

# EXPERIENCING, EXPLORING AND EXPERIMENTING IN AND WITH CO-DESIGN SPACES

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## ABSTRACT

The concept of *design space* has been useful to designers in supporting the act of designing and for reflecting on the activity of designing. With the increase in cooperative design practices, it is time to consider the concept of *co-design space*. Co-design spaces differ from design spaces in that they tend to be situated in the early front end of the design process (also referred to as pre-design), they rely on the collective creativity of designers working together with non-designers, they deal with very complex challenges such as social change and organizational transformation, and they often point to embodiments in the immaterial domains such as experiences and services. We will argue that we can add greatly to our understanding of design by experiencing, exploring and experimenting in and with co-design spaces.

## INTRODUCTION

There are several understandings and descriptions of the concept of *design space* currently used in the design literature so it is obvious that design discourse needs concepts that support designers both when they are doing design work and also when reflecting on it. (e.g. Binder & Hellström 2005, Browning et al. 2009, Heape 2007, Löwgren 2005, Westerlund 2005, 2009). Taking this observation as a point of departure, this paper discusses how an understanding of the concept of *co-design space* could contribute to the design discourse. Does a

co-design space have different qualities than a design space? Does thinking in terms of co-design space add to our understanding of design? Is it possible that the concept of co-design space could be used to support the creation of successful co-design processes, and therefore better proposals for desired futures?

## CO-DESIGN PROCESSES AND APPROACHES

Different flavours of cooperative design have been around since at least the 1970s with Robert Jungk's Future Workshops (Jungk & Müllert 1989) as one of the earlier examples. There are many different procedures for cooperative or participatory design (e.g., Ehn, 1988; Greenbaum & Kyng 1991; Schuler and Namioka, 1993) and co-design (e.g., Sanders and Stappers 2008) and it is not our aim to give an account for all the manifold of approaches in this paper, but we will introduce some of the primary directions. Most approaches include design work and aim at creating some kind of proposal for change that is imagined to work and be regarded as meaningful by prospective future users and other stakeholders (who are not experienced in design).

There are several issues identified as problematic in design processes where novices (i.e., people not experienced in design) participate. One is that too much time is spent on one early idea instead of exploring many possibilities. Another is that it can be difficult to get people to create ideas when they feel that they have insufficient knowledge. A third problem is that people who are brought into co-designing experiences may feel that they are not creative. Therefore many different co-design approaches have been explored over the years.

Can an exploration of the concept of *co-design space* help us understand how better to provide for these needs? Before we address this question, we will briefly investigate the current uses of *design space* and discuss how these may be connected to co-design processes.

## DESIGN SPACE

There is no such thing as an objective *design space* that can be defined or agreed on. Not beforehand and not even after the design work. *Design space* refers to at least three quite different definitions or interpretations: The experienced physical space, the current work and the future situation of use.

- a. the experienced or practiced physical *design space* in which, and with which, the design work takes place. This includes the materials/props that are present in the space. Using design space with this interpretation supports describing the activity going on and the situation's "back-talk" that Schön identified (1983:79) as one example.
- b. the *design space* of the current participant(s) in the design process and their practice. This includes the proposals that are currently worked on, and other aspects of the current design work.
- c. the *design space* of possible proposals that are imagined to "work", that prospective users and other stakeholders would find meaningful. This is sometimes called the solution space. This category of space is located in the "future".

All of these three are relevant to discuss in relation to design work, although there are different advantages for the use of each definition. But our intention is to explore some possible uses of *co-design space* and in order to discuss its potential, we will first present an example.

## CO-DESIGN WORK, AN EXAMPLE

A group of researchers and PhD students from different academic departments at Linnæus University participated in a workshop aimed at creating opportunities for joint interdisciplinary research projects. This workshop was situated in the front end of the design process and involved designers working together with non-designers on a complex challenge that would lead to social change and organizational transformation. The final goal was to identify topics and processes for future collaboration in research activities across the disciplines.



