## MUO-E3050 - Design for Social Change - Co-Design D, 26.10.2022-07.12.2022

Teacher in charge: Prof Sampsa Hyysalo <u>sampsa.hyysalo@aalto.fi</u> Co-teacher: Doctoral candidate Goeun Park <u>goeun.park@aalto.fi</u>

**DSC-CD** course provides students with basic understanding and competences to build design projects aimed towards social change through codesign arrangements. The course has two key themes:

- 1. Theories and key concepts of social change (Predominantly week one, but deepened across DSC-CD) provides a selective overview of most design relevant research on what it takes to achieve significant social change. DSC provides basics of core concepts, including sociotechnical systems, path dependence and path creation, sociotechnical couplings and interdependencies, practice change, activist and post-capitalist frameworks, policy issues and economic drivers. These resources are key to undestanding what is involved in social change, particularly sociotechnical change which is typically the type of social change where design is involved.
- 2. Collaborative design for social change: collaborative design extending design from professionals to impacted peoples and relevant stakeholders is often a prerequisite for fostering social change. The interests, resources, legitimacy and enthusiasm of these peoples need to be met for a change initiative to have a chance to succeed. This is very difficult for designers to approximate these in their studio alone. DSC features a set of hands-on exercises and associated learning materials on key aspects of planning and running different types of collaborative design in different settings. Successful design collaboration requires analyzing the big picture contexts and working from there to the nitty gritty details of designing for collaboration (... and back again). The student groups use these learning to device a plan for use (or non use) of collaborative design as part of their extended project brief and, if practicable, also enact some of the planned actions.

#### LEARNING OUTCOMES: On successful completion of this course, students will be able to:

- understand how codesign can facilitate social change in different socio-techno-economic settings;
- critically assess potentials and pitfalls of different strategies to social change in particular contexts;
- plan projects so that the merits and downsides of different ways, combinations, intensities and resources for fostering change are adequately addressed;
- assess potentials and pitfalls of different approaches to codesign for social change.

#### Assessment Methods and Criteria:

- Clear **understanding** of how design can facilitate social change in different socio-techno-economic settings; literature assignment
- **Critical assessment** of the potentials and pitfalls of different strategies to social change in particular contexts; in-class exercises and own/group project planning
- **Demonstration** of ability to plan projects so that the merits and downsides of different ways, combinations, intensities and resources for fostering change are adequately addressed; in-class exercises and own/group project planning
- **Assessment** of the potentials and pitfalls of different approaches to design for social change. in-class exercises and own/group project planning and literature assignment
- **Attendance** and **participation** in at least 80% of programmed lectures, workshops, seminars or field visits and successful completion of all teaching assignments and exercises within deadlines given.

#### Workload

Design for Social Change - Codesign (DSC-CD) 6 ects, 162 hrs

- Lectures, in-class demonstrations, in-class discussions and in-class work with tutoring: 98 hrs
- Independent literature study: 25 hrs
- Out of class work in own project assignment individually or in teams, preparing a presentation: 17 hrs
- Time to think: 22 hrs

#### Prerequisites:

User Inspired Design course or equal knowledge. Equal knowledge refers either to minimum of 10 ects of prior studies related to social change, design strategy, human centred design, co-design or a corresponding topics, or it can be demonstrated by passing a screening exam.

SDG: Sustainable Development Goals the DSC-CD addresses

1 No Poverty; 2 Zero Hunger; 3 Good Health and Well-being; 5 Gender Equality; 7 Affordable and Clean Energy; 11 Sustainable Cities and Communities; 12 Responsible Production and Consumption; 13 Climate Action

Course contact teaching times for Design for social change-Codesign is the following (detailed in below pages). In short, the first week runs together with 'design for social change – strategy, and there is activity every day. After this, Design for social change – codesign runs every wednesday and friday full days separate from DSC-Strategy.

