



## Analysis of Case Studies

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Erasmus+ project DoCS4Design (Doctoral Courses System for Design)

Findings from this study were used in the training 'competencies for social impact' (see report)

Citation:

Nader Sayún, M. (2023). Analysis of Case Studies. Project Report. DoCS4Design project. Available at <http://DoCS4Design.eu>

15 Dec 2023



# DoCS4Design



Doctoral Courses System for Design

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## Topic & Need

The design discipline has evolved in the past 30 years at an astounding pace, from it being exclusively about manufacturing and aesthetics, into giving “focus on wider strategies and relationships between multiple actors” as described (Julier, 2022), or focused on the social and identities (Koskinen, 2023) As these two authors agree, design is increasingly involved in thinking of culture, politics, activism, speculation and other fields previously confined to social sciences: this of course includes management.

Such a change has added layers of complexity to the occupational identity of designers as described by Koskinen. As scholars around the world are searching for “the new definition of design”, a number of positions are being opened for designers in fields that did not traditionally have them, spanning from corporate entities to government agencies and non-governmental organisations. Proof of this is our previous research on the survey to design researchers: even though the majority of the job positions that respondents noted are in academia and the private sector, around 16% of these positions were held in the public and non profit sectors.

In response to this change, and in sight of the sustainability challenges of today’s world, universities are under mounting pressure to produce competitive graduates capable of working in diverse organisations and on complex problems.

This crisis of occupational identity also means that the skills that define designers and separate them from other professions are also difficult to define. Traditionally, they had knowledge of





materials, colours and shapes, eventually they became experts in users, usability and market research, but now it is much less clear; What capabilities do professional designers in non-traditional design positions allow them to increase their performance and achieve positive social impact?

The case studies build on past research to focus on design researchers who have successfully built a professional career, that being in public and private organisations.

## Goal

Following the survey that was done with graduates of PhD in design, the case studies aimed to understand in further detail the capabilities designers themselves considered as critical through their career to perform in their current positions and to achieve positive social impact.

Concretely, the first aims of the case studies were divided in two:

1. to build personas of design-researchers who are employed in fields that are not traditionally associated with design while gathering insights on capabilities that are necessary for their success in said employments.
2. to speculate on the future of design-researchers, the capabilities that will be needed and potential alternative ways of employment.

This reflection on the future was followed up in the training event in Aalto University with a speculative CV workshop facilitated by Guy Julier, where PhD students reflected on and presented their view of ideal or dystopian futures of the design profession.

## Method (how we worked)

The case studies were conducted using structured and facilitated interviews with graphic materials to guide the conversation and gather data. Four case studies in total were facilitated by the university representatives in each of the schools, using the same materials. The interviews for the case studies were divided in four parts:

1. **Persona:** where we describe the career path of the interviewee, their education, motivations and work positions that led them to a doctoral programme in design, and the positions that they have held after their graduation from their doctoral programme.
2. **Doctoral programme:** where we dive into the concept of their doctoral research project, what influenced their topic and methods, and how they grew professionally because of their doctoral programme.
3. **Social impact:** where we open up the concept of social impact and discuss whether the interviewee intentionally assessed the social impact of their doctoral research project. The interviewee was asked to describe the social impact of their project, to point towards the sectors and actors that were impacted and to describe the methods, if any, that they used for assessment.
4. **Future of design research:** where the interviewer and the interviewee went through an exercise of speculative futures, to create personas for potential future design researchers, including competencies, job descriptions and other hard and soft skills. This guided reflection aimed to dig into imaginary futures of the design research profession itself.

The participants of the case studies, two from Aalto University, one from TU Delft and one from Politecnico di Milano, were selected by each university following some characteristics:

1. The graduate does not currently work in academia at the university where they graduated from
2. The graduate is currently employed and has had a history of successful work in relation to their PhD topic.
3. The topic of the participant's PhD is somehow related to social impact, work with communities, nonprofit or a similar field.

## Results

From the **Case Studies**, the competencies required to increase social impact outside of academia (figure 4), communication and project management skills are the most frequently mentioned. This suggests that survey respondents find a gap in current doctoral design studies when it comes to capacity building for communication and management. Similarly, skills related to statistics and data analysis as well as the capacity to work across disciplines appear to be necessary competencies to



# DoCS4Design



Doctoral Courses System for Design

increase the social impact of design research. For future research, it would be valuable to discern between the different competencies needed in each sector.



The preliminary results confirm the accuracy and relevance of the motivation behind this research: graduates of doctoral programmes in design have potential outside of academia but as we can see from the results of the survey, there is a gap between the required competencies of work positions outside of academia by graduates and the perception of their value by employers. Graduates appear to be increasingly interested in non-profit work positions as these align more to their values than other positions. According to graduates, specific skills, such as communication and project management skills, have significant roles in the quality and reach of social impact outside of academia. It is therefore worth considering how they might be supported within doctoral programmes.

The results of the case studies have been transformed into personas of graduates from design programmes, which were presented and discussed in the training event held in Aalto University campus in October 2023.





# DoCS4Design



Doctoral Courses System for Design

Some of the data gathered from these studies is planned to be used for future research.

## Outcomes

Speculative CV Workshop.

The personas as well as the discussion around the case studies have catalysed thinking about which capabilities will be more useful to develop in the student's careers. This time of insight is necessary of their professional development.

The case studies have also supported DocS4Design goals to map the diversity of PhD programmes in design and understand the differences between the expectations and values from all the institutions involved.

## Credits

All partners contributed to the output:

Aalto University

Elise Hodson, Guy Julier, Michel Nader,  
Sampsa Hyysalo



## Appendix

# PRIVACY NOTICE

Thank you for participating in this survey!

This research will support future doctoral students, the development of doctoral programs and the field of design research.

This interview collects information from alumni of TU Delft, Politecnico di Milano, Aalto University, Imperial College London, IIT Institute of Design and Carnegie Mellon. This research is part of the Erasmus+ project DoCS4Design (2021-2023), which focuses on mapping the diversity of doctoral education practices in design at these institutions (for more information, see <https://www.tudelft.nl/io/docs4design>).

In this interview, we want to learn more about:

- the career paths of graduates of doctoral programs in design
- the impacts of design research beyond academia, in particular social impacts and value creation
- what the future of design research looks like from the perspective of graduates of doctoral design programs
- how doctoral programs can prepare students, practitioners and organisations/institutions to benefit from design research outside of academia, in particular in the social and public sectors

This interview takes approximately one hour to complete and is organized in four parts:

- A - Persona
- B - Doctoral Studies
- C - Social impact
- D - Future of design research



Aalto University

## Alumni Survey DocS4Design - Privacy Notice

This privacy notice describes how your personal data will be used in the research study as a participating individual. You have also been provided with a document called "Participant Information Sheet", which explains in more detail how the study is carried out.

### 1. What is being studied in this research study and the purpose of processing personal data

This research study examines the Alumni Survey DocS4Design. This survey was done to research and analyse career paths of doctorate graduates from six participant universities in Europe and North America. This study is led by Professor Guy Julier from Aalto University's Department of Design.

This research is co-funded by the ERASMUS+ Programme and European Union, project DocS4Design

### 2. What personal data is processed in the research study

This survey will collect personal data: degrees, current job positions, past employment, education history, examples of personal project types and all answers the participants give to open questions in the survey.

#### Special categories of personal data (sensitive personal data)

Data belonging to special categories of personal data or other specially protected personal data **will not be processed** in the research study.

#### Personal data is collected from the following sources:

From the participant: Through the survey system in Aalto University's Webropol

The research methods are described to you more in detail in the "Participant Information Sheet" -document.

