



DoCS4Design



Doctoral Courses System for Design

The Research through Design course (C*)

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Erasmus+ project DoCS4Design (Doctoral Courses System for Design)

Participants: 20 PhD candidates and 12 staff at partner institutions

Time: 6 February - 23 March 2023

Location: online

Citation:

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Topic & Need

Design research builds on a diverse range of research traditions from science, humanities, arts, and engineering. In between those established (and evolving) traditions design is gaining position as part of research efforts.

In Research through Design, design methods, tools, and competencies are put to use in an effort that is aimed at producing knowledge. Because this is a recent development, PhD candidates in design often struggle to position their research, and specifically find it difficult to argue when they use design methods as part of doing research.



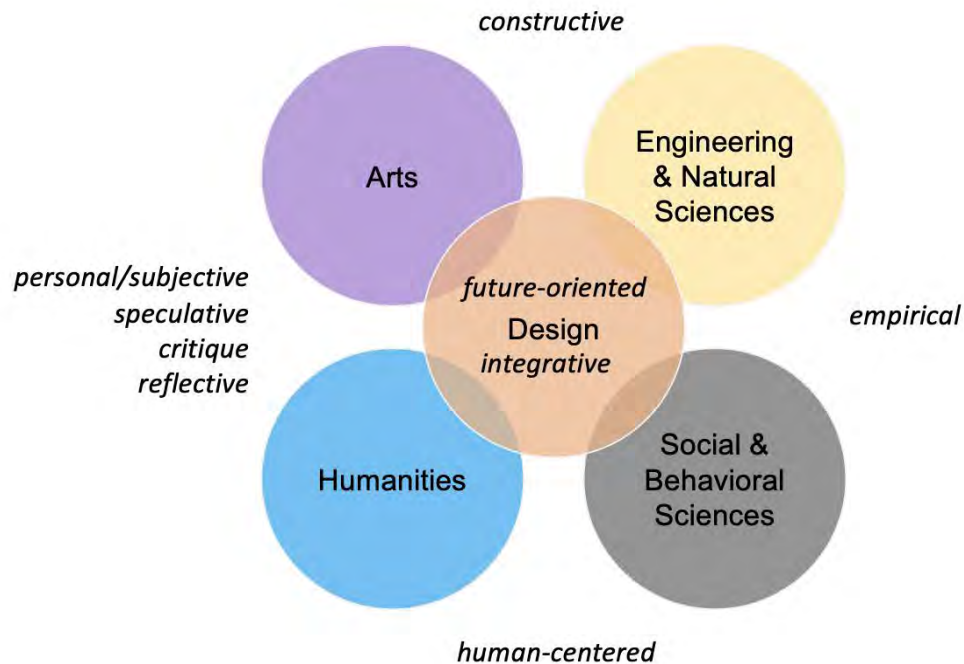


Fig.1: Design research is positioned inbetween older research traditions (Stappers, 2019).

Participants & Goal

The course aims to equip PhD candidates with an understanding of Research through Design, its methodological basis, current academic discourse, and successful documented examples. Participants learn respected published examples, how to position their own research between those, and can argue for the use of designerly (research) methods in producing knowledge.

A second goal of the course is that candidates get to know perspectives from different partner institutions, and look over the walls of their own schools.

Participants were 20 PhD candidates and 12 staff at partner institutions

Course Format (How we worked)

The course was based on earlier editions between the partners (2019, 2020). It spans four weeks, and works with 2-8 participants at each partner. In each week one theme is handled (method, knowledge, prototypes, dissemination), with the following structure:

1. The theme is introduced by a short video presentation, and a collection of readings.
2. In a first in-person meeting, all participants at each partner discuss the topic, led by a local researcher; they share their reflections and questions in a shared Q&A document with the organisers, who would respond before the 2nd meetings.
3. In a second online meeting, groups of 3 participants from different partners discussion the theme. One of the participants wrote questions and observations into the shared document. The organisers would again respond to these in the shared Q&A document.

