



*Participatory Design and Sustainability  
a literature review of PDC Proceedings*

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# A long-standing concern in Participatory Design

- Influencing participants, systems, and society beyond the time-frame of PD interventions/projects has concerned PD since its early years
  - Participants' empowerment to last beyond the intervention itself (Bødker 1996)
  - Sustainable system design for better integration in use/work contexts (Kensing et al 1998)
  - Tackling challenges of sustainability as means to make PD relevant also outside academia (Dittrich et al. 2002)
- Lack of a specific focus on the concern: often conflated and resolved into «mutual learning» (Iversen and Dindler 2014)

# What does «sustainability» means in/for PD?

## Literature review

- Search for «sustain\*» in *Title, Keywords, Abstract*
- 14 editions of PDC (691 items)

	2002	2010	2012	2014	2016	TOT
FULL	1	2	1			<b>4</b>
SHORT		1	2	6	3	<b>12</b>
OTHER		1		2	2	<b>5</b>

Papers read and annotated along the questions:

- How does sustainability link to the objectives?
- How do authors define “sustainability”?
- What is the target of sustainability?

## Limitations

- Sample limited to PDC proceedings
- Analysis at structural & logic levels of papers

# Use patterns for «sustainability»

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## *PD for Sustainability (PD4S)*

- Papers where PD emerges as an approach that can help tackling the challenges put forth by ‘sustainability sciences’

E.g. *Research agenda of Participatory Design (PD) in the area of collaborative transnational **rule-making on global sustainability concerns**. The paper adopts a pragmatic approach to interdisciplinary work, identifying new opportunities for PD by pointing to **social science oriented processes that may be strengthened by the theory and practice of PD**. (Buhmann 2014)*

# Use patterns for «sustainability»

## *Sustainability of PD Practice (SPDP)*

- Papers where the challenges of sustaining PD practice concretely are engaged with

*E.g. In this paper, we present effects-driven IT development, which is **an instrument supporting a proactive strategy for sustained participatory design** and implementation of large IT projects. (Hertzum and Simonsen 2010)*

# Use patterns for «sustainability»

## *Sustainability of PD Results (SPDR)*

- Papers that focus on the challenges and approaches that emerge in relation to providing sustainable outcomes

*E.g. Objective of the paper are: i) to clarify **how Participatory Design could support the sustainability and the effectiveness of an alternative**, ii) to present an experimentation with renewable energy as CPR as an alternative model to the actual vision of the energy system. (Capaccioli et al. 2016)*

# Some emergent and recurring themes

- PD4S: *reconfiguration and realignment* (of heterogeneous and diverging interests)
- SPDP: *design-in-use and tailorability*
- SPDR: *mutual learning, sense of ownership, and end-user development*
- SPDP&SPDR: *infrastructuring*



# ...and a recurring gap

- No sound nor explicit definition for «Sustainability»
  - a given for granted concept hinting at ‘the ability to continue or be continued for a long time’

Makes it difficult to

- Understand what PDers are after concretely (e.g. Temporality of sustainability)
- Articulate the relationship between sustainability and other PD principles (e.g. Empowerment, participation)
- Retrospectively look at what has been achieved (e.g. Assessing sustainability?)
  
- Call for explicit position towards and operationalization of «sustainability»

# A tentative (and broad) definition

## Sustainability in PD as

*the durability of alignments among the social and technical dimensions of PD processes, or PD outcomes, independently from and/or after the involvement and active intervention of an external participatory designer or researcher.*

# List of papers

## **FULL**

- Bossen, Claus, Christian Dindler, and Ole Sejer Iversen. 2010. 'User Gains and PD Aims: Assessment from a Participatory Design Project'.
- Buscher, Moniker, Dan Shapiro, Alexander Voss, Mark Hartswood, Rob Procter, Roger Slack, Alex Voss, and Preben Mogensen. 2002. 'Promises, Premises and Risks: Sharing Responsibilities, Working up Trust and Sustaining Commitment in Participatory Design Projects
- Davis, Janet. 2012. 'Early Experiences with Participation in Persuasive Technology Design
- Hertzum, Morten, and Jesper Simonsen. 2010. 'Effects-Driven IT Development: An Instrument for Supporting Sustained Participatory Design'.

## **SHORT**

- Baumann, Karl, Benjamin Stokes, François Bar, and Ben Caldwell. 2016. 'Designing in "Constellations": Sustaining Participatory Design for Neighborhoods'.
- Buhmann, Karin. 2014. 'Enhancing Collaborative Rule-Making on Global Sustainability Concerns Through Participatory Design: A Research Agenda Based Empirically on United Nations Developments on Business Conduct'.
- Capaccioli, Andrea, Giacomo Poderi, Mela Bettega, and Vincenzo D'Andrea. 2016. 'Participatory Infrastructuring of Community Energy'.
- Dick, Holger, Hal Eden, Gerhard Fischer, and Jason Zietz. 2012. 'Empowering Users to Become Designers: Using Meta-Design Environments to Enable and Motivate Sustainable Energy Decisions'.
- Grenville, Delia. 2012. 'Framing Participatory Practices in a Large Corporation'.
- Haskel, Lisa. 2014. 'Bridging the Gaps: Building on Experience with Participatory Design'.
- Haskel, Lisa, and Paula Graham. 2014. 'Hublink: A Case Study in Participatory Design and Open Source in the Third Sector'.
- . 2016. 'Whats GNU Got to Do with It?: Participatory Design, Infrastructuring and Free/Open Source Software'.
- Huybrechts, Liesbeth, Jessica Schoffelen, and Ben Hagenaars. 2014. 'Make-and-Tell in Haspenwood: On Generativity in Sustainable Design'.
- Kilbourn, Kyle, and Marie Bay. 2010. 'Foresight and Forecasts: Participation in a Welfare Technology Innovation Project'.
- Pérez-Bustos, Tania, and Manuel Franco-Avellaneda. 2014. 'Embroidering Self-Knowledge: Systematization of Experiences and Participatory Design of Weaving As a Caring Practice in Cartago, Valle, Colombia'.
- Uchida, Yuki, Fumiko Ichikawa, and Hiroshi Tamura. 2014. 'Powers of Ten: Acquiring Sense of Ownership in Grow'.

## **OTHER**

- Bossen, Claus, Christian Dindler, Julia Garde, and Volkmar Pipek. 2014. 'Evaluation, Sustainability and Long-Term Effects of Participatory Design Projects'.
- Dittrich, Yvonne, Retha De La Harpe, Mikko Korpela, Gertrudes Macueve, Rahel Bekele, and Jens Kaasbøll. 2014. 'Participation for Development'.
- Eriksen, Mette Agger, Anna Seravalli, Per-Anders Hillgren, and Anders Emilson. 2016. 'Collaboratively Articulating "Urban" Participatory Design?!'.
- Huybrechts, Liesbeth, Pablo Calderón Salazar, and Katrien Dreessen. 2016. 'De Andere Markt: Transferring Imaginations of Work'.
- Nilsson, Lina, Christel Borg, Malin Hofflander, and Sara Eriksén. 2010. 'PD 3.1 to the Rescue: Challenges for Participatory Design in a Health Care Context'.