Participation in what?
On Participation in PD

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Disentangling Participation

in5510 24. September 2018
focus: understanding & conceptualizing PD

- what is it that users participate in when participating in PD?
- how do they know they had any influence?
- what is a PD result? Who and how is it evaluated?

• Spaces for participatory creativity, *PDC 2010*
  ➔ Spaces for participatory creativity, *CoDesign Special Issue on PD, 2012*
• Disentangling power and decision-making in participatory design, *PDC 2012*
• Disentangling Participation. Power and Decision-making in Participatory Design, *Springer CSCW series*
• Design decisions and the sharing of power in PD, *PDC 2014*
• The life and death of design ideas, *COOP 2016* (w/ O-K Rolstad)
• Unpacking the notion of participation in Participatory Design, *Journal of CSCW 2016*
• What is a participatory design result? *PDC 2016*
what is participation & how to think about it

• have your voice heard & respected + have a say (process/result)

participation:
• the action or fact of having or forming a part of something, the sharing of something
  – stakeholders influence & share control over development initiatives and the decisions and resources which affect them
what is participation & how to think about it: example
Tone Bratteteig - in5510 - 24/9/18
**Figure 25: ND-100 and Tandberg terminal**

### Table: Patient Information

<table>
<thead>
<tr>
<th>Patient</th>
<th>Name</th>
<th>Diagnosis</th>
<th>Clinical History</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>007-2</td>
<td>Hans</td>
<td>AMI-F</td>
<td>History of epilepsy, use of benzodiazepines, status asthmaticus</td>
<td>IV; Inv; 27/1: 3 dayspr. Ecg</td>
</tr>
<tr>
<td>008</td>
<td>Kjell</td>
<td>25/1 dyspnoe</td>
<td>History of asthma, status asthmaticus</td>
<td>IV; Inv; 27/1: 3 dayspr. Ecg, stix</td>
</tr>
<tr>
<td>010</td>
<td>Gunnar</td>
<td>25/1 AMI stop</td>
<td>History of diabetes, status asthmaticus</td>
<td>IV; Inv; 27/1: 3 dayspr. Ecg, stix</td>
</tr>
<tr>
<td>011</td>
<td>Thorbjørn</td>
<td>AMI-L small</td>
<td>History of chronic obstructive pulmonary disease, status asthmaticus</td>
<td>IV; Inv; 27/1: 2 dayspr. Ecg, stix</td>
</tr>
<tr>
<td>012</td>
<td>Torolo</td>
<td>AMI 22/1 R</td>
<td>History of diabetes, status asthmaticus</td>
<td>IV; Inv; 27/1: 3 dayspr. Ecg, stix</td>
</tr>
</tbody>
</table>

### Work Team

- **WORK TEAM**
- **WORK TASKS**
  - IV
  - Inv

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*Department of Informatics*
University of Oslo
participation in design processes

- design: forming ideas in materials
- design experiments: see – move – see
  - evaluate the situation, bring in possibilities / choices
  - select one choice
  - try it out: concretize it
  - evaluate if it leads in the right direction (vision)
- decision-making – choosing between possibilities (the space of design ideas)
- evaluating the result (in context & over time)
  - understand how choices are inter-related: understand how small choices lead to which end result
what is participation & how to think about it:
examples
Turning the wooden wheel to rotate view or zoom while checking with gaze at projection.

Freeze scene, upload previous scene with barcode interface.

Selecting content, placing a content card on selected coloured RFID field, which associates content with colour blue, and placing blue triangle on physical map.
Manipulating content by placing a ‘command card’ (e.g. “scale decrease”) on colour zone of the single object to be manipulated.

Setting connections requires two rectangular tokens that define end points and angles defining curvature. Content card defines type of flow (e.g. pedestrian, high traffic) visible as moving dots on map.

Areas that are enclosed by connections can be filled with ground textures (grass, stone, water, etc.) by simply placing a circular token, the colour of which has been associated with a particular texture in the area on the map.
Figure 11. Map of the university campus, image of the station today and the architect’s plan for a future station.
Figure 12. Current narrow bridge, design for better flow.

Figure 13. The station as a ‘welcoming area’.
Figure 14. Architect explaining his solution.

Figure 15. Architect explaining solution with sketches.
Figure 19. Sketching content and showing recording.
first round of analysis

• values & concepts
  • openness
  • stakeholder participation
  • immediacy
  • urban concepts

• how to implement the vision
  • haptic engagement (tokens)
  • tracking framework
  • bringing MR outdoors
  • panoramas as representations of the site
  • working with sound

• negotiations with outside world
• decisions & non-decisions
different ways of arriving at a PD result