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Week 1. 24 Oct Mon 9.15-16:00 at Väre F102
        26 Oct Wed 9.15-16:00 at Väre F102
        27 Oct Thu 9.15-16:00 at Väre F101
        28 Oct Fri
                     9.15-16:00 at Undergraduate center M240
Week 2. 02 Nov Wed 9.15-16:00 at Väre F102
        04 Nov Fri
                     9.15-16:00 at Väre F102
Week 3. 09 Nov Wed 9.15-16:00 at Väre F101
        11 Nov Fri
                     9.15-16:00 at Väre O101
Week 4. 16 Nov Wed 9.15-16:00 at Väre F101
                     9.15-16:00 at Undergraduate center DELOITTE U119
        18 Nov Fri
Week 5. 23 Nov Wed 9.15-16:00 at Väre F101
                     9.15-16:00 at Väre F102
        25 Nov Fri
Week 6. 30 Nov Wed 9.15-16:00 at Väre F101
        02 Dec Fri
                     9.15-16:00 at Väre F102
Week 7. 07 Dec Wed will be announced later F101
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#### Reading assignments

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Week 1. Markussen (2019) by 27 Oct
Botero et al. (2020) by 28 Oct
Week 2. Hyysalo et al. (2019a) by 8 Nov
Müller & Druin (2002) by 8 Nov
Week 3. Botero & Hyysalo (2013) by 15 Nov
Week 4. Hyysalo et al. (2019b) by 22 Nov
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#### WEEK 1.

## **MON 24 Oct: Introduction and Overview (JULIER & HYYSALO)**

09:15 Preliminaries09:30 DSC - Strategy intro (Julier)10:45 DSC - Codesign intro (Hyysalo)12:00-13:15 Lunch

13:15 What is social change? (Julier)

## TUE 25 Oct: Together with Design for social change (DSC)-Strategy, Independent reading day

Compulsory reading 1. (reading assignment to be returned by morning of 27 Oct)

Markussen, T. (2019). The impure politics of design activism. In Tom Bieling (ed.) Design (&) Activism:

Perspectives on design as activism and activism as design (pp. 35-46). Mimesis edizioni.

Compulsory reading 2. (reading assignment to be returned by morning of 28 Oct) Botero, A., Hyysalo, S., Kohtala, C., & Whalen, J. (2020). Getting participatory design done: From methods and choices to translation work across constituent domains. International Journal of Design, 14(2), 17-34.

## WED 26 Oct: LECTURE 1 DSC-CoDesign (HYYSALO) (SEE NEXT PAGE FOR DETAILS!)

#### **9:15-15:30** Lecture topics:

- 'Politics by technological means'
- Obduracy, path dependency and Coleridge's dilemma
- Inferring obduracy vs inferring political intent

## **THU 27 Oct: Together with DSC-Strategy**

09:15 Discussion of Reading 111:00 A Short History of Design for Social Change13:15 Strategies and Tactics (Julier)

## FRI 28 Oct: LECTURE 2 DSC-CoDesign (HYYSALO) (SEE PAGE 5 FOR DETAILS!)

**09:15-10:30** Reading discussion

10:45-12:00 Lecture topics:

- Design participation as an approach to include relevant peoples into change making
- Incorporating peoples-to-be-affected in design as experts of their own domains
- Why and how does design participation work

13:00 -16:00 Exercise 1: Designing a codesign workshop

## WED 26 Oct: LECTURE 1 DSC-CoDesign (HYYSALO)

**Week theme:** sociotechnical change: what is it, why it can be hard and how to assess it a.k.a what do we need to understand if we want to change technical systems and why codesign is useful in it

#### **Lecture day 1 topics:**

- 'Politics by technological means'
- Obduracy, path dependency and Coleridge's dilemma
- Inferring obduracy vs inferring political intent

#### **Recommended readings:**

On path dependency

David, Paul. (1985), Clio and the Economics of QWERTY. The

American Economic Review. Vol. 75, No. 2: 332-337.

#### **Additional readings:**

On politics and values embedded in technology

Winner (1988), Do Artifacts Have Politics? In L. Winner, The Whale and the Reactor. University of Chicago Press: Chicago, IL.

On difficulties in inferring politics and values embedded in technology

Joerges, B (1993), Upon Opening the Black Box and Finding It Empty. Science,

Technology, & Human Values Vol. 18, No. 3: 362-378.

An accessible introduction to contingencies and social choice in technological development

**Pinch & Bijker (1989) The Social Construction of Facts and Artifacts.** In Bijker, Pinch and Hughes: The social construction of technological systems. MIT press Cambridge, MA

On why legislation and regulation comes by default too late to govern technological novelty

Kerr, O (2006) Searches and seizures in a digital world. harward law review.

On what technologies do and circumstantial conception of human existence

Perry, J., Macken, E., Scott, N., And McKinley, J. (1997). "Disability, Inability And Cyberspace." In B. Friedman (ed.), Human Values And the Design Of Computer Technology. Cambridge University Press: New York, NY.