### 3. Processing of necessary personal data and removal of the direct identifiers from the data

The research study only processes personal data that is necessary for the purpose and execution of the study. The research data is processed during the analysis phase of the research in a manner that you are not directly identifiable to the researchers.





Career path  
Studies, work positions, locations.

**PART 1 - PERSONA**

- 1- Fill in your universities and work positions.
- 2- Drag the nodes into the map according to location.
- 3- Fill in your topics of interest as a designer: What other fields of study are you interested on? (Use different size to show importance)
- 4- What values have you followed in your path as a design researcher? (use different size to show importance) e.g. top manufacturing quality, accessibility of use, artistic value, profitability, user-centered, experimentation...

**QUESTIONS FOR DISCUSSION**

- A- What motivated you to pursue a doctoral degree?
- B- What motivated you to do it in that specific university/country?
- C- What motivated to work in that position and location?
- D- What external factors influenced your career choices, work positions and studies?

Minister of the environment, study: it seemed to be very valuable.

Motivation, what was the impact?

Simultaneous projects: meaningful projects. Was it my place in academia to change the world?

Topics of interest besides design (e.g. health, computer sciences, transportation...)

Practical work!

Systemic change in different levels of society

Policy work, systems, etc. How organisations work.

New title is chief growth offices (nor design necessarily)

Human Centeredness as a core value: not costumer or user, but human

Building bridges, the asset of a designer. Designers work between different company functions.

Meet solutions that meet more people's interests. Take the approach along the design process.

Human centered-empathic - co-design approaches.

Design is even more important now because of the systemic practices: create circumstances for something.

Values in your career as a designer (e.g. top manufacturing quality, accessibility of use, artistic value, profitability, user-centered, experimentation...)

### PART 2 - DOCTORAL STUDIES

1- Fill in the map with your research topic, related fields and other fields that may have been impacted by your research. Describe the nature of that impact.

2- Add the most important values that influenced your choices in the research. (you can copy them from the previous frame)

3- Add the key people who influenced your research and their role. Locate them on the map. Which part of your research did they influence?

### QUESTIONS FOR DISCUSSION

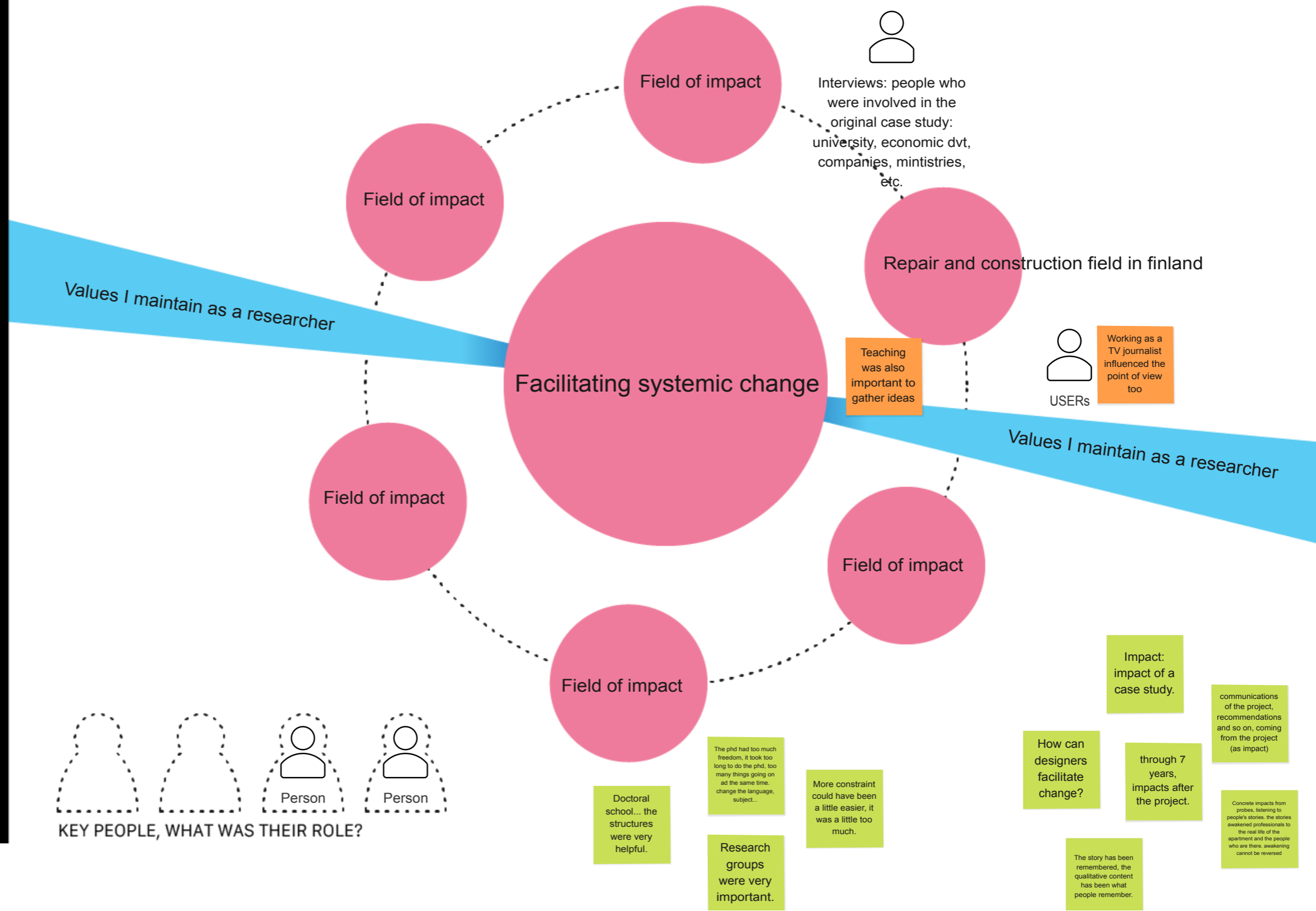
A- How did the values you mentioned before influence how you focused your research?

B- How did your personal interests fit in the doctoral programme?

C- How did your doctoral programme influence your research choices?

D- What was the role of partners, advisors/supervisors and employers?

