

# Exploring the ethics of human-centred design

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## Background

Worked in many high-tech projects, at Philips, KPN, TNO, introducing HCD.

Background in industrial design engineering (Delft University of Technology), marketing strategy, bit of psychology (Open University, NL), and organization studies and philosophy (University for Humanistic Studies, NL).

Concern with people 'versus' technology.

Part-time PhD in 2008: study HCD project from within, using philosophy; and similar studies since (in TA2 and in WeCare, see below)

## Goals and questions

*To share with you some anecdotes and underlying ideas...*

- *To explore the ethics that are inherent in many of our projects*
- *To propose a way to cope with these ethics: reflexivity*
- *To propose new research: projects > well-being*
  
- *What do we do in our projects? E.g. what do we do when we say that we do HCD?*
- *What could we do differently? How to better align our practices to our ambitions?*

## Papers (see also: [www.marcsteen.nl](http://www.marcsteen.nl))

Ethics-of-alterity (Levinas, Derrida):

- Steen: *The fragility of human-centred design* (PhD dissertation), Delft University of Technology
- Steen: Human-centred design as a fragile encounter, *Design Issues*, 28(1) (2012), pp. 72-80.
- Steen: Tensions in human-centred design, *CoDesign*, 7(1) (2011), pp. 45-60.

Pragmatism (Peirce, Dewey):

- Steen, Buijs and Williams: The role of scenarios and demonstrators in promoting shared understanding..., *Journal of Innovation and Technology Management* (forthcoming).
- Steen: Co-design as a process of cooperative inquiry and imagination (submitted, in review)

Virtue ethics, capability approach (Sen, Nussbaum):

- Steen: Participatory design and the virtues of cooperation, curiosity, creativity and care (submitted, in review)
- Steen, Aarts, Broekman and Prins: Social networking services for older people's well-being: An example of applying the capability approach. Paper presented at *HDCA Conference 2011*.

General:

- Steen, Manschot and De Koning: Benefits of co-design in service design projects, *International Journal of Design*, 5 (2) (2011), pp. 53-60. (*open access*)

## Terms

***Human-centred design*** (ISO 13407):

- Early involvement of (potential) users
- Balance between people and technology
- Organize multidisciplinary teamwork
- Iterations of research, design and evaluation

***Focus on process***: a social process, a process between people

***Focus on organizing***: managing, conditions, factors for success/failure

## Terms

- **User** centred design (e.g. Norman) ... HCD looks holistically at *people* rather than focus on people in their role of *users*
- **Co-design**: ‘a collective creativity as it is applied across the whole span of the design process’ (Sanders and Stappers 2008)
- **Participatory design** (PD): ‘the people destined to use the system play a critical role in designing it’ (Schuler and Namioka 1993)
- **Design thinking**: a process in which people cooperate in exploring/defining problems and exploring/developing solutions (Cross, Lawson, Thackara)

## Philosophy and ethics

**Philosophy:** tools for thinking about what we do and what we could do differently

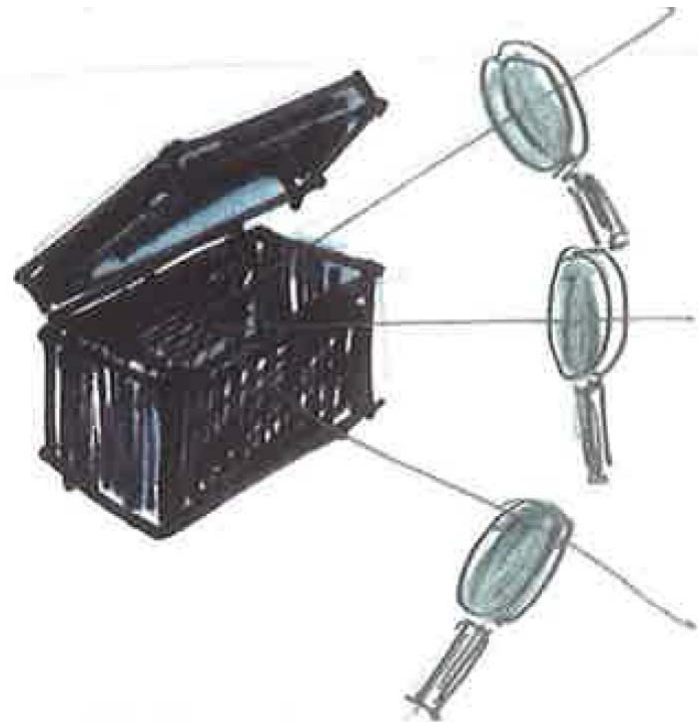
- E.g., John Dewey, pragmatist philosopher, aimed to ‘recover’ philosophy, so that ‘it ceases to be a device for dealing with the problems of philosophers and becomes a method, cultivated by philosophers, for dealing with the problems of man’ (1917)