Before the course starts, participants receive the PhD in Design - a Map & Glossary, which prepares them for the diversity of backgrounds of their online counterparts. They also receive an open-access publication 'Research through Design' (Stappers & Giaccardi, 2017), which contains theory covered in the course. In the first week, they also used the Representations to position themselves inbetween a selected set of preceding completed PhD candidates.

At the end of the course, there is an online plenary meeting with all participating candidates and researchers. This edition, the participants were so enthusiastic that it was decided at the meeting to have a 'reunion' one month later. That meeting was not required, but 16 candidates joined, and there was an informal chat over various topics in the course, and about the course formats. Several participants indicated that getting to know candidates at the other programmes was at least as valuable as learning about the content; some indicated they expected to maintain contact with one or more of the participants of the course.



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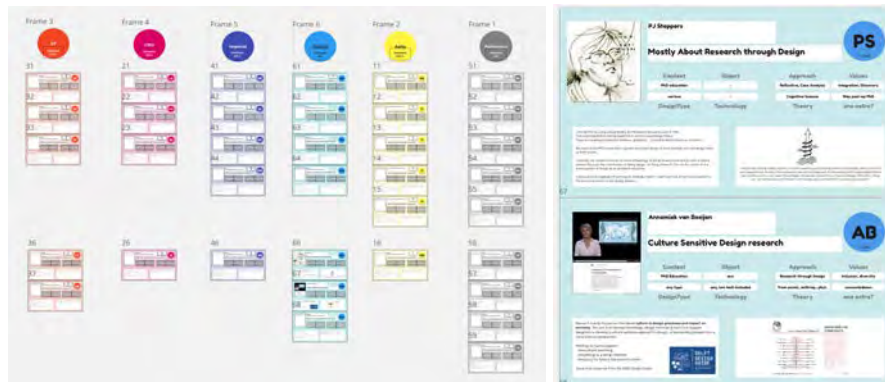


Fig. 2: Left: prepared vignettes for all participants in the course. Each column represents one of the institutions. Registered PhD candidates are shown at the top, participating staff researchers at the bottom of each column. Right: course organisers also prepared example vignettes introducing themselves.

Participants received course credits according to the rules at their own institution.

Resource materials developed

- Short videos to introduce the weekly topic, and the Representations tool.
- A compact version of the Research through Design chapter by Stappers & Giaccardi (2017) was shared in the course (this has the same content as the original chapter, but is easier to read and use in Miroboard discussions)
- PhD in Design - a Map & Glossary.
- PhD in Design - Representations
- An online Miroboard to share Vignettes introducing teachers and candidates.
- An online GoogleDoc for Q&A.





Outcomes

Participants enjoyed the meetings, and focusing on their research methods with different discussion partners. Especially the alternating between local in-person and international online meetings was deemed valuable, because it helped them to see broader opportunities than what they knew from their home institution. Some participants kept longer contact with counterparts at different universities.

At the end of the closing plenary meeting, several participants asked for a later 'reunion' meeting, which was organised one month after the course.

Impacts & Feedback

Learners appreciated access and overview of the 'respected publications' and core concepts in the field. In the online group meetings, they related the theory to their own particular practice. Some candidates extended their networks, and kept in contact with their counterparts after the course. All valued the deeper understanding about research methods.

In the earlier editions of the course, only the online meetings took place. Over the later iterations, we strengthened the interactions of the groups at each partner, where reflection of the candidates on what they could learn from other partner institutions proved valuable for both candidates and researchers.

In the 3 iterations of the course, we varied the number of participants, size of the groups, amount of literature, and format of the sequence of meetings. The alternation of within-institution and between-institution meetings went particularly well.

All partners found the course inspiring, and agreed in continuing the course after the DoCS4Design project would be finished.

References

Mattioli, F., Figoli, F.A., & Stappers, P.J. (2023) Connecting the PhD in Design: How PhDs Label Their Thesis Research. *LearnXDesign 2023*. The Design Research Society. 8 pp.