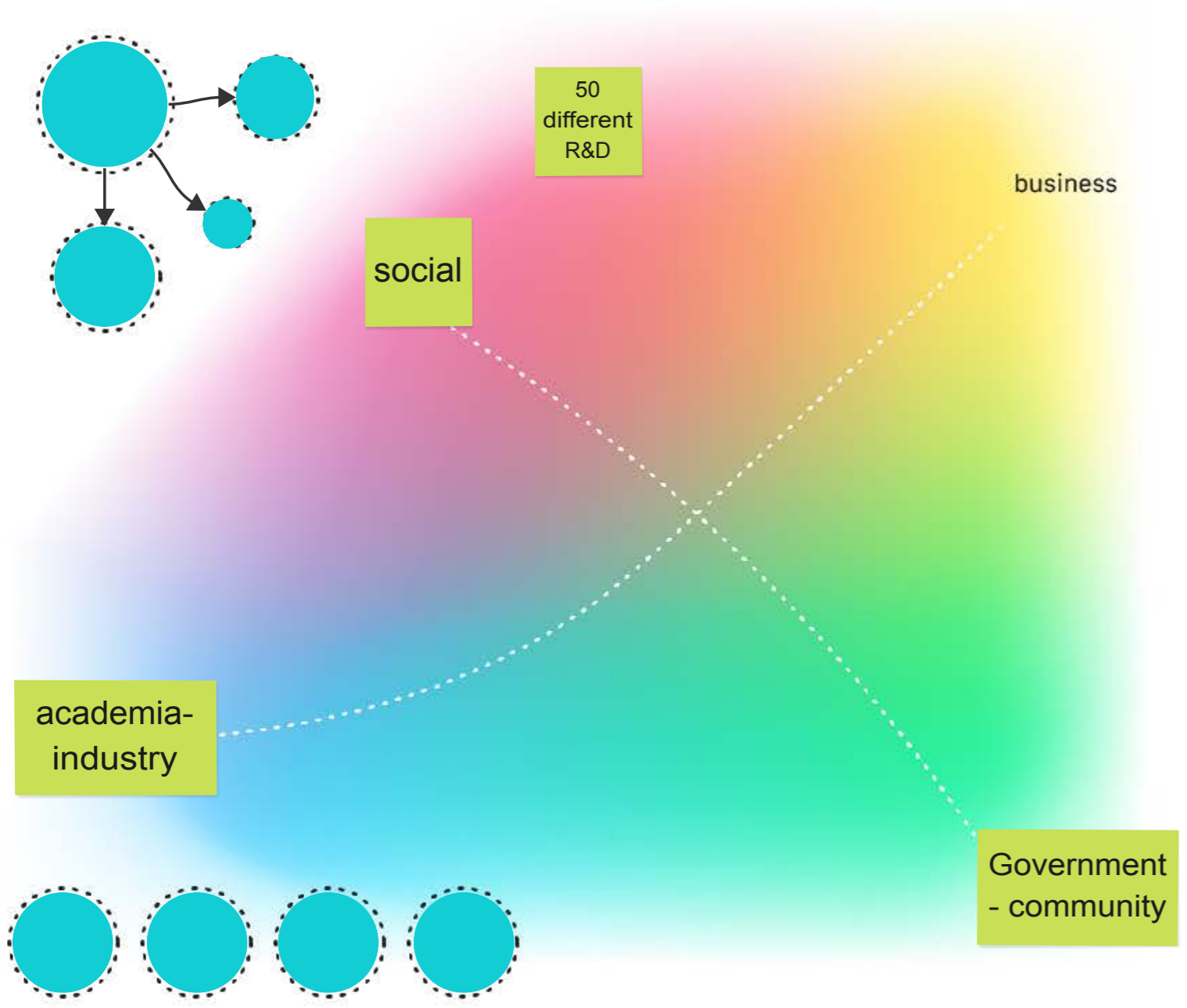
E- To what extent did your doctoral program allow you to pursue your interests?



KEY PEOPLE, WHAT WAS THEIR ROLE?

**[IMPACT]**  
"who is doing what differently as a result of the research?" (Belcher et al., 2021, p.4)

**[Social design]**  
"approaches to researching, generating and realising new ways to make change happen towards collective and social ends, rather than predominantly commercial objectives". (Armstrong et al., 2014, p.15)

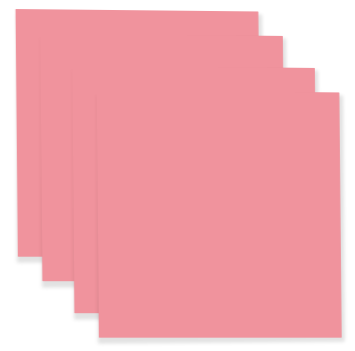


**PART 3 - SOCIAL IMPACT**

- 1- Build a map on the impact of your doctoral project in two parts:
  - Write a description of the impacts of your research in the bubble. Use the size to represent the bigger or smaller impact.
  - Drag the bubbles to the map where they belong.
- 2- Add other impact bubbles as necessary.

**QUESTIONS FOR DISCUSSION**

- A- How have you measured or how do you know the social impact of your research?
- B- Which channels or people allowed your work to be impactful? How did you find them? (e.g. partners, organisations, events, systems, communities...)
- C- Was the impact expected? did you intend for the impact of your research to happen?
- D- Are there positive and negative social impacts of your research?



Recognition of the work.  
The thinking that I developed during my PhD studies is something that is being applied during the career years. This is continuing.

What channels were more useful to create impact with your research?  
Who were the key actors who helped you increase impact?

# service designer skill

## PART 4 - FUTURE OF DESIGN RESEARCH

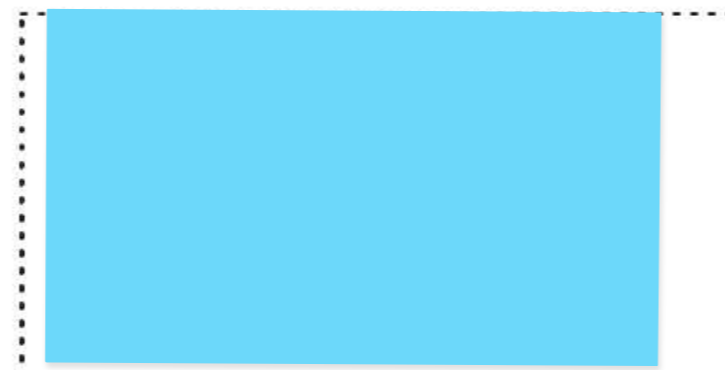
- 1- Write an ideal job description for a graduate of a doctoral program in design today using your own skills as a starting point.
- 2- Fill in competences, soft skills and practical skills a design research must have in today's world.

## QUESTIONS FOR DISCUSSION

- A- What is the role of design researchers and graduates of design doctoral programmes in today's world?
- B- Why are the skills of a design researcher useful, how can they support or build a better society?
- C- How can we increase the social impact of design research?
- D- Looking back and comparing to this ideal job description, what tools or skills would you have liked your doctoral studies to include or focus on?

### JOB TITLE

### ORGANISATION



### JOB DESCRIPTION

Chief growth officer:  
Create circumstances  
for growth

### RESPONSIBILITIES AND DUTIES

Create structures and  
conditions to enable  
growth (organisations

### QUALIFICATIONS

Graduate of a Design doctor

People are self organised and they need to have motivation. Empathic approach to human experiences and collaborative methods to improve inclusion and commitment.

### COMPETENCES

Analytical and creative simultaneously: a challenge.

### SOFT SKILLS

People's perspectives, the ability to see what motivates people, leadership skills (listening, consider their perspectives, be courageous, shed light to a shared future, not limiting but focusing, relationship building, trust with people. Social skills.

### HARD SKILLS

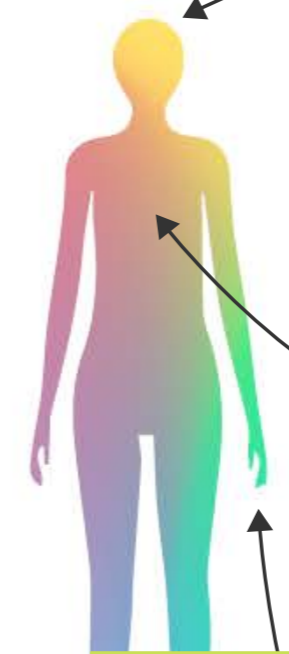
Analytical skills: she can point out issues that deserve more research, being able to frame 'what we need to know'.  
Priorities what and when to do, how to create processes.