#### FRI 28 Oct: LECTURE 2 DSC-CoDesign (HYYSALO)

## Day 2 topics:

- Design participation as an approach to include relevant people into change making
- Incorporating peoples-to-be-affected in design as experts of their own domains
- Why and how does design participation work

Compulsory reading (the reading assignment to be returned by 9:00 am on 28 Oct):

Botero, A., Hyysalo, S., Kohtala, C., & Whalen, J. (2020). Getting participatory design done: From methods and choices to translation work across constituent domains. International Journal of Design, 14(2), 17-34.

Day 2 exercise A: Design a workshop to ideate a concept for a sustainable maker space and its activities that engages also the sustainability of latest distributed manufacturing technologies. Location downtown Helsinki.

- Just one workshop
- Aim is to move towards a specification of what this maker facility would be like
- Aim is to define the key user and stakeholder groups for a realizable concept
- A step by step exercise to prime the following exercises

#### **Recommended readings:**

How design participation has changed

Hyysalo, S., Jenssen, T., Oudshoorn, N. (2016) Introduction to the new production of users. In Hyysalo, S., Jenssen, T., Oudshoorn, N (Eds). *The new production of users: Changing innovation collectives and involvement strategies*. New York: Routledge.

#### **Additional readings:**

Deeper approaches to understanding technological change

Williams & Edge (1996), The Social Shaping of Technology. Research Policy. Vol. 25: 865-899.

On challenges and tensions in grassroot design activist social change initiatives

Smith, Adrian, Mariano Fressoli, and Hernan Thomas. 2014. "Grassroots Innovation Movements: Challenges and Contributions." *Journal of Cleaner Production* 63: 114–24.

WEEK 2 DSC: CoDesign (HYYSALO) WED 02 Nov and FRI 04 Nov

Week 2. theme: CoDesign and sociotechnical democracy a.k.a how to involve implicated people in envisioning and deciding on changes

## Lecture day 3 topics:

- Different orientations to democratizing design
- Ideals of design democracy from citizen control point of view
- Design democracy from design/use domain specialization and information economies
- Range of approaches to design democracy (++ from UID)
- CoDesign as practical arrangement
- Intermediate designing
- Exclusion in inclusion; Freedom vs support in codesign
- Material and social mediation in arrangements

**Day 4 exercise A:** Design a multidisciplinary expert <u>workshop for envisioning</u> energy technology change to 2035 (wind, solar PV, energy efficiency, demand response systems)

- Just one workshop
- Promoters, conservatives and hinderers of change
- Extrapolation from present, extrapolation from other countries, structural change
- Systems interrelations affect the speed of change

## Compulsory readings (the reading assignments to be returned by 08 Nov):

1) Hyysalo, S., Hyysalo, V., and Hakkarainen, L. (2019). The work of democratized design in setting-up a hosted citizen-designer community. *International Journal of Design* 13 (1): 69-82. PDF

2) Müller, M & Druin, A (2002) Participatory design: The third space in HCI. Jacko, J & Sears, A (eds) The human-computer interaction handbook: fundamentals, evolving technologies and emerging applications, 1051–1068. Lawrence Earlbaum: Hillsdale, NJ, US.

#### **Recommended readings:**

On depth of participation in terms of citizen control and power

**Arnstein, Sherry R. 1969. A Ladder of Citizen Participation.** *Journal of the American Institute of Planners* 35 (4): 216–24

#### On intermediate designing

Hyysalo, S., Marttila, T., Perikangas, S., and Auvinen, K. (2019) Intermediate codesigning in transitions governance: Catalysing and channeling participant action. *The Design Journal*. <a href="https://doi.org/10.1080/14606925.2019.1661557">https://doi.org/10.1080/14606925.2019.1661557</a>

### On understanding and analysing the mediation of human cognition and action

Engeström, Y (2000) Activity theory as framework for analysing and redesigning work. Ergonomics 43 (7) 960-976.

#### On history and ideas of democratizing technology design

Törpel, B, A Voss, M Hartswood, and R Procter. 2009. "Participatory Design: Issues and Approaches in Dynamic Constellations of Use, Design, and Research." In Configuring Designer-User relations, edited by A Voss, M Hartswood, R Procter, M Rouncefield, R S Slack, and M Büscher, 13–30. London, UK: Springer.

Asaro, Peter M. 2000. "Transforming Society by Transforming Technology: The Science and Politics of Participatory Design." Accounting, Management and Information Technologies 10 (4): 257–90.

