

# **Background**

- Trained in 'industrial design engineering'. Work at TNO, a government/commercial innovation lab
- Work in design and innovation projects: user involvement, co-design, innovation management
- Parallel to my day-to-day work, I reflect what we do in our projects and on the methods we use
- Previously, I 'deconstructed' human-centred design (PhD thesis 2008); currently, I am exploring how 'pragmatism' can help to understand and organize co-design differently

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John Dewey: The need for a recovery of philosophy, 1917, p. 65

Philosophy recovers itself when 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 [designers].

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# Outline of my presentation

Move towards co-design, in ICT products/services

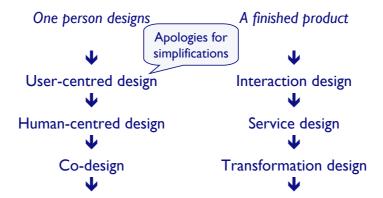
New fundamentals for co-design are needed

Pragmatism as a novel perspective on co-design

An example from practice: MiReCol for co-design

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### Move towards co-design, in ICT products/services



Diverse people work on in an innovation project, and on organizational change — **co-design-as a process** 

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## New fundamentals for co-design are needed

#### Current fundamentals:

• Science – about 'what is', search for universal truth

typically)

• Engineering linear, logical, search one optimal solution (supposedly,

However, co-design is about 'what ought to be', about specific situations and specific responses, not-only-linear, not-only-logical, finding 'solutions that work'

'Design thinking' is about: 'where do we want to be?' 'how do we get there?' (John Thackara 2006, p. 2)

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### Pragmatism as a novel perspective on co-design

- Draw from philosophical pragmatism in order to better understand (theory) and organize (practice) co-design
- Pragmatism: about 'how things work' in practice, about experience and empathy (ethics), about cooperation and negotiating (politics) and it is future-oriented (imagination)
- I am not a philosopher, but I draw from philosophy; in this case from parts of two of John Dewey's texts:

  How we think (1910) and Logic: The theory of inquiry (1938)

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## Co-design as a process of inquiry (1/2)

- I Feeling that there is a problem, making the situation 'questionable' Experience (personal, subjective) as starting-point
- 2 Defining (provisionally) the problem that will be addressed How the problem is defined (cf. 'wicked problems')
- 3 Exploring and defining the problem and possible solutions, in parallel, iteratively
- Using perception to explore problems, and imagination to explore solutions
- Expressing and discussing (subjective) experiences and perceptions
- 4 Reasoning about the problem and possible solutions
  - Discussing means and ends, and relations between them, systems thinking
  - Expressing and negotiating different (personal) roles and interests
- 5 Trying-out solutions, to see whether they solve the problem
  - E.g. early prototyping, trials, pilots, and learning from that



## Co-design as a process of inquiry (2/2)

Where do we want to be?

How do we get there?

Decision-making

(besluitvorming)

• Conception, creating

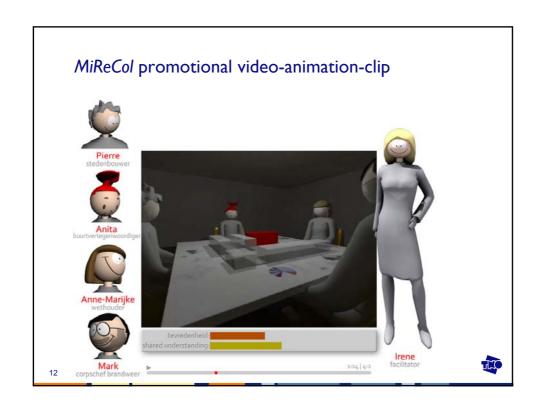
- Idea-forming (beeldvorming)
- Perception, envisioning
- Express and discuss subjective experiences (rather than only 'facts')
- Ethics of co-design
- Express and negotiate roles and interests (rather than look for one 'best' solution)
- Politics of co-design
- E.g. 'conflict management'

• E.g.: 'dramatic rehearsal'

An example from practice: MiReCol for co-design

- MiReCol: Mixed-Reality Collaboration
- Mixed-reality: Mixing the real and the virtual
- Tool for urban planning in a co-design fashion
- In progress...





## Key elements of the MiReCol system

- Tools to express experiences, e.g. 'story telling' by citizens
- Tools to visualize and experience problems and solutions, in real-time, using models and simulations ('tangibles')
- Tools to negotiate perspectives ('serious gaming')
- Tools to monitor and influence group dynamics, esp. communication and cooperation

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- Thank you for your attention
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