Problems are complex

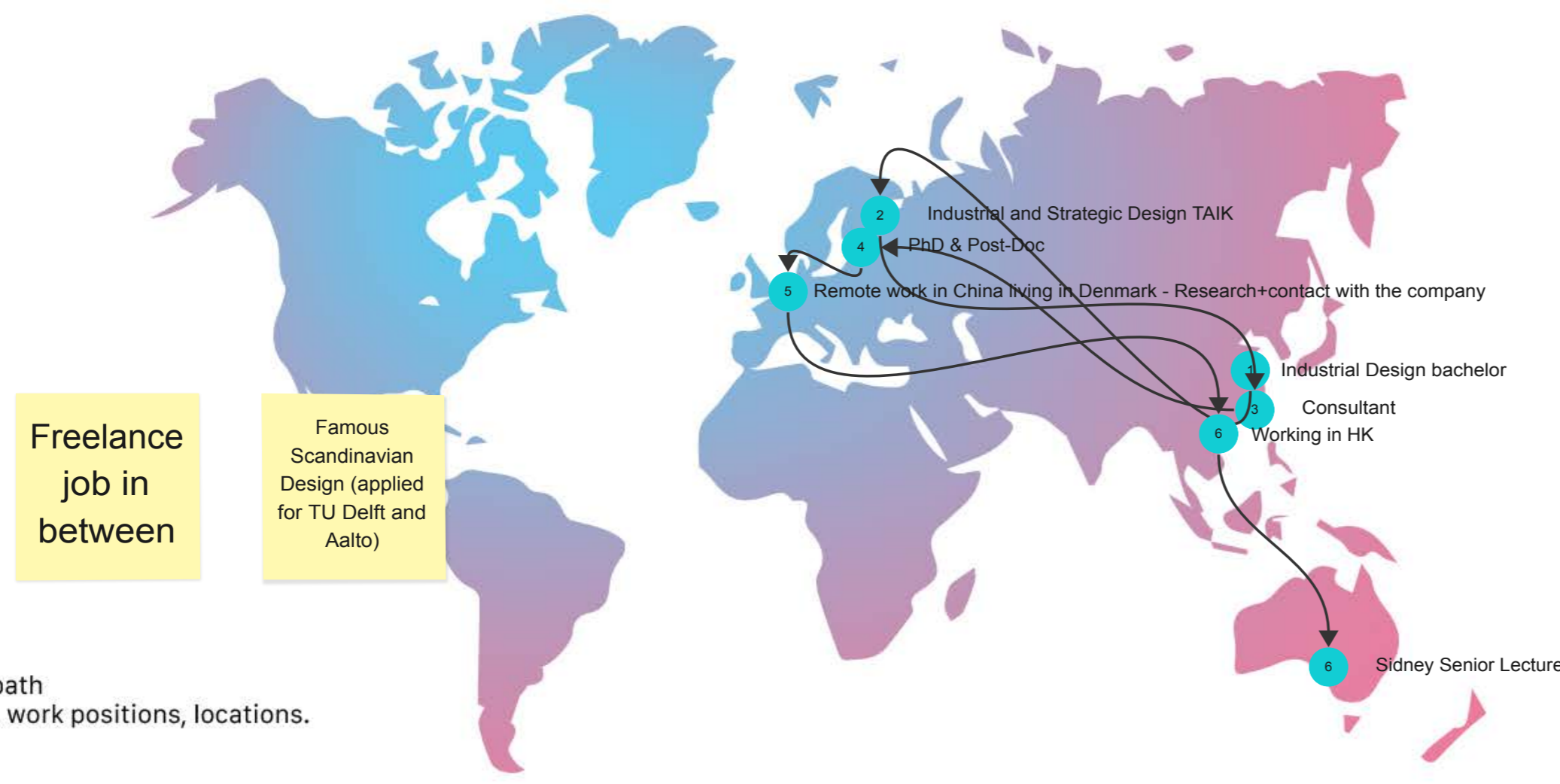
Uncertainty: designers help to conceptualise and make uncertainty tangible for people to act based on these things.

Organisations need change: design project management skills, we are professionals of change. It is always a change process, accelerate change.

Building bridges between different functions inside an organisation: Hr, E&D, Comms, etc.



- 1
- 2
- 3
- 4
- 5
- 6



Freelance job in between

Famous Scandinavian Design (applied for TU Delft and Aalto)

Career path  
Studies, work positions, locations.



Topics of interest besides design (e.g. health, computer sciences, transportation...)



Values in your career as a designer (e.g. top manufacturing quality, accessibility of use, artistic value, profitability, user-centered, experimentation...)

**PART 1 - PERSONA**

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- 4- What values have you followed in your path as a design researcher? (use different size to show importance) e.g. top manufacturing quality, accessibility of use, artistic value, profitability, user-centered, experimentation...

**QUESTIONS FOR DISCUSSION**

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### PART 2 - DOCTORAL STUDIES

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### QUESTIONS FOR DISCUSSION

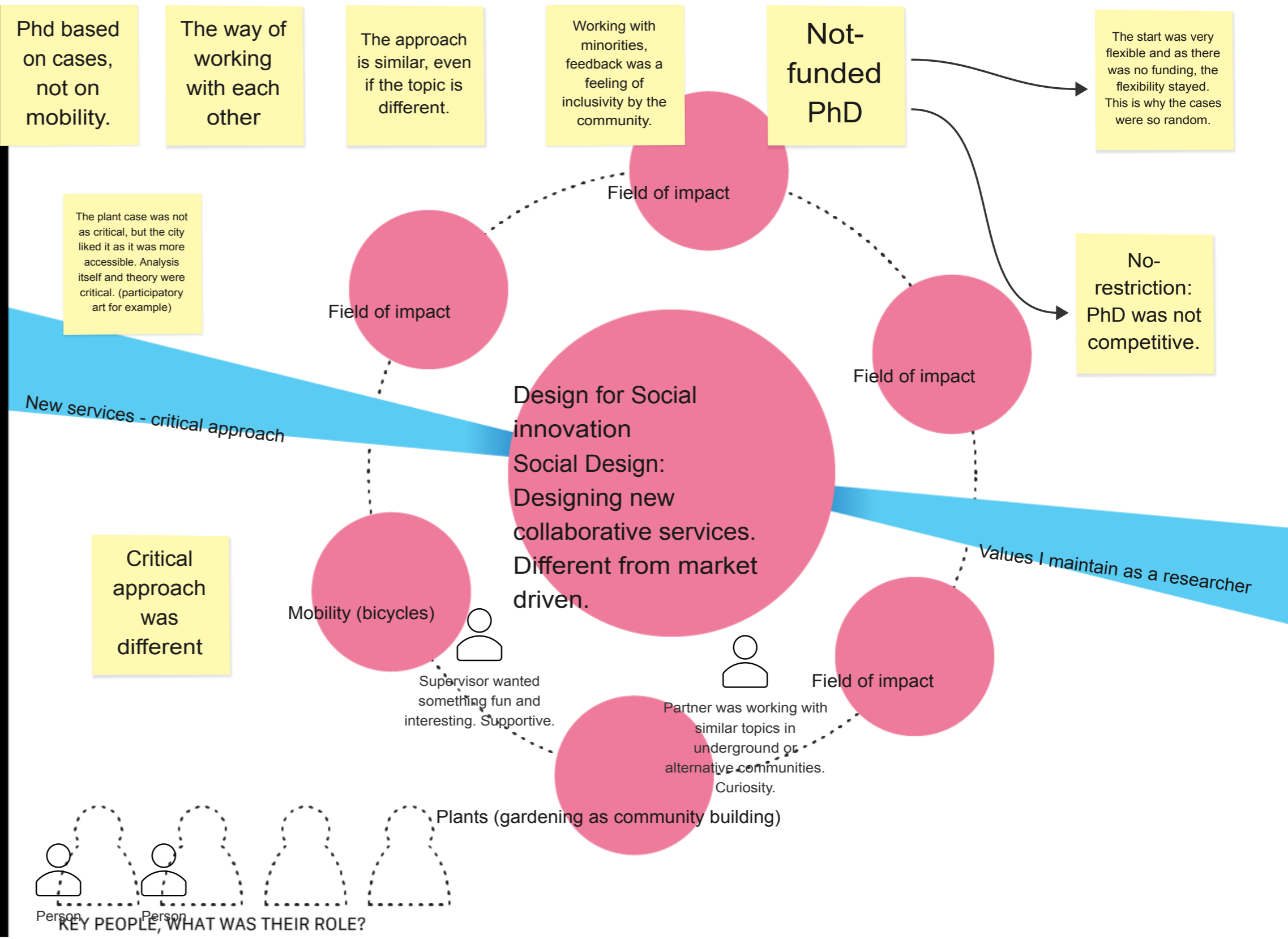
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C- How did your doctoral programme influence your research choices?

