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Staging, co-creating and reframing: a framework to map a community-based project

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Abstract

The extension of the design domain over the last decades has shifted the focus from products to processes and opened the design process to new actors. The most applied frameworks to map the design process include several phases and techniques that can support focusing on stakeholders, but they are represented as fundamentally linear processes. These models might be insufficient in the currently expanded design domain where the designer has the role of facilitator rather than expert, and recursivity is essential. Based on a case study, this paper proposes a new design process of staging, co-creating and reframing that happens recursively over time, and where framing is applied to redefine the problem based on each interaction with the stakeholders. In the case study, the framework is applied in a community building project in Copenhagen. The design process is explained as it ran twice through the framework, involving various stakeholders.

Keywords: staging, co-creating, reframing, mapping design process

Introduction

Back in 2001 Richard Buchanan proposed a comprehensive frame to understand the nature of design (Buchanan, 2001). This frame includes four orders. The first two orders emerged in the earliest stages of the discipline of design and were focusing on *symbols* (the domain or graphic design) and *things* (the domain of industrial design). The maturation of the discipline and continuous ordering and reordering lead design to focus on two different orders, concerning *actions* and *environments*. Action concerns the interaction among human beings through products, services, experiences, and activities. The last order of design, according to Buchanan, concerns environments and therefore systems or, more specifically human systems,

that are described as "the integration of information, physical artefacts, and interactions in environments of living, working, playing, and learning."

When writing this, Buchanan was also acknowledging to be at the early formative stage of understanding how third-and fourth-order design could be able to transform the design professions and design education. If we observe Buchanan's orders, we recognise that the perspective at that time could not catch the full implications of the change the third and fourth order of design could bring about. The debate on design regarding those two orders took several different directions, one of which moved the focus from the outcome of design (a product, a service or an experience) to the process of value creation, in which value is co-created and co-designed.

When focusing on services, Vargo and Lush (S. Vargo & Lusch, 2004; S. L. Vargo & Lusch, 2008), propose a perspective shift that involves the role of designers and service providers, which can no longer be considered as *solution owners*, but rather as *value proposers*, in a process in which the final outcome of service is co-created by the beneficiary together with a multiplicity of other actors. Therefore, the co-creation of value is the result of a negotiation, in which designers play the role of facilitators and the final result is not under the control of designers nor of any other specific actors. This suggests that the same approach to design be reconsidered, from a *project-based* approach, that is fundamentally transferring value from a provider to a client in a very defined and closed time duration, to an *infrastructuring* approach, i.e. an open process defined by a number of different actors, that does not have a clearly defined beginning, nor an end (Hillgren, Seravalli, & Emilson, 2011; Morelli, De Götzen, & Simeone, 2020:22).

A further step in the evolution of the design domain concerns the redefinition of the context of action. Industrial design was mostly focusing on products and service design on the assumption of an asymmetric interaction between a service provider who creates value - and someone else - a beneficiary. A redefinition of such interaction is extending the domain of design, including a number of initiatives based on a broader approach to design (Manzini, 2015). This perspective is highlighting a number of innovation initiatives at all levels, from local initiatives aimed at enhancing creativity in small communities or in neighbourhoods, to innovation centres aimed at the development of urban, regional or national areas (Villa Alvarez, 2022). In those cases, the *material* of design action, that is what a designer manipulates in physical or logical sense (Blomkvist, Clatworthy, & Holmlid, 2016), varies from local communities to innovation policies. At the same time, the design process is no longer an *expert* process, with a well-defined start, end and with the involvement of specific expertise, but it would rather become an open design process (Hillgren et al., 2011). This expansion may not transcend a broader definition of design, such as the one suggested by Herbert Simon - Everyone designs, who devises courses of action



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aimed at changing existing situations into preferred ones - (Simon, 1969), however it is actually stretching the domain of design and would require a reflection upon the most appropriate methodological approach. It is therefore important to understand what this domain expansion opens to, which models can help support a design process in this context, and to highlight some examples that suggest new practices and new directions for managing design processes.

Models for the design process

The process of designing has been described and mapped in different ways: the most used representations have been proposed by the British Design Council, which described it as a Double Diamond *(Design Council, ND)*, while IDEO.org articulates Design Thinking in a process including five steps (IDEO, 2012, 2015). The two models have been re-elaborated in many different ways and by many authors. Still, a common criticism to those models has been to refer to a fundamentally linear process, with a start and an end (Cat, 2019).