Stappers, P. J. (2019). Framework for Policy and Governance on Research through Design: Seeding document for panel session RTD2019 Conference 'Method & Critique', Thursday 21/3/2019 at Het Nieuwe Instituut, Rotterdam, The Netherlands.

Stappers, P. J., & Giaccardi, E. (2017). Research through Design. In M. Soegaard, & R. Friis-Dam (Eds.), The Encyclopedia of Human-Computer Interaction. (2nd ed., pp. 1-94). The Interaction Design Foundation. Chapter 43

Stappers, P.J., Sleswijk Visser, F, & van Boeijen, A.G.C. (2023) Design Labels: The words that Divide and Unite Us. 15th International Conference of the European Academy of Design, 19 October, Espoo, Helsinki. P 728-736.

Stappers, P.J. & van Boeijen, A.G.C. (editors, 2022) PhD in Design – A Map & Glossary. Docs4Design project.

Credits

The course was organized by P.J. Stappers, with researchers from each of the partners taking part.

All partners contributed to the output:

Aalto University	Elise Hodson, Guy Julier, Michel Nader, Sampsa Hyysalo
Carnegie Mellon University	Jonathan Chapman
Illinois Institute of Technology	Carlos Teixeira
Imperial College London	Rafael Calvo, Weston Baxter
Politecnico di Milano	Fabio Figoli, Francesca Mattioli, Lucia Rampino
TU Delft	Annemiek van Boeijen, Pieter Jan Stappers, Wilfred van der Vegte



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Appendix - Call for Participation

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INVITATION TO ONLINE COURSE

Positioning (in) Design Research

Are you a PhD candidate interested in the tensions between design and research? If you are from one of the DoCS4Design institutions (Aalto University, Carnegie Mellon University, Illinois Institute of Technology, Imperial College, Politecnico di Milano or TU Delft) we are looking forward to meeting you at this 4-day online course that will be organized across the DoCS4Design schools in February-March 2023. There is space for 4 participants from each of these schools.

What is the training about?

The training event focuses on common challenges for PhDs in Design: the methods for research, the tension between design and research (as in Research through Design) and the tension between scientific impact and societal impact. In this course you

- discuss these matters with peers outside your own school
- learn about your own position in the design research field and what is particular about your own school
- become familiar with methods literature from Research through Design

Why would you take part?

- To extend your network with peers from leading design schools
- To acquire knowledge for explaining PhD in Design in future career opportunities
- To understand the variety of methods in design research

How will you work?

The course consists of four weeks with the same structure: in preparation you will receive an introductory lecture and reading assignment; On Monday/Tuesday you have a short in-person orientation meeting with the four students from your own school and your local member of the DoCS4Design team. On Wednesday/Thursday/Friday you have an online discussion between three students from different schools, and write a brief summary of your findings.

At the end of the course we have a two-hour online plenary meeting with all students and the DoCS4Design team.

Who can take part?

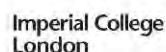
The course is open for four PhD candidates at each DoCS4Design partner. Candidates should already have some research results, and consolidated a research approach and topic (this is part of the basis for the discussions).

How do you take part?

Contact your DoCS4Design partner (that is probably the person from whom you received this call), and submit a 1A4 letter indicating your motivation to participate, and where you stand in your research (defined topic and approach, any results available).

Where does it take place?

The event will be online and in your own school.





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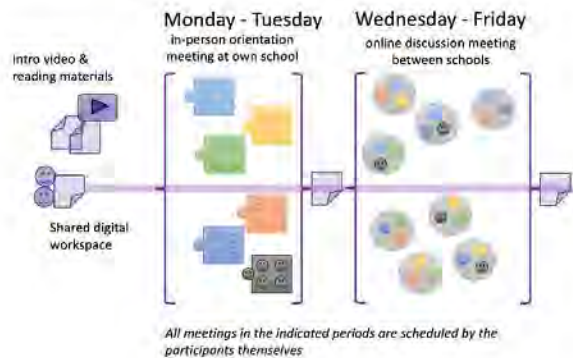
What does it cost and what does it bring?