D- What was the role of partners, advisors/supervisors and employers?

E- To what extent did your doctoral program allow you to pursue your interests?



**[IMPACT]**  
 "who is doing what differently as a result of the re... cher et...  
**[Social design]**  
 "approaches to researching, generating and realis... to make change...  
 happen towards collective and social ends, rather than predominantly commercial  
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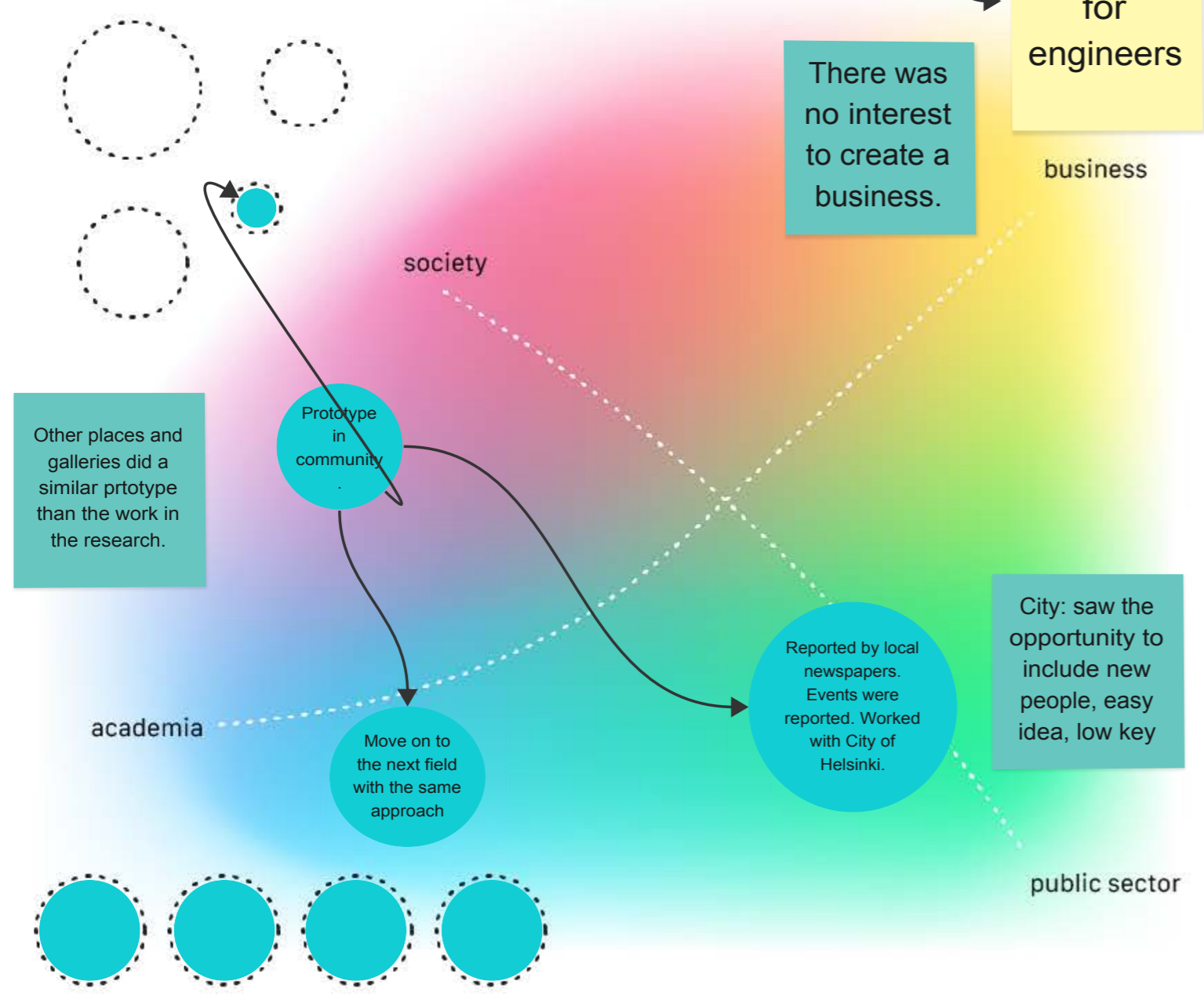
No impact measurement research, no analysis.

It is no research if you dont valide the data? In the nordics it is not so rigid.

for engineers

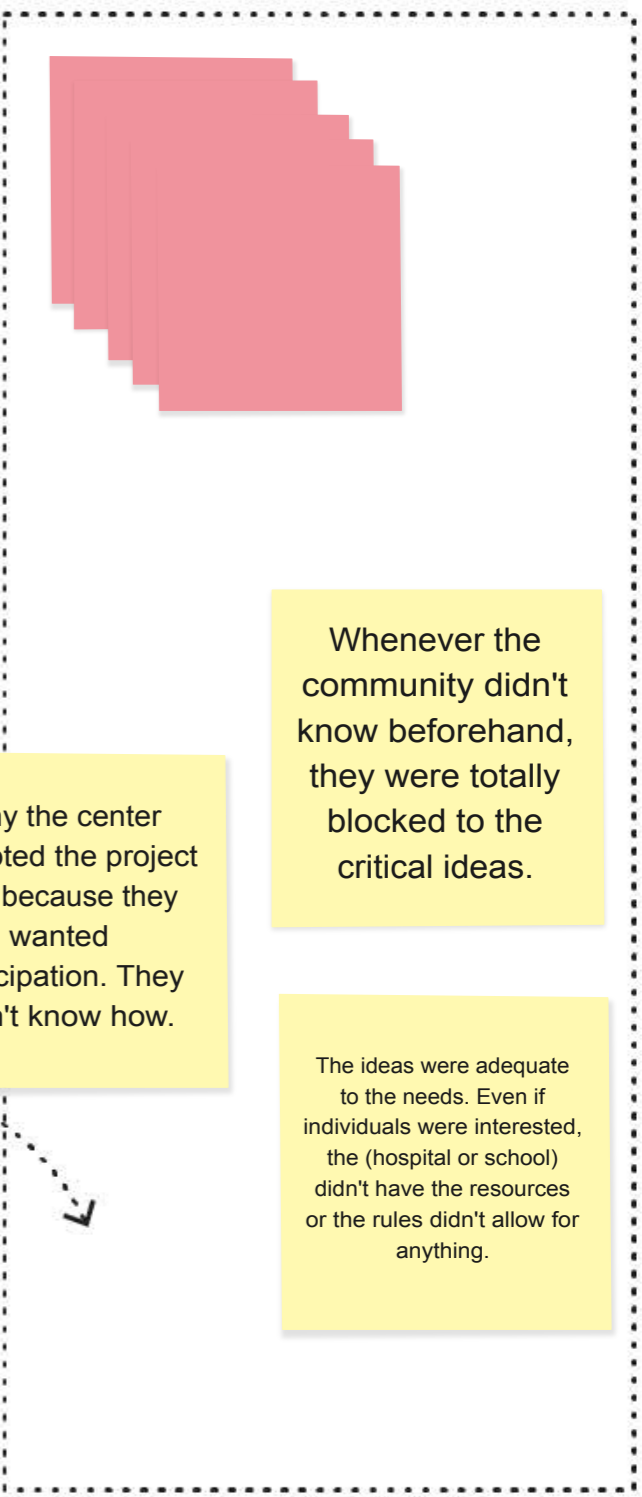
There was no interest to create a business.

business



**PART 3 - SOCIAL IMPACT**

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"I see more cases" of using plants for community building. Similar ideas around.