The afternoon workshop was briefly speaking done in three steps: the participants individually presented their current interests and work, divided into three groups the participants created desirable visions and finally they collectively tried to identify what activities would be necessary in order to get from the current situation to the desirable visions.

There were thirteen participants in the workshop which was held in a large room with many free walls.

The journey started with a presentation of the past and current research interests of each participant. In order to make the most of this activity, participants were asked to prepare for their short presentations before coming to the workshop by writing key words or phrases on up to six cards and bringing one object about which they could tell a story. After each participant's presentation, the cards and the objects were displayed on the large central wall. The wall was structured as a timeline moving from the past to the present to the future. Everyone sat in comfortable chairs facing the wall.

The next step was for the participants to cluster the cards, and thereby the concepts, so that connections and themes could be identified, named and easily seen by all. Thus, the wall and the objects brought in for sharing provided a visual map of the co-design space of their past and current research experiences. This collaborative co-design space provoked some interesting discussions.

The participants were invited to take a break with the understanding that when they returned they would leave





behind the past and current situation and jump into the future. The action changed places as well, with small tables being set up for the small team working sessions.

To facilitate the generation and communication of ideas between team members, we had prepared toolkits that contained a wide variety of visual forms, colors and sizes. As an experiment in the role of ambiguity in the co-creation process, we did not include any verbal content as is normally the case with generative toolkits. By using only simple and symbolic shapes we hoped that the participants could move past their own languages of expertise to focus on the shared content of research collaborations at their university anywhere from two to ten years in the future.

After creating their co-created visions, the teams presented their visions for the future and placed them up on the large wall on the future end of the timeline.

In the final step, the participants were challenged with coming up with ideas to describe how to get from the current situation to the future they had described. Each person filled out action items on colorful cards that were shaped like puzzle pieces. The cards were positioned on the large front wall in the space (i.e., the Bridge) between Present and Future. After a presentation of all the action items each participant was invited to use four red dots to prioritize the action items he or she felt were



most important to explore. Thus, the final prioritized list of next steps was visualized collectively as the step between “now” and “future”. The final wall is shown in the picture near the end of this paper.

### CO-DESIGN SPACE

What about the concept of *co-design space*? What would be productive ways of using this concept? If we reflect on the workshop using the three aspects, a, b and c, above as a starting point we get:

a. The experienced physical space where this workshop was held was a large room with many free walls that afforded paper and stuff to be pinned on them. Also tables and chairs could be moved and placed freely. This together with carefully designed assignments and toolkits greatly supported the participants in their co-design work of envisioning as well as presenting ideas. This could very well be called a *co-design space*.

The environment where the co-design work takes place can, of course, also have negative effects on the work. This can be the case when the environment does not afford people to sit, stand or move around in ways that they want (e.g., in a room for lectures where the furniture is fixed and mostly one-way communication is supported).





Use of the physical space and the sequence of activities in the physical co-design space were carefully planned to optimize the time spent by the participants, most of whom had to travel to attend the event. The physical co-design space became a mirror of the conceptual co-design spaces and afforded the visual display of the artifacts that were produced and discussed along the journey.

b. The participants' activities can be said to constitute a *co-design space* through their situated practice. The sharing and understanding of their respective current experiences as well as the generation of ideas, framing, judgments, proposals, staging, etc. were highly collaborative.

The co-design work clearly needs to be accounted for and prepared for. *Co-design space* would differ from *design space* in this context, for example, by the additional preparations needed to ensure that all the stakeholders are able to contribute on an equal basis. Visualization of the emerging solution is also something that both the design experts and non-experts must understand.

c. In this example we can also say that the participants co-designed situations they, in the future, themselves would like to participate in. Each team created a desirable *co-design space*. But when exploring this *co-design space* they also identified future fears to this *co-design space*, like economic threats resulting from restrictions or requirements that the university and funding agencies would create.