Participation in the course is free of charge and registered participants will receive a training certificate. A number of ECTS for PhD candidates might be issued by your own institution; please refer to your PhD programme Coordinator in this regard. The ECTS will be issued to students who have attended more than the 75% of the training event.

Timing

Wednesday 18 January	Motivation letters for participation should be handed in with your local DoCS4Design team.
Monday 30 January (or earlier)	Confirmations will be sent as soon as possible.
Monday 6 February	We will distribute an online introduction lecture, the course manual, and reading materials, and instructions for making a vignette to introduce/summarize your research.
Monday 13 February	Participants hand-in completed vignettes.
Monday 20 February until Friday 17 March	The course will run for four weeks. See diagram below
Thursday March 23, 16:00-18:00 CET	The online plenary final meeting.

DoCS4Design Online Course – Weekly Schedule





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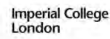


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Appendix - Sample lecture sheets (for video introduction)

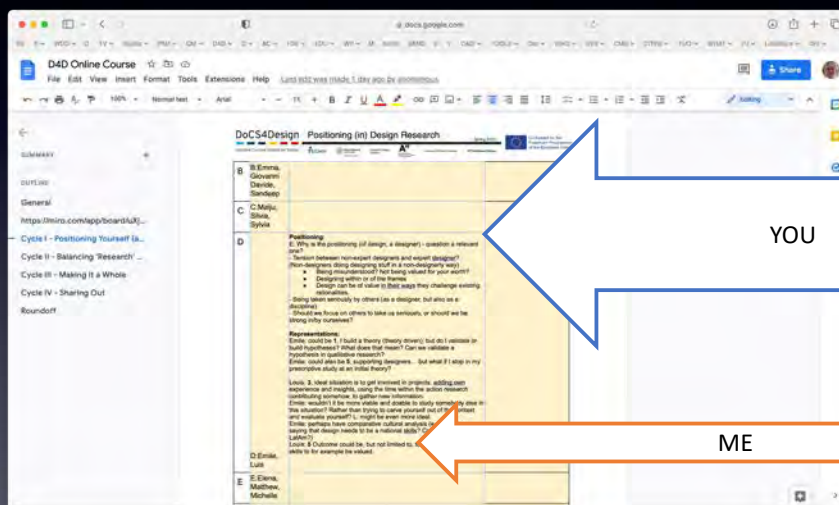
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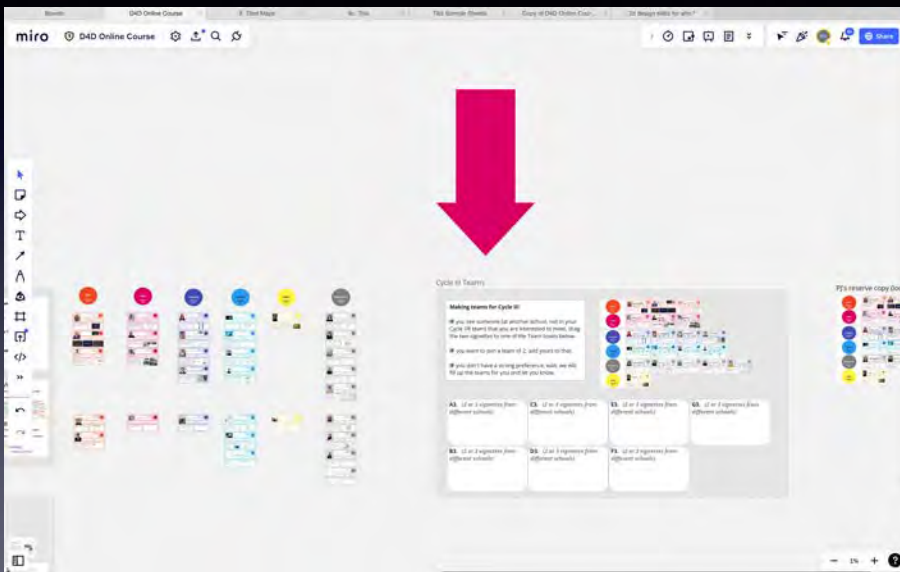