Moving around plants is not really good for plants, but it was never the focus or the priority of the project. Pure human-centered approach. Nowadays there is a different view.

Why the center accepted the project was because they wanted participation. They didn't know how.

Whenever the community didn't know beforehand, they were totally blocked to the critical ideas.

The ideas were adequate to the needs. Even if individuals were interested, the (hospital or school) didn't have the resources or the rules didn't allow for anything.

What channels were more useful to create impact with your research? Who were the key actors who helped you increase impact?

### PART 4 - FUTURE OF DESIGN RESEARCH

- 1- Write an ideal job description for a graduate of a doctoral program in design today using your own skills as a starting point.
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- A- What is the role of design researchers and graduates of design doctoral programmes in today's world?
- B- Why are the skills of a design researcher useful, how can they support or build a better society?
- C- How can we increase the social impact of design research?
- D- Looking back and comparing to this ideal job description, what tools or skills would you have liked your doctoral studies to include or focus on?

We should be aware of the lack of tools by designers to analyse impact.

Practical tools - sociologists and social workers evaluate what designers do.

Transformation facilitator (company, community)  
Big or small scale)

### JOB TITLE

ORGANISATION Public sector, corporate, small or medium enterprise... In reality no

You are invited to procure change or transitions. stakeholder and community engagement (co-design). Common vision and problems, agree on a goal and values. Facilitation.

### JOB DESCRIPTION

Facilitating, forming a space for people to participate and express, negotiate. Make sure everyone is represented and everyone's input is utilised. Define the problem space, solution path and resources. Design interventions (where to start with, what is easy to start with? strategic planning)

### RESPONSIBILITIES AND DUTIES

- Soft skills are key. the ability to listen and being responsive (no certificate for that) Some of this comes through talent.

QUALIFICATIONS Graduate of a Design doctoral program

### COMPETENCES

- Reserach on design
- research through design

They are extremely diverse. There is no overlap within the Design research PhD graduates.

Sometimes research is not even considered research by other disciplines.

### SOFT SKILLS

- commitment to (claim) caring for people  
- (do good)

- Reflective practitioner  
- Research through experience  
- Style, aesthetics (expanded to everything)

### HARD SKILLS

- Design things: organise, make, etc.  
- practice (anything)

- critical framing using all kinds of methods

We didn't really learn about the practicalities or strategy around making publications. (In our programme, we didn't learn how to publish)

Communication of research to different types of people. Knowledge communication... We took for granted what we believe and that it is shared by others.

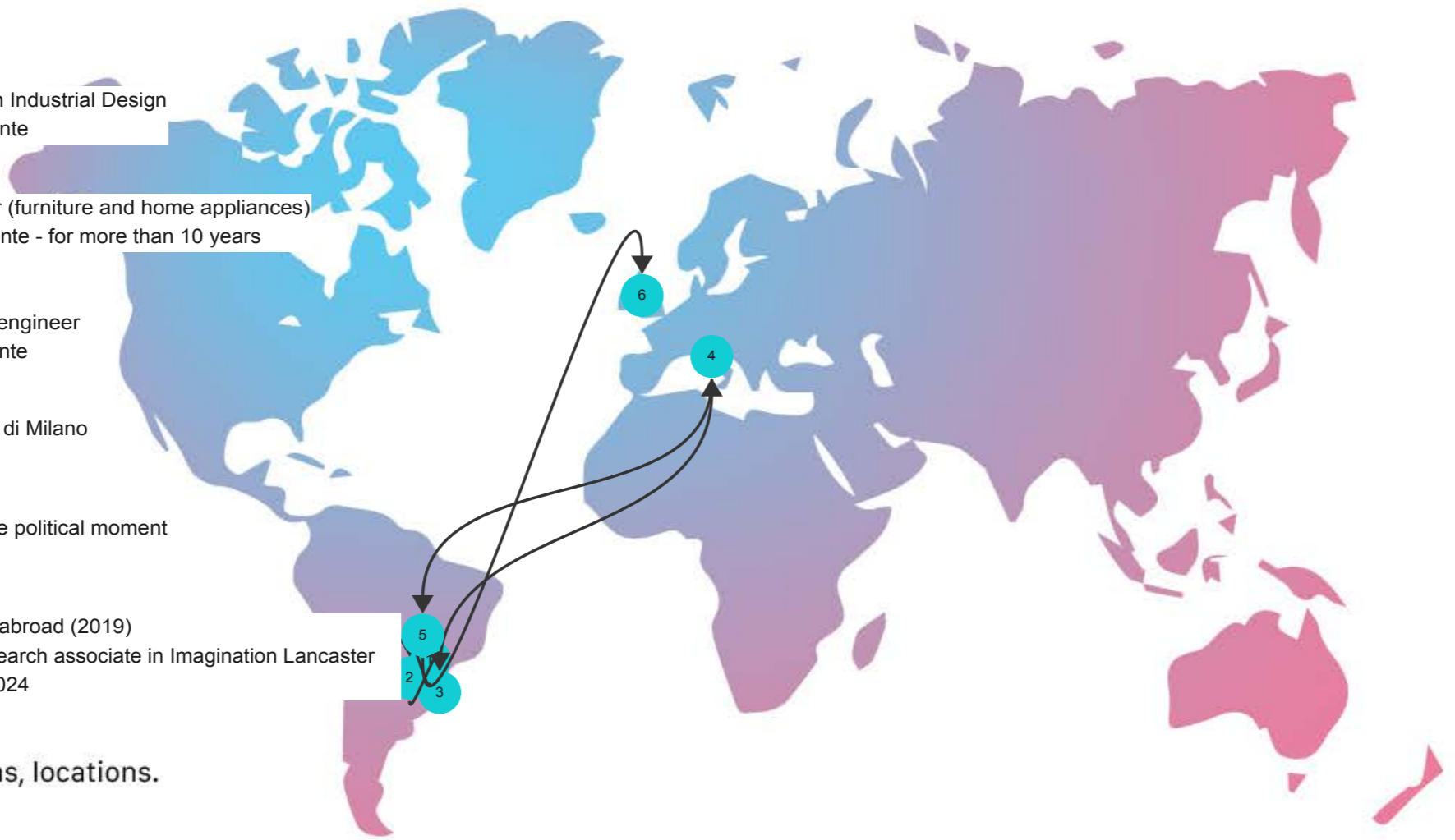
Defend design research in front of other fields, preparedness to do it

- ego and pre-assumptions of a designer. We go, intervene and leave. We do not always analyse impact. (We do not know how to evaluate and we don't have tools for social impact)