When applied to projects belonging to the third and fourth orders proposed by Buchanan, criticisms have been expressed about the limitations of the design thinking process. These reflections argue that design must evolve for the new context to avoid superficial solutions, and "we need more than design thinking if we want to solve big social problems" (Hillgren et al., 2011). Working on this line, feedback loops and iterations have been introduced by many authors, to highlight the natural recursivity of the design process, but the kind of representation used always risked falling into the trap of being interpreted as a linear sequence of actions.

Recursivity is particularly relevant when describing an open design process, such as the process emerging from the interaction within communities or users, citizens, or even in processes of policy making. Here the design action is strongly dependent on the interaction among different stakeholders and on the progressive development of mutually agreed solutions. Recursivity, in this case, is caused by a continuous process of analysis and framing, which defines temporary results that are further elaborated by the stakeholders in new analyses and framing phases. This process of dynamic framing has been described in several cases. Dorst (Dorst, 2015) explored the process of frame creation as an intrinsic part of the domain of design. The logical process suggested by Dorst is considered in its relation to design practice by Van der Bijl Brouwer, (van der Bijl-Brouwer, 2019) who, in the analysis of a series of cases of interventions in the public sector, studies the evolution patterns and the drivers in the dynamic of process framing. In the analysis of the drivers, the author mentions



solutions prototypes to support the interaction among stakeholders and the use of thinking tools as a self-reflection support for the design group.

The project illustrated in this paper proposes a new case in which the process of framing is accurately described and represented as an iterative cycle, that resonates with Van der Bijl-Brouwer's suggestions. For this reason, the paper can suggest further reflections on a possible description of the process of framing, especially referred to cases in which this logical process is not simply a designer's individual maturation of a problem, but rather a process in which a community of actors defines a problem and subsequently organises people and actions to address such problem.

This paper is proposing the analysis of a case from a very operative perspective. A process of analysis, staging and framing has been considered in a local project in Copenhagen, where a group of service design students has engaged the local community in the definition of an open process to promote local initiatives.

Description of the project & project context

The project that led to the creation of the suggested framework was carried out in Copenhagen during the first half of 2022 by a group of Service Systems Design students at Aalborg University ("the design group" here onwards). The project brief was provided by an organisation called Kulturdistriktet (KD from here onwards). KD is an organisation trying to bring cultural richness and build a sense of community in two neighbouring areas of Copenhagen: Østerbro and Nordhavn. The brief called for the design of a service that generated this sense of community as well as a fanbase for KD to ensure its success in its coming initiatives. Therefore, the design group embarked on this challenge from the beginning of February to the end of May.

The result of the project was a research-powered toolkit for community building that KD can apply over time on repeated occasions for the creation of different communitybuilding events whose focus is to unite inhabitants through building together something tangible. The idea was inspired by numerous community-building projects carried out throughout Europe but also in Copenhagen (Hillgren et al., 2011; Light & Seravalli, 2019; Meroni, 2007; Munthe-Kaas, 2015; Munthe-Kaas & Hoffmann, 2017). This toolkit for KD was meant to systematise the creation and maintenance of community-building initiatives.

The toolkit was created through an open design process which involved inhabitants of the areas, KD, and a few of its business partners. The suggested framework was created and applied with the goal of structuring and guiding the complexity of an open design process.



The need to open the process

The nature of the brief proposed by KD - the creation of initiatives to support the sense of community - implied an open co-design process. Such a process is particularly relevant in several public initiatives - like the above-mentioned ones, that inspired our project - and shows the importance of community involvement during the conception and realisation of the initiatives.

Furthermore, an important ambition in the Danish public culture sector is the inclusion of citizens in future initiatives to co-create urban spaces and urban life (Municipality of Copenhagen, ND). Thanks to this alignment in method and ambitions, the public administration could play a role in the implementation of KD's initiatives, which increases the likelihood of success.

The suggested framework emerges from the need for a new logic that supports an open process and focuses on co-design sessions. Therefore, the three core phases of the framework aim at orchestrating, carrying out and reflecting on these sessions.

Description of the phases

The following framework aims to specifically support a process where a multiplicity of actors collaborates to create and solve a design problem. Therefore, it focuses on the activity of co-design and on the recursivity needed in the process when reframing the problem after these collaborative sessions.

The framework is composed of five phases: Preliminary research, Staging, Cocreating & Co-learning, Reframing and Delivery. The three middle phases are part of a loop as seen in Figure 1.