**Ethics:** focus on questions like: ‘What do I/we want to do?’, ‘What should I/we do?’, ‘What can I/we do?’

I studied the *process* of human-centred design



result





... a fragile encounter between other and self



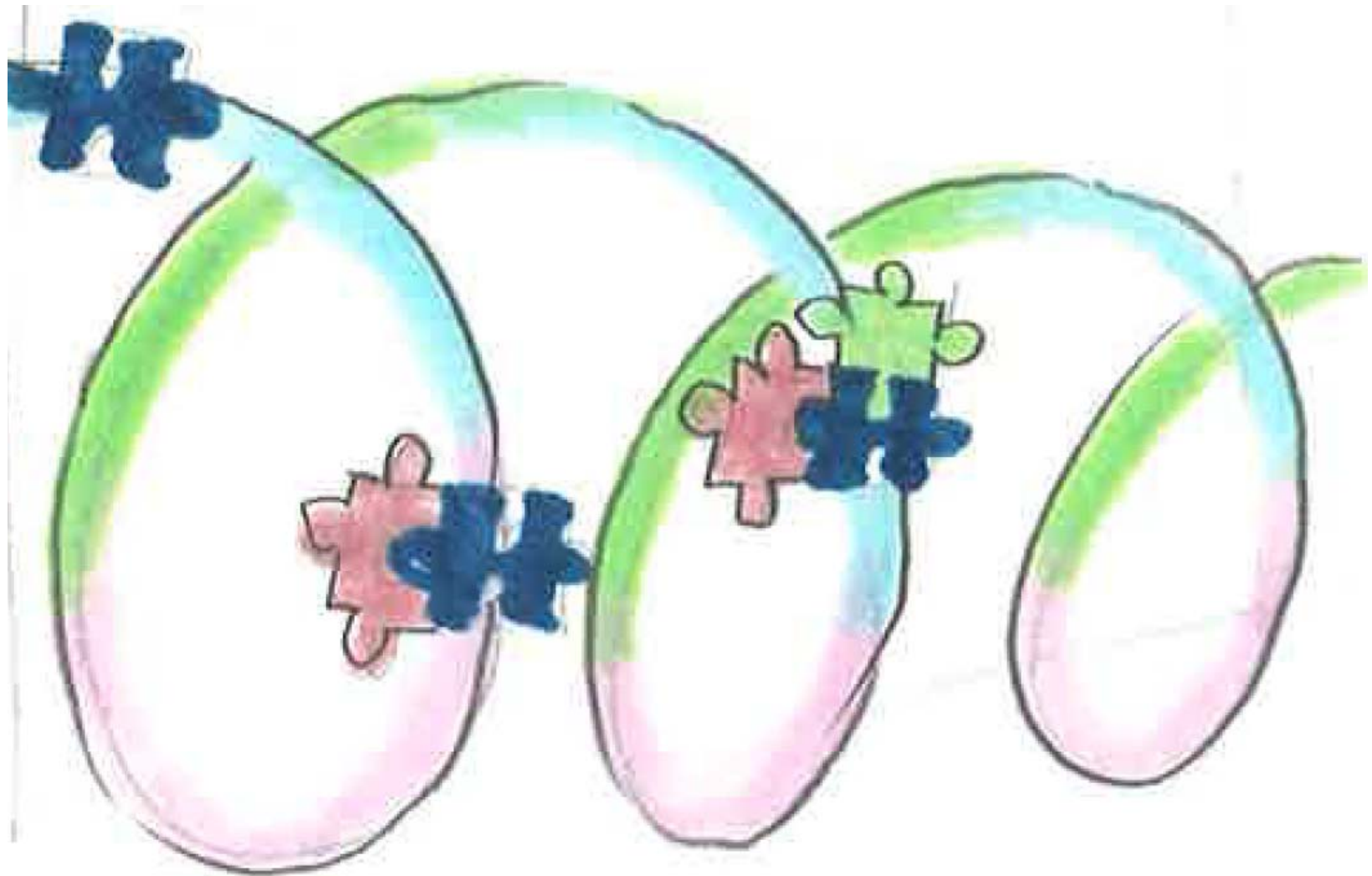
## ... a fragile encounter between other and self