the Sisom project 2005-2006
<table>
<thead>
<tr>
<th>Physical problem</th>
<th>Cry a lot (own suggestion)</th>
<th>Emotions</th>
<th>Afraid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bleed nose-blood</td>
<td></td>
<td>Nightmares</td>
<td></td>
</tr>
<tr>
<td>Broken leg</td>
<td></td>
<td>Embarrassed</td>
<td></td>
</tr>
<tr>
<td>Wounds on the skin</td>
<td></td>
<td>Angry</td>
<td></td>
</tr>
<tr>
<td>Head pain</td>
<td></td>
<td>Miss family and friends</td>
<td></td>
</tr>
<tr>
<td>Head ache</td>
<td></td>
<td>Feel sorry</td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
<td>Cry a lot</td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td></td>
<td>Irritated</td>
<td></td>
</tr>
<tr>
<td>Phlegm in my mouth</td>
<td></td>
<td>Other children don’t want to play with me</td>
<td></td>
</tr>
<tr>
<td>Things smell</td>
<td></td>
<td>Don’t want to play with others</td>
<td></td>
</tr>
<tr>
<td>Bad/unpleasant</td>
<td></td>
<td>Shivering hands</td>
<td></td>
</tr>
<tr>
<td>Nose feels tight</td>
<td></td>
<td>Difficult to walk</td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm or sweat</td>
<td></td>
<td>I think I don’t want to decide anything</td>
<td></td>
</tr>
<tr>
<td>Mouth problems</td>
<td>Dry in the mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain in the mouth</td>
<td></td>
<td>I think it is my fault that I am sick</td>
<td></td>
</tr>
<tr>
<td>Don’t manage to eat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep during the day</td>
<td></td>
<td>I don’t get to know things I want to know</td>
<td></td>
</tr>
<tr>
<td>Easily tired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Don’t manage anything</td>
<td></td>
<td>Can’t take my medicine</td>
<td></td>
</tr>
<tr>
<td>Cannot read</td>
<td></td>
<td>Disgusting to take med.</td>
<td></td>
</tr>
</tbody>
</table>

An example of the 'SiSom' application
second round of analysis: design experiments

creating design ideas in PD

- multi-disciplinary collaboration
- ethnographic studies as a basis for mutual learning
  - mutual understanding and respect
- learning throughout the PD process
  - learning through various activities
- providing basis for technological imagination
  - BUT maintain their own perspective
- meeting the participants where they are
  - adjust process
  - adjust activities and techniques
selecting design ideas to implement

- problem setting and solving goes together
  - steps towards a vision
  - postponing decisions ("placeholders")
  - understanding effects of a choice
- negotiations and power games
Ole Kristian Rolstad
concretizing design choices

- the power of making
  - “object world” *(Bucciarelli)*
  - technical choices
- mock-ups and demos
  - show, not tell
  - scenarios and simulations
seeing /evaluating the results of a choice

- see – move – see
  - evaluation is an inseparable part of design
- seeing as explicit evaluation
  - usability test: the artifact itself
  - seeing the artifact in its real use context
  - research prototypes and research products
  - long-term use
understanding how decisions interact

- big and small decisions (some decisions are more important to be part of)
- unforeseen consequences of decisions
- decision linkages *(Langley et al)*
  - sequential linkages: a decision leads to a other decisions, smaller ones (nesting), larger ones (snowballing), or same decision recurring
  - precursive linkages: a decision can affect premises for later decisions/ issues: enabling, evoking, pre-empting, cascading, merging, learning
  - lateral linkages: different issues share resources and compete (pooled) or share a context (contextual)
- non-decisions
planning for a sustainable design result

“Results are all action carried out by the MWU*, centrally and locally, which on the basis of activities and insight gained within the project are aiming at giving the MWU and its members increased influence on the planning, control and data processing of the firms.” (Nygaard & Bergo 1975: 7)

* MWU = Iron and Metal Workers’ Union

“can we have good participatory processes that do not show evidence of more democratic ideals in the resulting artefacts?” (Balka 2010: 3)
what is a participatory design result?

• = the results that exist when a PD project ends
• “shows evidence of democratic ideals” by increasing the agency of its users and giving them a voice in matters they did not have before
• strengthen users’ “power to” act, which may strengthen their “power over”
• a critical perspective is needed to recognize power structures of the use situation and address them (but this does not require a conflict-oriented view)
• need for characterizing the arenas of design and participation that the PD project aims at

• participatory design results can be achieved in many different ways
• and there are many ways in which a PD result can be participatory
what is participation & how to think about it

- degrees of participation
  - manipulation, legitimacy, efficiency, transformation (Gaventa 2006)
  - non-participation, tokenism, citizen power (Arnstein 1969: ladder of participation)
  - typology of interests in participation (Cornwall 2008)
what is participation & how to think about it

- degrees of participation
  - ...
  - typology of interests in participation (Cornwall 2008)

Table 2 A typology of interests

<table>
<thead>
<tr>
<th>Form</th>
<th>What ‘participation’ means to the implementing agency</th>
<th>What ‘participation’ means for those on the receiving end</th>
<th>What ‘participation’ is for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal</td>
<td>Legitimation – to show they are doing something</td>
<td>Inclusion – to retain some access to potential benefits</td>
<td>Display</td>
</tr>
<tr>
<td>Instrumental</td>
<td>Efficiency – to limit funders’ input, draw on community contributions and make projects more cost-effective</td>
<td>Cost – of time spent on project-related labour and other activities</td>
<td>As a means to achieving cost-effectiveness and local facilities</td>
</tr>
<tr>
<td>Representative</td>
<td>Sustainability – to avoid creating dependency</td>
<td>Leverage – to influence the shape the project takes and its management</td>
<td>To give people a voice in determining their own development</td>
</tr>
<tr>
<td>Transformative</td>
<td>Empowerment – to enable people to make their own decisions, work out what to do and take action</td>
<td>Empowerment – to be able to decide and act for themselves</td>
<td>Both as a means and an end, a continuing dynamic</td>
</tr>
</tbody>
</table>
what is participation & how to think about it

• participation: the action or fact of having or forming a part of something, the sharing of something

• participation in decision-making in design
  • see: evaluate the situation, bring in possibilities / choices
  • move: select one choice
  • & try it out: concretize it
  • see: evaluate if it leads in the right direction (vision)

• framing a PD project
• creating design ideas in PD
• selecting design ideas to implement
• concretizing design choices
• seeing /evaluating the results of a choice
• understanding how decisions interact
• planning for a sustainable design result