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Don't forget the GoogleDoc



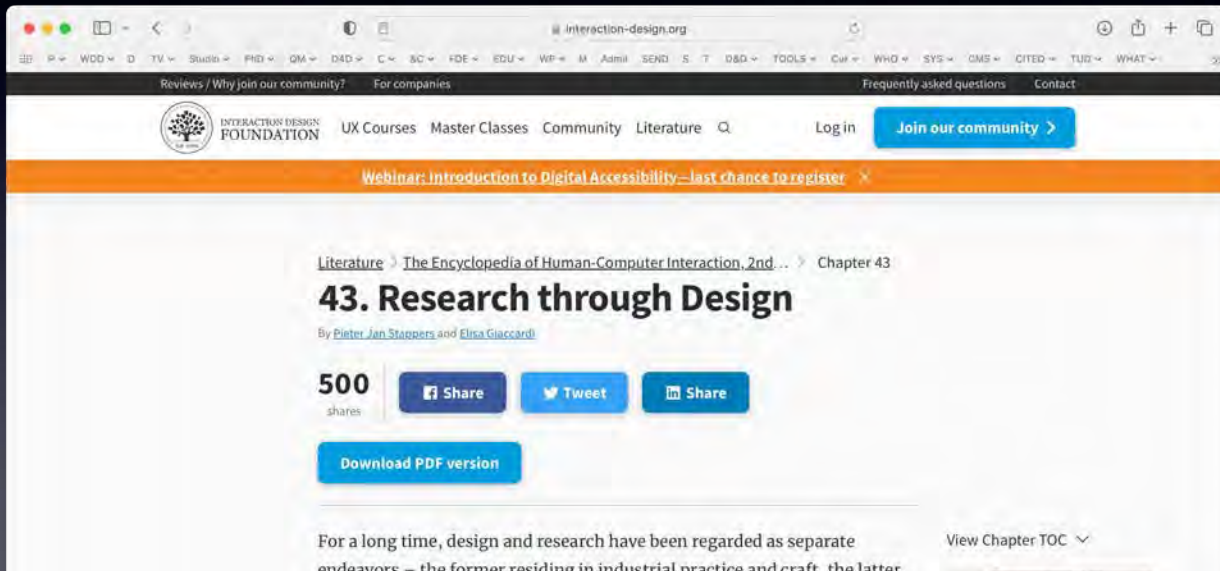
Who to meet in Cycle III



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The RtD chapter



Definitions and Examples

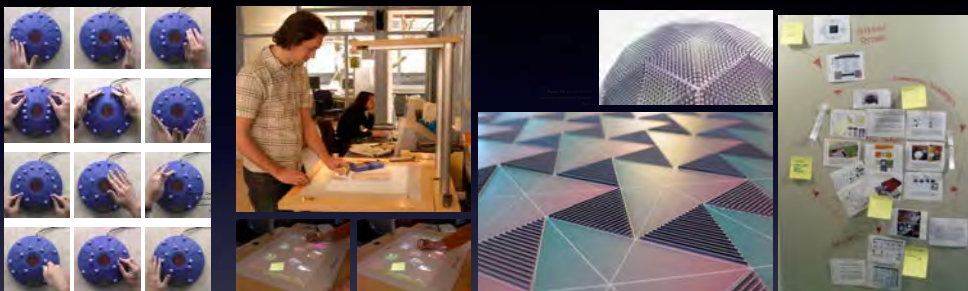


Figure 2.1. (left) Prototypes of a mobile phone, (middle) a person working at a table, (right) a wall with sticky notes and diagrams.