- › *Can we be open towards others?*
- › Continental 20th century philosophers Levinas and Derrida
- › We attempt to be **open** towards **others**, especially towards (potential) users of the products or services that we are working on
- › ... recommendations against tendency to privilege **self** over other (stay within box) and tendency to move to **closure** (less openness)

Examples, from Freeband project FRUX (2006-2008):

- › *Mobile applications for police officers and for informal carers*
- › Police officer: “We don’t want those woollen trousers”
- › Team member: “We need to do something about their problem”

**... a process of joint inquiry and imagination**



## ... a process of joint inquiry and imagination

- › *How to frame the problem? Where to look for solutions?*
- › American pragmatist philosophers Peirce and Dewey
- › We attempt to organize a process of cooperative **problem-setting** and **solution finding** (design thinking), joint inquiry and imagination
- › ... recommendations for moving between exploring and defining the practical problem, and developing and evaluating practical solutions

Examples, from FP7 project TA2 (2008-2012) ([www.ta2-project.eu](http://www.ta2-project.eu)) :

- › *Innovative ICT (vid comms, gaming, etc.) to improve 'togetherness'*
- › Problem <-> Solutions (e.g. in control...ease-of use, group...individual)
- › Promoting shared understanding (vision...pyramid)

**... virtues of cooperation, curiosity, creativity and empowerment**



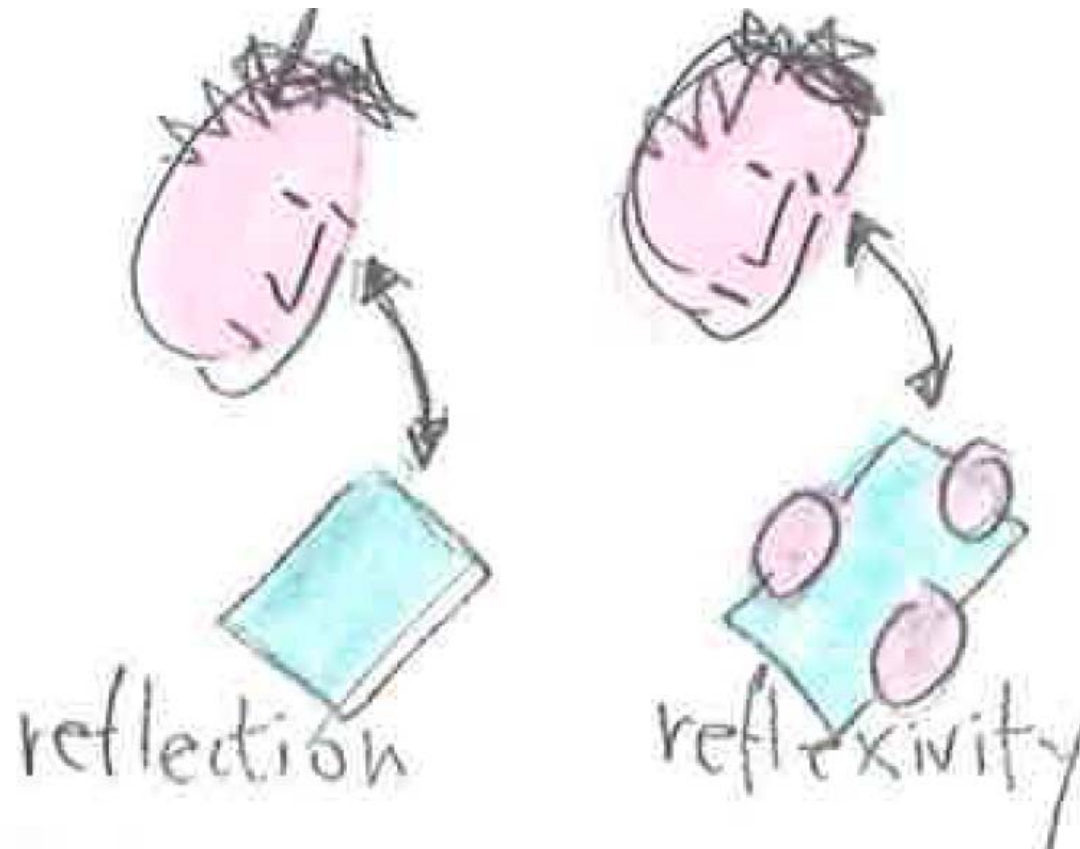
## ... virtues of cooperation, curiosity, creativity and empowerment

- › *How do you, project-team member, think, feel and act in the project?*
- › Classical virtue ethics, Aristotle, and contemporary MacIntyre
- › We need virtues of cooperation, curiosity, creativity and empowerment
- › ... recommendations to cultivate these virtues, i.e. to become **virtuoso**

Examples, from AAL project WeCare (2010-2012) ([www.wecare-project.eu](http://www.wecare-project.eu))

- › *Help older people in social networking and participation*
- › Cooperation: to make collective walks during lunch