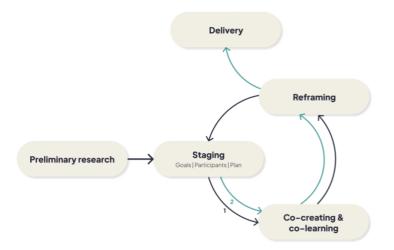


Figure 1. The design process map



Preliminary research

This initial phase was inspired by existing design models such as Double Diamond (Design Council, ND) and IDEO (IDEO, 2015) which include an analytical phase of empathising or discovering. Moreover, co-design processes integrate initial research as an essential phase as well (Jørgensen, Lindegaard, & Rosenqvist, 2011).

Preliminary research intends to explore the subject from different angles through primary and secondary research methods with the purpose of building fundamental knowledge of the problems, challenges, and space in which the actors move in, allowing the design group to learn the language of the actors, but also visualising the actors that should be invited in the following stages of the process (Jørgensen et al., 2011). Some examples of methods used in preliminary research are desk research, auto-ethnography, and interviews.

The preliminary research of the case study began with desktop research on the topic and on similar projects. This included digging into what initiatives the Municipality of Copenhagen had successfully implemented. These projects served as an inspiration and provided preliminary knowledge about the activities inhabitants are interested in, and the complexity of the concepts the brief included.

As the first contact with real users, the design group conducted a total of 7 in-depth one-hour-long interviews with the goal of knowing what *culture* meant for them, narrowing down the brief, and exploring a utopian vision of their neighbourhood. The interviews were semi-structured, meaning that the group prepared some questions beforehand, but there was room for other questions depending on how the conversation developed. During the session, the group introduced a short foresight exercise in which the participants had to describe, in a short story, what a utopian perfect day in their neighbourhood would be like. In some sessions the group also proposed the *space travel exercise* where the participants had to imagine travelling to *their own planet* and talk about their perfect neighbourhood.

First loop

Staging

Once the required initial knowledge is gathered, the next step is to stage co-design sessions by bringing actors into the design process. As shown in Figure 1, the staging phase is part of a loop and will be repeated in following phases of the process. During the first occurrence of this phase, the design group prepares for the sessions by:

- Setting the goals, scope and expected outcomes for the co-creating & colearning activity



- Selecting and inviting relevant actors that will participate in the process as experts of their own experience (Sanders & Stappers, 2008)

This task of building the network requires its own phase in the proposed framework since it is a conscious effort that often becomes as relevant as the co-design sessions themselves. It is worth noticing that the construction of the network is obviously highly influenced by the choices of the design group (Jørgensen et al., 2011; Pedersen, 2020).

The specific activities carried out during Staging were to reach out to relevant users to invite them to take part in two workshops and a design game. The preparation of the workshop agenda and exercises, and the creation of the design game, are part of the Staging phase as well.

The design group looked for workshop participants through social media and email, using their personal and professional networks as well as online communities. The scope was very broad since the target group included all the citizens in the area. The goal of the first workshop was to understand the characteristics of a desirable community from the citizens' point of view and generating ideas for community events. The second workshop would revisit these characteristics with a new set of participants and use backcasting to plan towards their desired neighbourhood.

Co-creating & co-learning

This phase refers to the actual moment of co-creation with users in staged sessions. This is the phase that Pedersen calls *facilitating*. However, it was decided to call it *cocreating and co-learning* (Light & Seravalli, 2019) because, during these sessions, the design group intends not only to facilitate but also to be active participant with users and other stakeholders.

Pedersen defines several properties or things to keep in mind during this phase:

- Involve relevant actors, ideally lead users²
- Appoint facilitators that guide the sessions.
- Design objects such as physical materials or visual content that can be used as boundary objects during the sessions. These objects can trigger creativity, and a discussion, thus helping users understand the problem.
- The material arrangement, including the physical location, the furniture, the time of the day, etc.



In the first loop, the co-creation and co-learning phase was based on a series of workshops organised together with citizens¹. The design group organised a total of two workshops that were correlated with each other. During the sessions, part of the design group facilitated while the other part participated in the activities. The co-creation happened through open discussion and tangible pieces that made the concepts of community and culture easier to work with. These were, for example, pictures of communities, quotes and fake banknotes. The exercises included rating different types of communities, rating the participants' own ideas, brainstorming, and backcasting.

The rating of community pictures, brainstorming and backcasting were especially insightful for reframing the project at the end of the first loop.