- 1 Bachelor degree in Industrial Design  
Brazil, Belo Horizonte
- 2 Industrial designer (furniture and home appliances)  
Brazil, Belo Horizonte - for more than 10 years
- 3 Master, Industrial engineer  
Brazil, belo Horizonte
- 4 PhD in Politecnico di Milano  
Milan
- 5 Freelance (not nice political moment  
for research)  
Brazil
- 6 Look for positions abroad (2019)  
Post-Doctoral Research associate in Imagination Lancaster  
UK - until march 2024



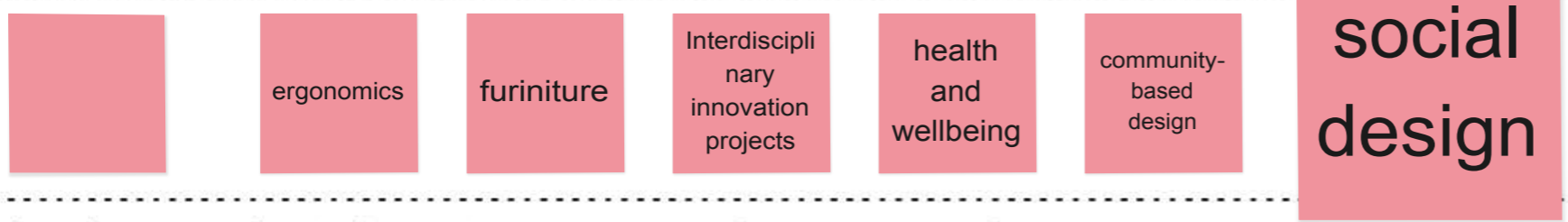
Career path  
Studies, work positions, locations.

### PART 1 - PERSONA

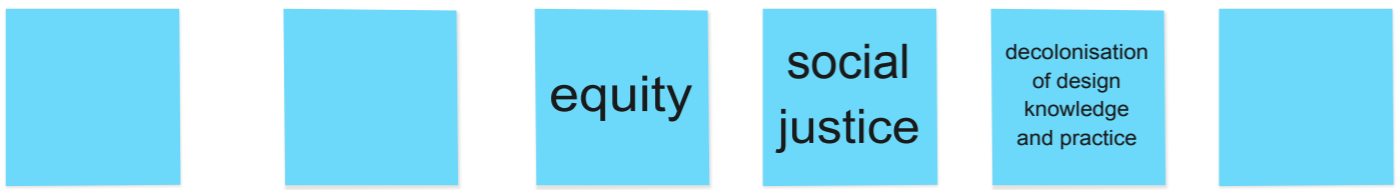
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- D- What external factors influenced your career choices, work positions and studies?



Topics of interest besides design (e.g. health, computer sciences, transportation...)



Values in your career as a designer (e.g. top manufacturing quality, accessibility of use, artistic value, profitability, user-centered, experimentation...)

**CAREER PATH:**  
She came back to Brazil after PhD for personal reasons and started a freelance career. However she felt her approach was not successful in Brazil and started look for a job position abroad (research associate at Imagination Lancaster)

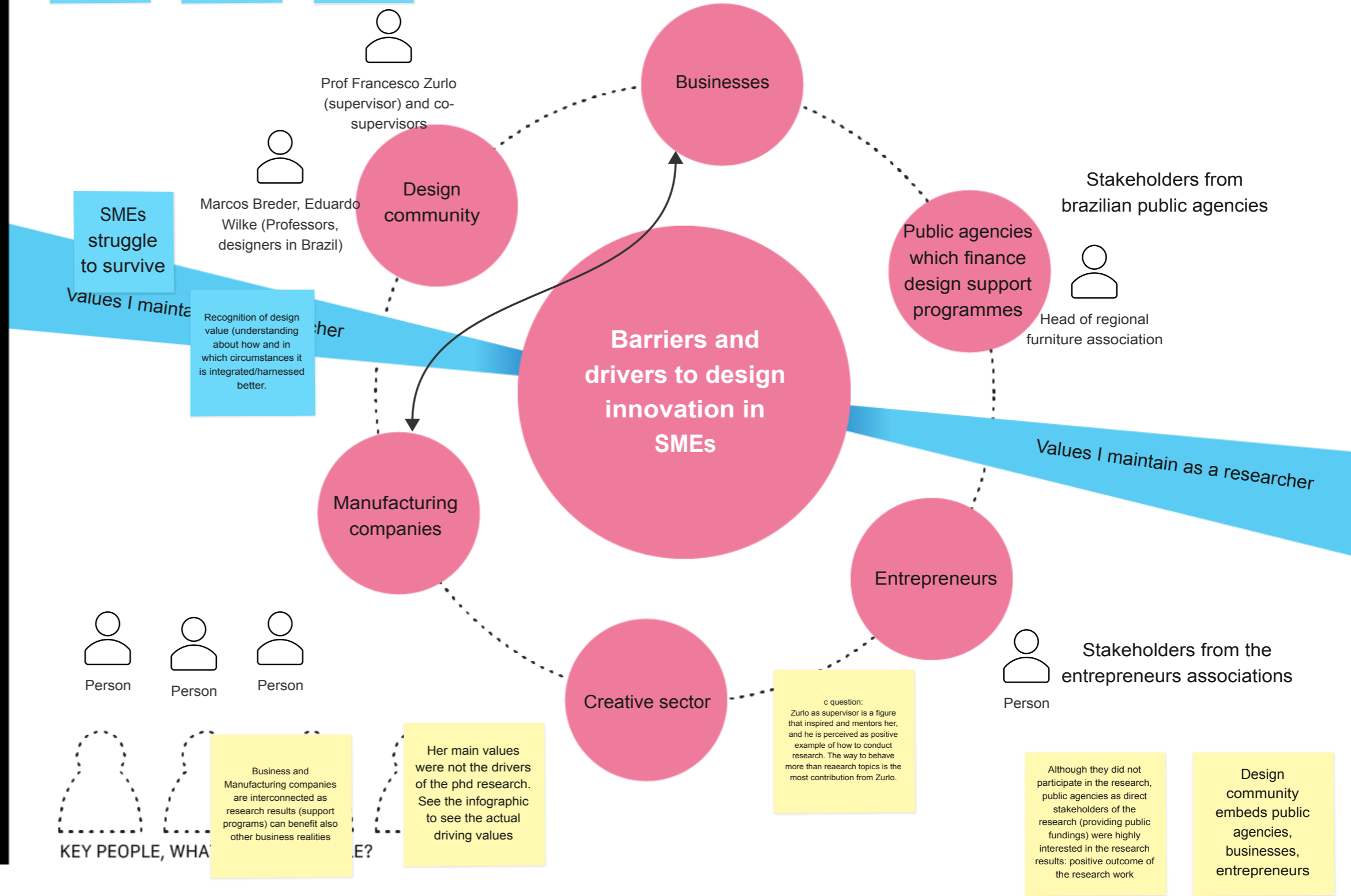
**TOPICS OF INTEREST:**  
ergonomics is not a keyword about her current research but its techniques and methods support her current research interests that sometimes neglect scientific techniques and methods

