

IN 5510 Deltakende eksperimentell design/ Participatory Experimental Design

Introduction

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Design of Information Systems



This course is about

- Where do design ideas come from?
- How can I stimulate ideas?
- Working with design ideas based on use.



This course is about

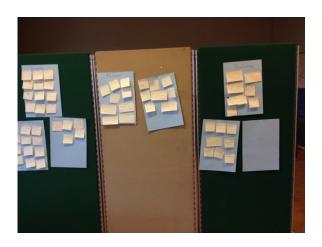
- Where do design ideas come from?
- How can I stimulate ideas?
- Working with design ideas based on use.
- User participation in design



Experimental design

- Open up for new ideas
- Open up for ideas you have not thought out yourself
- Work professionally with design ideas



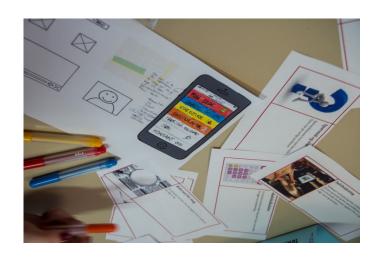




Experimental design 2

- Not a deterministic outcome
- No master plan for the design product
 - maybe for the process
- No formalized models
- No up-front specifications





Where do ideas come from?

Designers learn from designers

Apple Design vs Braun

Braun became known for its iconic designs for a wide range of devices





Early iPhone calculator app vs Braun ET44 calculator.

Braun T3 pocket radio vs. the early iPod

https://se.braun.com/en/design-culture

Where do ideas come from (2)?

Engelbart
designed the first
mouse for «augmenting
human intellect»



Douglas Engelbart, 1963



"I don't know why we call it a mouse. Sometimes I apologize. It started that way and we never did change it" (Engelbart)

http://www.networkworld.com/article/2167877/smb/douglas-engelbart--inventor-of-the-computer-mouse--has-died.html

Design is about making futures

- Scandinavian tradition of Participatory Design: "ensuring that those who will use information technologies play a critical role in their design".
- "shaping of future situations" for others
- mutual learning

(Robertson and Simonsen, 2012, p 2)

Discuss for 6 minutes

- Do you have experience with design that has slid nicely into your life?
- Have you experienced design that has not fitted nicely into your life?

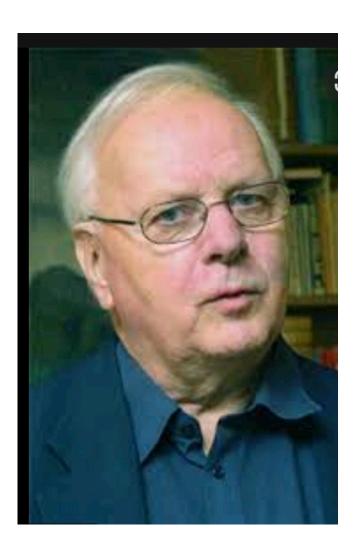
Design building on practice

- A socio-technical approach that appreciate the context in which the technology will be used
- And what's going on in that context
- And what people really do

"..the development of the artifacts with which people work and the development of their work practices go hand in hand" (Suchman & Trigg 1991, p. 65).







Norwegian heritage!

- Early participatory design projects were Scandinavian
- Norwegian Iron and Metal project
- Work was changing with the introcuction of computers
- Kristen Nygaard: buildingg knowledge

In this course

- This course stands on two legs:
 - Creativity by opening up for ideas based on use
 - User participation in design
- Focus is on use
- Focus is on process

Aims for user participation

- Improving the quality and relevance of the product
- Improving the quality of the design process
- Enhances engagement from users
- Encourages more robust communication
- Shared understandings between stakeholders
- Close to actual practice
- Participation as a democratic value

Participation

- Users are not merely answering questions about their opinions
- Users draw sketches and discuss design ideas together with colleagues and designers



How?

• Tools and techniques for design and participation

- Workshops
- Interactions with prototypes
- Mock-ups
- Scenarios
- Design games
- **—**



Photo: Ida Braaten



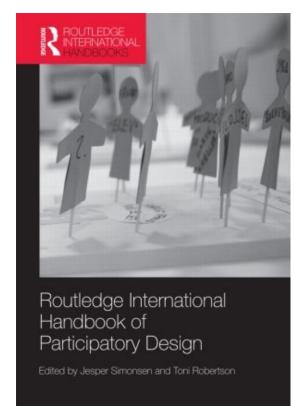
Welcome to PDC 2022



Practical matters

- Textbooks:
 - Simonsen, J., & Robertson, T., editors (2012) "Routledge International Handbook of Participatory Design", Routledge, Available online on oria. Löwgren, J. & Stolterman, E. (2005). Thoughtful interaction design: a design perspective on information technology. Cambridge, Mass.: MIT Press, Preface + chapter 1-2. Available online on oria.
- Theoretical curriculum read it!
- Four mandatory assignments
- Learning outcomes





More practical matters

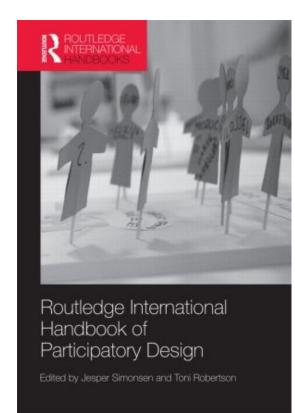
Teaching schedule

- Lectures on Mondays
- Exercises on Wednesdays

Project work in groups

- Two feedback sessions
- Project report
- Oral exam





Learning outcomes

After successful completion of this course, you can

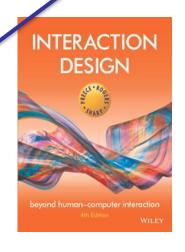
- explain the basic principles of experimental and participatory design
- apply basic tools and techniques for collaborating with users in the design process
- provide a rich description of the use context and the user group
- design a prototype together with users and evaluate it with them
- analyze the design suggestion through theoretical concepts from the course and argue for your design choices
- discuss ethical perspectives concerned with designing with users
- plan and implement a participatory design process where mutual learning is a goal

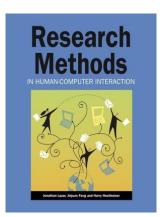
About reading papers

- What is the key question(s) that the author(s) address in their text?
- How do they motivate (i.e. justify) the importance of the question(s)?
- How do they go about to produce their argument(s) to the question(s) addressed?
- What is the answer to the questions stated, or what is the key message of the paper (or chapter) that the author(s) try to send to the readers?
- What are the potentially positive benefits, that the authors state themselves, of the key message of the text?
- What does it say to you?
- You can read it fast for overview first, and then read it deeper later in the course.

NOT: Other literature

Preece, Sharp and Rogers: Interaction
 Design beyond human-computer
 interaction, 2015, John Wiley & Sons Ltd
 (INF 1500/1510)





• Lazar, Feng and Hochheiser: *Research Methods in HCI*, 2010. Wiley

Preece, Sharp and Rogers on data gathering

• «.. data gathering is a central part of establishing requirements, and of evaluation. Within the requirements activity, the purpose of data gathering is to collect sufficient, accurate, and relevant data so that a set of stable requirements can be produced, within evaluation, data gathering is needed in order to capture users' reactions and performance with a system or prototype» (Preece, Sharp and Rogers, 2015, p 226).

This is different from doing PD.