- Rating community pictures: the participants placed pictures on a scale that went from "I do not want this in my community" to "I want this in my community" (Figure 2)
- Brainstorming: the participants ideated cultural activities that could help the inhabitants to be more socially active (Figure 3)
- Back-casting: the participants worked in defining the first steps towards their desired neighbourhood. The participants worked in pairs and created illustrations, timelines, and written plans for the future



Figure 2. Rating community pictures during the first workshop



Figure 3. Brainstorming community events during the first workshop

¹ Although the workshop was initially planned by the design group, the workshops were open to citizens' contributions. Indeed, in the first workshop the purpose of the first exercise changed because one of the participants changed the rule.



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Reframing

During the reframing stage, the design group wanted, first of all, to bring the new insights gathered in the co-creating and co-learning phase and analyse them; secondly, to reframe the problem "by finding the problem behind the problem" (Pedersen, 2020) and third, to ideate new ideas for the solution (Dorst & Cross, 2001). The reframing phase might result in two directions: either the result might be used in the staging phase of a new loop, or the design group might proceed to the delivery phase. The design group discussed that this reframing might lead to a change in the project's scope, a more precise focus area, or a new prototype. It is worth noticing that the reframing can present different outcomes depending on the number of times one has gone through the loop in the framework.

In the first loop, the reframing activity was aimed at analysing the results of the workshop. The design group started the reframing phase by analysing the community pictures exercise (Figure 2). One of the community picture's main insights that allowed us to reframe the project was "people love socialising and having fun specially around food and drinks".

The second workshop activity to analyse was the brainstorming outcomes which were many community event ideas written in post-its as noticeably short sentences, for example: "share your tomatoes plant", therefore, we had to choose a method that allowed us to develop meaningful content for each idea - the method was making sense of it all. After applying the method, each short idea evolved as a storytelling that included the description of the event and the role of KD. The brainstorming gave us an idea of possible community events and would allow us to reframe our project in the ideation phase as a source of inspiration.

The third and last activity to analyse was the backcasting which yielded descriptions of how the participants imagined their future perfect neighbourhood and the actions needed to turn the ideal neighbourhood into reality. One of the main discoveries from analysing the backcasting exercise was that the participants had several ideas related to sharing something tangible, for example: share your tomato plant, share meals, share tools. The patterns mentioned before allowed us to reframe the project with the conclusion "community and belonging appear because of common interests".

The second loop:

The design group went through the loop twice before the project deadline.

Staging

In the second round of Staging, a design game was created with the goal of engaging the target users.



Setting goals. The goals that the design group set for the design game were the following: 1. *Evaluate the tasks needed in the organisation of a co-creation event.; 2. Research the relationships and collaborations needed between the main stakeholders.; 3. Initiating a discussion about the possible collaboration and implementation of the project.*

Creating the design game. These goals guided the team when choosing a type of design game and a play dynamic. The game created was a mix of two types of design games (Brandt, 2006):

- scenario-based: to place the participants in a specific situation
- negotiation-oriented: to create a common understanding of a workflow

The game was fully developed during the phase Staging and prepared for the codesign session. All the material support for the game can be seen in Figure 4.

Inviting relevant users. In the first phases of the project, the design group had experienced difficulties inviting people through social media, and mobilising everyone to one location at one specific time for workshops during the first round of Staging. Therefore, the design group took a different approach this time. The decision was to visit Fælledparken, a park in the area where the project was based, which was also a popular meeting place for the target group, looking for participants there. The users were offered a cold drink in return for their time.



Figure 4. The scenario-based game. The cards represent relevant tasks that usually occur in community events. Participants had to place the cards on the wheel, deciding who was supposed to perform the task.

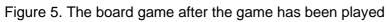


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Co-creating and co-learning

The game was played with a total of 7 groups of 2 to 5 people. To gather the insights, the design group took written notes of the important comments from the participants and between them while playing the game. See Figure 5.





Reframing

The reframing phase started by analysing the results of the design game. The goal of the analysis was to recognize some common patterns among the answers obtained in the design game that could suggest a direction for the solution. The design group used an excel chart to count the number of times that the participants assigned certain tasks to certain stakeholders, for example 84% of the participants decided that the task "schedule activity" should be carried out by the local inhabitants and 16% decided that it should be carried out by the event organiser.