**VALUES:**  
values mostly derives from her previous experience in engaging with people with no rights in Brazil, and her personal frustrating feelings about the lack of social justice and equity in Brazil

equity

social justice

decolonisation of design knowledge and practice



### PART 2 - DOCTORAL STUDIES

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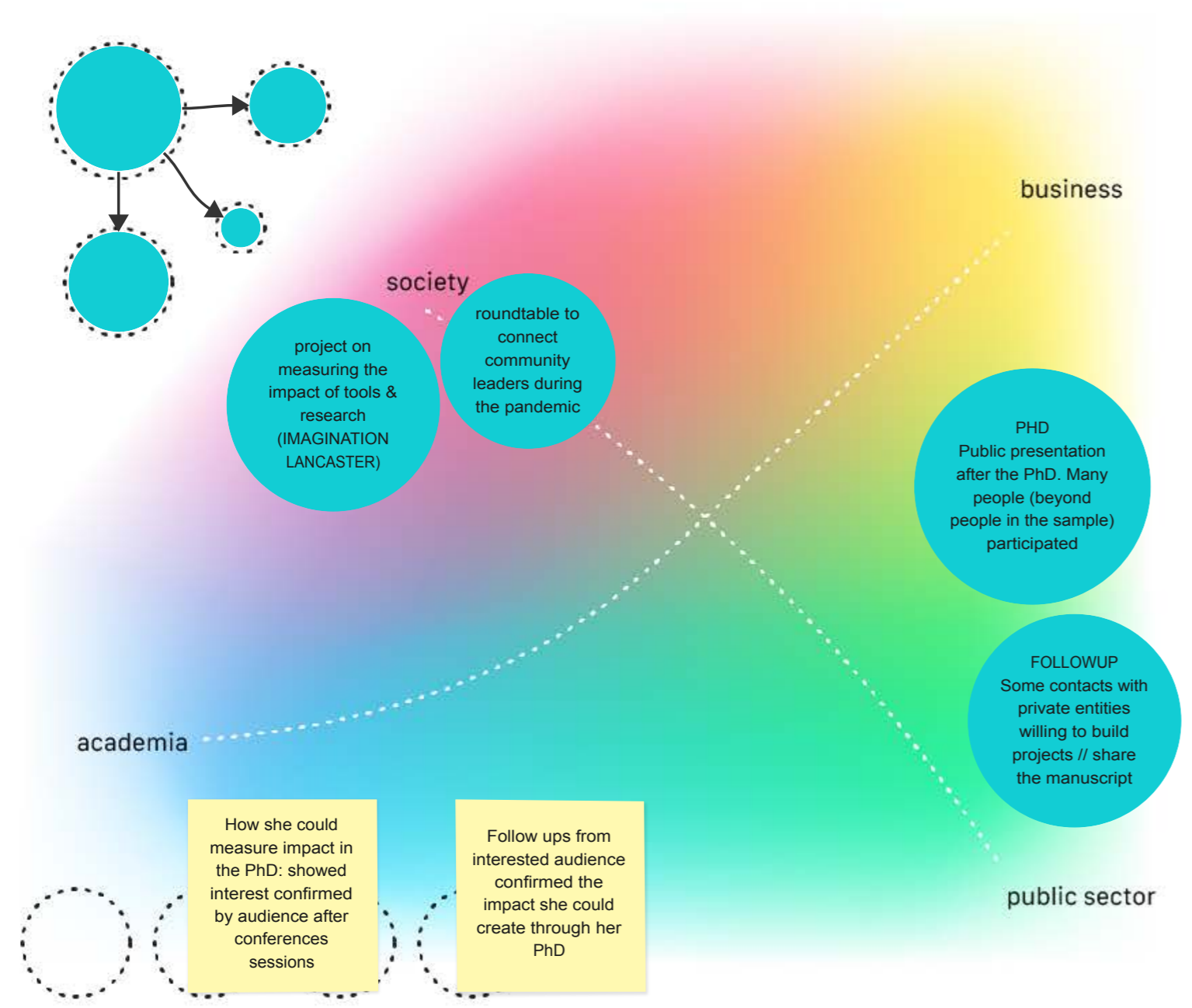
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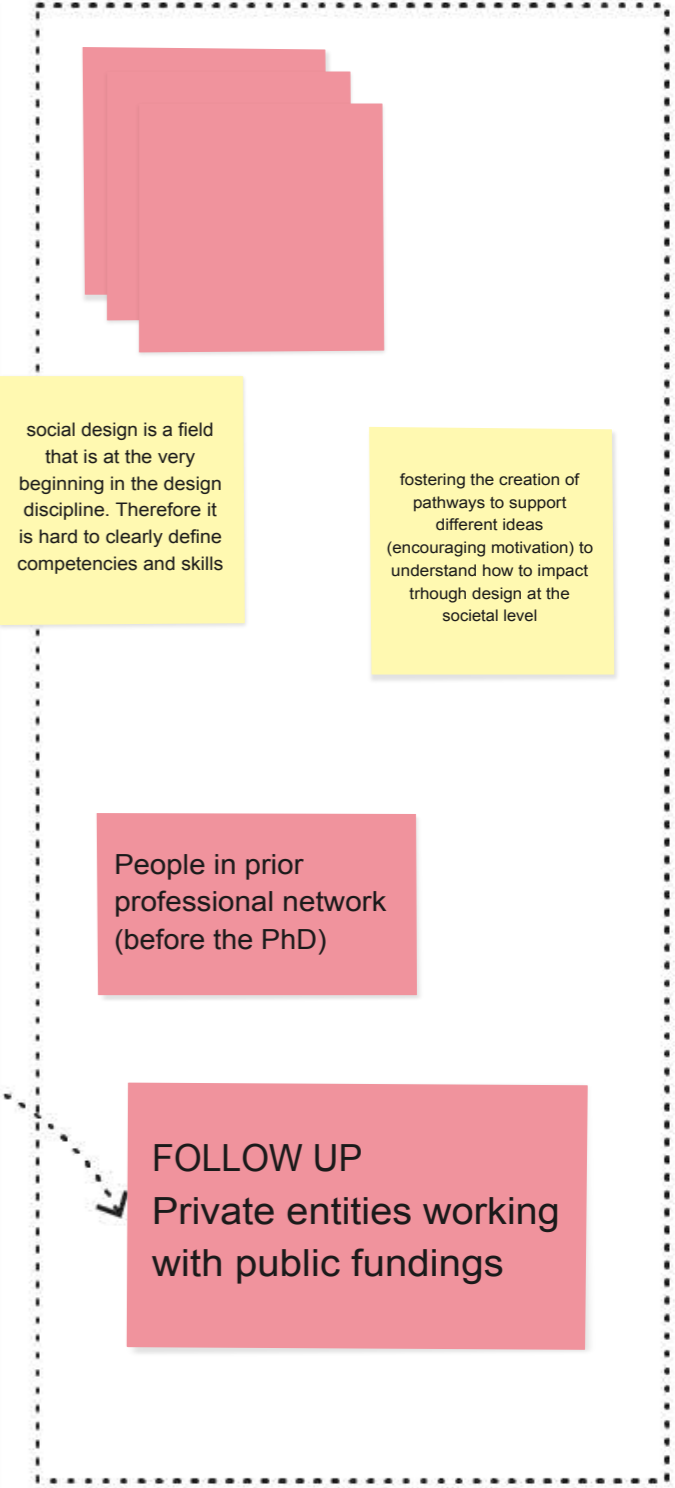
**QUESTIONS FOR DISCUSSION**

A- How have you measured or how do you know the social impact of your research?

B- Which channels or people allowed your work to be impactful? How did you find them? (e.g. partners, organisations, events, systems, communities...)

C- Was the impact expected? did you intend for the impact of your research to happen?

D- Are there positive and negative social impacts of your research?



What channels were more useful to create impact with your research?  
 Who were the key actors who helped you increase impact?