- › Curiosity: to speak open-minded-ly about others
- › Creativity: to promote productive solution finding
- › Empowerment: to develop tools that others can use

## Reflexivity as a way to cope with these ethics productively



**Human-centred design**

**>**

**Well-being?**



## Exploring the ethics of human-centred design

This seminar will explore the ethics of human-centred design (HCD), where HCD is meant to refer to innovation processes that include user involvement and co-design (ISO 13407). Based on critical reflection in several HCD projects, and drawing from three schools of ethics, the idea is explored that the process of HCD has intrinsic ethical qualities:

*Ethics-of-alterity (Levinas, Derrida) helps to see HCD as a fragile encounter between other and self; Pragmatist ethics (Dewey) helps to construe HCD as a process of joint inquiry and imagination; and Virtue ethics (Aristotle) helps to understand the virtues of cooperation, curiosity, creativity and care.*

In addition, reflexivity is proposed as a way for practitioners to cope more mindfully with the ethical qualities, so that HCD projects can more effectively promote participation and empowerment, and help people to flourish.

Moreover, one idea for future research is proposed: To study the relationships between our ways of organizing HCD, processes of participation and empowerment, and the effects on actually improving people's well-being.

## Marc Steen

Marc Steen works as a senior scientist in human-centred design, co-design, open innovation and innovation management at TNO, a not-for profit organization for research and innovation in The Netherlands ([www.tno.nl](http://www.tno.nl)). He earned MSc, MTD and PhD degrees in Industrial Design Engineering at Delft University of Technology. Before joining TNO, he worked at Philips and KPN. Marc works in international projects TA2 ([www.ta2-project.eu](http://www.ta2-project.eu)) and WeCare ([www.wecare-project.eu](http://www.wecare-project.eu)) and for national and international clients. He is particularly interested in questions concerning creativity and cooperation, participation and empowerment, and ethics and reflexivity.