## DISCUSSION

Knowledge is primarily only present in the form of knowledgeable people as Molander nicely puts it (2009).

Therefore we need techniques, procedures and other ways of conducting these co-design activities, as well as artefacts like space, material and props, in order to support all the participants in both creating understandings of what might be desirable and also supporting each other in doing so. It can also be instructive to support the participants in creating understandings of what is not desirable in the future. As much can be learned from utopian as from dystopian scenarios of the future. And what it is that is learned is likely to be quite different in each case.

And we also need a discourse to be able to plan, conduct, understand and learn more about co-design activities and here we see that the concept of *co-design space* can be useful. Because of the number and variety of people involved in co-designing, there are many more aspects to consider in the process such as:

- Preparation for the co-designing event(s): Recruiting participants, providing activities to ensure that they are “warmed up” for creative thinking, preparing special props or materials to evoke idea generation, etc.
- Facilitation of the event(s): What is the agenda? Is it fixed or open? What role does the facilitator play? Are there tools or techniques that are in play?
- Documentation and visualization: How will the output of the co-designing activities be displayed? How will the event be recorded?
- Reflection on the co-designing process: Who determines what the outcome means? How do you know if the event(s) was/were successful? What is the collective outcome? What are the individual outcomes?

It is argued that design is conducted “backwards” from rough ideas of the wholeness of what might be desirable situations (Gedenryd 1988). From there we create more detailed and articulated proposals. But outcomes of the co-designing process can be the dystopian scenarios. These scenarios inform or inspire the creation of the desirable solution since these are outside of the co-design space. These are not desirable but still they support the understanding of it by triggering discussions on both undesirable but also on conflicting issues.

One support for this is language. The better we can talk about the activities, the better the participants can understand possibilities. And with the variety of participants in a co-design process, it is important to consider multiple types of languages in use. It is here that visualization and enactment can come in handy.



Perhaps the most obvious advantage of using *co-design space* over just *design space* is when each participants' influence on the outcome is of great importance or salient in some other sense. This is the case, for example, in the design of new healthcare systems and/or services. Each stakeholder has a critical and distinct perspective. By acknowledging that each participant is very important, we move towards an understanding of a collaboratively created understanding of the possibilities and impacts of the future situations of uses for different people.

The design spaces of these future situations are infinite, in the sense that there are always an unknown amount of possible solutions. This is the same with a co-design space, but in practice a co-design space will in a way feel smaller or more focused since the participants together will be able to exclude more solutions that are neither desirable nor sustainable.

In another sense the co-design space will seem larger and/or more full since the participants with their different experiences will be able to envision and present even more different and relevant solutions.

It seems clear that this use of *co-design space* would not deal so much with "facts" but with emphasis on creating knowledge regarding desirable and understandable futures in relation to specific contexts, aims and people. The "co-" prefix clearly acknowledges that this *co-design space* in practice depends on the participants.

Instead of arguing for only one use, we encourage use of the concept *co-design space* meaning all of these simultaneously: the "real", experienced material, the social relations and practices, and the imagination of futures. This is similar to Edward Soja's concept *thirdspace* (1996), thus acknowledging both the understanding that space is socially constructed as well as the increased importance many scholars ascribe to spatiality and space. But most of all, acknowledging that we need a discourse to be able to plan, conduct, understand and learn more about *co-design activities* and here we see that the concept of co-design space can be useful. The addition of the "co-" to "design space" also clearly accounts for the collaborative creation of knowing that constitutes co-design activities.

We hope that this exploratory paper generates discussions that will create more knowledge in relation to the uses of the concept *co-design space*.

#### NOTE

A video about the workshop, *Exploring Opportunities for Interdisciplinary Research Projects – Linnaeus University*, has been posted at <http://www.youtube.com/watch?v=Jeb5i9J5l8I>

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