-editor (with Prof. I. de Haan) of the series *Innovations in Political Theory* of the Amsterdam University Press;
- Professor Peter-Paul Verbeek: member of the editorial board of the *North European Journal of Philosophy*, corresponding editor of *Design Philosophy Papers* and member of the editorial board of *Philosophy and Technology*.

External research funding:

Several VENI, VIDI and VICI projects (which form the most competitive funding scheme from NWO, the ‘Vernieuwingsimpuls’) have been awarded to members of the 3TU.Ethics in the last years. This is an indicator of the high quality of research conducted by the senior staff members of 3TU.Ethics.

- *Moral Emotions and Risk Politics*, (2010-2015), NWO-VIDI project, project leader: Dr Sabine Roeser, Delft University of Technology;
- *Technology and the limits of humanity: the ethics and anthropology of posthumanism*, (2008-2013), NWO-VIDI project, project leader: Professor dr Peter-Paul Verbeek, University of Twente;
- *Evaluating the Cultural Quality of New Media; Towards an Integrated Philosophy of Human-Media Relations* (2006-2012), NWO-VICI project, project leader: Professor Dr Philip Brey, University of Twente.
- *Emotions & Technological Risks; Emotions as a Normative Guide in Judging the Moral Acceptability of Technological Risks* (2005-2009), NWO-VENI project, project leader: Dr Sabine Roeser, Delft University of Technology;
- *Technology and the Matter of Morality* (2004-2008), NWO-VENI project, project leader: Professor dr. Peter-Paul Verbeek, University of Twente.

Next to these individual grants, other funding schemes of NWO represent an important source of funding for 3TU.Ethics. One NWO research programme in particular, “Responsible Innovation” (Dutch: *Maatschappelijk Verantwoord Innoveren*), provides a main source of funding to the research conducted within the Centre. In addition, in 2009 NWO has granted 800K Euro for supporting the 3TU.Ethics Graduate School which will commence in September 2010.

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Members of 3TU.Ethics are also involved in European collaborative research, financed through the Framework Programme(s) of the European Commission. Examples of projects are *Ethical Issues of Emerging ICT Applications* and *Ethical and regulatory issues raised by synthetic biology*. These projects are of particular strategic relevance for the international collaborations they activate and the consolidation of the international visibility of the centre they ensure.

For a complete overview of externally funded research projects, please consult the following website: <http://www.ethicsandtechnology.eu/research/quality/>

5. Contribution to public debates

The main focus of 3TU.Ethics is on high quality research. However, as pointed out before, this research should not only be of theoretical relevance but also of practical relevance. This ambition is partly realized by collaboration with researchers who develop new technologies, for example in the areas of ICT, robotics, nuclear energy, and biotechnology.

Furthermore, members of 3TU.Ethics frequently organize or participate in workshops for or with policy makers and engineers. In addition, 3TU.Ethics members are also actively engaged in public outreach. Several of our members are active in public debates, through interviews and opinion articles in public media in the Netherlands but also internationally. For example, 3TU.Ethics Managing Director dr. Sabine Roeser is a member of the 'Filosofisch Elftal' (Philosophers' team) of the Dutch newspaper *Trouw* for which she is interviewed on a regular basis on societal issues, and she is a member of the COGEM, a committee that advises the Dutch government about genetic modification. Professor dr Peter-Paul Verbeek is member of the prestigious Young Academy, a division of the Royal Dutch Academy of Arts and Sciences which amongst other activities organizes debates about the role of science in society. 3TU.Ethics Scientific Director Professor dr. Jeroen van den Hoven has received the World Technology Award 2009 and the Namur Award 2009, two awards for internationally outstanding contributors to societal debates about technology.

For an overview of media appearances of 3TU.Ethics-members, please consult the following website:

<http://www.ethicsandtechnology.eu/news/media/>

6. 3TU.Ethics Graduate School

In 2009 3TU.Ethics was awarded a highly competitive grant (800K) by NWO for launching the 3TU.Ethics Graduate School, which will commence in September 2010. The Graduate Programme Leader will be Professor Dr Philip Brey from the University of Twente, while the Coordinator of the programme will be Dr Claudia Basta from Delft University.

The Master programme involved in the Graduate School is the programme Philosophy of Science, Technology and Society (PSTS) in Twente. The graduate school will integrate the last year of the PSTS track with the 1st year of the PhD track, offering the opportunity to Bachelor and Master of Science candidates to initiate their PhD studies while attending courses in the field of ethics of technology. The programme is designed according to the core research themes of 3TU.Ethics, namely Moral issues in engineering design and R&D, Moral issues in the use and regulation of technology and Values in Engineering and Society.

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7. Composition of the research staff and organizational lay-out

In the last 2 years, several non-tenured positions were converted to tenured positions. At present, the organization counts on 6 full professors plus one guest professor, Professor Seumas Miller, who is dividing his time between the Centre for Applied and Public Ethics (CAPPE) in Australia and 3TU.Ethics. There are currently 19 PhD projects within the three research programmes of the centre.

The main managerial and organizational functions of the centre consist of a Scientific Director (0,1 fte), a Managing Director (0,3 fte) and a Coordinator (0,8 fte). In order to ensure a balanced participation of the three partner departments in the management of the centre, these functions rotate among the three partner universities every three years. As support staff members the centre also counts on a secretary (0,6 fte) and a webmaster (0,1 fte); additional functions (such as communication services) are contracted on *ad hoc* basis.

A complete list of staff members of 3TU.Ethics can be found on the following website:
<http://www.ethicsandtechnology.eu/people/>