	Working Definition	Key Associated Terms
Doing Research	Work done with the intention to produce knowledge for use by others	Question, hypothesis, theory, investigation, interpretation, generalization, validation, discovery
Doing Design	Work done with the intention to produce a feasible solution to improve a given situation	Idea and concept generation, synthesis, development, integration, discovery, prototyping, invention, implementation, realization
Artifact	Object (often material) created during a design process	Sketch, blueprint, brief, specifications, vision, proposal, recommendation, business plan
Prototype	Artifact used in research that can realize the (inter)action that is studied	Implementation, realization, test, exploration, solution, proof of concept, construction

design
design of products
conventional design creating products

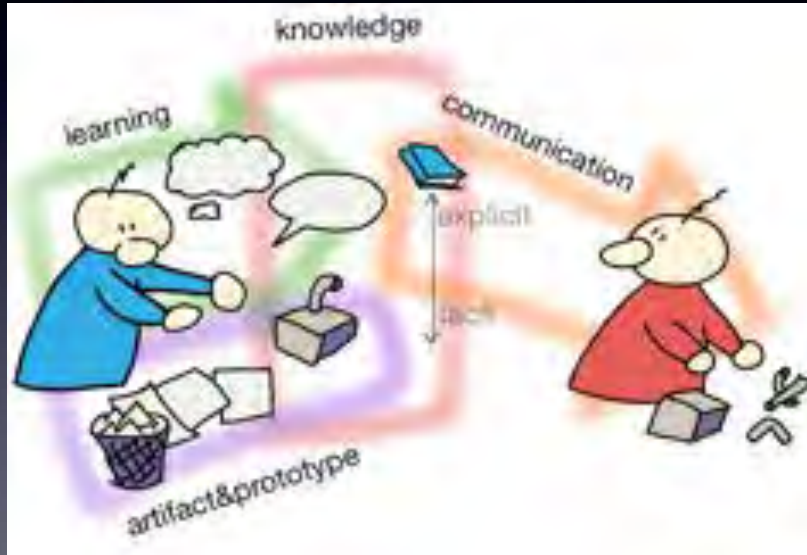
research
research into design
research about design methods

research
research for knowledge
conventional research creating knowledge

Figure 2.4 The aimed-for results of research and design are often different. This chapter aims to describe academic theory about the contributions of design to knowledge, and in that respect is itself in the middle category, 'research about design methods'.



Themes



Knowledge intake and output

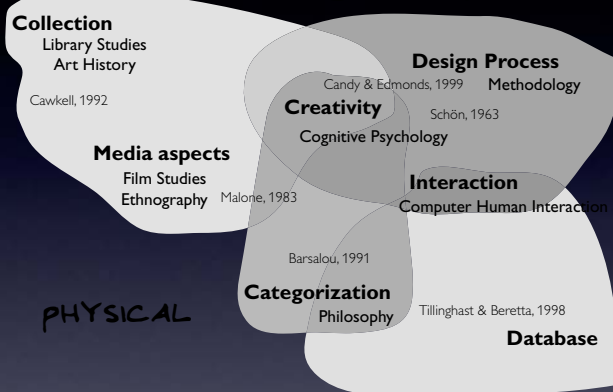




Figure 4.4 Annotated portfolio illustrating the style of Dieter Rams (from Gaver 2012)



(Images from flickr.com's Creative Commons. Credits: 1 Nick Wade, 2 Rene Spitz, 3 Brett Wayne, 4 ...)

general-to-particular
dimension
(Löwgren 2013)



Prototypes (a.k.a. 'Artefacts')

1. *Unfinished, and open for experimentation*
2. *A way to experience a future situation*
3. *A way to connect abstract theories to experience*
4. *A carrier for (interdisciplinary) discussions*
5. *A prop to carry activities and tell stories*
6. *A landmark for reference in the process of a project*

(Stappers, 2013)

- **What 'new knowledge(s)' are made in your research?**
- **What 'new thing(s)' are made in your research?**
- **(How) are these connected?**
- **What function do they serve? For whom?**
- **Is it tangible? How do you 'tell its story'?**

- **What challenges do you see?**
- **What opportunities do you see?**