### WEEK 3 DSC: CoDesign (HYYSALO) WED 09 Nov and FRI 11 Nov

Week theme: Beyond and instead of the workshop

a.k.a codesign is not about workshops, its about adequate ways to include people in envisioning, designing and making decisions

#### **Lecture day 5 topics:**

- Selecting approaches (codesign journey planner, action catalogue and other resources)
- Approach, methodology, methods, techniques, arrangements
- Extending design to 'use-time'
- Building a portfolio to aide participation

**Day 6 exercise B**: Build a <u>portfolio of codesign actions</u> for participatory design and marketing of landmark library

- Renewal of old institution, a flagship
- Increase ownership
- 2-4 year time span
- Design insight lacking in some areas
- Wide and differentiated envisioned user base
- Wide and differentiated stakeholder and partner networks
- Several funding and decision making constituencies
- The merits and shortcomings of complementary actions that are not hardwired into series

## Compulsory reading (the reading assignment to be returned by 15 Nov)

Botero, A. and Hyysalo, S. (2013) Ageing together: Steps towards evolutionary co-design in everyday practices. *CoDesign: International Journal of CoCreation in Design and the Arts* 9 (1): 37-54. <a href="https://doi.org/10.1080/15710882.2012.760608">https://doi.org/10.1080/15710882.2012.760608</a>. <a href="https://doi.org/10.1080/15710882.2012.760608">PDF</a>

## Compulsory reflecting reading to be read AFTER exercise B

Hyysalo, V. and Hyysalo, S. (2018) Mundane and strategic work in collaborative design. *Design issues* 34 (3): 42-58. PDF

#### **Recommended readings:**

On extended design approaches premised on design in use-time

Hartswood et al. (2002) CoRealization, a principled synthesis of participatory design and ethnomethodology. Scandinavian journal of information systems.

Fischer, Gerhard, and Elisa Giaccardi. 2006. "Meta-Design: A Framework for the Future of End-User Development." In End User Development, 427–57. Springer

#### On design in and for citizen communities

Verhaegh, S., Van Oost, E. & Oudshoorn, N. (2016). Innovation in Civil Society: The Socio-Material Dynamics of a Community Innovation. Chapter 8. In Hyysalo, S., Jenssen, T., Oudshoorn, N (Eds). *The new production of users: Changing innovation collectives and involvement strategies*. New York: Routledge.

Johnson, M. Hyysalo, S & Tamminen, S. (2010) Virtuality of Virtual Worls, or, what can we learn from play-acting horse girls and marginalized developers. Symbolic Interaction 35. 33 (4) University of California Press, Pages: 603-633.

DiSalvo, Carl, Andrew Clement, and Volkmar Pipek. 2012. "Participatory Design For, With, and by Communities." International Handbook of Participatory Design. Simonsen, Jesper and Toni Robertson (Eds). Oxford: Routledge.(2012), 182–209. Hard copy only: ask from sampsa if you get interested

#### WEEK 4 DSC: CoDesign (HYYSALO) WED 16 Nov and FRI 18 Nov

Week theme: Using codesign to fostering long-term difficult change a.k.a what design can do when the change is not designable

## **Lecture day 7 topics:**

- Social change and limits to 'designability'
- Understanding infrastructural conditions to design and change
- Transitions to sustainability and transition management
- Identifying intervention points in broader sociotechnical change
- Operating with different 'hypotheses and theories of change'
- (Forms of design change communities)

**Day 8 Exercise C:** Design change engagement series to create mid-range transition pathways among the diverse actors needed in energy/biodiversity / municipal carbon reduction

- Cross sectoral systems change cannot be designed (adequately)
- Diverse areas of expertise and interests need to be included
- Serious economic and social implications; playfulness needs to be legitimated
- How change can be effectively pushed forward may vary
- The goals, change process outlines, identified actions cannot be achieved in just one workshop
- 'The house of cards -curse of serial workshops and actions';

Compulsory reading to be read AFTER exercise C (The reading assignment to be returned by 22 Nov) Hyysalo, S., Marttila, T., Perikangas, S., and Auvinen, K. (2019) Codesign for transitions governance: A Mid-range pathway creation toolset for accelerating sociotechnical change. Design Studies 63: 181–203. PDF

#### **Recommended readings:**

System transitions and long-term sostech regime change

Geels, F.., Schot, J., 2007. Typology of Sociotechnical Transition Pathways. Research Policy 36, 399–417.