Figure 6. The prototype of the community support toolkit, at the beginning (left) and at the end (right) of the reframing phase

Once completed the analysis of the design game, the group reframed the project, deciding which stakeholder should be responsible for each action based on the patterns found in the analysis. Reframing the project direction led to the creation of the first prototype of the project: a digital interactive prototype created in Figma which had the purpose of testing the flexibility of the solution. For this matter, the design group tried the solution with eleven different scenarios, each scenario had the characteristics of what was considered to be a "building together event". The following step was to test the prototype with Jesper (the CEO of KD) which suggested combining the knowledge of the first prototype with the method used by KD to organise events. This was one of the most important steps of the project because it triggered a radical reframe for the solution, Figure 6 shows the prototype at the beginning of the reframing phase (left) and the prototype at the end of the reframing phase (right).

Delivery phase

The goal of this phase is to materialise the solution and make it ready to be used by the end users. The outcome of this phase can vary from a concept to a defined product or service.

The final solution consists of a toolkit that could enable Kulturdistiktet, other citizens or citizens associations to create future initiatives, even without the active participation of the design group. The toolkit was handed over in both digital and analogic version, and consisted of two main parts:



A concept board, where the organiser is guided through interactive parts to specify a concept that resonates with the research insights and therefore with the target group. This board also refers to research cards that explain the insights behind the exercises and requirements. Having access to the insights was a priority for Kulturdistriktet (Figure 7).



Figure 7. The concept board

A set of task cards (Figure 8), which are used to assign tasks to different stakeholders based on the results from the design game. Each card has the following characteristics

- It makes a recommendation on who might take care of that specific task (the event organiser, a local business, or the inhabitants),
- It describes the involved responsibilities in detail, and
- It refers to a card which exemplifies the task



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Figure 8. Task cards

Cards and board were prototyped and tested with Kulturdistriktet. They are thought not only for internal use but also as a co-creation and negotiation tool with different stakeholders during the organisation of any new initiatives.

Discussion

The case presented in this paper refers to a community of citizens that was only broadly defined, based on their geographical location, the neighbourhoods of Østerbro and Nordhavn in Copenhagen. The duality between designers and clients cannot easily be defined because the community in this area is not clearly defined. The problem met by the design group is similar to the problem faced by KD when proposing new cultural initiatives in the area: the involvement of citizens in this process could not count on a shared goal defined by the community, nor on a place to aggregate the community. This made it hard for the design group to engage participants and required a very accurate work in the phase of staging, to make sure that the co-design activities planned in this phase could catch the attention and encourage the participation of citizens. If on one hand, this represents a limitation to the project, it also clarifies very well the need to *stage* the co-creation phase, and to generate all the material support to facilitate the co-design exercise.

The nature of the brief proposed by KD - the creation of initiatives to support the sense of community - implied an open process of co-creation. An open-ended approach is particularly relevant in several public initiatives or social innovation



processes (Hillgren et al., 2011). Some of the contextual conditions for this process however, are hardly captured by the existing models that map design processes, namely the Double Diamond and the model proposed by IDEO. Furthermore, those models do not consider co-design as a specific characteristic of the process, taking for granted that the subject of the design process is *the designer* or a design group. The need to open the process to participation needs specific phases of preparation (preliminary research) and networking (staging), whereas the phases of discovering, (or empathising in the IDEO model), defining or ideating are hardly distinguishable in the co-creation phase of the model presented in this paper, when the interaction with citizens provides information that can be used either for analysing the context or for defining new ideas. The intrinsic iterativity of the framework proposed is suggesting different moments of interaction with the community; in fact, the fundamental value deriving from the design process is created in those moments of co-design, where the designer is facilitating this open process. A more subjective role of the designer concerns the delivery phase, where the knowledge produced in the co-creation and framing phases has been properly organised, with the concept board and the task cards.

The framework proposed in this project produces a direct outcome - the toolkit delivered in this project - but on the other hand it creates the conditions for new openended processes among the community, to manage future initiatives.

Conclusion

The extension of design action towards broader social innovation processes and the changing role of designers, from decision makers to facilitators, suggest a new way of mapping the design process that could efficiently support such new conditions. The existing models are often misleading in those processes because they suppose a clear starting point and an end, and because they are implicitly linear, whereas an openended process would necessarily be recursive. The framework proposed in this paper is mapping a flexible and open process that admits continuous reframing. The process proposed with this case is obviously stopping at the delivery of the toolkit. A third loop could have been consisted in a test of the toolkit, to assess the operativity of the concept board and the task cards, when used by the KD personnel. This has not been done only because of the time limitation imposed by the brief (about three months). The test could also validate the efficacy of the toolkit in cases in which the design group is not participating at all in the co-design process: would the cards and the concept board be sufficient to suggest all the tasks? Does the kit need any integration? Would the card kits lead to a further staging-co-designing-reframing process? Those questions need to be verified with further research.



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