Hoogma, R et al. (2001) experimenting for sustainable transit. Chapter 1 introduction

## On understanding infrastructure

Star, Susan Leigh, and Karen Ruhleder. 1996. "Steps toward an Ecology of Infrastructure: Design and Access for Large Information Spaces." Information Systems Research 7 (1): 111–134.

On identifying intervention in systems change and using value sensitive design to deliver

Mok, L. and Hyysalo, S. (2018) Designing for energy transition through Value Sensitive Design. *Design Studies* 54 (1): 162-183. https://doi.org/10.1016/j.destud.2017.09.006. PDF

On understanding how structures are enacted (a.k.a how they affect action)

Orlikowski, W (2000) Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations. Organization science Vol. 11, No. 4, July–August 2000, pp. 404–428

Fundamental reading on value sensitive design

Friedman, Kahn, and Borning (2006): Value Sensitive Design and Information Systems.

In P. Zhang & D. Galletta (Eds.), Human-Computer Interaction in Management Information Systems: Foundations. M.E. Sharpe, Inc: NY

## WEEK 5 DSC: CoDesign (HYYSALO) WED 23 Nov and FRI 25 Nov

Week theme: Taking stock of the covered issues on (co)design for social change to inform your project

## Lecture day 9 topics

- Assessing change domain characteristics
- Assessing agendas
- Assessing and selecting relevant participants and participations
- Assessing designer-user approach
- Assessing involvement arrangements
- Orchestrating material and social mediation
- Assessing recording and take-aways
- Assessing the not-so-small matter of time
- Planning design iterations

## Day 10 exercise D: your (team) project

- Noon: setting up and laying out basic parameters of the project
- Afternoon: Tutoring

## **Compulsory readings:**

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## **Recommended readings:**

- Recommendations based on your team project

## **Additional readings:**

- Recommendations based on your interests

# WEEK 6 DSC: CoDesign (HYYSALO) WED 30 Nov and FRI 02 Dec

Week theme: Project presentations, course summary and feedback

## **Day 11**

Noon: Preparing project presentations and tutoring

## **Day 12**

Project presentations and comments

Own project presentations

10 minutes: Project presentation

15 minutes: Codesign plan presentation 15 minutes: Commentary and discussion

10 min break after two presentations

45 mins each = 6 in 270 minutes (with 15 mins overrun space to 15:30 used for reflection if possible)

## WEEK 7 DSC: CoDesign (HYYSALO)

## WED 7 Dec

Noon: Course Feedback DSC-STRATEGY Afternoon: Course feedback DSC-CODESIGN

**FRI 8 Dec:** Return the latter part of reading assignment by 08 Dec 16:00 (We need to hand forward grading by 12 Dec)

# Readings assignment

On each reading in the course compulsory reading package list four things prior to the following Wednesday (ie Wednesday after the week in which the compulsory reading is listed)

- 1) What were the core insight(s) of the reading? Max 3 insights
- 2) What is the contribution of the reading to your own practice?
- 3) Where do you disagree with the author(s)?
- 4) What do you want to ask about the reading in the class? Max 2 questions

This assignment will form the <u>first half</u> of your course essay: the <u>second half</u> you can complete by the end of the course; this is simply adding to your original answers the new insights that you gain on each topic and its relevance to your interest and project (reflections). Return the whole assignment in one document at the end of the course to BOTH <u>goeun.park@aalto.fi</u> AND <u>sampsa.hvysalo@aalto.fi</u> **by 08 Dec, 16:00.** 

An example of filling in, how I filled my appraisal of "Introduction" in "New Production of users"

## 1) The core insight(s) of the reading (max 3 main insights)?

- There is an ongoing intensification of user involvement in across innovation activities as well as users capacity to contribute
- "New" production of users has taken place ever since 1920s, increasing recognition of the previously separated areas
- User involvement is increasingly a "strategic" rather than empowering or tactical endeavor

#### 2) What is the contribution of the reading to your own practice?

- It was worth trying to characterize the big changes around codesign

#### 3) Where do you disagree with the author(s)?

- The introduction cuts many corners in how users are currently embedded in product, service and systems design. To hammer the basic points in it is "too argumentative", that is, it can be read as presenting the advanced forerunner organizations as the future for all companies, which will not be the case.

#### 4) What you want to ask about the reading in the class (max 2 questions)?

- when not to involve users, when does it make no sense?
- has the democratizing thrust in user involvement now flown out the window? If so, what's the point of bothering with user involvement?